



Africa Knowledge Platform

Africa Regional Centres of Excellence
(ArcX) related to green transition

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European Commission – Joint Research Centre



Africa Knowledge Platform

The Africa Knowledge Platform is a scientifically driven **collaborative framework** focusing on devising innovative solutions leveraging **EO** and other **geospatial data** in support of global challenges within the **Green Transition** domain.

africa-knowledge-platform.ec.europa.eu

A single entry point for the **Regional Centres of Excellence programme for the Green Transition in Africa** by enhancing **cross-thematic** and **cross-regional synergies**, as well as fostering collaboration with major pan-African projects and initiatives around the following components:



Beneficiaries



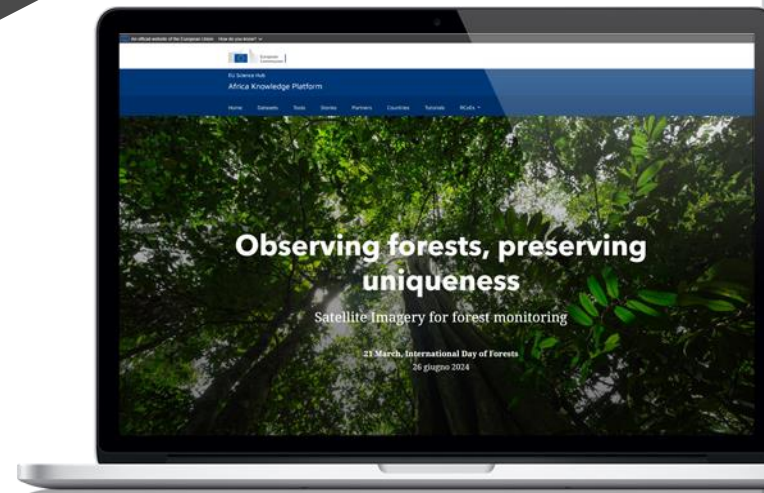
EU Delegations

DG INTPA
DG RTD
DG NEAR

African Regional Centers of Excellence

African Union Commission

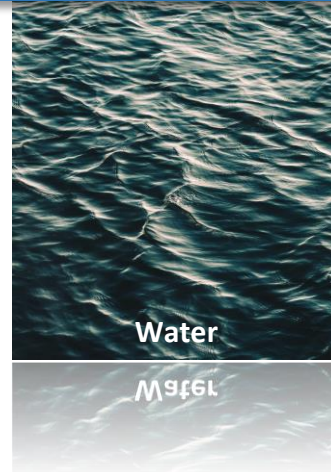
Civil society & Practitioners



Africa Knowledge Platform Regional Centres of Excellence for the Green Transition

AFRICAN REGIONAL CENTRES OF EXCELLENCE RELATED TO GREEN TRANSITION

Thematic Components



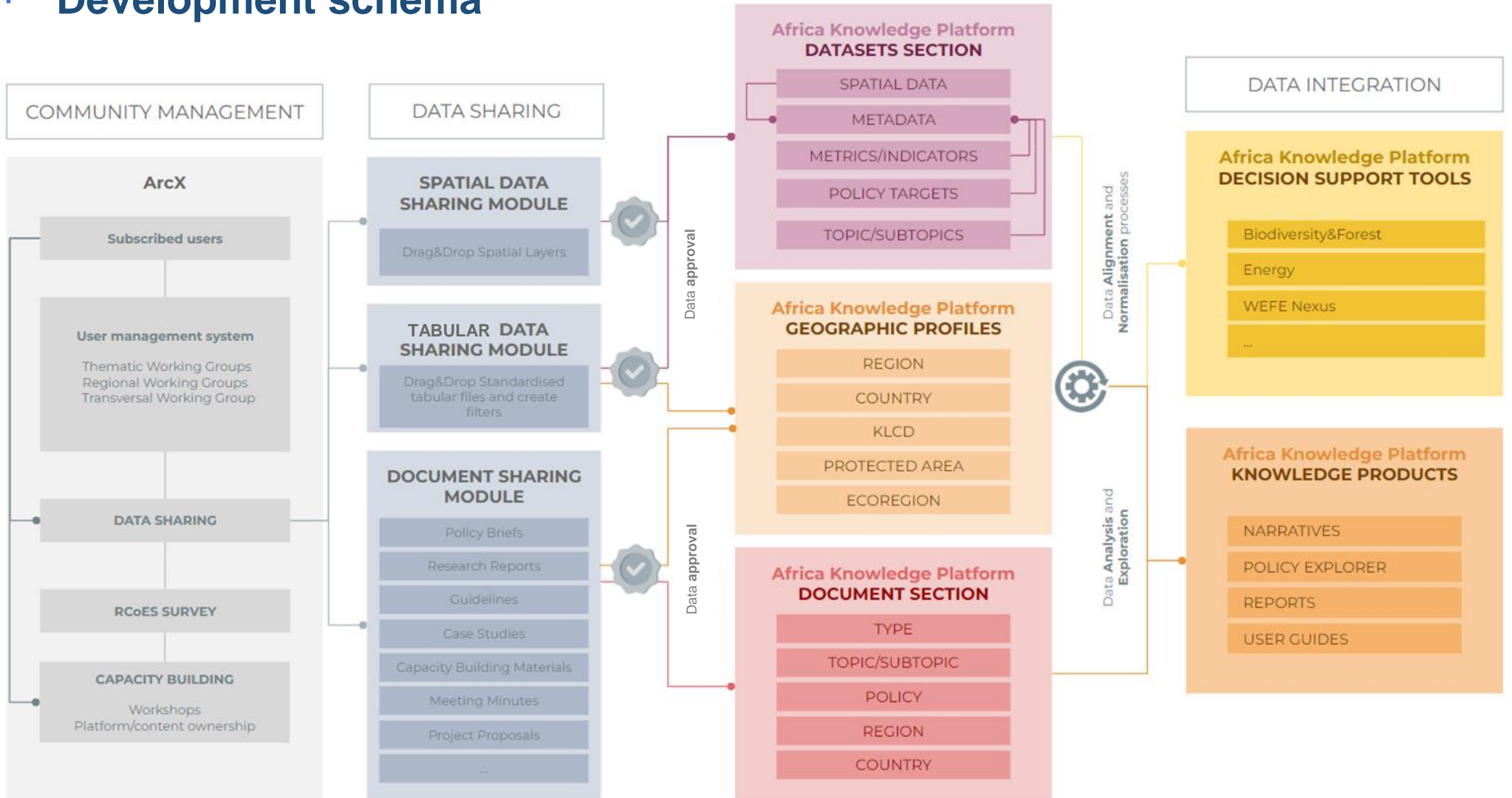
Transversal Component (AKP)

