



East Africa Drought Watch

Regional Drought Monitoring and Early Warning
System

Continental Capacity Building Workshop on ADMA and Validation
of the EADW v.2.0 for Early/Anticipatory Action

Integrating EADW into Bulletins

Bulletins are a primary means of disseminating crucial information about drought conditions and recommended actions. They serve as tools for:

1. Timely Information Dissemination:

- Up to Ten-day updates
- 5 essential parameters: rain, temperature, soil-moisture, vegetation, and combinations of these

2. Risk Assessment and Preparedness:

- Historical overview down to 1991
- Landscape context information to assess the impact
- Socio-economic information integration to assess vulnerability

3. Decision Support:

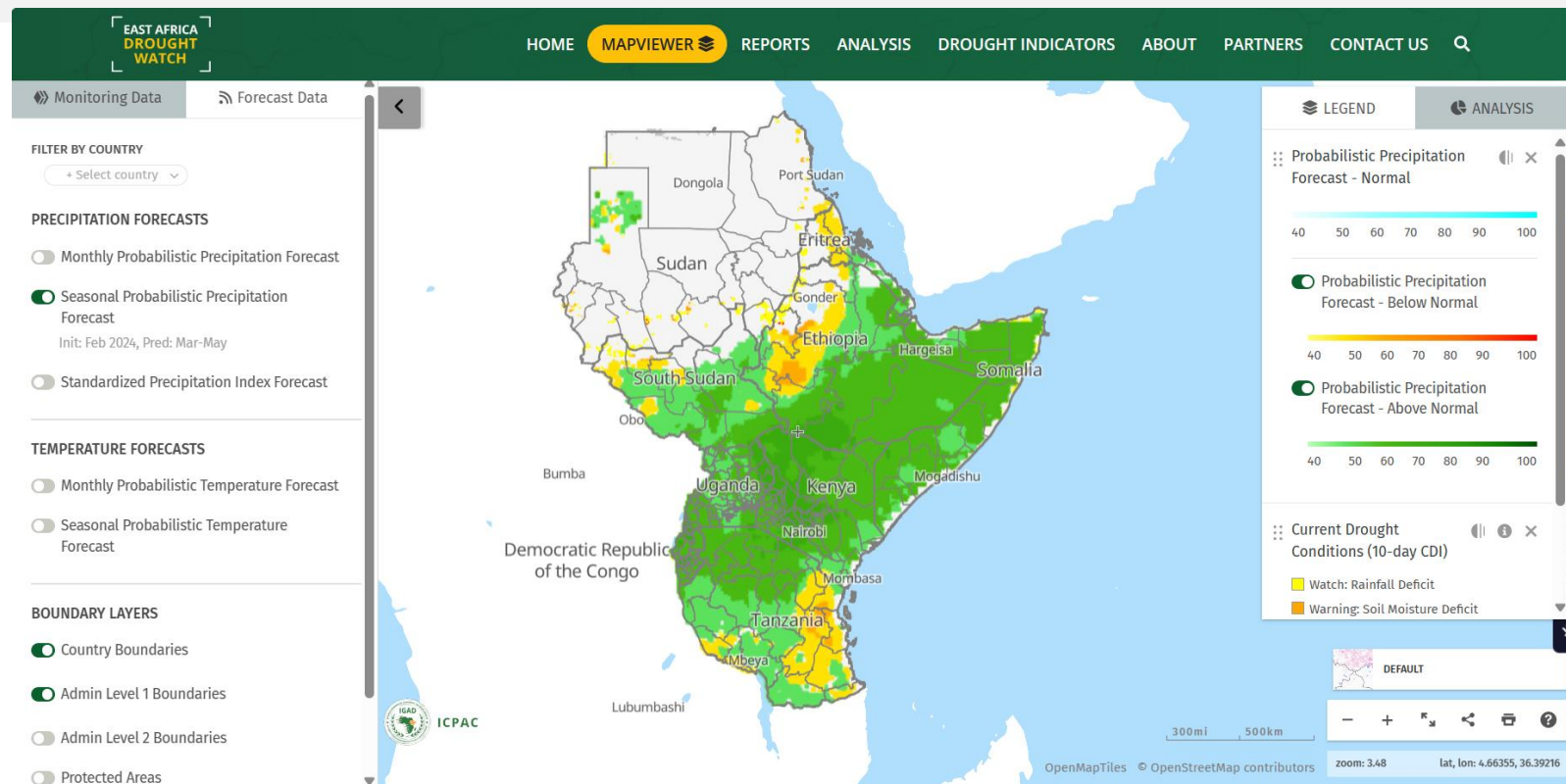
- The expert uses EADW to compile a bulletin and makes a written advise to decision makers, on what actions can be performed, with context of the mapped and graphed evidence generated by the Drought Watch

Integrating EADW into Bulletins Cont'd...

5. **Public Awareness and Education**: Bulletins can be used to educate communities about the risks associated with drought and encourage proactive measures to minimize their vulnerability.
6. **Coordination and Collaboration**: By providing a common platform for sharing information and analysis, bulletins foster collaboration and enhance the effectiveness of drought response efforts among various stakeholders, including government agencies, humanitarian organizations, and communities.

Integrating Forecast Data/Information Into Bulletins

- In addition to monitoring biophysical drought indicators. The EADW also has a probabilistic forecasting panel for precipitation and temperature.



Integrating Forecast Data/Information Into Bulletins Cont'd...

- The precipitation and temperature forecasts are rolled out monthly and seasonally.
- Having probabilistic forecasting for precipitation and temperature alongside biophysical drought indicators is a comprehensive approach to monitoring and predicting weather patterns.
- By integrating these different data streams, the EADW can provide more accurate assessments of drought risk and potential impacts on agriculture and ecosystems.
- Probabilistic forecasting adds a layer of insight by offering a range of possible outcomes, which can help decision-makers better prepare for and respond to varying weather conditions.

