

# EARTH OBSERVATION FOR NATURAL CAPITAL







### **CUSTOMER FOCUSED ACTIONABLE INFORMATION**

Real time

Reliable & unbiased

Relevant

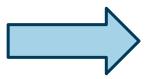






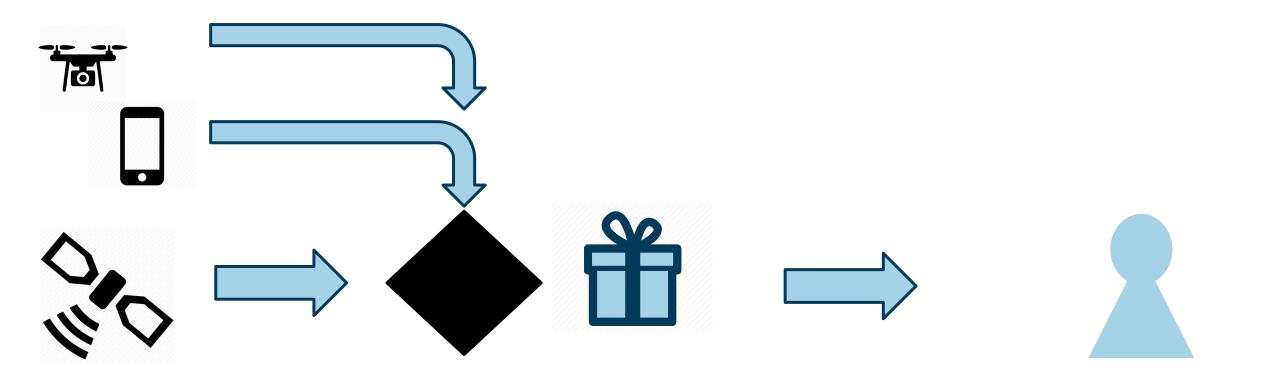




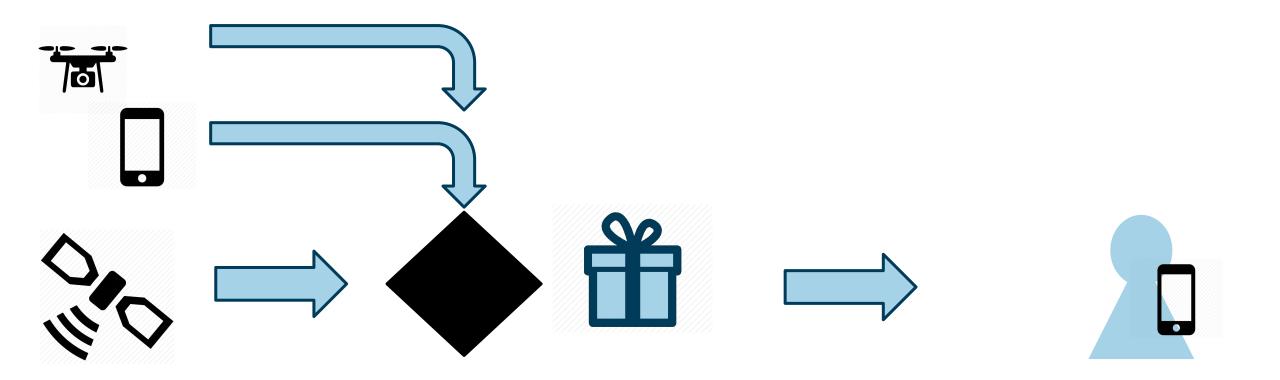