Devising innovative solutions leveraging **EO** and other **geospatial data** in support of global challenges within the **Green Transition** domain

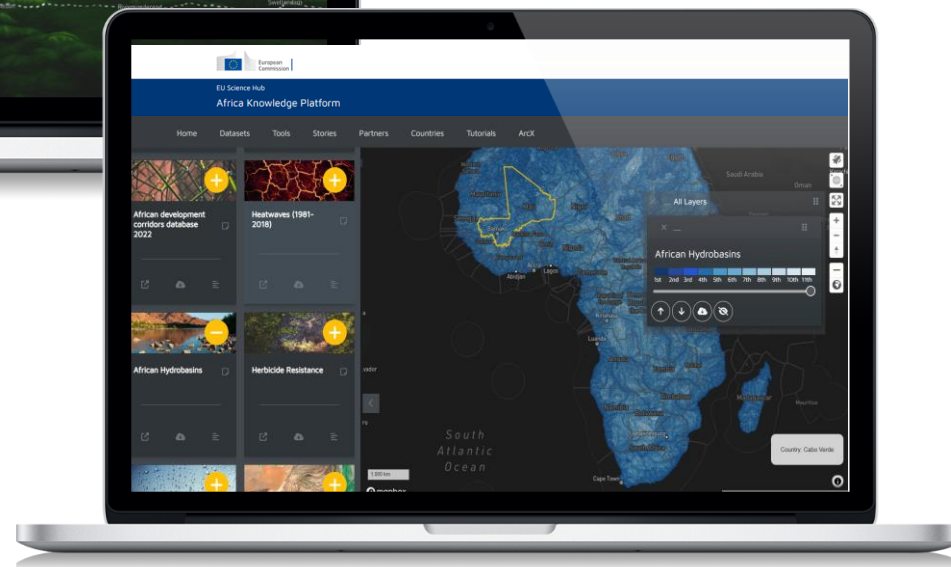
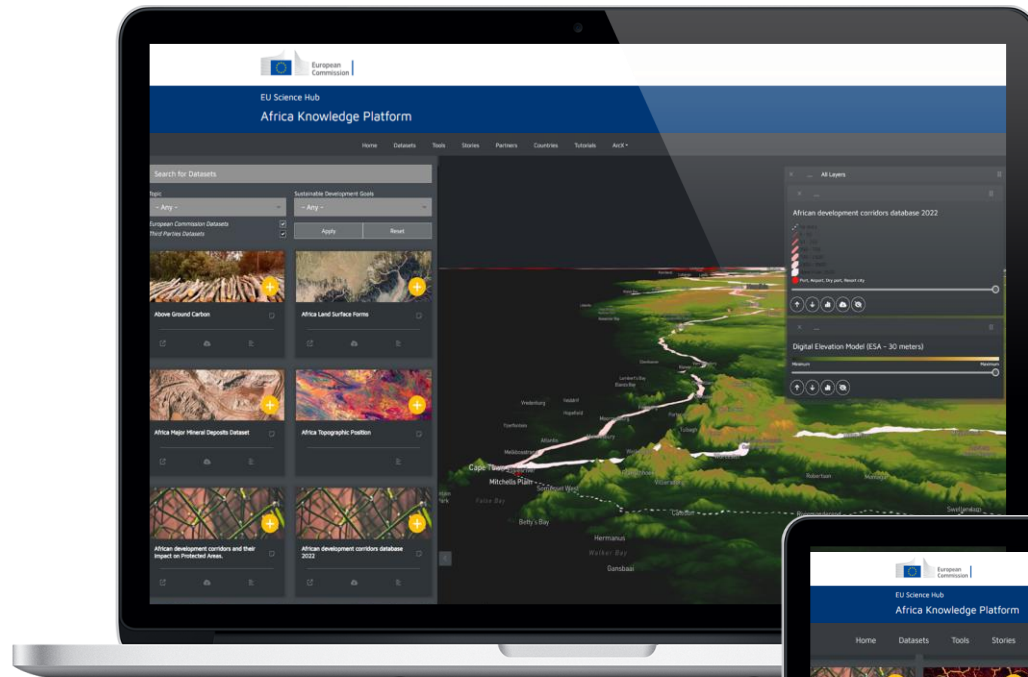
Enhancing **cross-thematic** and **cross-regional synergies**, as well as fostering collaboration with major pan-African projects and initiatives

Develop novel **decision-support systems** to help policy makers with **spatial prioritisation** and land use planning, strengthening of the **science-policy interface**

