



Food and Agriculture
Organization of the
United Nations

Hand-in-Hand Geospatial Platform Quick-Start Guide

Transforming data into impact

2022

Table of Contents

| | |
|--------------------------------------|-------------------------|
| Introduction | Page 3 |
| Access the platform and explore data | Page 4 |
| View the data catalogue | Page 5 |
| Add your own data | Page 6 |
| Create the map | Page 7 |
| Customize data | Page 8 |
| Country feature information | Page 9 |
| Time-series | Page 10 |
| Integration with FAOSTAT | Page 11 |
| External data | Page 12 |
| National data | Page 13 |
| Split map feature | Page 14 |
| Click and Play storytelling | Page 15 |
| Give feedback | Page 16 |
| Contact information | Page 17 |

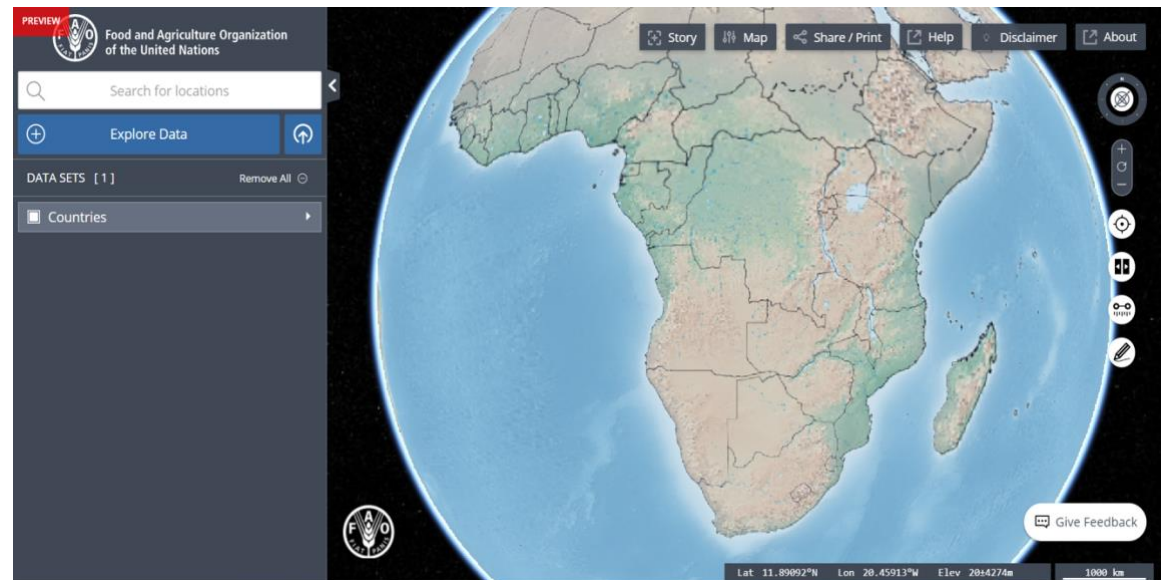
Hand-in-Hand Geospatial Platform Quick-Start Guide

The Hand-in-Hand Geospatial Platform is a supporting tool for the Hand-in-Hand (HiH) Initiative, an evidence-based, country-led and country-owned initiative to accelerate SDG1 and SDG 2, using the most sophisticated tools available, including advanced geospatial modeling and analytics to identify the biggest opportunities to raise the incomes and reduce the inequities and vulnerabilities of rural populations, who constitute the vast majority of the world's poor.

See the video for an introduction to the HiH Geospatial Platform: <https://www.youtube.com/watch?v=xKON7YWWXUI>

The platform brings together over 20 technical units from multiple domains across FAO, from Animal Health to Trade and Markets, integrating data from across FAO on Soil, Land, Water, Climate, Fisheries, Livestock, Crops, Forestry, Trade, Social and Economics, among others.

Data is also sourced from FAO partners and public data providers across the UN and NGOs, academia, private sector and space agencies. Over 1 million geospatial layers and thousands of statistics series with metadata records have been assembled to date.



Use the interactive HiH geospatial platform to produce data maps and create compelling impact stories. From remote-sensed geospatial data to statistical time series, the data visualization tool enables the analysis of public and private agricultural-related data at global, regional, national and subnational data.

Access the platform and explore the available data: <https://data.apps.fao.org/>

The data is divided into domain-specific categories and contains a long list of geospatial and statistical datasets across multiple sub-disciplines from global to subnational level.

The screenshot displays the FAO Data Apps interface. A red box highlights the 'Explore Data' button in the left sidebar, with the instruction: "Click on 'Explore Data' to access the data catalog". Another red box highlights the 'Water' tab in the top navigation bar, with the instruction: "Browse the domain(s), browse through available data layers and select the dataset(s) to apply". The main content area shows a search bar for the catalogue, a list of categories including Hydrological Basins of the World, Rivers of the World, Irrigation / Infrastructure, Climate, Analyses, Statistics (AquaSTAT), Water Productivity Remote Sensing (WaPOR), and External Datasources. The 'Water' category is selected, showing a description and an image of a person watering plants.

