Presented at the FIG Working Week 2019, during 22-26, 2019 in Hanoi, Vietnam

FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

"Geospatial Information for a Smarter Life and Environmental Resilience"

ORGANISED BY FIG

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land portal

What is the spatial platform? What are its functions?

Stay tuned and find out more at https://landportal.org/

Rik Wouters
sr land expert Kadaster NL

PRESENTATION OUTLINE

1. **WHAT** – ***Open Data Spatial Platform for Land Governance***
2. **WHY** – ***GIS for Non-GIS-Experts***
3. **HOW | The Backend** – ***Managing Different Data Types***
4. **HOW | The Frontend** – ***Understanding Data & Using Layers***
5. **VIEWER** – ***Prototype preview***
6. **WHAT'S NEXT?** – ***Stay tuned!***

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2019 Land Portal User Survey

Have your say

and take the survey now!

LAND AND THE SUSTAINABLE DEVELOPMENT GOALS (SDGs)

UN member States endorsed the 2030 Agenda and committed to implement the **Sustainable Development Goals (SDGs)**, a set of 17 Global Goals, in a 15-year period**. The 2030 Agenda for Sustainable Development** contains land-related targets and indicators under SDGs 1, 2, 5, 11 and 15. Many land organizations and stakeholders are committed to fully implementing the SDGs and to monitoring the land-related indicators in order to promote responsible land governance. Land is a significant resource, both cross-cutting and critical to achieving the SDGs.

Learn more about this initiative.

Discover the **eight targets** and **twelve indicators** related to land:

Jump to SDGs page...

Goal 1: No poverty

Target 1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property,

Tier status for SDGs indicators

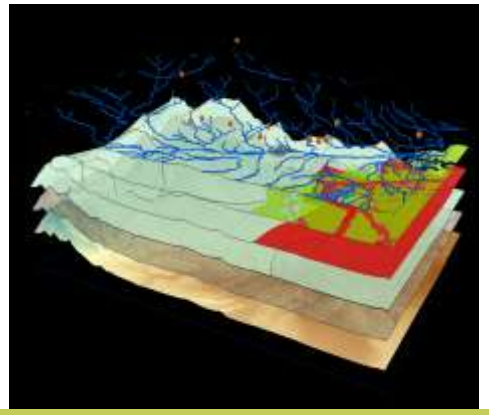
- **Tier 1**: Established and data being produced
- **Tier 2**: Established but no regular data
- **Tier 3**: No established methodology

1 NO POVERTY	1.4.2	Tier 2
2 ZERO HUNGER	2.3.1	Tier 3
	2.3.2	Tier 3
	2.4.1	Tier 3
5 GENDER EQUALITY	5.a.1	Tier 2
	5.a.2	Tier 2

WHAT

Open data spatial platform for land governance

- *The Land Portal pioneered the open data revolution in the land sector and is committed to building an inclusive information ecosystem for a better land governance at the local and global level*



The Land Portal spatial platform enables non-GIS-experts to combine, analyse and map large portions of data

- *To reach this ambitious goal we joined forces with partners with different operational and advisory roles:*

kadaster

Contecht

PlanB
VIRTUAL CONSTRUCTION

UNIVERSITY OF TWENTE.

land portal

WHAT

Open data spatial platform for land governance

> ***"With the Land Portal spatial platform we want to replicate the success of our existing data repository, extending our data model and approach to different types of spatial data"***
>
> *Laura Meggiolaro,*
> *Land Portal Coordinator*

- ***The Land Portal data approach is based on:***
  - ✓***State of the art Linked Open Data (LOD) technology & standards***
  - ✓***Full and free access to up-to-date data and metadata***
  - ✓***Great variety and flexibility*** *in handling different data types*
  - ✓***Data in perspective, data for all***