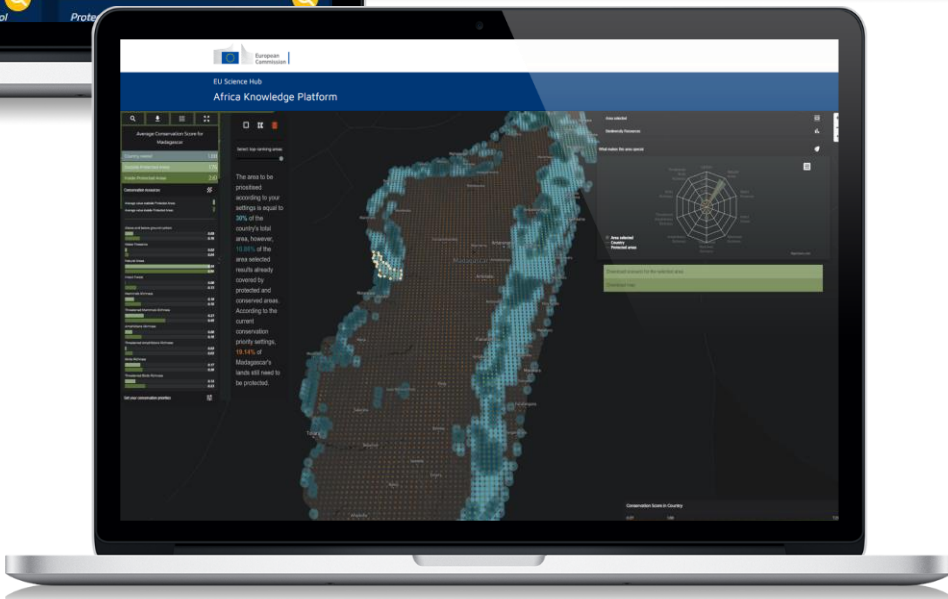
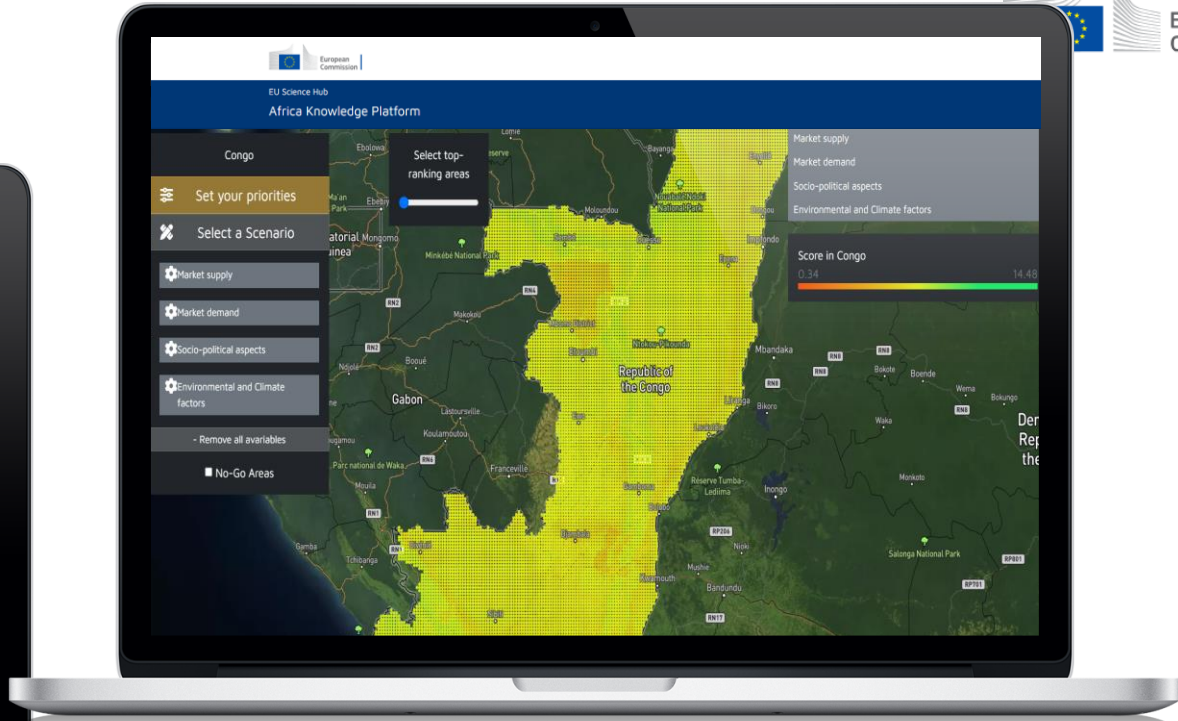
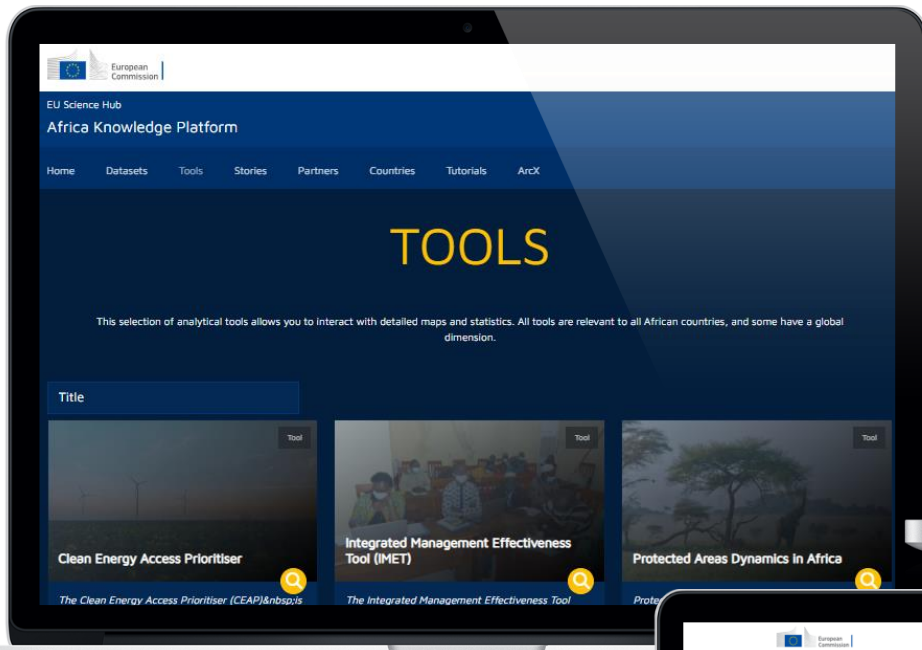
Africa Knowledge Platform Development schema