Click on 'Explore Data' to access the data catalog

Browse the domain(s), browse through available data layers and select the dataset(s) to apply

PREVIEW Food and Agriculture Organization of the United Nations

Search for locations

Explore Data

DATA SETS [1] Remove All

Countries

Food Security Crops Livestock Trade Land **Water** Climate Fishery Forestry Done

Socioeconomic and Demographic Novel Coronavirus (COVID-19) Boundaries My Data

Search the catalogue

- Hydrological Basins of the World
- Rivers of the World
- Irrigation / Infrastructure
- Climate
- Analyses
- Statistics (AquaSTAT)
- Water Productivity Remote Sensing (WaPOR)
- External Datasources

Water Share

Description

In a world with 7 billion people to feed amid growing concerns about land and water scarcity, today's land and water professionals need easy access to up-to-date information, models, approaches and technologies for sustainable food production.

View the data catalogue for more information on each dataset

Each dataset includes a description with more details and links to the data catalogue that contains the original source of the information as well as the metadata.

The description provides useful information on the dataset, from custodian to license, including links to the data catalogue for more information on the source

Countries requiring external assistance for food

Countries requiring external assistance for food are expected to lack the resources to deal with reported critical problems of food insecurity. Food crises are nearly always due to a combination of factors, but for the purpose of response planning, it is important to establish whether the nature of food crises is predominantly related to lack of food availability, limited access to food, or severe but localized problems. GIEWS updates this list four times a year. Accordingly, the list of countries requiring external assistance is organized into three broad, not mutually exclusive, categories:

- Countries facing an exceptional shortfall in aggregate food production/supplies as a result of crop failure, natural disasters, interruption of imports, disruption of distribution, excessive post-harvest losses, or other supply bottlenecks.
- Countries with widespread lack of access, where a majority of the population is considered to be unable to procure food from local markets, due to very low incomes, exceptionally high food prices, or the inability to circulate within the country.
- Countries with severe localized food insecurity due to the influx of refugees, a concentration of internally displaced persons, or areas with combinations of crop failure and deep poverty.

See more <http://www.fao.org/giews/country-analysis/external-assistance/en/>

Data and Resources

- Countries requiring external assistance for ... [Explore](#)
- Interactive Map [Explore](#)
- Config [Explore](#)
- Config featureInfoTemplate [Explore](#)