Integrating Data from Other Sources

- To help draw more insights into analysis, the EADW allows users to integrate data from other sources.
- These include data on land use, soil types, crop areas, rangelands, population distribution, drought-induced displacements, and disaster displacements.

GEOGRAPHIC BACKGROUND

- Koppen Climate Classification i
- Soil Type i
- Land Use i
- Thermal Regions i

THEMATIC LAYERS

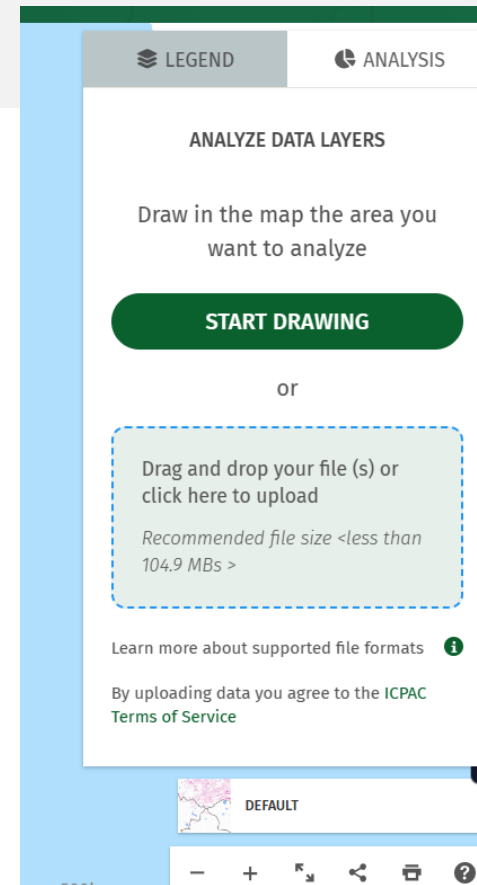
- Acute Food Insecurity - IPC
- Cropland Area Mask i
- Rangeland Area Mask i
- Population Distribution Projections i

DISASTER DISPLACEMENTS

- Drought Induced Displacements
- Disaster Displacements

Integrating Data from Other Sources – User Defined Data

- Users can draw or upload shapefiles of their areas of interest (specific watersheds, protected areas, etc.) and carry out analysis using the different biophysical drought indicators and forecasting products in the system.



Exercises

- Identifying the important informational components of national drought bulletin
- Develop a drought bulletin using the products on EADW and other sources (integration of info/convergence of evidence)

How to Develop a Drought Bulletin Using Products on the EADW

There are two ways of generating a bulletin from the EADW:

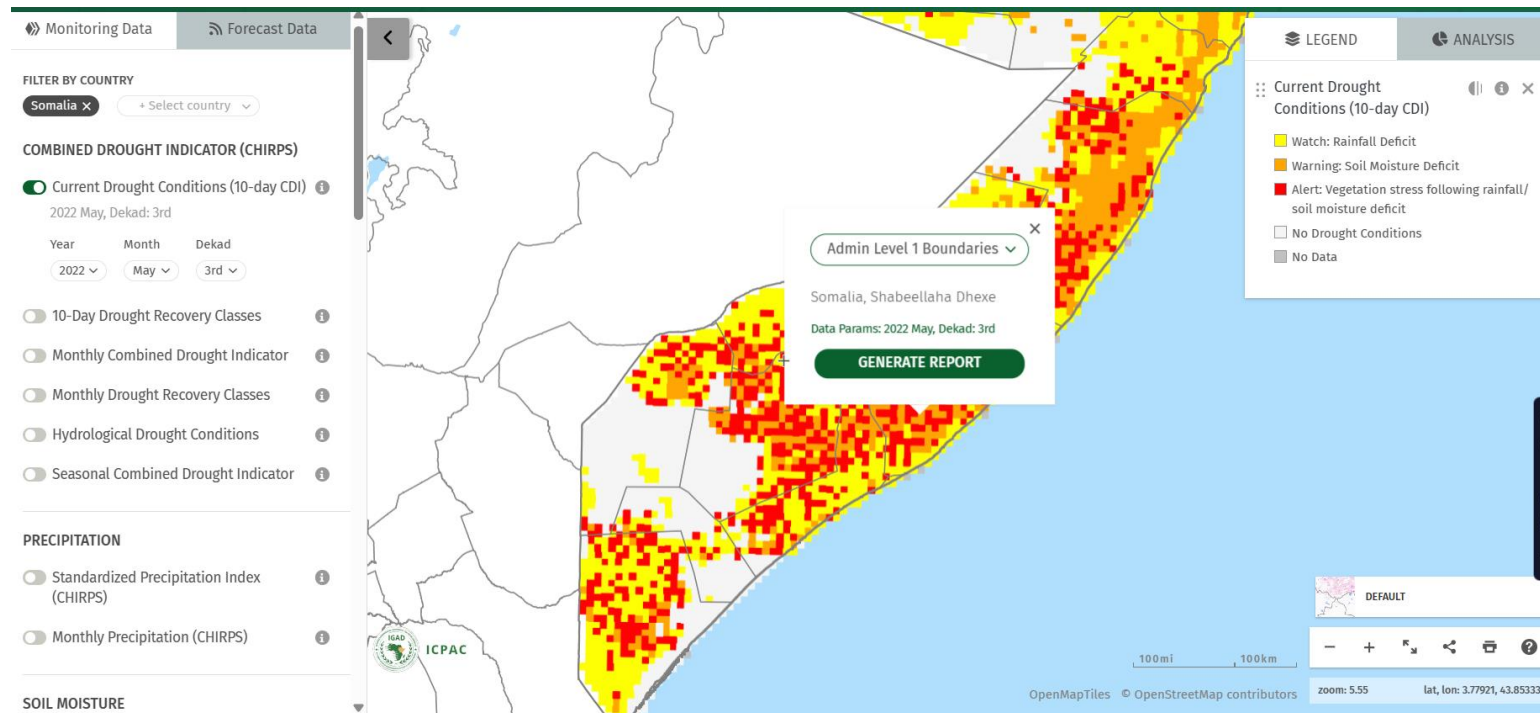
1. Auto-generate a bulleting from the *MAPVIEWER*, *REPORTS* or *ANALYSIS* page.
2. Use selected products from the *REPORTS* or *ANALYSIS* page to develop a tailored bulletin.