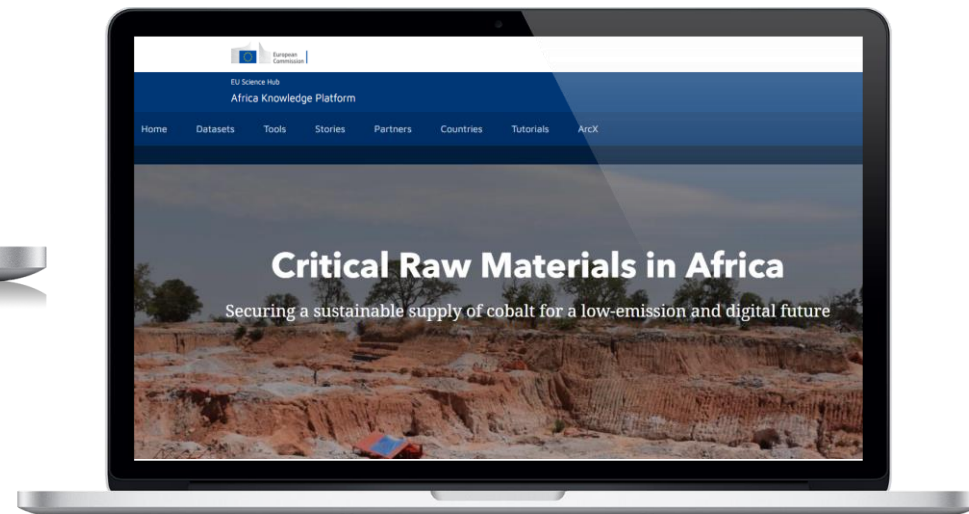
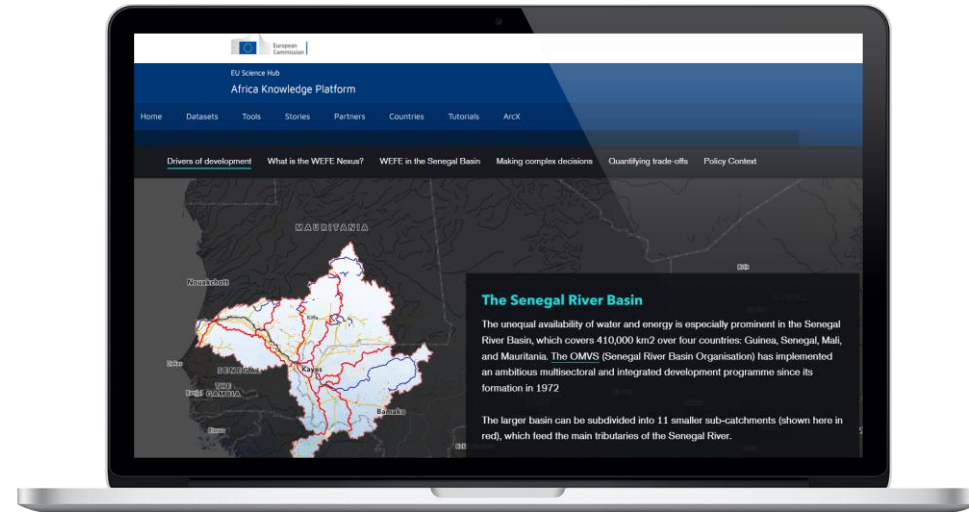
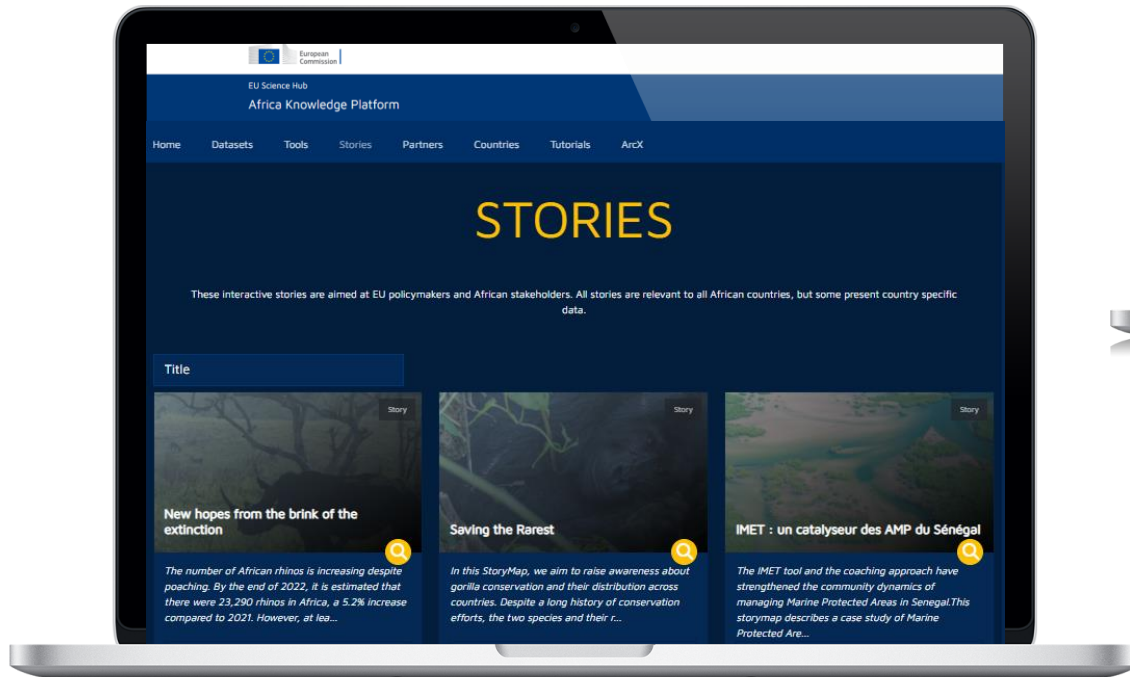
Africa Knowledge Platform Datasets



Africa Knowledge Platform Tools



Africa Knowledge Platform Stories



Africa Knowledge Platform

Country profiles

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Senegal

Senegal

Within the country profile you can explore global and national datasets and near real-time information.

Biodiversity & Forest

Terrestrial ecoregions
List of terrestrial ecoregions in country and protected areas coverage statistics.

Print Copy CSV Search:

NAME	AREA (km ²)	% OF ECOREGION IN COUNTRY	% OF ECOREGION PROTECTED IN COUNTRY	% COUNTRY CONTRIBUTION TO GLOBAL PROTECTION	% OF ECOREGION PROTECTED WORLDWIDE
Guinean forest-savanna mosaic	26467.36	3.95	25.749	5.74	25.75 <i>Aichi target 11 met</i>
Guinean mangroves	1470.14	6.582	64.641	18.064	64.64 <i>Aichi target 11 met</i>
Sahelian Acacia savanna	54149.73	1.78	36.435	6.195	36.44 <i>Aichi target 11 met</i>
unassigned_land	85.7	0.014	46.869	0.028	46.87 <i>Aichi target 11 met</i>
West Sudanian savanna	114602.16	7.023	21.322	9.424	21.32 <i>Aichi target 11 met</i>

Showing 1 to 5 of 5 entries

Previous 1 Next

Species Ecosystem Functions and Services Natural Resources Protected and Conserved Areas & Conservation Actions

Marine ecoregions
List of marine ecoregions in country and protected areas coverage statistics.

Print Copy CSV Search:

NAME	AREA (km ²)	% OF ECOREGION IN COUNTRY	% OF ECOREGION PROTECTED IN COUNTRY	% COUNTRY CONTRIBUTION TO GLOBAL PROTECTION	% OF ECOREGION PROTECTED WORLDWIDE
Canary Current	73431.53	4.087	0	0	0.00 <i>10.00% missing</i>
Equatorial Atlantic	25876.5	0.162	0	0	0.00 <i>10.00% missing</i>
Gulf of Guinea West	313.23	0.22	0	0	0.00 <i>10.00% missing</i>
Sahelian Upwelling	23665.27	37.742	12.272	31.666	12.27 <i>1.27% missing</i>

Showing 1 to 4 of 4 entries

Previous 1 Next

Marine Ecosystems Species Ecosystem Functions and Services Natural Resources Protected and Conserved Areas & Conservation Actions

Inland surface water
Areas of permanent and seasonal surface inland water and their changes over time (1984 - 2020) are expressed in km³ and percentages.