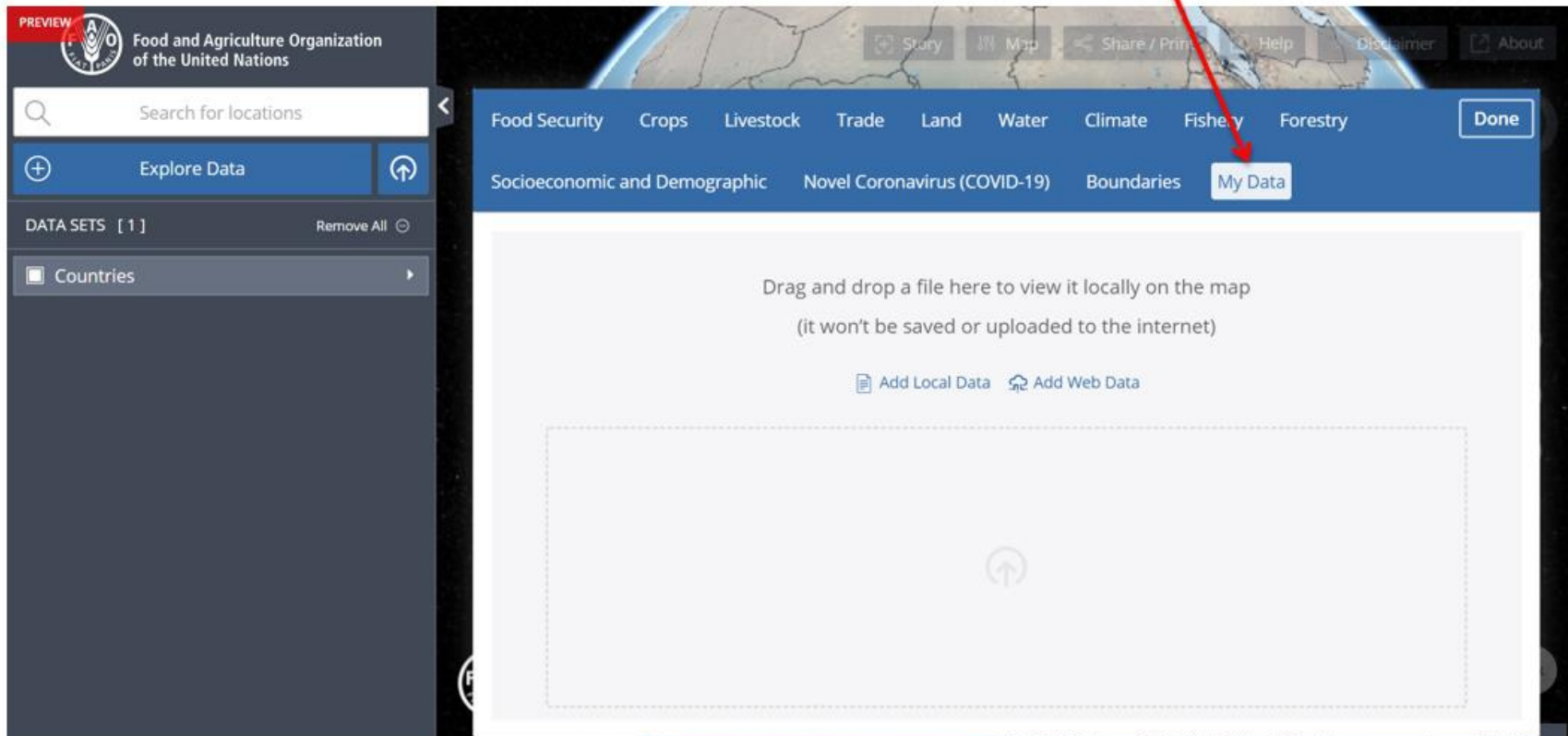
Additional Info

| Field | Value |
|--------------|---|
| Source | http://www.fao.org/giews/country-analysis/external-assistance/en/ |
| Last Updated | July 15, 2020, 2:34 PM (UTC+02:00) |
| Created | June 14, 2020, 9:17 PM (UTC+02:00) |

Add your own public or private data

Upload local or web data to complement datasets available in the platform to compare private or sensitive data to publically available data without sharing it with other platform users.

Select 'My Data' to upload local files or data from web



Add all the selected datasets to the map

Once you have decided on the datasets to select, click on 'Add to the map' to view the data directly on the map. You can choose one dataset or select multiple datasets to overlay and compare them in the map viewer.

Select all the datasets you want to view and click
'Add to the map'

The screenshot displays the FAO Data Explorer interface. On the left, a sidebar shows the 'DATA SETS [1]' section with a 'Countries' filter. The main panel features a search bar and a list of datasets under the heading 'Hotspots (Countries requiring external assistance for food)'. The datasets listed are 'Food Security Indicators', 'World Development Indicators (WDI)', and 'National'. A map preview on the right shows a world map with highlighted regions in Africa and Asia. A red box highlights the 'Add to the map' button on the map preview, with a red arrow pointing to it from the text box above. The top navigation bar includes categories like 'Food Security', 'Crops', 'Livestock', 'Trade', 'Land', 'Water', 'Climate', 'Fishery', and 'Forestry'. A 'Done' button is visible in the top right corner of the main panel.

Customize your data by adjusting the available features

The platform provides multiple features to customize data visualization. The left hand column contains your workbench and legend that describes each dataset that you have added to the map. Depending on the type of data, you can adjust the opacity of the colors, select the year, and further refine the criteria. Using the cursor you can zoom-in from global to subnational level or move left and right to view different continents.

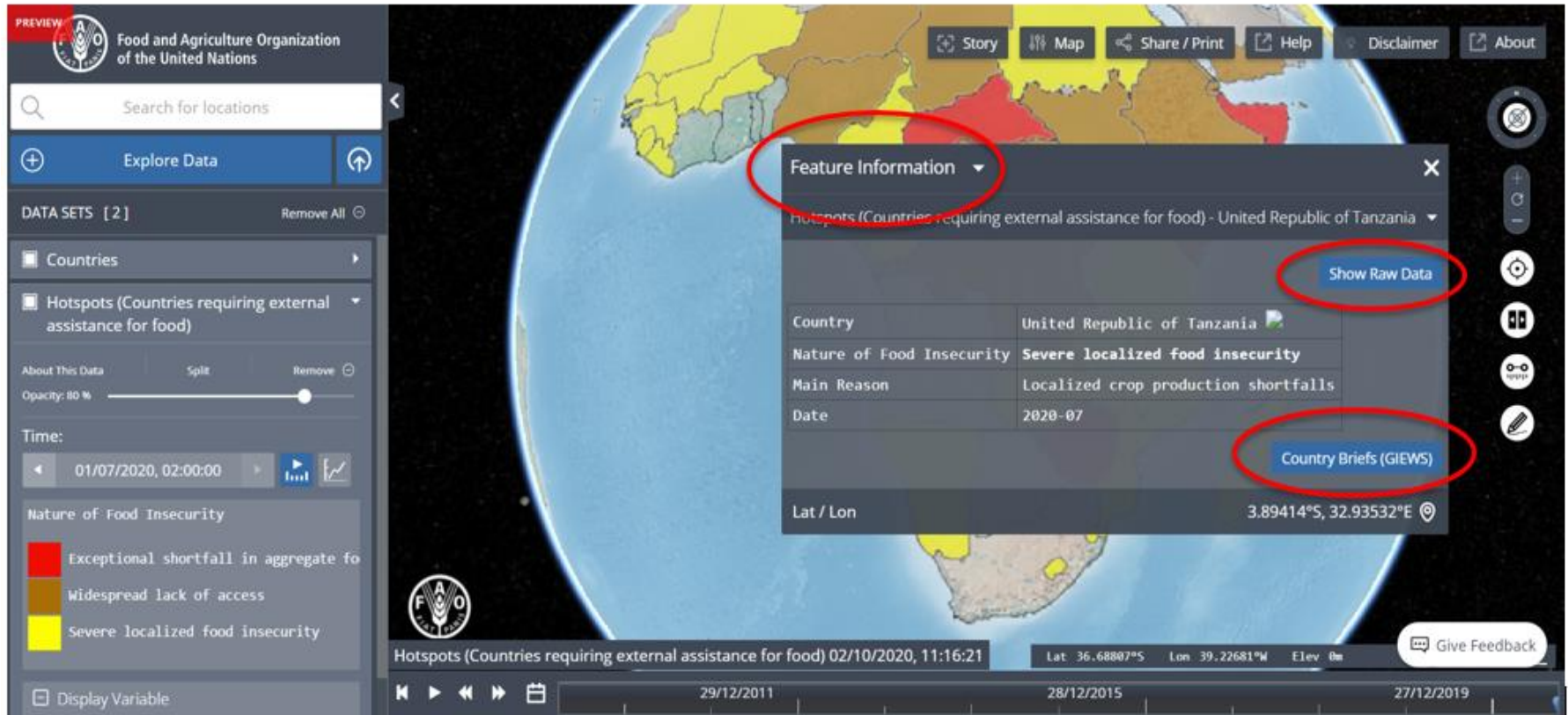
This is your workbench where you can see all your selected datasets and customize their features