Auto-generate a Bulleting from the MAPVIEWER Page.

To generate a bulleting from the Mapviewer page:

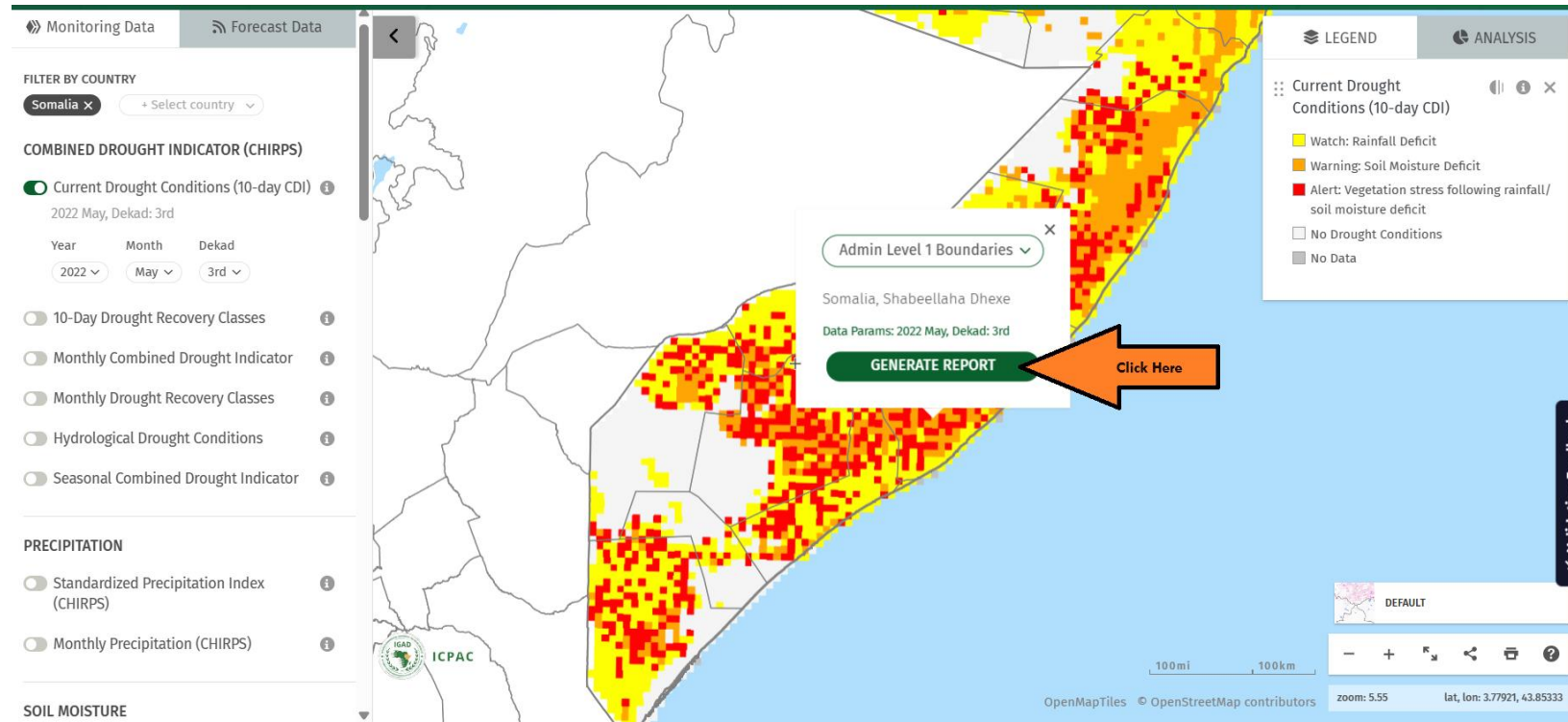
1. Go to the Mapviewer page and carry out your analysis.



Drought condition analysis. Source: East Africa Drought Watch Mapviewer Page

Auto-generate a Bulletin from the MAPVIEWER Page Cont'd...