Land degradation
Virtual elevation profile of the country providing minimum, maximum, median, mean elevation values in meters.

3,000

Stable Productivity Product increase in productivity No increase Product loss due to productivity Product loss due to productivity Product loss due to productivity

Africa Knowledge Platform ArcX Portal



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- Transversal Component
- Thematic Components
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- News
- Newsletter

AFRICA
KNOWLEDGE
PLATFORM

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ArcX Programme

ArcX (Africa Regional Centres of Excellence) is at the forefront of Africa's sustainable development, driven by a collaborative effort between Africa and Europe. Our mission is to advance Science, Technology, and Innovation (STI) to meet the challenges of the green transition.

Learn More

About the ArcX Programme



Africa plays a critical role in the global green transition, and Arc X is dedicated to ensuring that this transformation is inclusive. By aligning with the EU Green Deal and the Science, Technology, and Innovation Strategy for Africa 2024, Arc X promotes growth that benefits all communities, particularly those most vulnerable to environmental changes.

The success of Arc X is built on the strong partnership between the European Union (EU) and the African Union (AU). This collaboration enhances innovation and research capabilities across both regions.

It strengthens local capacities by improving data collection, knowledge generation, and skill development among African scientists and policymakers. The African Regional Centres of Excellence act as innovation hubs, providing tailored solutions for each region's unique needs.

Discover More

Discover

- Biodiversity & Forest**
Objectives: The regional Centres of Excellence (RCoEs) become a reference point for updated information, able to influence policy decisions in the respective regions on forestry and
- Water**
Objectives: Conduct innovative research and provide recommendations to support decision-making on water resources management, environmental degradation, and disaster risk.
- Food Security & Agroecology**
Objectives: Strengthen the scientific, technological, and institutional capacities of Specialised Regional Organisations (SROs) and RMRNs/RCoEs in agroecology to produce.

<https://africa-knowledge-platform.ec.europa.eu/arcx>

Africa Knowledge Platform

ArcX Thematic hubs

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WATER

Objectives:

1. Conduct innovative research and provide recommendations to support decision-making on water resources management, environmental degradation, and disaster risk reduction (DRR) at both national and transboundary levels.
2. Enhance skills and build capacity.
3. Develop and implement response programs at all levels to improve management and ensure equitable access to water and WASH services.
4. Formulate and execute responses to environmental degradation and DRR.

Location: Botswana, Burkina Faso, Ghana, Kenya, Malawi, Mauritius, Mozambique, Namibia, Nigeria, Senegal, South Africa, Sudan, Uganda, Zambia, Zimbabwe
Duration: 48 months
Budget: 45 million
Lead Organisation: Stellenbosch University (South Africa)

AVAILABLE RESOURCES

Displaying 1 - 15 of 38

Title	Thumbnail	Summary
Water footprint		Water Footprint in Africa, considered as the sum of both the green and blue WF and defined as the ratio between evapotranspiration (in m3 per hectare) and crop yield (in ton per hectare). The value is...
Area equipped for irrigation, in 2 x GWV/m2		Area equipped for irrigation with groundwater, expressed in m2 multiplied by GWV/m2. Lower values of the indicator indicate that electricity would require the number of areas equipped for irrigation...
Households with water > 30 min away round trip, % of total		Percentage of households with water more than 30 minutes away round trip. The indicator reflects the crucial role of the water energy nexus and indicates that electricity access could generate greater...
Reservoirs - Global Dam Watch		The current version of the GDW database (version 1.0) contains 41,143 barrier and dam locations and 38,291 associated reservoir polygons. The GDW database aims to include all types of anthropogenic...
Barriers - Global Dam Watch		The current version of the GDW database (version 1.0) contains 41,143 barrier and dam locations and 38,291 associated reservoir polygons. The GDW database aims to include all types of anthropogenic...
Threatened Endemic Species Richness - Sharks and Rays		Africa's extraordinary richness in biodiversity and ecosystem services comprises a strategic asset for sustainable development. Yet the decline and loss of biodiversity hampers the sustainable social...

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BIODIVERSITY & FOREST

Objectives:

1. The regional Centres of Excellence (RCEs) become a reference point for updated information, able to influence policy decisions in the respective regions on forestry and biodiversity, contributing to the regional and global agendas.
2. Cross-sectoral and cross-regional coordination and strategic steering of RCEs will be improved to address the Science, Technology and Innovation challenges related to Africa's green transition.

Location: Eastern Africa, Western Africa, Central Africa, Southern Africa
Duration: 54 months (Central Africa); 48 months (Eastern Africa); 48 months (Western Africa)
Budget: 47 million (Central Africa); 65 million (Eastern Africa); 63 million (Western Africa)
Lead Organisation: CIFOR-ICRAF
ARC Thematic Unit

Regional Centres of Excellence:
Eastern and Southern African Regional Centre for Mapping Resources for Development (RCHRD)
Western Africa - Centre de Savoir Ecologique (CSE)
Central Africa - Observatoire des Forêts d'Afrique Centrale (OFAC)

AVAILABLE RESOURCES

Displaying 1 - 15 of 61

Go to:

Select a country

Title	Thumbnail	Summary
Integrated Management Effectiveness Tool (IMET)		The Integrated Management Effectiveness Tool (IMET) is a decision-support tool intended to identify the planning-motivating evaluation process to improve protected areas (PA) management at...
GBIF Data Browser		A placeholder layer to get the legend in the GBIF dataset
Important Marine Mammal Areas (IMMA)		The IUCN IMMA layer identifies specific habitat areas crucial for one or more marine mammal species, which may be suitable for conservation through delineation and management. IMMA...

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FOOD SECURITY & AGROECOCLOGY

Objectives:

1. Strengthen the scientific, technological, and institutional capacities of Specialized Regional Organizations (SROs) and IMMA/RCEs in agroecology to produce, collect, access, process, share data/information and to conduct impactful research activities using a gender sensitive approach.
2. Enhance the contribution of IMMA/RCEs in agroecology to transformative, high-quality research and the generation and dissemination of scientific knowledge.
3. Improve cross-sectoral and cross-regional coordination and strategic steering of RCEs to address the challenges related to Science, Technology and Innovation in Africa's green transition.