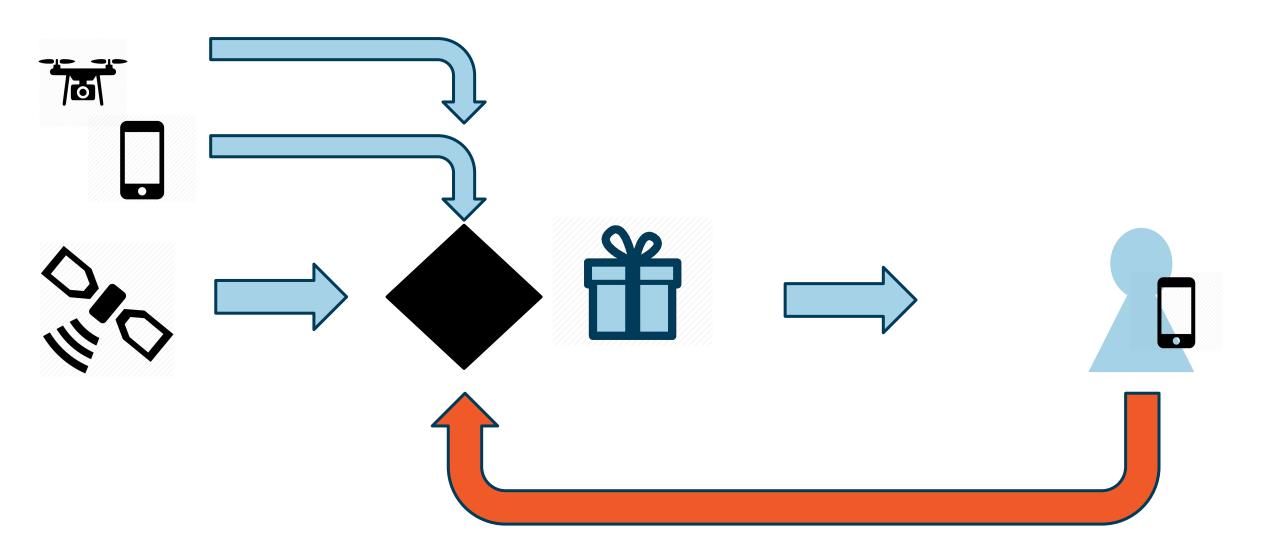














## SMART FOREST & COMMODITY ANALYTICS





### **SUPPLY CHAIN RISK MONITORING**

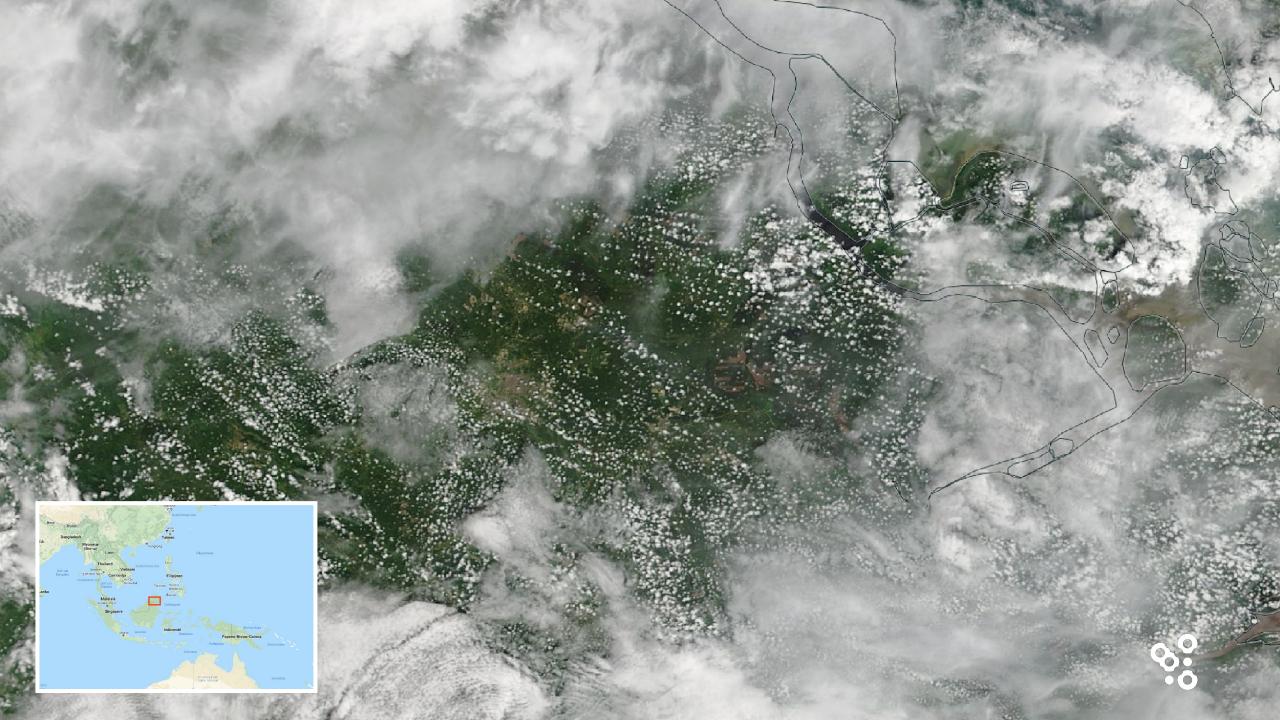
### Where are low risk plantation smallholders that require **financing for replanting?**