Choose the background Earth map and move your cursor to rotate around different regions of the globe

The screenshot displays the FAO Data Explorer interface. On the left, the workbench shows the FAO logo, a search bar, and a list of data sets: 'Countries' and 'Hotspots (Countries requiring external assistance for food)'. The 'Hotspots' dataset is selected, showing an opacity of 80% and a time slider set to 01/07/2020, 02:00:00. A legend titled 'Nature of Food Insecurity' defines three categories: 'Exceptional shortfall in aggregate food availability' (red), 'Widespread lack of access' (brown), and 'Severe localized food insecurity' (yellow). The main map area shows a globe with these categories overlaid on the African continent. Navigation tools like 'Story', 'Map', 'Share / Print', 'Help', 'Disclaimer', and 'About' are visible at the top of the map. A 'Give Feedback' button is at the bottom right. A timeline at the bottom shows dates: 29/12/2011, 28/12/2015, and 27/12/2019.

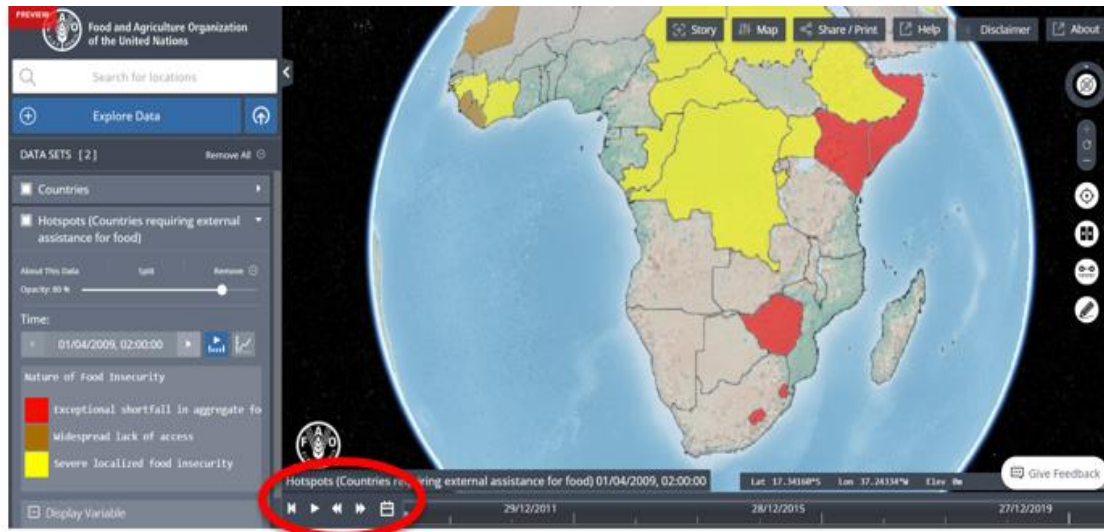
View specific feature information of your data by country

Click on any country on the map to view specific information related to the dataset selected and access the raw data or additional resources. The example below of Hotspots (countries requiring external assistance for food) displays country, nature of food insecurity, main reason, as well as latitude and longitude.