Location: Eastern Africa, Western Africa, Central and Southern Africa
Duration: 36 months
Budget: 42 million
Lead Organisation: Forum for Agricultural Research in Africa (FARA), ARC Thematic Unit

Regional Centres of Excellence:
Eastern Africa - International Centre for Insect Physiology and Ecology (ICPE)
Western Africa - West and Central Africa Council for Agricultural Research (WCAARF)
Southern Africa - Centre for Coordination of Agriculture Research and Development (CCARDESA)

AVAILABLE RESOURCES

Displaying 1 - 15 of 49

Title	Thumbnail	Summary
Water footprint		Water Footprint in Africa, considered as the sum of both the green and blue WF and defined as the ratio between evapotranspiration (in m3 per hectare) and crop yield (in ton per hectare). The value is...
Map of agricultural land of continental Africa		The map is based on Copernicus Global Land Cover data which shows actual land cover (what physically covers the soil across the globe - forests, grasslands, croplands, lakes, wetlands, built-up area, etc.). The value is...
Food insecurity and malnutrition in Africa		Measuring food insecurity in Africa, identifying root causes, and finding long-term solutions.
Digital Elevation Model (DEM) - ESA - 30 meters		The Copernicus DEM is a Digital Surface Model (DSM) that represents the surface of the Earth, including buildings, infrastructure and vegetation. It is offered in three resolutions and two extents (a...
Tuning SBAs into opportunities		New geographical analyses support European Commission efforts to unlock digital export through the AI4EU Innovation Agenda
Life Cycle Thinking for our food		Exploring the environmental impacts of food consumption with the example of African cocoa

Africa Knowledge Platform

News and events

Africa Knowledge Platform Newsletter



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NEWSLETTER

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Latest news from the work of the European Commission's Joint Research Centre on Africa, and updates on datasets, tools and stories available in the Africa Knowledge Platform: <https://africa-knowledge-platform.ec.europa.eu>.

Main Information

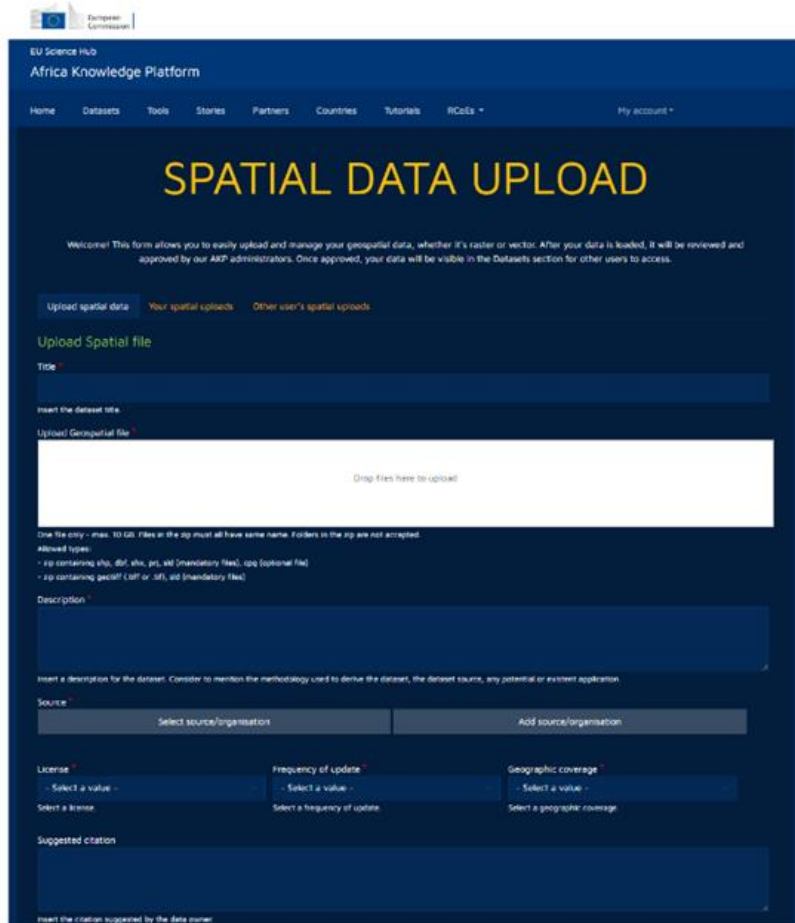
E-mail *

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By checking this box, I confirm that I want to register for this service and I give my consent to the European Commission to process my personal data for the purpose described in the [privacy statement](#) (that is, to receive information requested on different topics in the area of (a) service(s) of the European Commission through our newsletter or notifications).

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Africa Knowledge Platform Data Ecosystem – spatial data



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SPATIAL DATA UPLOAD

Welcome! This form allows you to easily upload and manage your geospatial data, whether it's raster or vector. After your data is loaded, it will be reviewed and approved by our AKP administrators. Once approved, your data will be visible in the Datasets section for other users to access.

Upload spatial data Your spatial uploads Other user's spatial uploads

Upload Spatial file

Title

Insert the dataset title.

Upload Geospatial file

Drop files here to upload

One file only - max. 10 GB. Files in the zip must all have same name. Folders in the zip are not accepted.
Allowed types
- zip containing shp, dbf, xls, prj, all (mandatory files), cpg (optional file)
- zip containing geojson (.json or .zip), all (mandatory files)

Description

Insert a description for the dataset. Consider to mention the methodology used to derive the dataset, the dataset source, any potential or existent application.