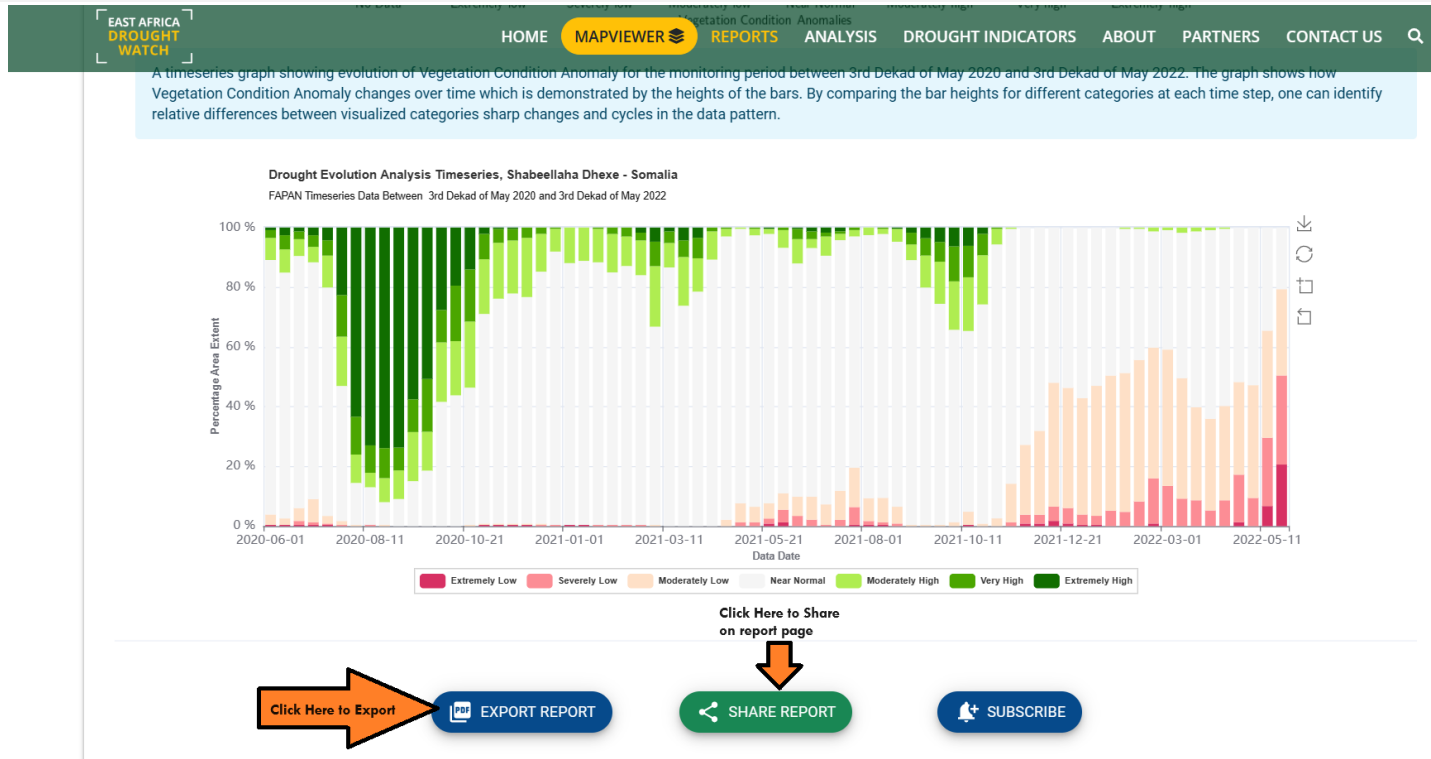
2. Once done with the analysis, click on the “GENERATE REPORT” button to generate your bulletin.



Drought condition bulletin generation. Source: East Africa Drought Watch Mapviewer Page

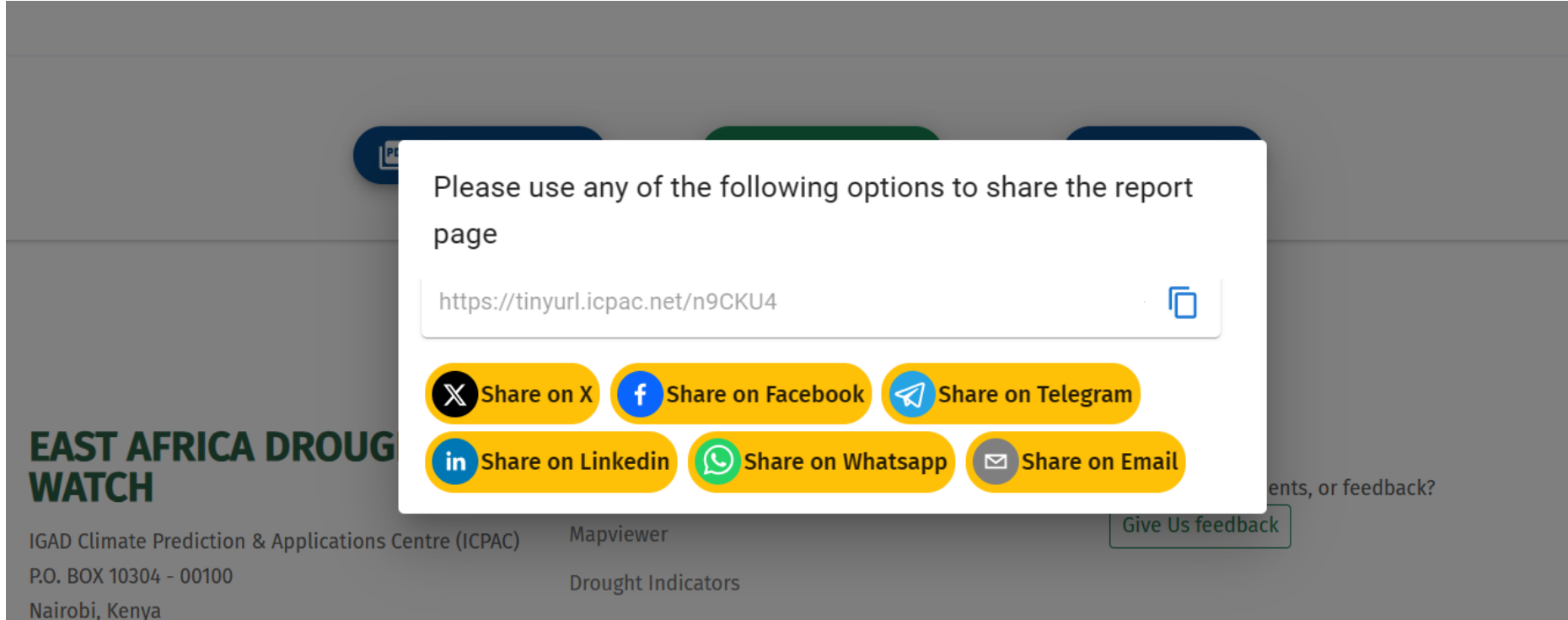
Auto-generate a Bulletin from the MAPVIEWER Page Cont'd...

3. A bulletin for the chosen date on your area of analysis will be generated on a new tab, ready to export as a pdf file or share on social media or via email as a link.



Drought condition bulletin. Source: East Africa Drought Watch Mapviewer Page

Auto-generate a Bulleting from the MAPVIEWER Page Cont'd...



