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Covid-19 Bulletin

AKADEMIYA2063's Online Covid-19 Portal.

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AKADEMIYA2063 has developed a comprehensive data, analytics, and communications agenda on the impacts of and responses to the Covid-19 pandemic among African countries.

AKADEMIYA2063's online <u>COVID-19 portal</u> is the central location where all knowledge products are housed and disseminated. The portal is updated regularly with the latest publications and resources, including bulletins, briefs, and webinar videos. The portal gives access to data, charts, maps, and methodologies used to produce various publications. It also features an embedded, interactive, and user-friendly tool to track the spread of the Covid-19 pandemic across Africa. Having all of AKADEMIYA2063's Covid-19 related work in one location through an online portal is a convenient way to disseminate and provide broad and real-time access to research results as they are generated. For this reason, the portal is permanently available and maintained to guarantee users' free access and easy download of the entire set of resources.

Providing and ensuring a comprehensive user experience is a key objective of the portal. Therefore, all the resources are made available in English and French. The portal is composed of the four main components enumerated below:

- 1. Library of all publications organized around four thematic workstreams.
- 2. Webinar section for access to the webinar series calendar, a postcard of the upcoming webinar, and recording of all past weekly webinars.
- 3. Repository of data, maps, and charts produced under each workstream.
- 4. Interactive tool to help access the latest data on the spread of COVID-19 across Africa.

FINDING A SOLUTION TO THE PROBLEM OF FOOD CROP PRODUCTION DATA

From effects on access to seeds and fertilizers, limited movement of goods, declining demand, to labor shortage, the disruptive impact of Covid-19 on food production systems is real. The challenge here is not only the likely extent and complexity of the disruptions, but also the difficulty to identify and track them in real time. Unlike the propagation of the disease itself which can be tracked through testing and tracing, it is impossible, even in normal times, to have accurate information on cropping activities. The introduction of confinement and other measures to control the pandemic make the situation even more difficult. There is no way of knowing whether farmers have access to inputs, in time or in adequate quantities, whether they have been too sick to tend to their farms or could work only partially. One would eventually find out at the end of the growing season from the impact on harvested quantities. One is then left to play catch up to deal with a crisis situation.

The complete lack of information about growing conditions can be overcome by using today's digital technologies. Remotely sensed data allow to track in real time changes in vegetation cover, weather data, and other parameters related to cropping activities. Recent developments in machine learning and computer modeling make it possible to track and predict crop production using these data. The benefits go far beyond the ability to overcome the obstacles to data gathering during crises. The many weaknesses hampering the access to good quality agricultural statistics also can be overcome using the same digital technologies, from measuring arable land, planted areas, and crop yields to the spatial distribution of harvested quantities. Our scientists are using these technologies to assess changes in food production systems during the pandemic and thereby provide valuable information to tackle the impact of the pandemic among local communities.

Thematic Workstreams

AKADEMIYA2063's research on the impacts of COVID-19 is organized into four workstreams: Vulnerability Hot Spots, Staple Food Price Tracking, Production Systems Disruption, and Macro Effects of Trade Disruption. Each workstream has its section displaying key outputs ranging from bulletins and briefs to data, charts, and maps (Figure 1).

Figure 1. Outputs of the Production Systems Disruptions Workstream in the AKADEMIYA2063 COVID-19 portal.



- The **Overview Box** describes key issues to be addressed under the workstream and the methodologies and tools used. The box also includes links leading to more details on the workstream outputs, all posted on the workstream's dedicated page. The workstream page is also accessible by clicking on the **View All** link at the top right, as depicted in figure 1.
- The Latest **Bulletin Box** advertises the latest bulletin that has been published under the workstream in question. The **More bulletins** button, available at the bottom of the box, redirects the user to all the bulletins that have been hitherto published under the workstream.
- The Latest **Brief Box** similarly presents the latest brief available for the workstream. The **More briefs** button, also located at the bottom of

Figure 2. AKADEMIYA2063 webinars' section in the COVID-19 portal

the box, redirects the user to all the briefs that have been published under the workstream.

 The Data, Charts, and Maps Box shows the most recent data or illustrations generated under the workstream. The latter includes all the intermediary outputs produced, a large share of which does not find space in the published bulletins and briefs.

Webinars

AKADEMIYA2063 organizes several webinars as an additional medium for communicating research outputs on the impacts of the COVID-19 pandemic. The webinars also provide an opportunity to discuss detailed research findings with partners and stakeholders across the continent. All webinars are conducted in two separate sessions, one in English and one in French. Recordings are made available in the webinars' section, as shown in Figure 2.

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Interactive tool

As the outbreak of COVID-19 is of growing concern and a significant public health issue, tracking its spread is

crucial. Embedded within the portal is an interactive tool that provides daily updates on the pandemic's propagation status across the continent to visitors.

Figure 3. COVID-19 historical and actual number of cases across the African continent – Interactive tool embedded into the AKADEMIYA2063 COVID-19 portal



Workstreams page

Lastly, every workstream has a dedicated page that encompasses two sections. The first section provides a comprehensive overview of research work that is conducted in a specific workstream. The second one provides access to all bulletins, briefs, data, charts, maps, and webinars related to that specific workstream. While the first section has already been discussed in section 2 above, the second section is organized into four different tabs as follows: Bulletins, briefs, data, charts, and maps, as well as webinars (Figure 4).

Figure 4. Workstream page advertisements of Bulletins, Briefs, Data, charts, and maps, as well as webinars in the AKADEMIYA2063 COVID-19 portal

Bulletins	Bulletins	
Briefs	i →	m August 21, 2020
Data, charts and maps	2020 Pearl Millet Production Forecasts for Selected West African Countries: Côte	Application of Ren Learning for Crop
Past webinars	D16 COUNTRY To Count of the Advancement Covid-19 Bulletin	ACCENTA COVID-10
	2020 Pearl Millet Production Forecasts for Selected West African Countries: Côte d'Ivoire, Mali, Burkina Faso, Sierra Leone, The Gambla, and Senegal.	Application of R and Machine Lex Productione Fore Crises Recine Ly and Khadi

Each tab on the left menu in Figure 4 advertises materials related to a specific workstream. Users can, therefore, navigate through these materials and access related content quickly. Moreover, each map or chart displayed on the data, charts, and maps menu can be clicked on for an expanded view and subsequently downloaded with the associated data such as authors' names, titles, and data sources (Figure 5).

At the bottom of each workstream page (Figure 6), three boxes representing quick access to other workstreams are provided—this facilitates users' navigation between workstreams. 5 Figure 5. Data access and download for each workstream in the AKADEMIYA2063 COVID-19 portal.







Conclusion

All the knowledge products presented in this bulletin are available in the COVID-19 web portal. Given that all the resources are located in one unique platform, they can be accessed readily at any time and from everywhere. Additional bulletins, briefs, and other resources, such as podcasts, will be available shortly. All these resources contribute to a better understanding of the COVID-19 pandemic, its implications, and how to respond to it.



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