

**World Space Forum  
On line, December 13<sup>th</sup> 2022**

**Mainstreaming EO data in Co-development Projects :  
CNES-AFD partnership**

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# AFD-CNES Partnership



- **Group AFD (French Development Agency)**

- AFD + PROPARCO + Expertise France
- 3000 + 400 + 1000 employees
- 120 + 115 + 100 countries of intervention
- 12150 + 2300 + 237 M€ commitment in 2021
- Secretariat FFEM and FID



- **CNES : French Space Agency**

- Space strategy definition and implementation
- 4000 people, 4 centers
- Budget (2022) : 2566 M€





## AFD-CNES Partnership

### Objectives :

- To develop a French policy of space applications for co-development in compliance to the 2030 Agenda SDGs and Paris Agreement
- To propose a joint French offer of space technologies applications to AFD beneficiaries and CNES partners
- By raising awareness, training, capacity building, services demonstration on use cases,...
- Areas of cooperation : food security, water, land management, risks and conflicts, forests, urban development, mobility, energy, health but also... governance and use of data with a geographical dimension; digital divide ; innovation



*Philippe Baptiste  
CNES President*

*Rémy Rioux  
AFD General Director*

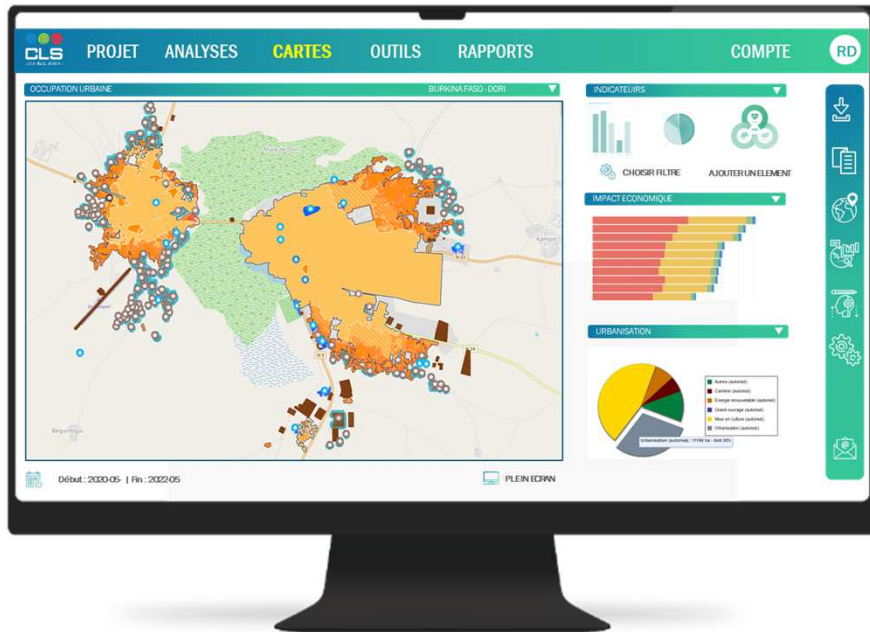
***MOU Signature, Paris, January 26<sup>th</sup> 2022***

# Mainstreaming EO data in Co-development Projects



LEVEL OF DIFFICULTY	BENEFICIARIES	AFD	COMMONS
« QUICK WIN »	Support in providing access to spatial data	Project monitoring via satellite imagery	Support acculturation to commons in satellite imagery
MID-TERM	Support in creating local observatories using spatial data	Create a baseline in a more systematic way	Support in building a database with indicators to understand territories
LONG TERM	Support research level of beneficiaries	Collecting structured data to combine with satellite imagery	Support in creation of new methodologies to create commons from satellite imagery

# The PASSDEF Project : objectives



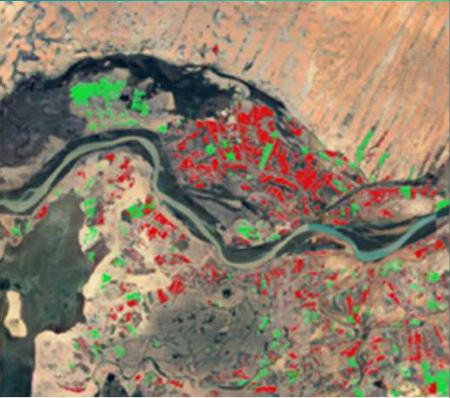
- Lack of an operational geospatial data exploitation tool
- Develop a tool that **centralizes a maximum of data and services**, and that allows access to these services according to the type of data and users (different levels of sharing and access, from open source to project level)
- Need for AFD **counterparts to be able, if they wish, to also integrate the geospatial services developed in their projects** into the tool, thus allowing them to benefit from substantial savings linked to the development of this digital infrastructure and to the analyses already developed and hosted there

# 6 demonstrators for the Monitoring & Evaluation of AFD projects



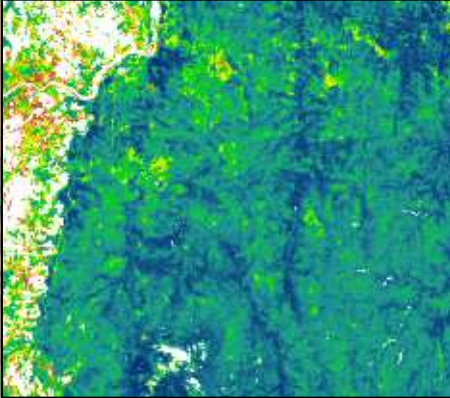
FINALIZATION

Bahr Linia  
TCHAD



FINALIZATION

National Park  
RDC



FINALIZATION

Svay Chek  
CAMBODGE



Sustainable resource  
management

Monitoring of  
agricultural practices  
and performance

Sustainable Resource  
Management

Deforestation  
monitoring and early  
warning

Sustainable  
management of  
resources

Dynamics and uses of  
the water resource



## Geo-services derived from satellite Earth Observation for sustainable resource management

- Current and retrospective mapping of land use and occupation
- Spatial and statistical indicators of the dynamics and performances observed on the territories in terms of agricultural, forestry and water resources
- Derived analyses from the impact of implemented projects
- Continuous monitoring and projections



# 6 demonstrators for the Monitoring and Evaluation of AFD projects



**DELIVERED**

**Secondary cities  
BURKINA FASO**



**INITIALIZATION**

**NRBC – NORTH AND  
WEST AFRICA**



**INITIALIZATION**

**Connectivity NORTH -  
IVORY COAST**



**Crisis management**

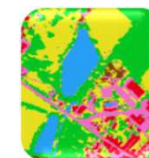
Urban dynamics and  
migration flows

**Risk Management**

Critical infrastructure  
monitoring and  
prevention

**Risk Management**

Impact analysis of the  
renovated road  
network and exposure  
to flooding



**Geo-services derived from satellite  
Earth Observation for risk and crisis  
management**

- Mapping of built-up areas and economic development indicators by cross-referencing data
- Monitoring of IDPs / refugees in support of humanitarian crisis management
- Risk assessment and prevention (floods, critical infrastructures...)
- Evaluation of the impacts of a crisis (conflict, natural disaster, etc.)
- Monitoring the reconstruction and restoration of ecosystem



The background of the slide is a composite image. On the left, a curved portion of the Earth is visible, showing a topographic map with green and brown colors. The rest of the background is a dark blue space filled with numerous small, bright green stars.

**Thanks for your attention**