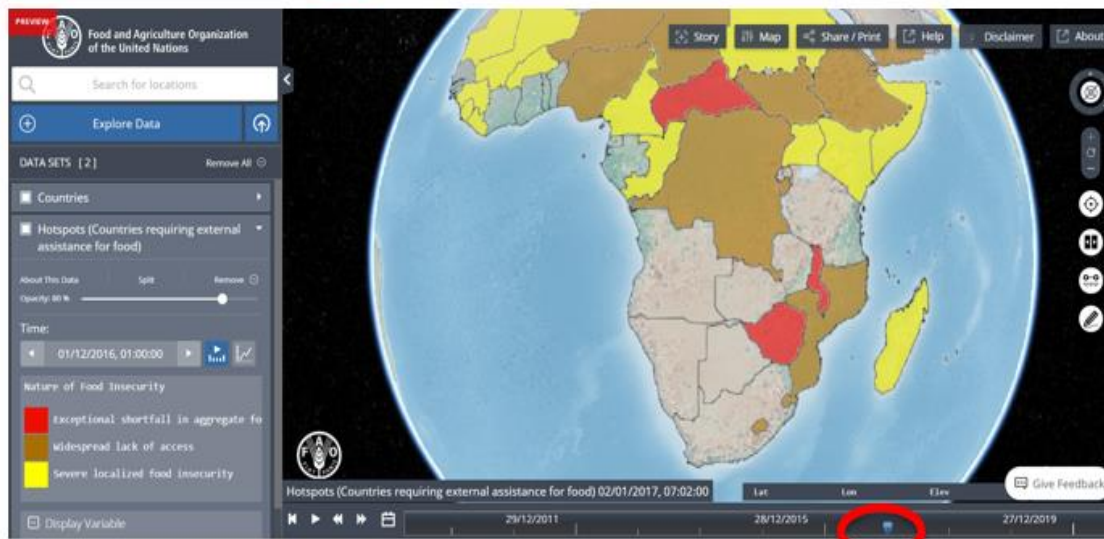


Adjust the features to show trends over time

Use the slider on the bottom to view the changes over time for your selected dataset or datasets.



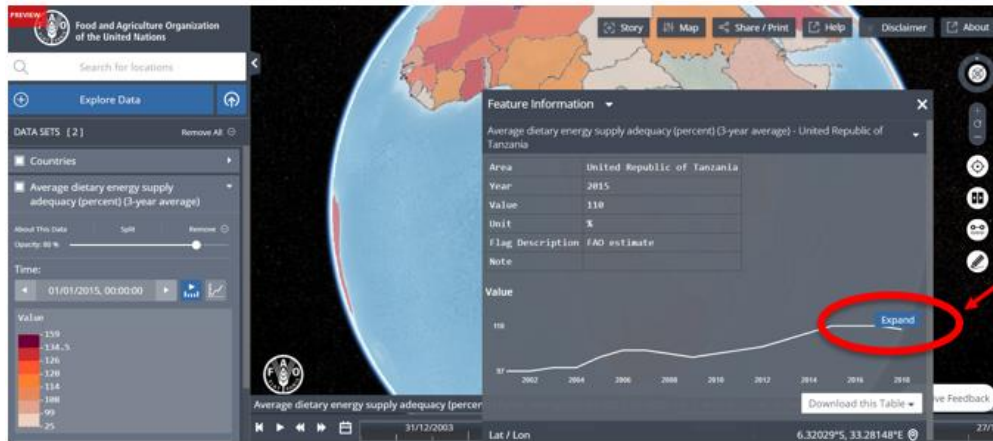
Hotspots (countries reporting external assistance for food) in 2009



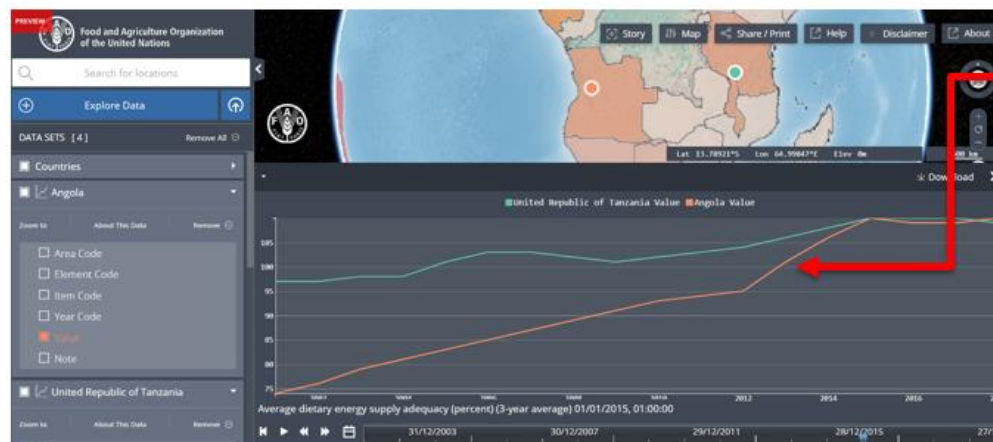
Hotspots (countries reporting external assistance for food) in 2015

Direct integration with FAOSTAT enables time series trends on the map

In addition to retrieving information from the data catalogue, the platform pulls data directly from FAOSTAT¹ in real-time and generates table comparisons for each country simply by clicking on 'Expand' and then selecting another country and clicking on 'Expand' again.