Please use any of the following options to share the report page

<https://tinyurl.icpac.net/n9CKU4>

Share on X Share on Facebook Share on Telegram

Share on LinkedIn Share on Whatsapp Share on Email

EAST AFRICA DROUGHT WATCH

IGAD Climate Prediction & Applications Centre (ICPAC)
P.O. BOX 10304 - 00100
Nairobi, Kenya

Mapviewer
Drought Indicators

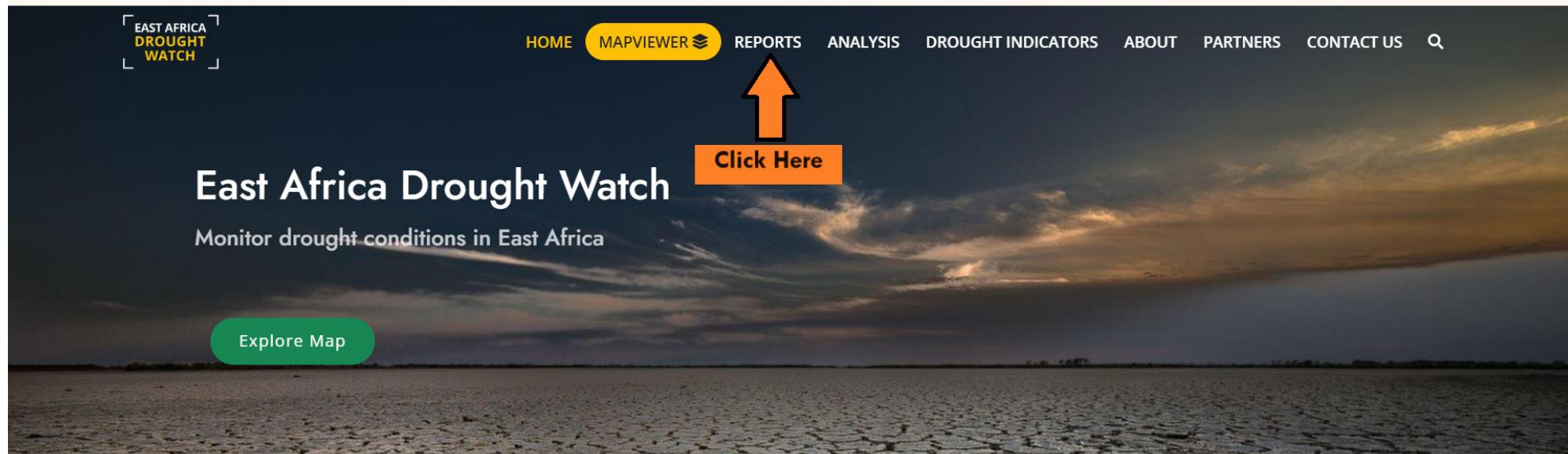
Give Us feedback

Report Sharing. Source: East Africa Drought Watch

To access a sample bulletin, go to:
<https://tinyurl.icpac.net/cr5qaC>

Auto-generate a Bulleting from the **REPORTS** Page.

- The *REPORTS* page generates a Decadal, Monthly, or Seasonal, time series bulletin backdating to two years from the specified data.
- To generate a bulletin from the *REPORTS* Page:
 1. Go to the EADW HOME page, then click on *REPORTS*.

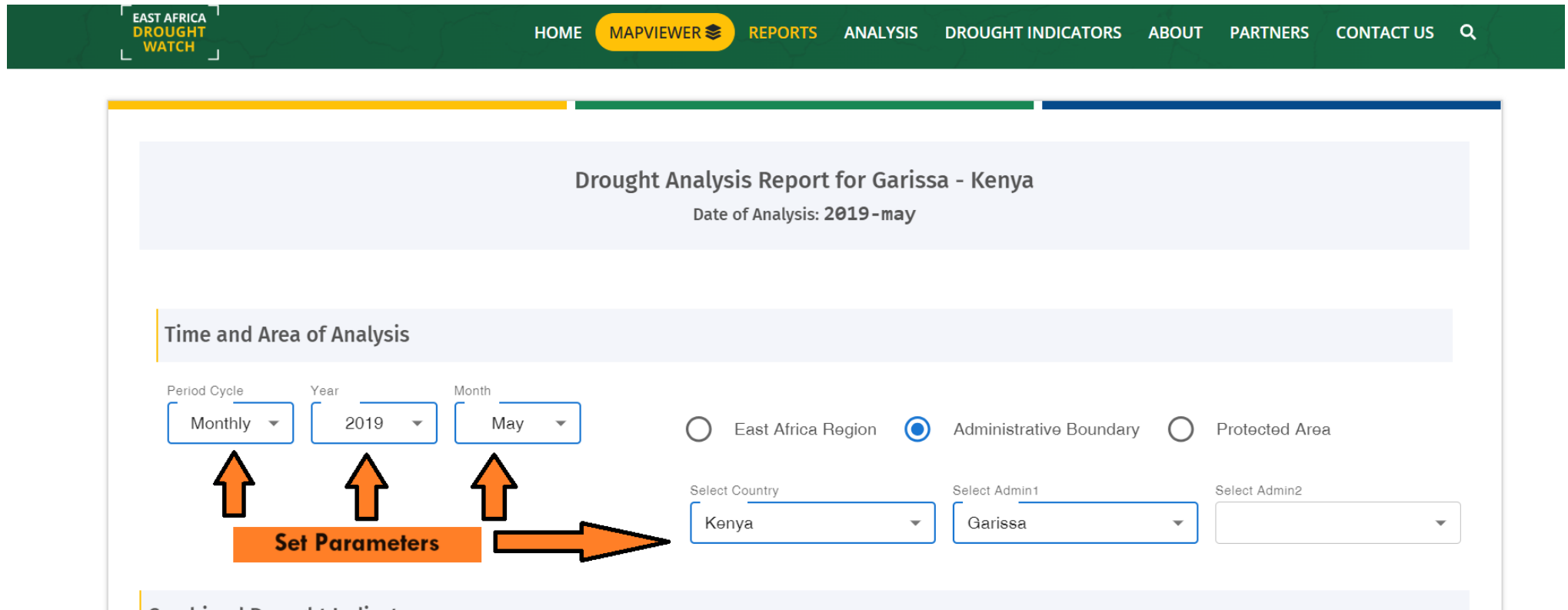


EADW HOME Page. Source: East Africa Drought Watch

Auto-generate a Bulleting from the REPORTS

Page Cont'd...