### **SUPPLY CHAIN RISK MONITORING**

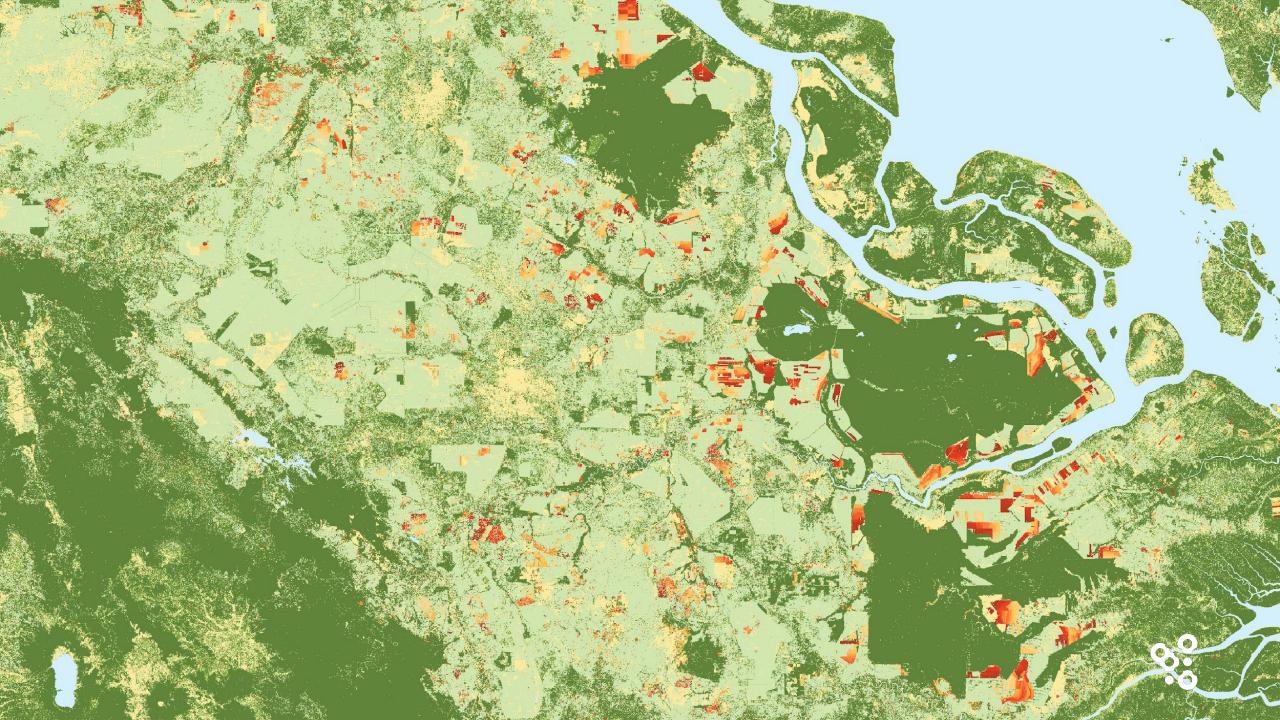
How much **deforestation** is happening or happened in my investment area?

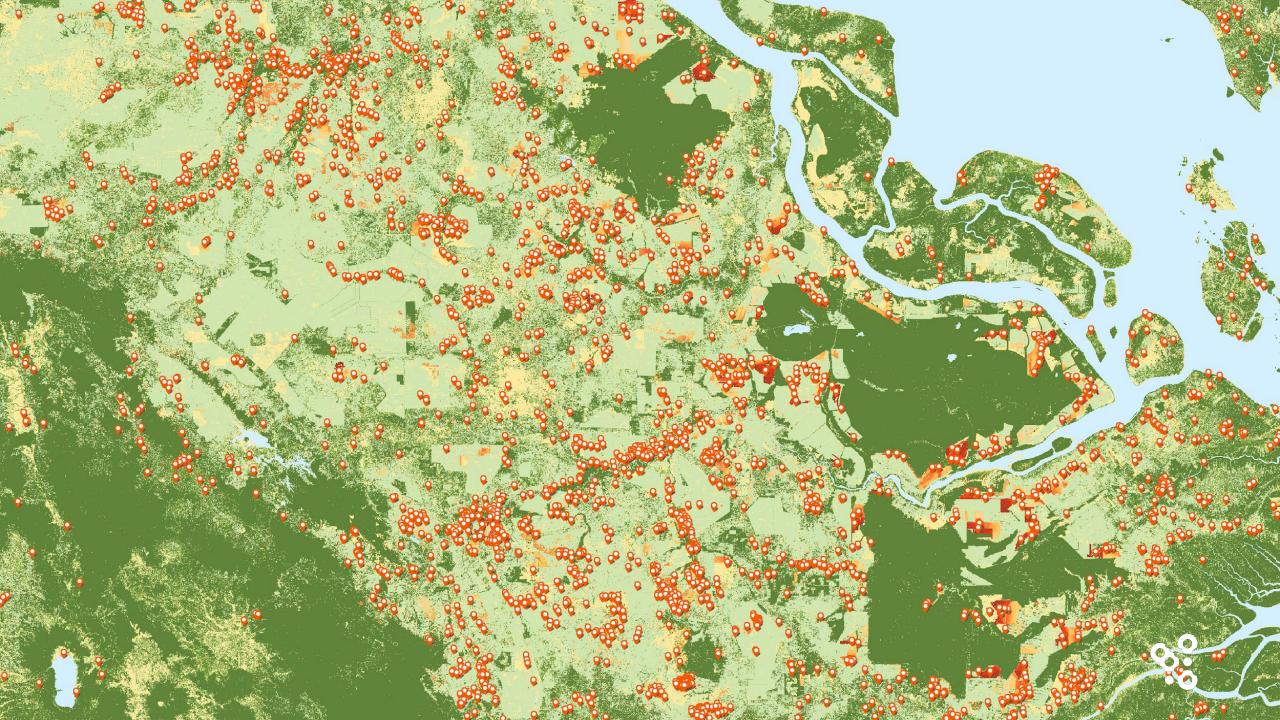












### Alert Bulletin Deforestation

 Tailored selection of relevant change

- Natural forest
- Forest
- Water
- Deforestation 2015
- Deforestation 2014





### DEFORESTATION ALERT BULLETIN PENINSULAR

1 JULY - 17 JULY, 2017





### OVERVIEW OF **DEFORESTATION ALERTS**

Number of deforestation alerts, 1 july - 17 July, 2017



Total •	Peatland •	Mangrove •	Non-Forest •	Natural Park •	Consession Area
13	8	1	4	1	0
263 ha	130 ha	18 ha	 100 ha	 15 ha	-