Select the country and click on 'Expand' to view the table

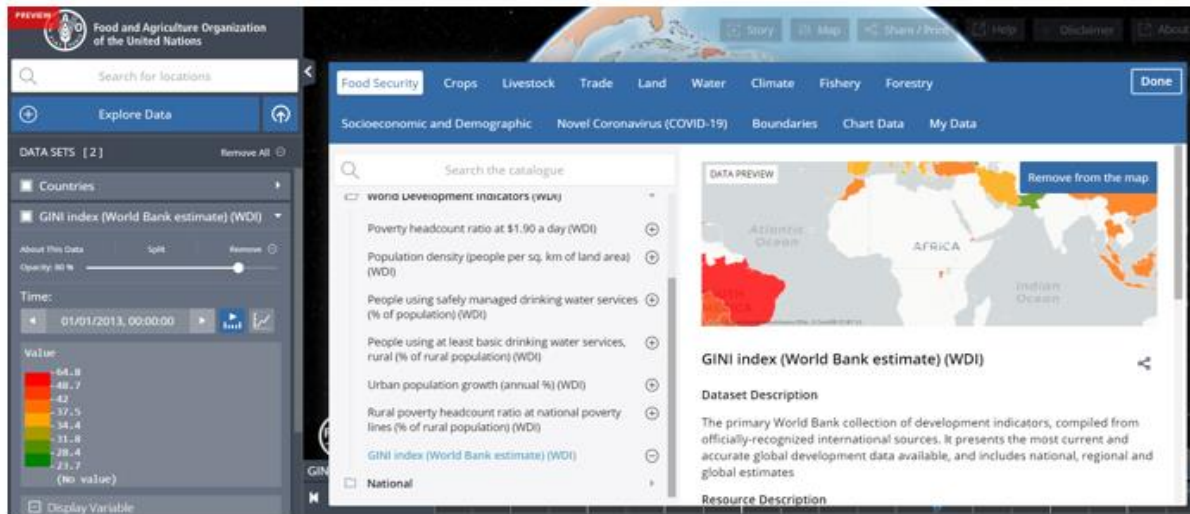


Select another country and click on 'Expand' again to view the table with country comparisons

¹ FAOSTAT provides free access to food and agriculture data for over 245 countries and territories and covers all FAO regional groupings from 1961 to the most recent year available.

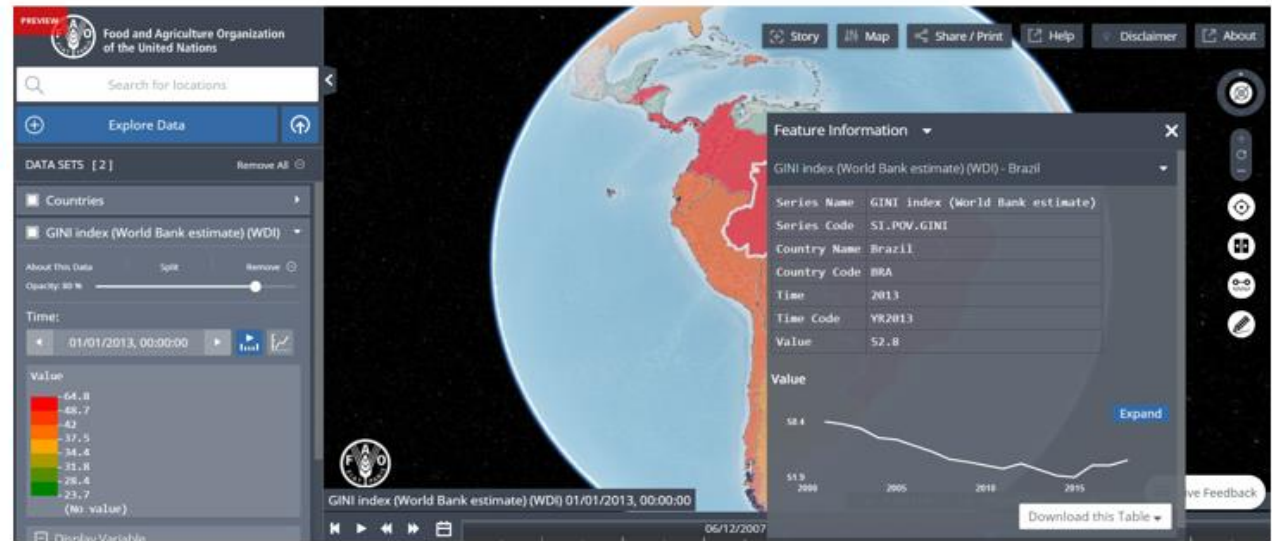
Compare data from external leading data collection agencies

Data is also available from leading agencies with data collection capabilities to facilitate comparisons of cross-sectoral data for more informed, more comprehensive agricultural-related data-driven maps.