WHY

GIS for non-GIS-experts

Closing the gap between people and GIS data

- *As the current big data revolution provides an unprecedented amount of land-related data, a new demand for spatial data emerges from an increasingly wide and diverse range of stakeholders in the land sector. Yet, land-related data often remains fragmented and hard to access, with spatial data typically being produced and disseminated only within a small niche of GIS experts*

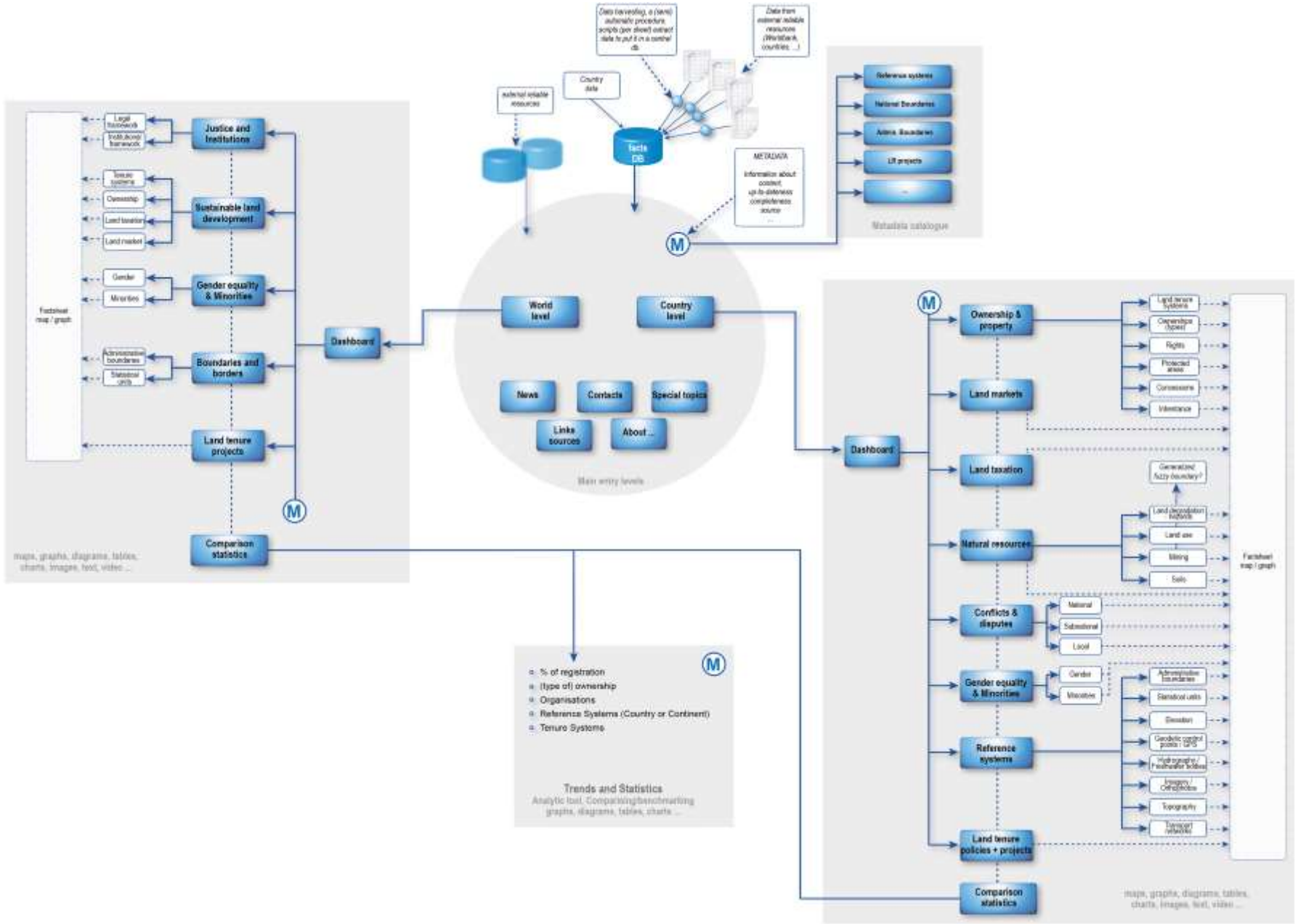
WHY

Land governance data in scale

Visualising land governance data across the globe

- *Addressing with limited resources the key land issues of the 21st century and realising the SDGs development agenda, require the harmonisation and the coordination of actions and policies both at the local and at the global level. To do so, the actors involved in land governance at all levels must be able to look at relevant data and information at different levels of spatial disaggregation.*