Source

Select source/organisation Add source/organisation

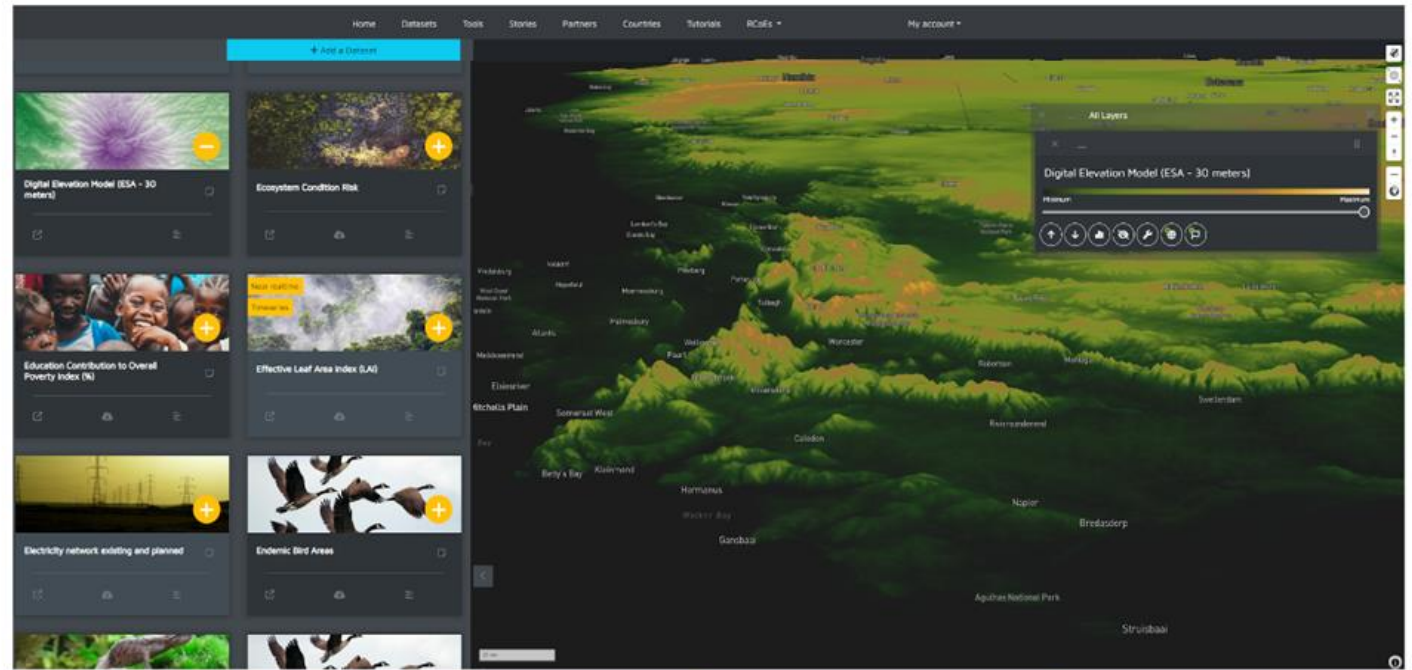
License Select a value - Select a license

Frequency of Update Select a value - Select a frequency of update

Geographic coverage Select a value - Select a geographic coverage

Suggested citation

Insert the citation suggested by the data owner.



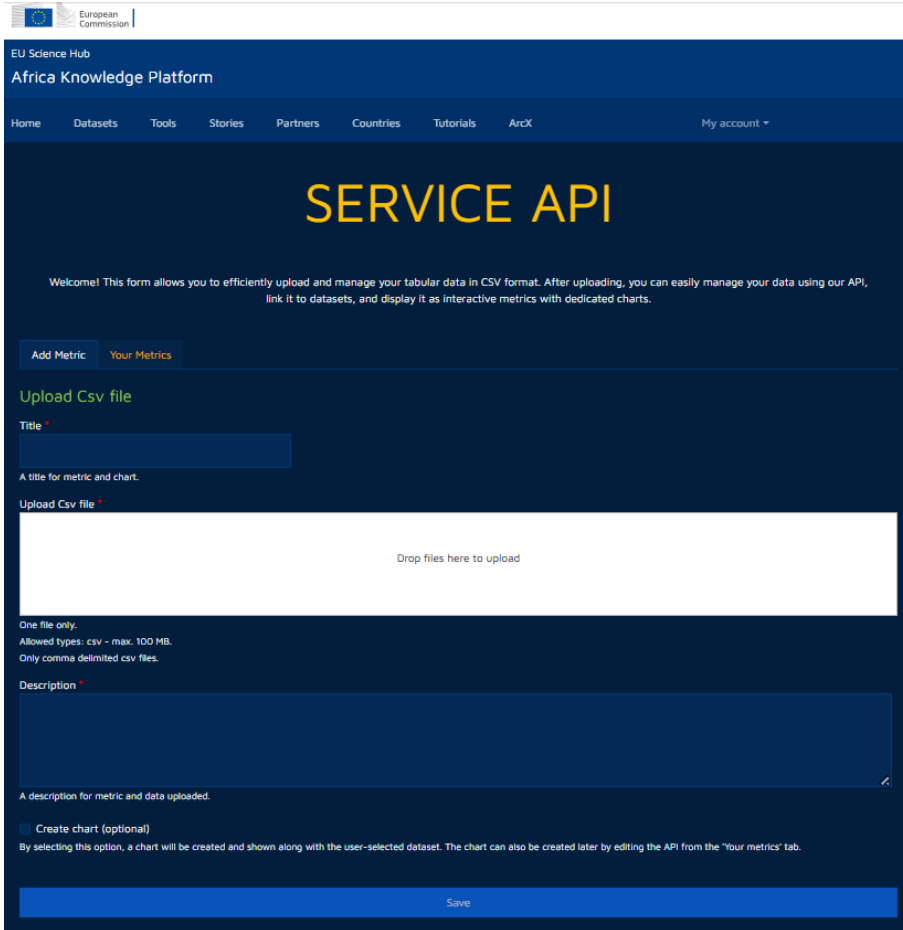
Link to RCoEs
Components and
to specific topics

Link to policies

Link
to indicators
and metrics

Ensure partners
ownership

Africa Knowledge Platform Data Ecosystem – tabular data



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SERVICE API

Welcome! This form allows you to efficiently upload and manage your tabular data in CSV format. After uploading, you can easily manage your data using our API, link it to datasets, and display it as interactive metrics with dedicated charts.

Add Metric Your Metrics

Upload Csv file

Title *

A title for metric and chart.

Upload Csv file *

Drop files here to upload

One file only.
Allowed types: csv - max. 100 MB.
Only comma delimited csv files.

Description *

A description for metric and data uploaded.

Create chart (optional)
By selecting this option, a chart will be created and shown along with the user-selected dataset. The chart can also be created later by editing the API from the "your metrics" tab.