Deforestation alerts over a longer period of time



### 6 Bulletin

This Bulletin presents the detected deforestation alarts in Perinsular Malaysia. These areas are detected using satellite imagery, and is developed for use by the IOI groep. Deforestation alarts have been selected based on this methodology.

- All deforestation patches of at least 10 ha, as well as individual deforestation patches, whose area is 10 ha within a distance of no more than 500 m of each other, are incorporated.
- when within a peatland area (with a buffer of 300m), deforestation patches of at least 5 ha within a distance of no more than 500 m of each other, are incorporated
- Consid Assessment
- ipecia dieasale.
- Cocession areas
- Peatland
- Natural Parks (WDPA)





### **ACTIONABLE ANALYTICS**

- Historical and real time data
- real-time deforestation
   alert bulletin
- Also crop status or floods



### **SMART ANALYTICS THAT ENABLES YOU TO ACT**



Responsible supply chain monitoring



Investments and portfolio management



Sustainable development goals



Certification







Prioritized deforestation alerts

Monitor plantation performance

Decrease and mitigate **risk** 

**Plan** investments and increase production.



### WHAT SETS US APART?







### **SMART ANALYTICS**

- **Realtime** be the first to know, nobody does it as fast as us
- Reliable and unbiased be sure of what you know
- Relevant know what you need to know



### **ABOUT OUR POSITIVE IMPACT**

We create **actionable** information from space data to enable our clients to **feed the world** while protecting the world's natural resources



## COPERNICUS LAND MONITORING SERVICE





### WHAT IS IT?

"The Copernicus Land Monitoring Service (CLMS) provides geographical information on land cover and on variables related, for instance, to the vegetation state or the water cycle.

It supports applications in a variety of domains such as spatial planning, forest management, water management, agriculture and food security."







### **BUSINESS MODEL**

B2C

B<sub>2</sub>B

M2M

?



### **BUSINESS MODEL**

B2C

B<sub>2</sub>B

M2M

**S2S** 





Home Products News Product Access Viewing Library

Vegetation

Energy

Water

Cryosphere

Hot Spots

### Home

The Copernicus Global Land Service (CGLS) is a component of the Land Monitoring Core Service (LMCS) of Copernicus, the European flagship programme on Earth Observation. The Global Land Service systematically produces a series of qualified bio-geophysical products on the status and evolution of the land surface, at global scale and at mid to low spatial resolution, complemented by the constitution of long term time series. The products are used to monitor the vegetation, the water cycle, the energy budget and the terrestrial cryosphere.