HOW | The architecture



HOW | The Backend

Managing Different Data Types

> ***“We want to deal with complexity in the back-end of the platform, providing a ready-to-use and hassle-free spatial tool to our diverse community of users”***
>
> *Marcello De Maria,*
> *Land Portal Data Analyst*

- ***Flexible and smart data management system*** *handling a variety of different data types:* ***not only explicit spatial dataset****, but also survey data & other data types containing useful but unstructured spatial information*

HOW | The Frontend

Understanding Data & Layers

- *Thanks to the back-end data management system, the end users of the platform will access ready-to-use, accurate, complete and up-to-date layers of land governance information from a variety of sources*

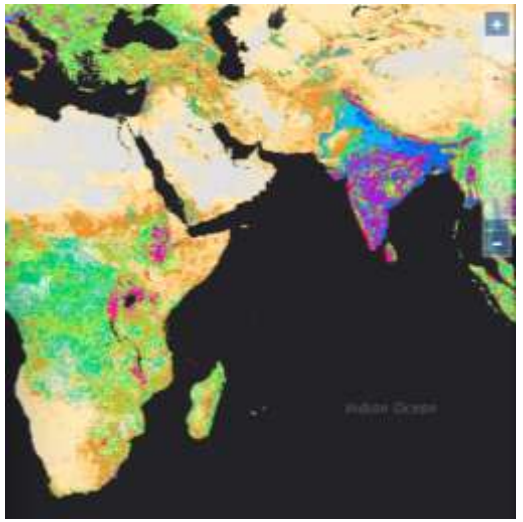
- *The **front-end main components are:***

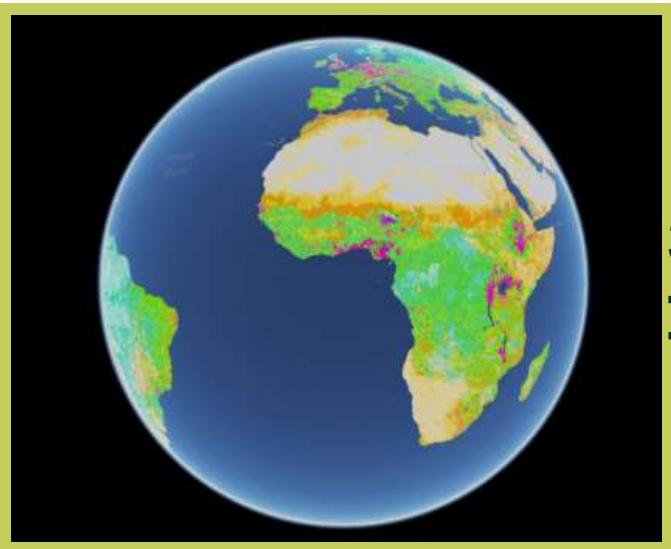
  - ✓ ***Guide** / How to / Help sections*
  - ✓ ***Searchable catalog** of indicators organised by themes, regions and datasets*
  - ✓ ***Viewer** – allowing for real-time data visualisation and analysis of multiple layers, with immediate access to curated metadata*

> ***"Users need to understand the meaning of the data they are looking at, they do not necessarily [redacted] to know the technical definition of GIS or lay[redacted]"***