2. Set your analysis parameters (Period Cycle, Year, Month, Administrative Boundary)



EAST AFRICA DROUGHT WATCH

HOME MAPVIEWER REPORTS ANALYSIS DROUGHT INDICATORS ABOUT PARTNERS CONTACT US

Drought Analysis Report for Garissa - Kenya

Date of Analysis: 2019-may

Time and Area of Analysis

Period Cycle: Monthly Year: 2019 Month: May

East Africa Region Administrative Boundary Protected Area

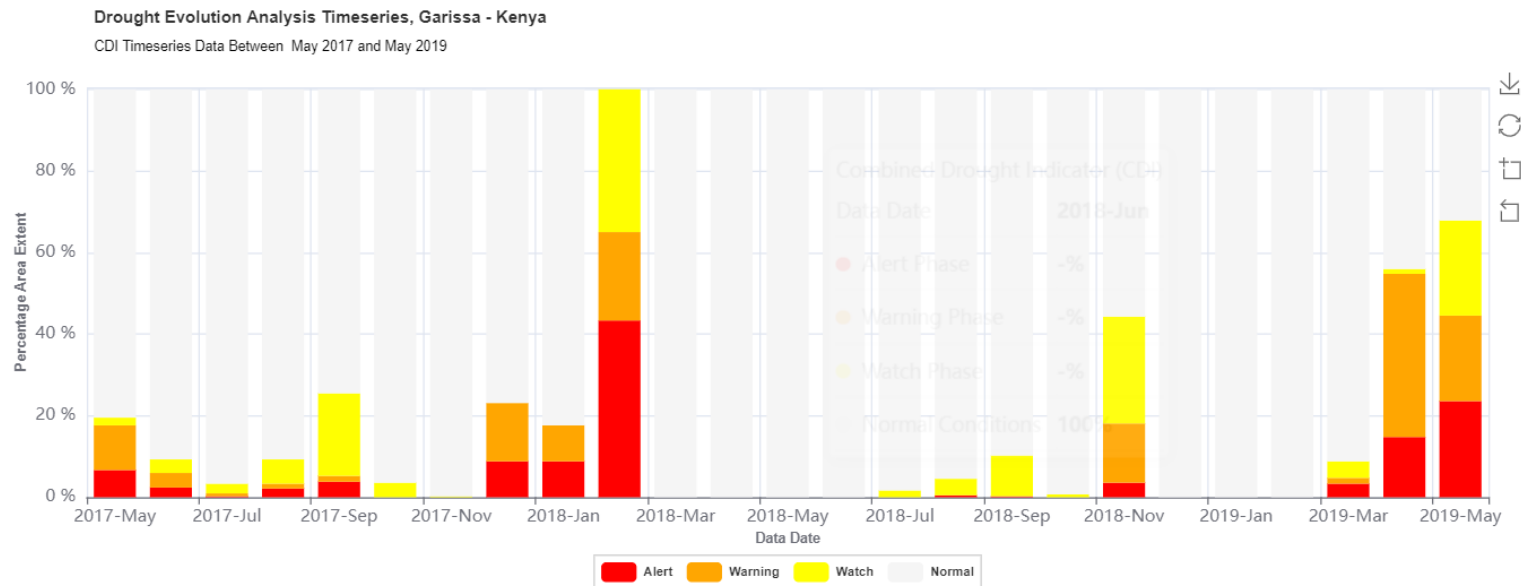
Select Country: Kenya Select Admin1: Garissa Select Admin2:

Set Parameters

Auto-generate a Bulleting from the REPORTS

Page Cont'd...

- The system will generate a bulletin on the fly, ready to download as a pdf or share via social media platforms/email.

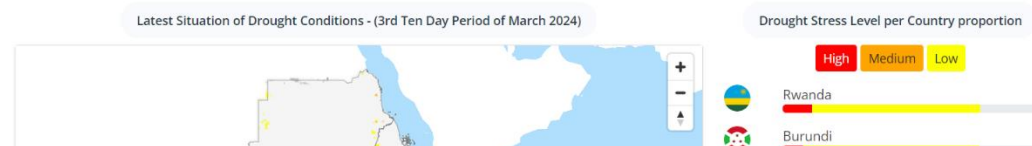
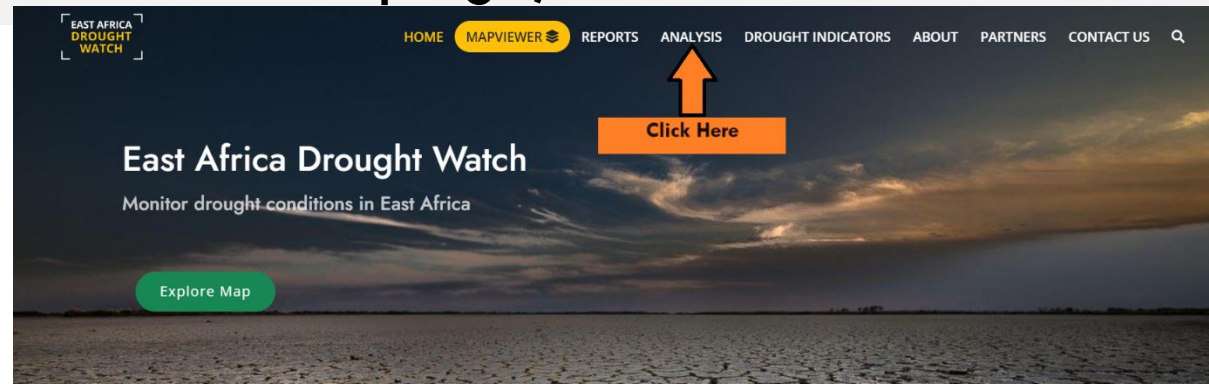


A drought persistence heatmap showing intensity of drought across the Garissa - Kenya for the monitoring period between May 2017 and May 2019. The heatmap is generated using a graduated classification color scheme. Areas shaded dark red indicate that drought conditions were more persistent over the area compared to other analyzed areas.