Read more

### In the picture

38 TB

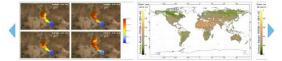
downloaded in 1st quarter 2018

### 2800th

user registered for online access

### Drought surveillance

in Sri Lanka by CGIAR's IWMI



### Latest news

One day of missing Sentinel-3 input observations Tue, 05 Jun 2018

Help us improve our Land Cover maps - extended deadline! Fri, 25 May 2018

First Lake Water Quality products Fri, 25 May 2018

Annual satisfaction survey launched! Mon, 14 May 2018

Read more

### User support corner

- Leaflet
- Product portfolio
- Contact us
- FAQ







### CLMS VS SFCA



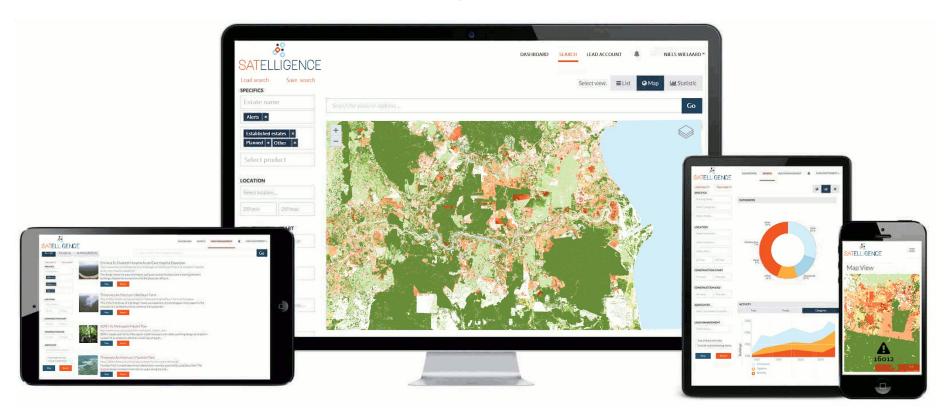


### **FOOD SECURITY**

### How to **feed** 2 billion more mouths in 2030?



### CONTINUOUSLY UPDATED COMMODITY MAP OF THE WORLD









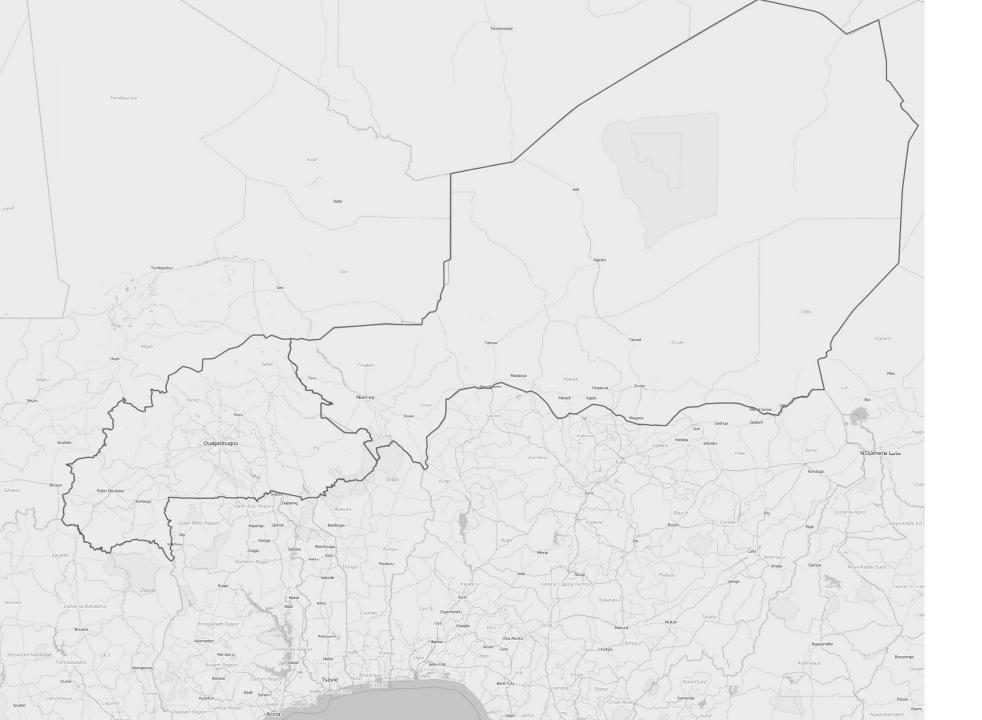