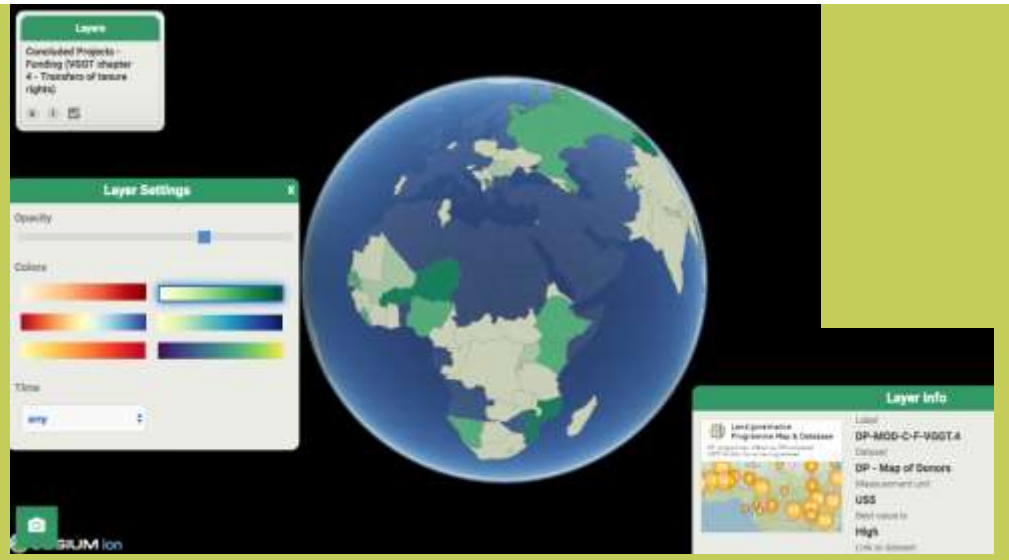
Viewer prototype preview

2D Viewer Prototype

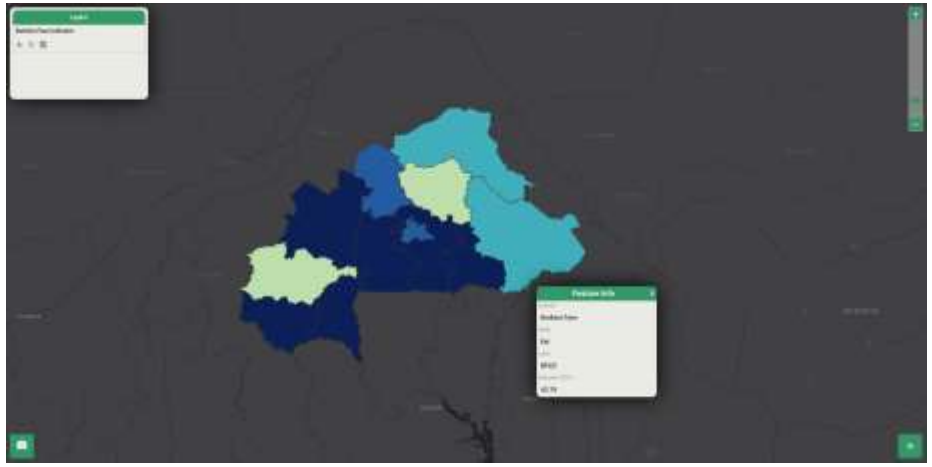


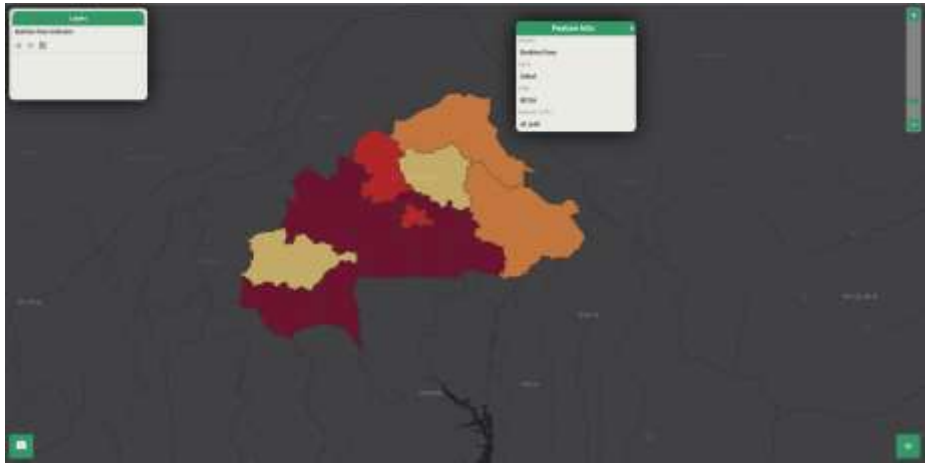


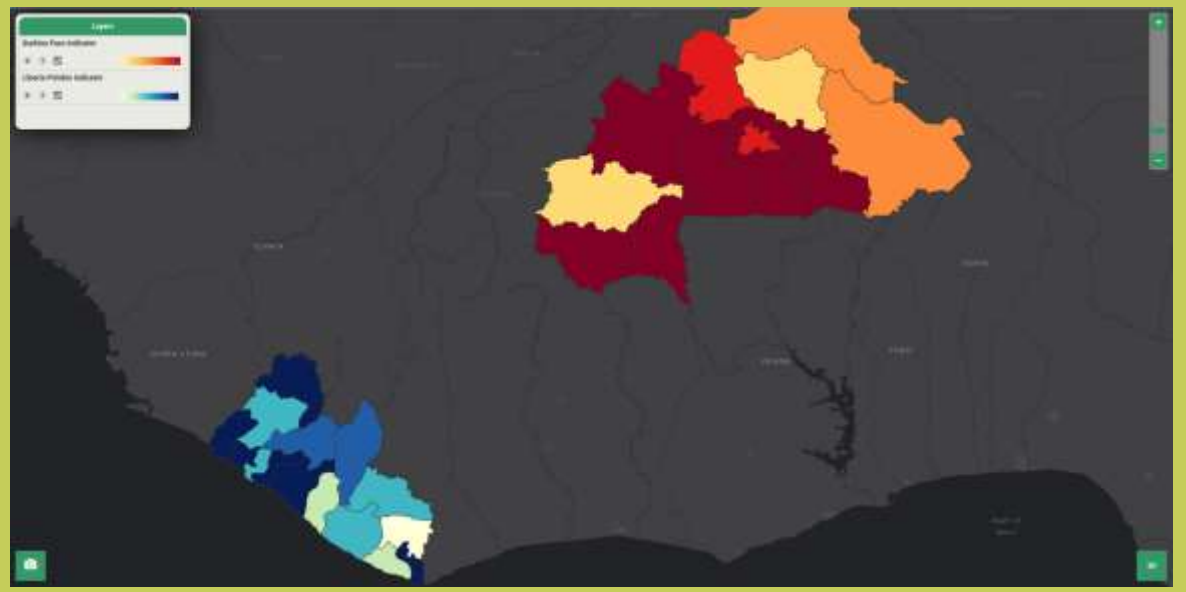
3D Viewer Prototype



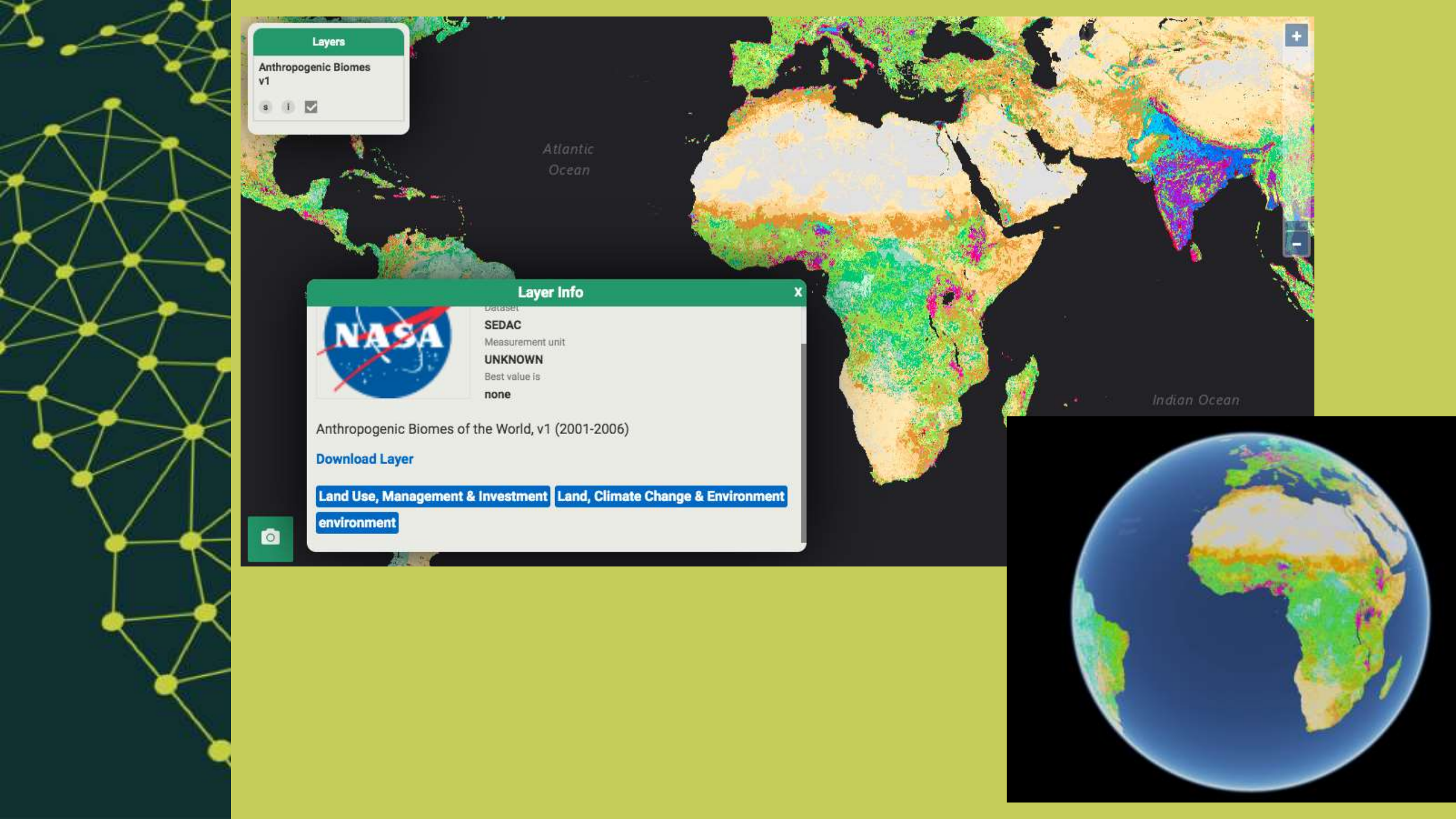
Viewer prototype preview





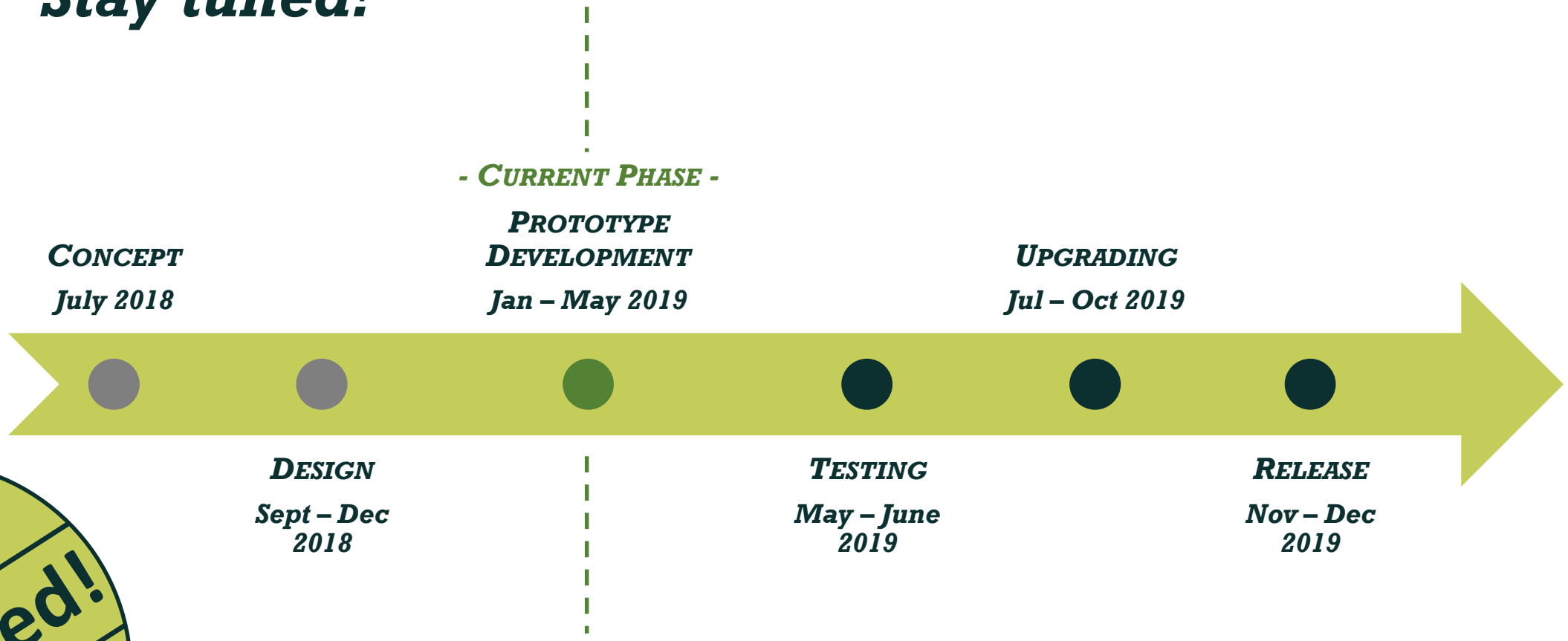


Zoom inside a country and see how data are distributed among the different regions


Layers
Anthropogenic Biomes v1
Atlantic Ocean
Indian Ocean
Layer Info
x
NASA
Dataset
SEDAC
Measurement unit
UNKNOWN
Best value is
none
Anthropogenic Biomes of the World, v1 (2001-2006)
Download Layer
Land Use, Management & Investment
Land, Climate Change & Environment
environment

WHAT'S NEXT?

Stay tuned!



- *We will soon start the prototype testing!*
  Do you want to help us by providing your feedback?
  Write to hello@landportal.info

amsterdam FIG

WORKING WEEK 2020

10–14 MAY

Smart surveyors for land and water management

GIN Geo-Informatie Nederland

WELCOME TO FIG WORKING WEEK 2020

Amsterdam, the Netherlands
10 - 14 May 2020

FIG Working Week is an exciting week-long conference that brings the international community of surveying and spatial professionals together to discuss key challenges of our time within the surveying profession with fellow peers. With the theme

Smart Surveyors for Land and Water Management

Please explore the website for more information. Enjoy. The organising committee looks forward to welcoming you to Amsterdam in 2020.

Thank you for listening

More info: Laura Meggialaro