

# LARGE-SCALE EXPLOITATION OF SATELLITE DATA IN SUPPORT OF INTERNATIONAL DEVELOPMENT

## → LAND DEGRADATION MONITORING

Satellite Earth Observation (EO) allows for a regular inventory of land degradation on a wide range of spatial and temporal scales. It is a cost-effective method offering up-to-date global data that rapidly reveals where change has happened in a consistent and repeatable manner.

The land degradation monitoring service provides up-to-date information products to address the three main indicators of land degradation at various spatial and temporal scales: land cover and land cover change, land productivity, and carbon stocks. The service can be extended with land status indicators to early identify the factors contributing to land degradation and ecosystem function.

Data can be provided in form of maps in raster or vector format for easy integration within existing GIS systems and/or web portals or the service is accessed via a web portal inclusive online mapping and basic analytical tools. Furthermore, summaries of information, such as statistics per administrative unit, can be provided in tables or graphs which can directly be imbedded in regular reporting obligations.

### DESCRIPTION

Quantitatively mapping of the change in status, drivers and impacts of land degradation at different spatial and temporal scales

### USE

- › Evaluate impact of interventions
- › Identify and evaluate hotspots

### INPUT PRODUCTS

Land cover and land cover change

- › Land productivity
- › Carbon stocks
- › Other land status indicators include land surface temperature, evapotranspiration, precipitation, soil moisture, terrain slope, erosion potential, protected areas, habitat heterogeneity, burnt areas, water bodies and so on.)

### SPATIAL RESOLUTION AND COVERAGE

Local/national (10-30m) and regional (250m) scale

### BENEFITS

Improved strategy and decision making:

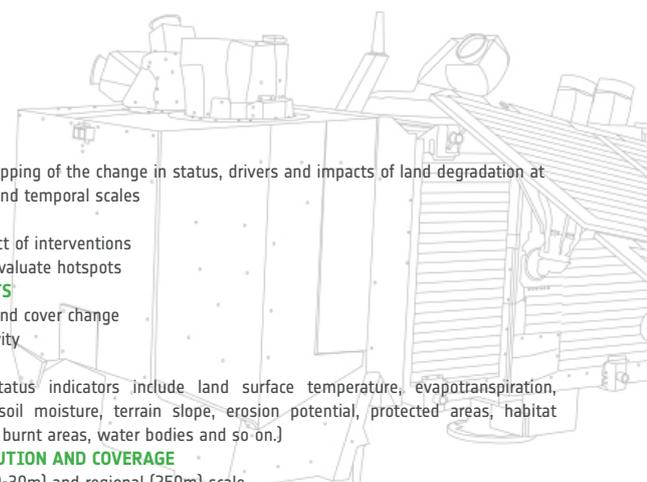
- › Prioritize actions
- › Select and upscale successful practices and interventions
- › Improved understanding of the context of land degradation (synergies and trade-offs between causes and impacts)
- › Monitor activities more effectively and efficiently

### DELIVERY FORMAT

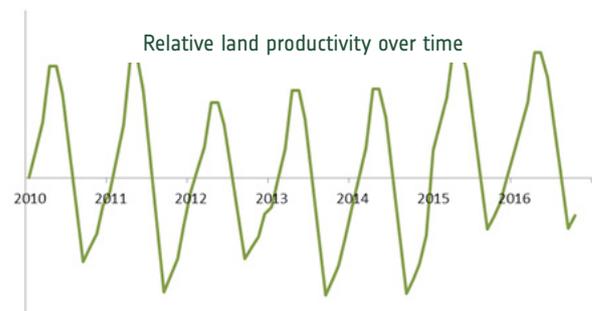
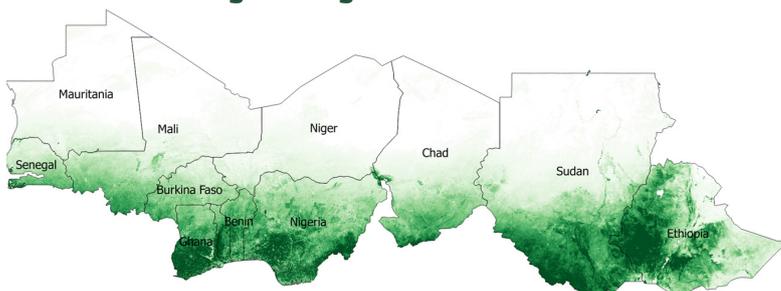
Depending on user needs, most products can be updated regularly (daily at regional level, every 10 days at local/national scale)

### FREQUENCY

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## Regreening of the Sahel



COUNTRY	VEGETATION COVER CHANGE 2010 - 2016	INCREASE IN FOREST AREA
Mali	- 1 %	-
Burkina Faso	5 %	4 %
Ethiopia	6 %	- 2 %



Areas with increased vegetation cover



For more information, please contact:

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