Example: GINI Index (World Bank Indicators) and other World Bank indicators are available

View the *feature information* for external datasets and click on 'Expand' for comparisons



Add national data to strengthen country reports

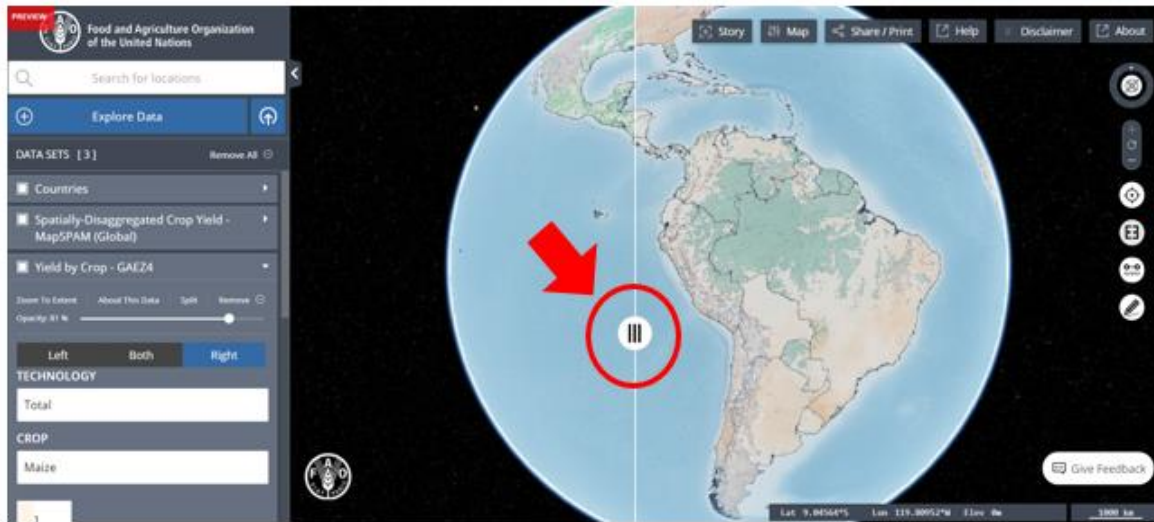
Publically available national data is already integrated in the platform using the Database of Global Administrative Areas (GADM) for subnational boundaries. Any private data can be added through the 'My Data' feature shown above in the case of sensitive data.

National and subnational data at different admin levels is available to view more accurate and localized data

The image displays three sequential screenshots of the FAO Data Explorer interface. The first screenshot shows the 'Countries' list with 'Niger' circled in red. The second screenshot shows the 'Poverty Map (Nigeria - Admin 2)' dataset selected, with a red arrow pointing to the 'Dataset Description' section. The third screenshot shows the resulting map of Nigeria with a legend for 'PopulInt (est.)_2014' and a 'Give Feedback' button.

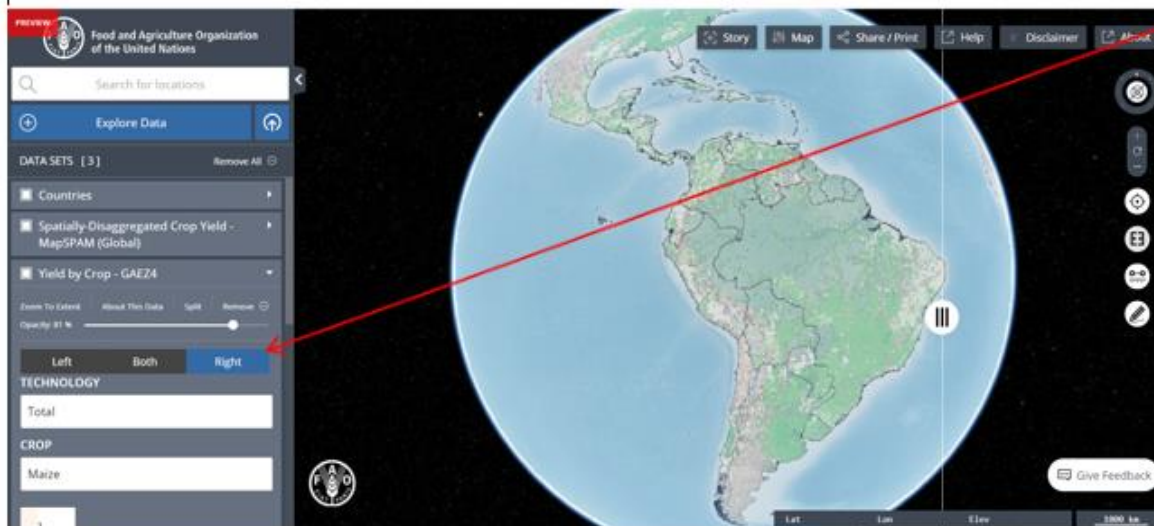
Use the 'split' feature to compare different datasets

The 'split' feature allows you to compare different data, moving left and right with cursor, for comparison.



Add two or more datasets
and select 'split'

Separate the data from right
and left in order to view the
comparison



Transform your data map into a “click and play” impact story

Once you are finished assembling the data, save and publish your data by capturing each scene and adding brief descriptions to create a compelling data-driven story to make your case.