### **Burkina Faso**

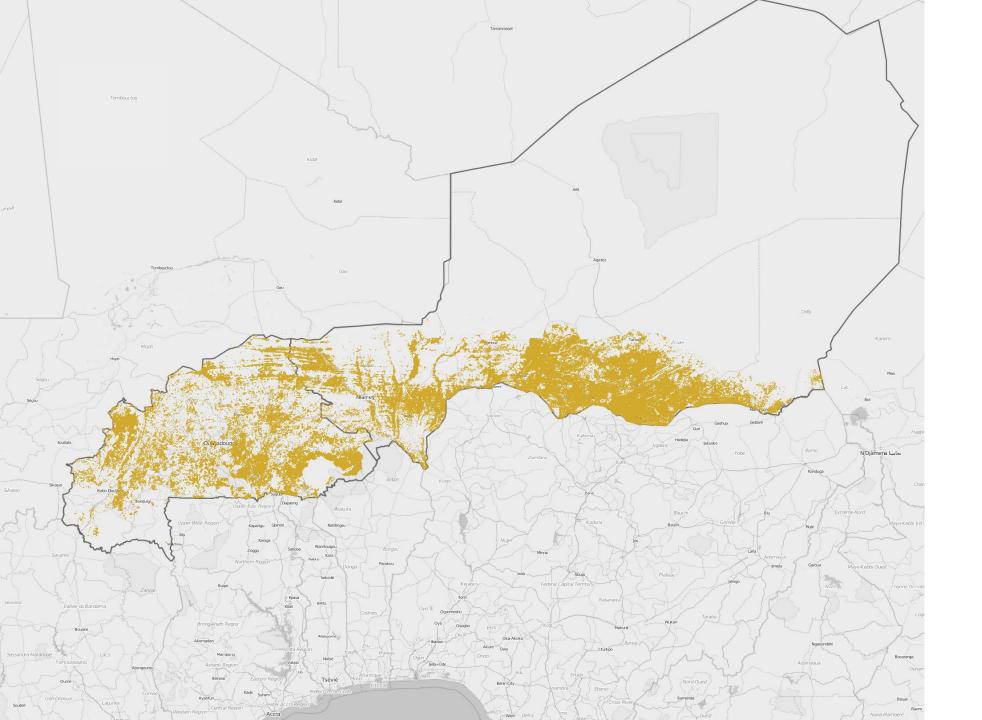
### Niger





### Burkina Faso Niger



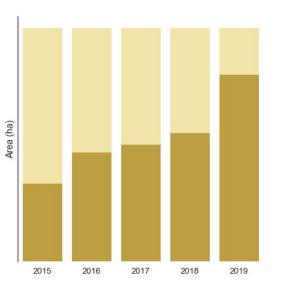


### **Cultivated area**

Cultivated area

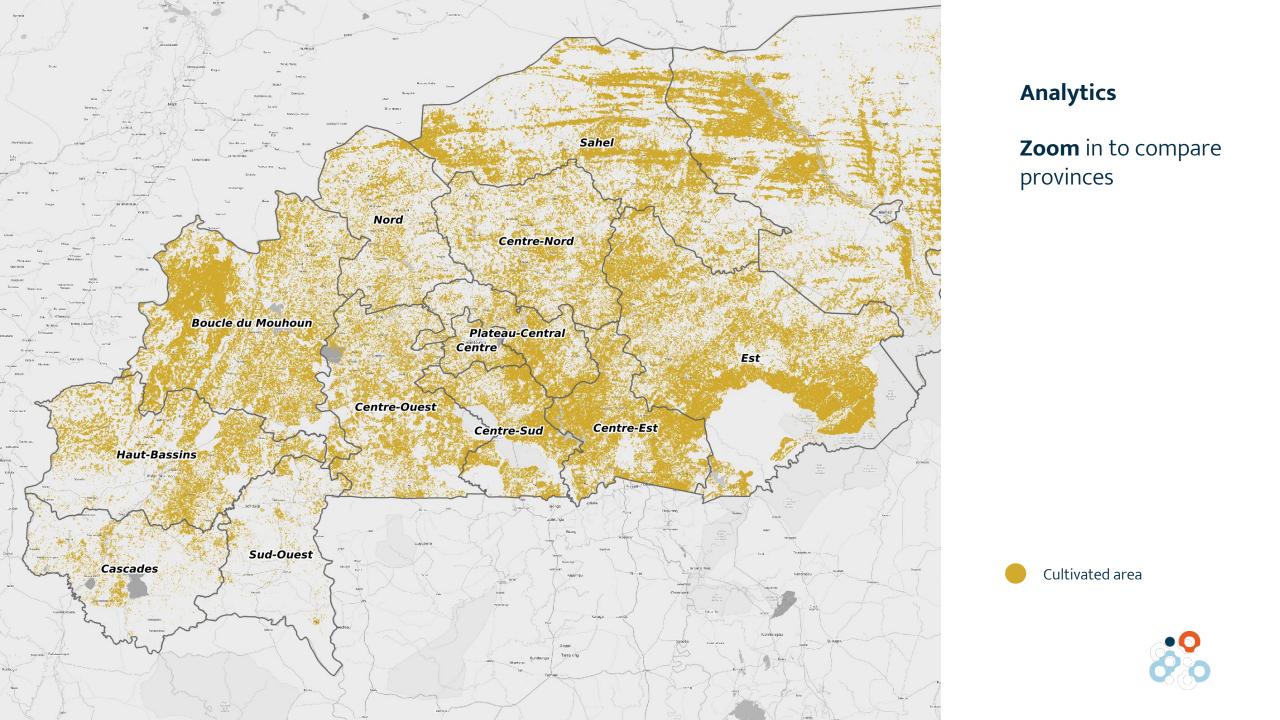


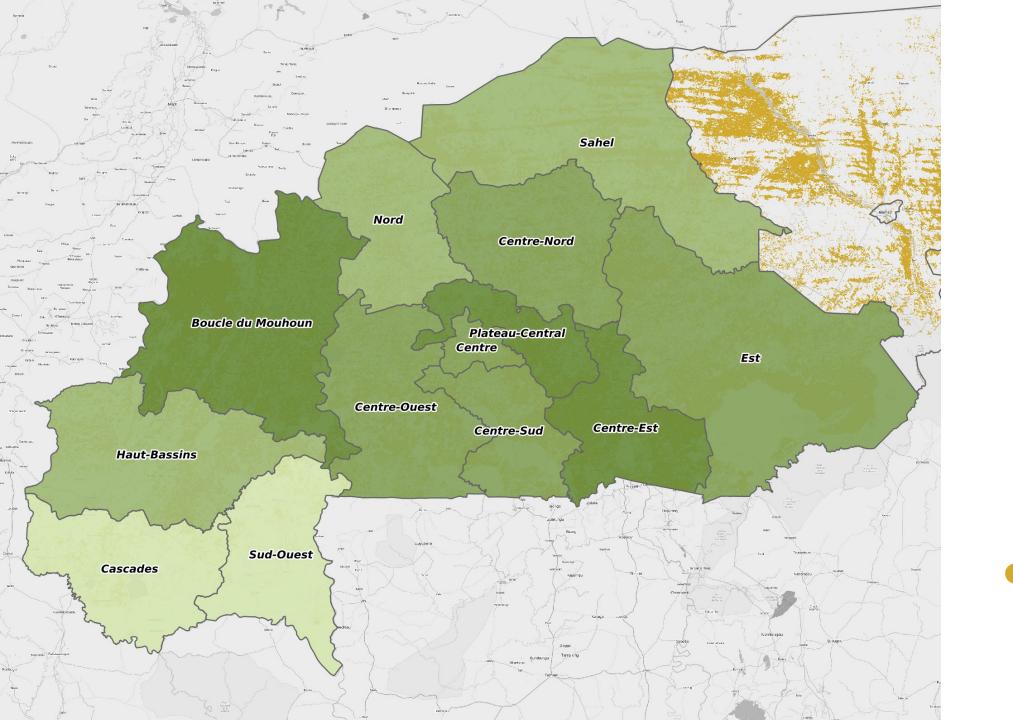
### Analytics Historical trends











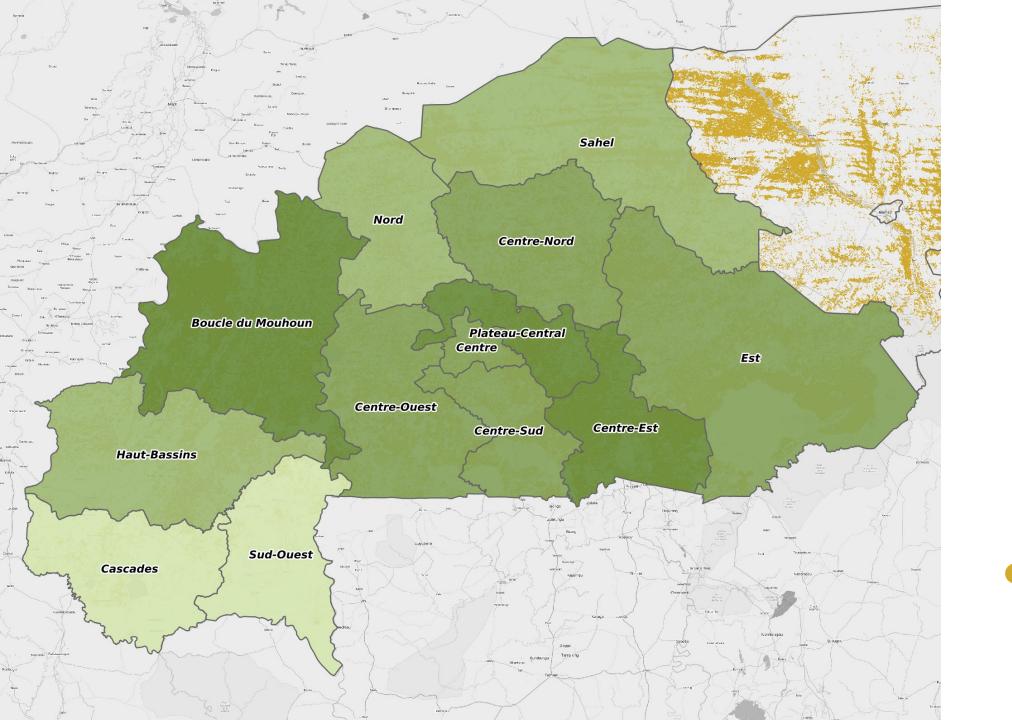
### **Analytics**

**Zoom** in to compare provinces

Add data components like **productivity** 

Cultivated area





### **Analytics**

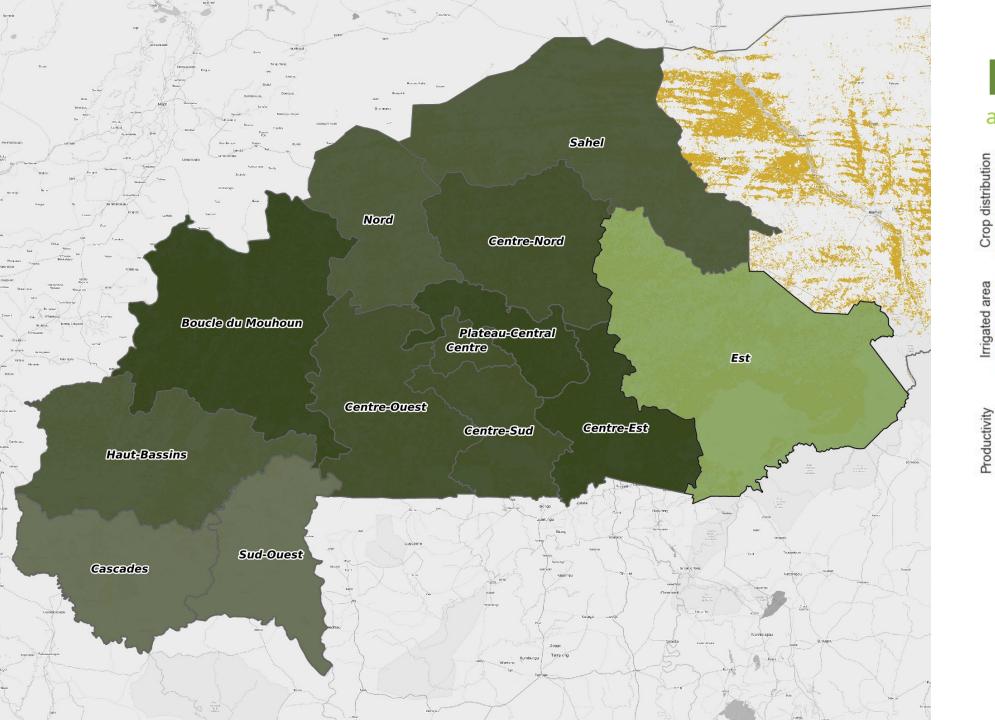
**Zoom** in to compare provinces

Add data components like **productivity** 

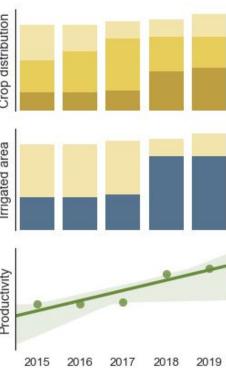
And get **reports** 

Cultivated area