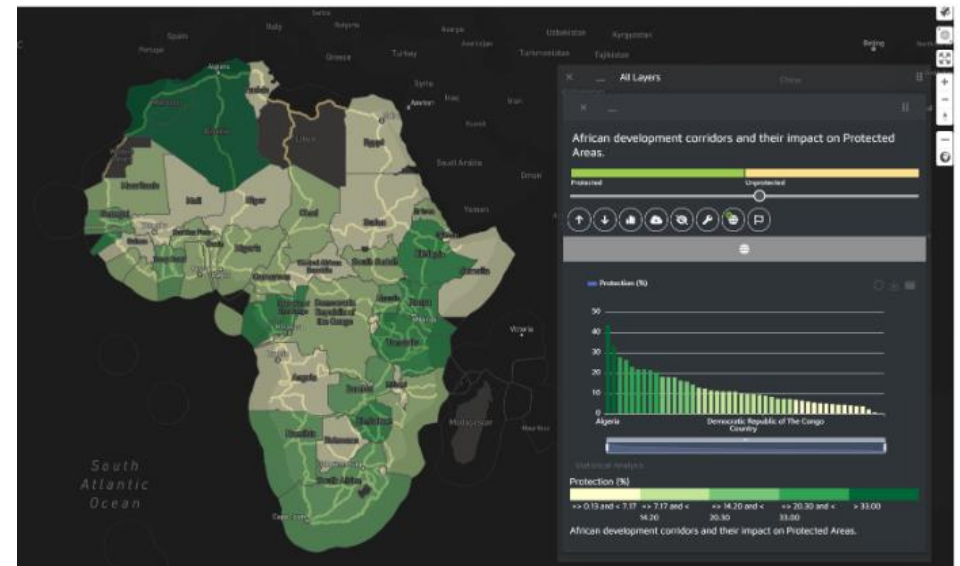
Save

Reusable APIs

Link to policies

Link to
datasets

Ensure partners
ownership

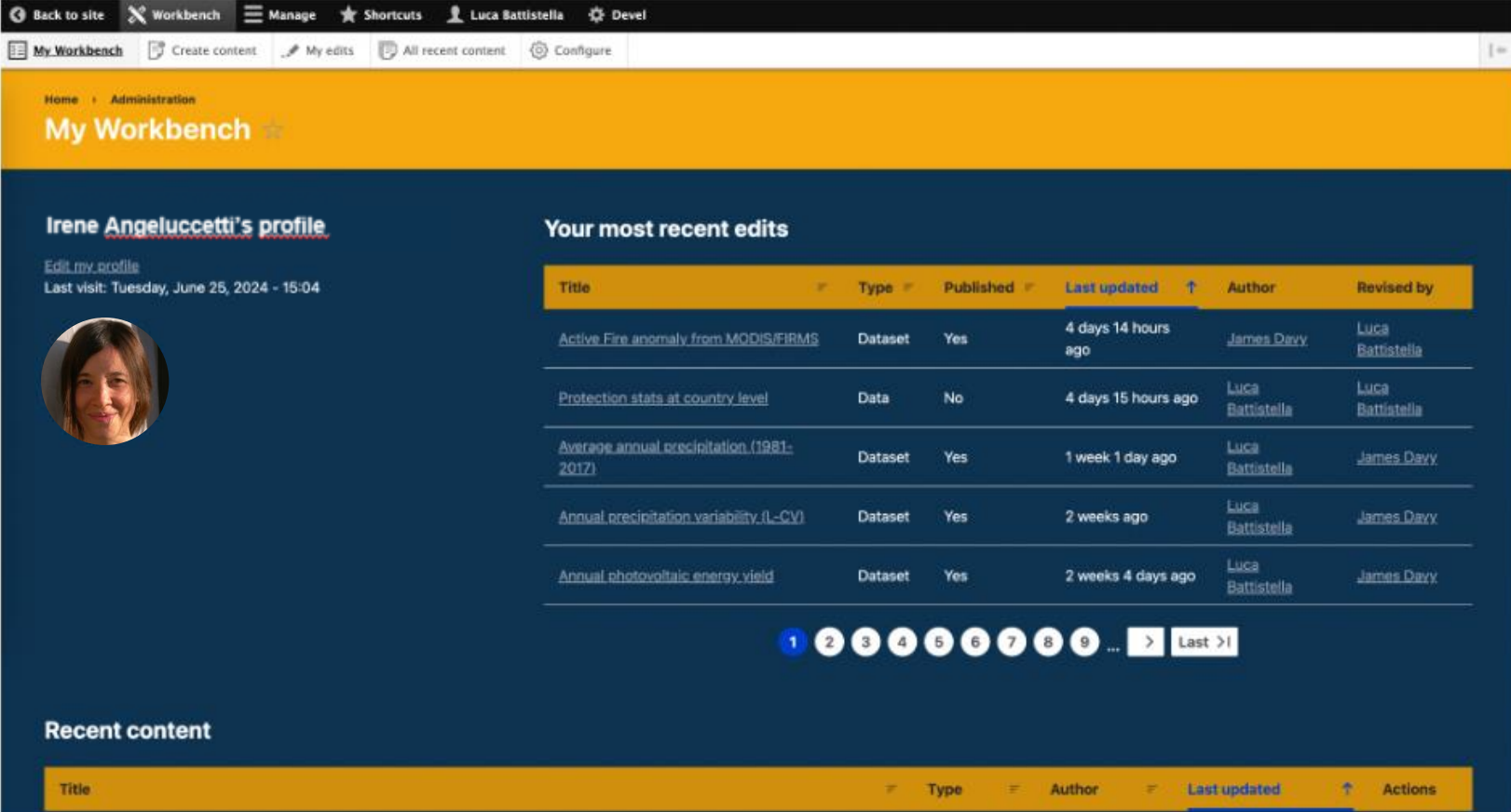


Africa Knowledge Platform

Data ecosystem - user management

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- Load Statistics
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- RCoE Survey results
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- Update your profile
- Log out



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Irene Angeluccetti's profile

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Last visit: Tuesday, June 25, 2024 - 15:04



Your most recent edits

Title	Type	Published	Last updated	Author	Revised by
Active Fire anomaly from MODIS/FIRMS	Dataset	Yes	4 days 14 hours ago	James Davy	Luca Battistella
Protection stats at country level	Data	No	4 days 15 hours ago	Luca Battistella	Luca Battistella
Average annual precipitation (1981-2017)	Dataset	Yes	1 week 1 day ago	Luca Battistella	James Davy
Annual precipitation variability (IL-CV)	Dataset	Yes	2 weeks ago	Luca Battistella	James Davy
Annual photovoltaic energy yield	Dataset	Yes	2 weeks 4 days ago	Luca Battistella	James Davy

1 2 3 4 5 6 7 8 9 ... > Last >|

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Africa Knowledge Platform

Planned work – Policy explorer

The user now digs into the wealth of knowledge spread across many platforms

AKP will provide organised information through the policy explorer



POLICIES will be

searchable by

- Geographic area of application
- RCoEs thematic component
- Projects

available

- In a dedicated AKP page
 - As summary
- As downloadable full text

connected to

- Datasets
- Statistics
- Story maps
- Decision Support Systems
- Good practices

Africa Knowledge Platform

Planned work – Decision Support Systems

Integrate socio-economic aspects

Leverage on user friendly frameworks

Aim for enhanced user customization

User uploaded data

User defined scale of analysis

User defined area of analysis

Integration with AKP datasets





Thank you!

Please visit africa-knowledge-platform.ec.europa.eu

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