A change map showing where drought has improved, remained the same, or worsened since the previous May 2019. Yellow/orange colored show areas where drought worsened, while green colored areas show drought improvement. Area colored grey shows places where drought condition remained the same.

Auto-generate a Bulleting from the ANALYSIS Page.

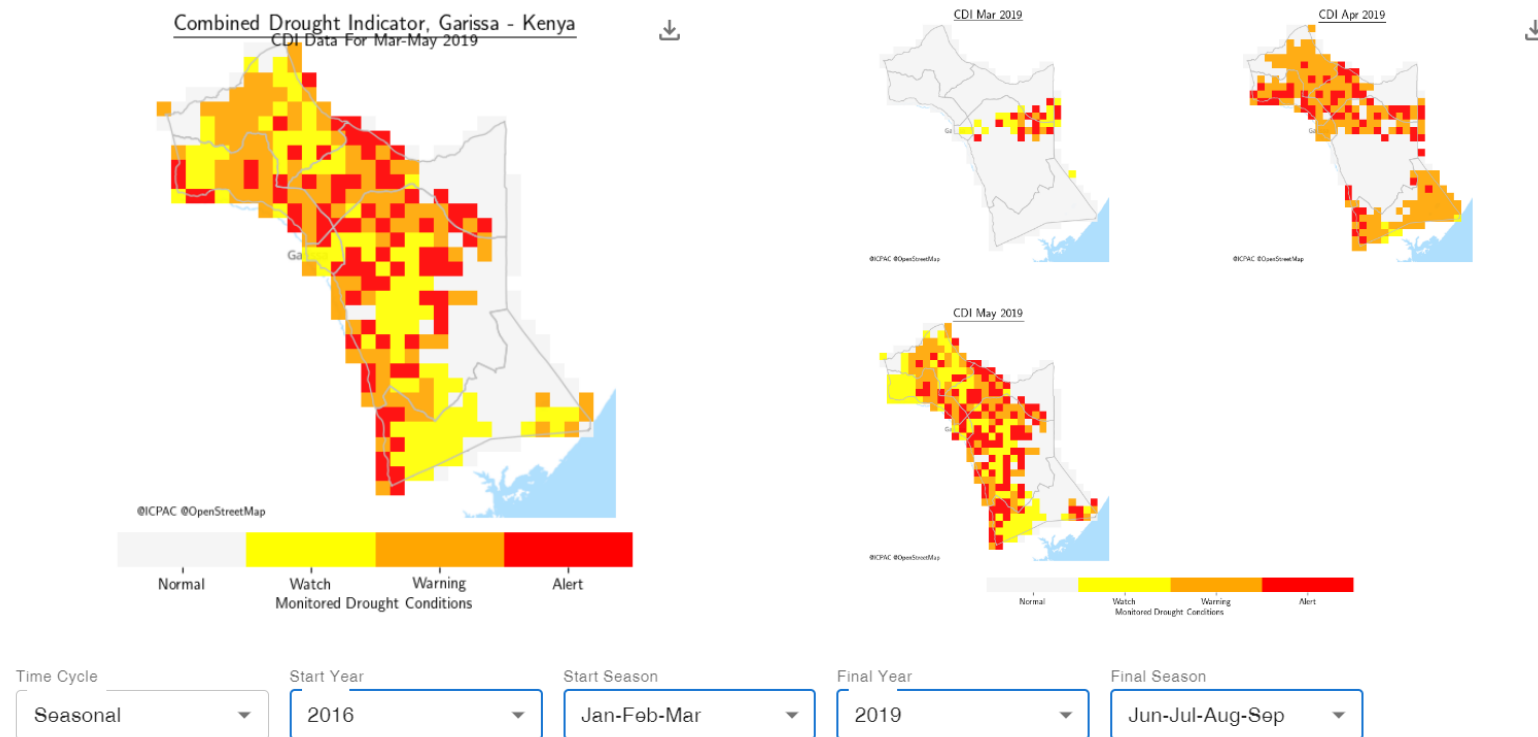
- The *ANALYSIS* page auto-generates a Decadal, Monthly, or Seasonal, time series bulletin backdating to two years from the specified data.
- Furthermore, it allows users to specify an analysis period beyond two years for different drought indicators.
- To generate a bulletin from the *ANALYSIS* Page:
 1. Go to the EADW HOME page, then click on *REPORTS*.



Auto-generate a Bulleting from the ANALYSIS

Page Cont'd...

2. Set your analysis parameters (Period Cycle, Year, Month, Administrative Boundary). The time series analysis could cover more than 2 years.