## **Est** analytics





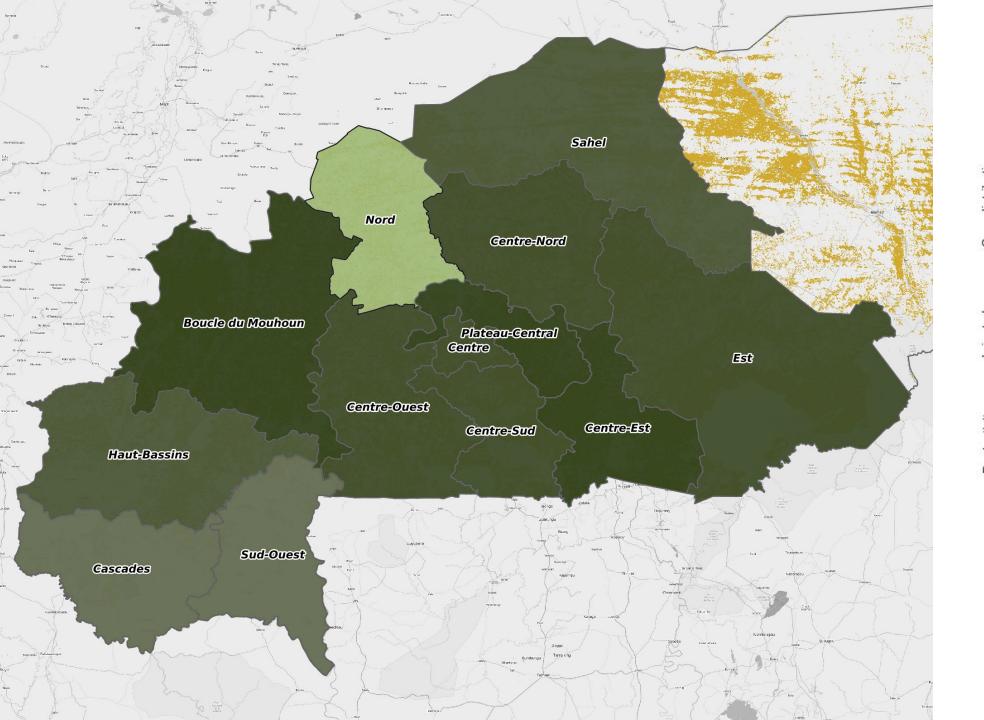
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Maize

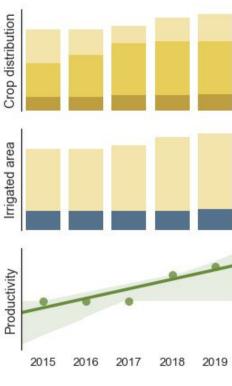
Rice

Irrigated area





# Nord analytics





Maize

Rice

Irrigated area



### **COPERNICUS LAND MONITORING SERVICE**

Produces **excellent data components** but it's not an end user product or service.



### **COPERNICUS LAND MONITORING SERVICE**

Take 1 step back to move 2 steps forward: focus on being B2B data component provider, provide high bandwidth API access, collect success stories from B2C parties



### **PROMISING DEVELOPMENTS**

Analysis Ready Data (#ARD)



About membership Medium Sign in Get started

2018-03-21

@opencholmes radiant.earth



### Join us in August for an Analysis Ready Data Interoperability workshop

I wrote about <u>Analysis</u> Ready <u>Data</u> a month ago (and Scott shared what <u>Planet is doing on ARD</u>), and a few of us have been plotting to bring together a wide variety of satellite imagery experts to try to really collaborate on interoperability between different satellite providers. We've secured some space at Planet's Mountain View office, to help keep the costs down, but we're aiming for a truly neutral, collaborative gathering to help move the earth observation industry forward. <u>Radiant.Earth</u>, a new NGO working on 'earth imagery for impact', who have lead the convenings on <u>SpatioTemporal Asset Catalogs</u> (STAC), will be involved to make it not dominated by any vendor.