1. Select 'Story' and add text to describe each data map

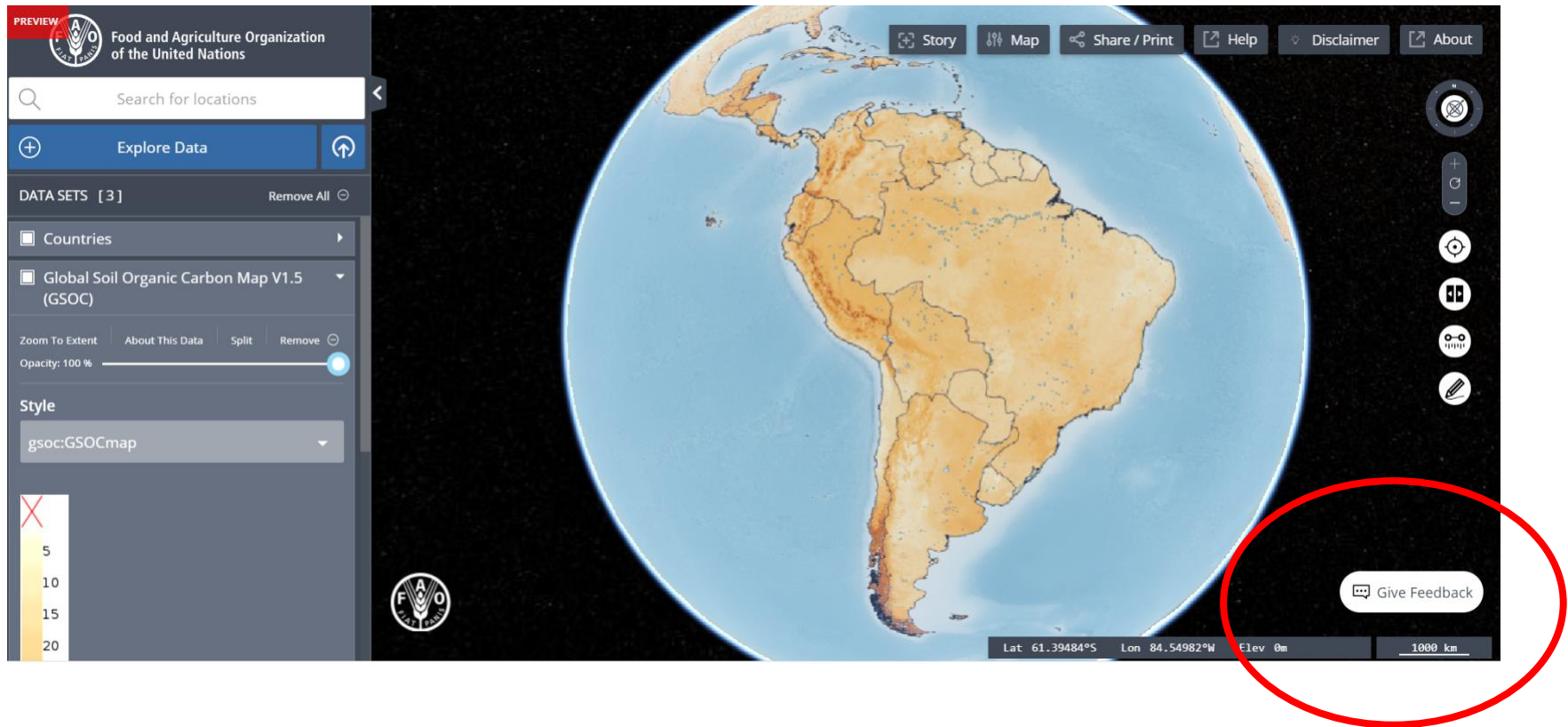
3. Select "Share/Print" to generate a unique URL and save or share your

2. Select 'Capture Scene'

The screenshot displays the FAO StoryMap interface. On the left, a sidebar shows the 'Explore Data' section with 'DATA SETS [3]' including 'Boundaries', 'Rift Valley fever', and 'disease'. The 'Rift Valley fever' dataset is selected, and its variables are listed under 'Display Variable'. The main map area shows a satellite view of the region with green and red overlays representing disease events. A text editor window is open over the map, containing the following text: 'Integration of geospatial data from the Gridded Livestock in the World (GLW) database and Er', 'Compare Human Population Density to distribution of cattle (GLW) and Rift Valley Fever disease events (Empres-i)', and 'Timothy Robinson, Giuseppina Cinardi (AGAL), Fairouz Larfaoui, Claudia Pittiglio (AGAH) Animal Production and Health Division (AGA)'. A 'Capture Scene' panel is visible on the right, showing a play button and a 'Capture Scene' button. The bottom of the interface features a timeline with dates '30/12/2007' and '29/12/2011' and a scale bar of '200 km'.

Give Feedback directly through the platform

The HiH team is working to continuously integrate new datasets and create country and domain specific evidence-based case studies to improve targeting and tailoring of policy interventions, innovation, finance and investment, and institutional reform. For feedback related to data or to the platform, select 'Give Feedback'.



Ready to get started?

Access the platform and start creating your data maps: <https://data.apps.fao.org/>

For more information or to get involved contact fao-data@fao.org

All maps in this publication have been created using shapefiles from the United Nations.

Source: FAO Hand-in-Hand Geospatial Platform. 2023. Map geodata [shapefiles]. New York, USA, United Nations.

The boundaries and names shown and the designations used on these map(s) do not imply the expression of any opinion concerning the delimitation of its frontiers and boundaries. Dashed lines on maps represent approximate border lines for which there may not yet be full agreement.