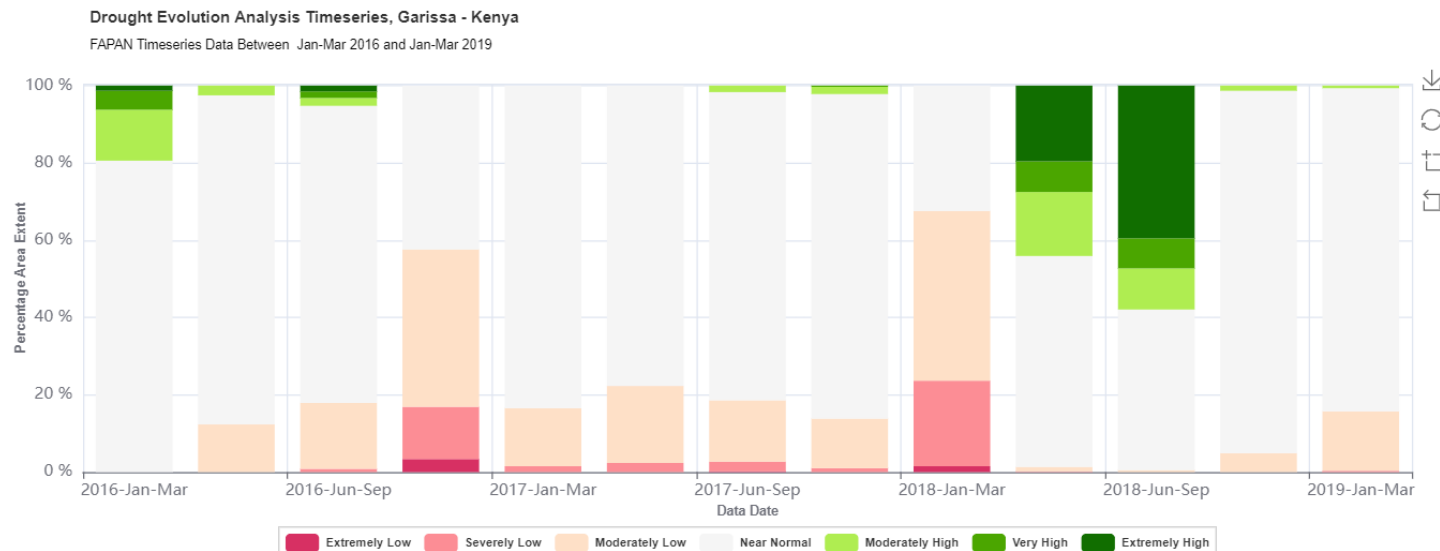
Auto-generate a Bulletin from the ANALYSIS

Page Cont'd...

3. The system will generate a bulletin on the fly, ready to download as a pdf or share via social media platforms/email.

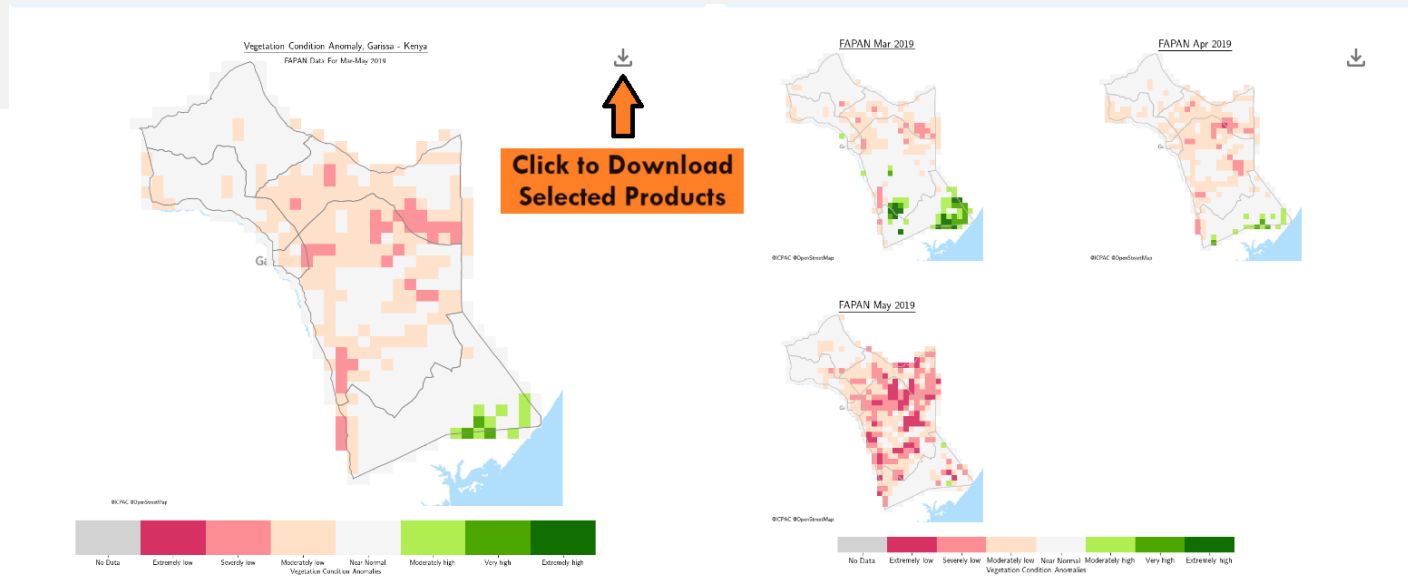
Time Cycle: Seasonal
 Start Year: 2016
 Start Season: Jan-Feb-Mar
 Final Year: 2019
 Final Season: Jan-Feb-Mar

A timeseries graph showing evolution of Vegetation Condition Anomaly for the monitoring period between Jan-Mar 2016 and Jan-Mar 2019. The graph shows how Vegetation Condition Anomaly changes over time which is demonstrated by the heights of the bars. By comparing the bar heights for different categories at each time step, one can identify relative differences between visualized categories sharp changes and cycles in the data pattern.



Use Selected Products from the **REPORTS** or **ANALYSIS** Page to Develop a Tailored Bulletin.

- You can download selected products from the *REPORTS* or *ANALYSIS* Page and use them to develop your own tailored bulletin with recommendations for different stakeholders.
- The includes any maps or graphs generated on the *REPORTS* or *ANALYSIS* page.



Use Selected Products from the REPORTS or ANALYSIS Page to Develop a Tailored Bulletin.



Foxit PDF Reader
Document

Exercise

- Pick one of the following regions and carry out a drought analysis.
 1. Iburasirazuba – Rwanda (2017 January to 2019 December)
 2. Shabeellah – Somalia (2021 January to 2023 December)
 3. Garissa – Kenya (2021 January to 2023 December)
 4. Oromia – Ethiopia (2021 January 2023 December)
- Autogenerate a drought bulletin from the EADW for your chosen region.
- Develop a tailored drought bulletin using the products on EADW and other sources (integration of info/convergence of evidence)