

EARTH OBSERVATION FOR SUSTAINABLE LAND AND WATER MANAGEMENT « GMES IN NORTH AFRICA »

OPERATIONAL SERVICES

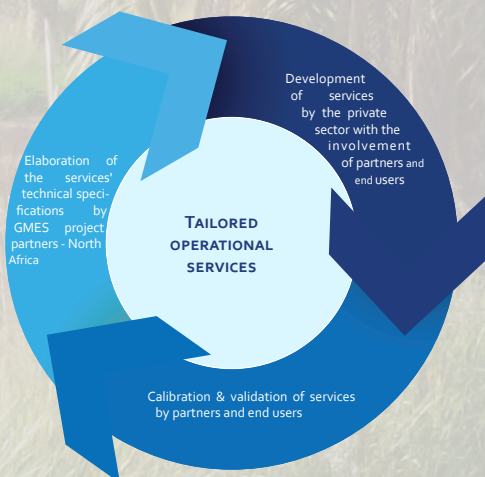
to meet the information needs of decision-makers, managers and stakeholders involved in sustainable land and water management, by valorizing earth observation derived data.



A MULTI-SCALE APPROACH INVOLVING END-USERS OF REMOTE SENSING PRODUCTS

NATIONAL SCALE	ANALYSIS OF END-USER NEEDS Identify key players and end-users • Inventory of geospatial product needs • Translate needs into technical specifications
	CAPITALIZATION OF EXPERIENCES AND VALORIZATION OF ACHIEVEMENTS Inventory of projects related to GMES services • Capitalization of achievements feedback • Formulation of recommendations
	IDENTIFICATION OF PILOT AREAS FOR SERVICE IMPLEMENTATION Identification of pilot areas • Cataloguing available data & sharing policies • Defining protocols for the exchange and use of auxiliary data
REGIONAL SCALE	AUXILIARY DATA EXCHANGE PROTOCOLS Analysis of challenges • Identification of alternatives • Formulation of recommendations
	CAPACITY BUILDING Inventory of training needs • Development of training modules • Implementation of innovative training approaches
	ADVOCACY with decision-makers in charge of agricultural development strategies, environmental monitoring and integrated water resources management

A PARTICIPATORY AND ITERATIVE PROCESS FOR THE IMPLEMENTATION OF OPERATIONAL SERVICES



Priority Themes:

- Seasonal agricultural monitoring and early warning
- Evaluation of water abstracts for agricultural use
- Monitoring and assessment of land degradation

The development of technical specifications:

- Needs analysis
- Involvement of partners
- Capitalization

Involvement of the private sector:

The development of earth observation services will be carried out by the private sector, through international consultations based on the technical specifications developed by the consortium

Calibration and operationalization of services will be carried out by national partners with the involvement of end-users

OWNERSHIP AND SUSTAINABILITY THROUGH A DOWNSTREAM STRATEGY INTEGRATING NATIONAL, SUB-REGIONAL & REGIONAL LEVELS

- Services tailored to the end-users needs
- Energization of the exchange and sharing process at different scales
- Information, awareness-raising, dissemination through the dedicated exchange and sharing platform
- End-users capacity building on the tools developed and the techniques used

GMES in North Africa is a Supporting project for decision-making in sustainable management of land and water through the provision of services and products based on techniques and data of earth observation.



OBJECTIVES

Valorization of the potential of remote sensing for sustainable management of natural resources through:

- The development and the sustainability of decision support services
- The Boosting cooperation and the Promotion of the exchange of expertise
- The capacity building and awareness raising to all partners and end-users.

SERVICES

- Agriculture Seasonal Monitoring, Early Warning and Assessment
- Water Abstraction Surveillance, Monitoring and Assessment in Irrigated Areas
- Land Degradation Monitoring and Assessment.



View of a pivot irrigation near a traditional ghout, El Oued, Algeria



Revegetation of coastal dunes, Nouakchott, Mauritania

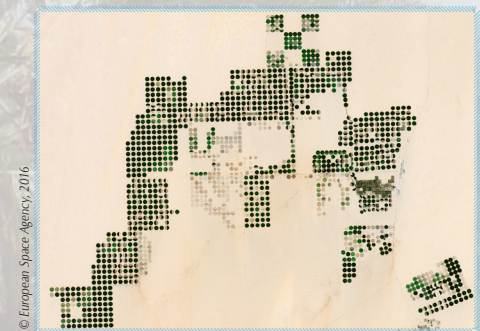
Andrea Borgarello@World Bank/TerrAfrica



Irrigated perimeter, Médenine,

MAIN ACTIVITIES

- Analysis of needs expressed by the end-users in terms of remote sensing derived products
- Diagnoses of existing earth observation approaches and methods
- Design and development of geospatial services
- Activation of an operational network of partners
- Development of the regional exchange and sharing platform
- Raising awareness and capacity building.



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Vue des zones irriguées par des pivots dans le désert égyptien captés par le satellite d'observation de la Terre (Sentinel 2)

EXPECTED RESULTS

- Methods and models for monitoring water, natural resources and crops
- Operational earth observation services to support decision-making
- Information systems for data sharing and experiences capitalization
- Integration of spatial observation into natural resource management.

OSS IS A COPERNICUS RELAYS

- Foster the use of Copernicus data in its action zone
- Acts as the main information point for devices development based on Copernicus satellite data.

