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Covid-19 Bulletin

AKADEMIYA2063's MULTI-WORKSTREAM AGENDA ON COVID-19

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

The breadth and reach of the complex ramifications and disruptions from the COVID-19 pandemic are unprecedented. The damage from the pandemic combines the effects all major shocks of the last couple of decades. It has elements of the disruption of financial markets as well as foreign and domestic food supply chains from the recent global financial and food crises. Its effects on food production systems are similar to the perturbation from the ebola outbreaks or cyclones, drought and other major weather events. Even some of the elements of social disruption associated with conflict and civil strife are experienced under the pandemic. The fact that all of these various shocks happen concurrently and engulf the entire globe, with no regions left untouched and thus poised to help fuel a possible recovery, makes the pandemic an extraordinary challenge.

As countries across the globe struggle to adjust and contain its multiple effects, AKADEMIYA2063 has put together a comprehensive program to deepen our understanding of the effects, and possible responses thereto, on food and nutrition security, livelihoods among vulnerable communities, and more broadly on national economies in African countries. The program falls under five workstreams:

1. Mapping community vulnerability to identify potential major hot spots
2. Tracking staples food price changes and their impact on food and nutrition security
3. Food production systems disruption and effects on communities and the national economy
4. Global trade disruption and the effects on economic growth and livelihoods

THE COVID WORK PROGRAM IN FOCUS

The goal of AKADEMIYA2063's agenda on Covid-19 is, through relevant data and analytics, to guide responses by governments and other key actors. Our proximity and extensive networks allow us to address the pandemic and its effects from the national to local community level with greater granularity.

The multipronged nature of the crisis calls for multiple angles of attack dealing with the disruption of trading, transport, production and financial systems, along with their effects on supply chains, employment and incomes. AKADEMIYA2063 uses a combination of data, knowledge products, communications tools and learning events to: (i) enhance our understanding of the pandemic's multiple ramifications; (ii) track its current and future dynamics; and (iii) inform coping responses as well as future efforts to restore livelihoods.

The scale and pace of the crisis in the context of limited resources make the identification of communities with the least capacity to absorb most shocks from the pandemic a key priority. Proactive responses will also require the tracking of key measures of distress. Local food market dynamics and changes in staples prices are good candidates.

Equally critical is the ability to assess disruption of food production systems, anticipate impacts and plan options for effective interventions to restore productive capacities and break the chain of perturbation. Advances in big data and machine learning offer real opportunities here.

The worldwide nature of the pandemic exposes countries to trade related and other global shocks. How these are transmitted and what their impacts are on local communities constitute important dimensions of coping strategies.

Finally, the pressure on authorities to act quickly, at scale and over a range of policy areas creates a real need to minimize the potential for error and leverage the scope for learning and exchange to enable more impactful interventions.

5. Assessing and benchmarking COVID-19 policy responses for learning
6. Communications and outreach activities

In this bulletin, we describe each workstream including the communications and knowledge products through which results will be shared with our partners and stakeholders.

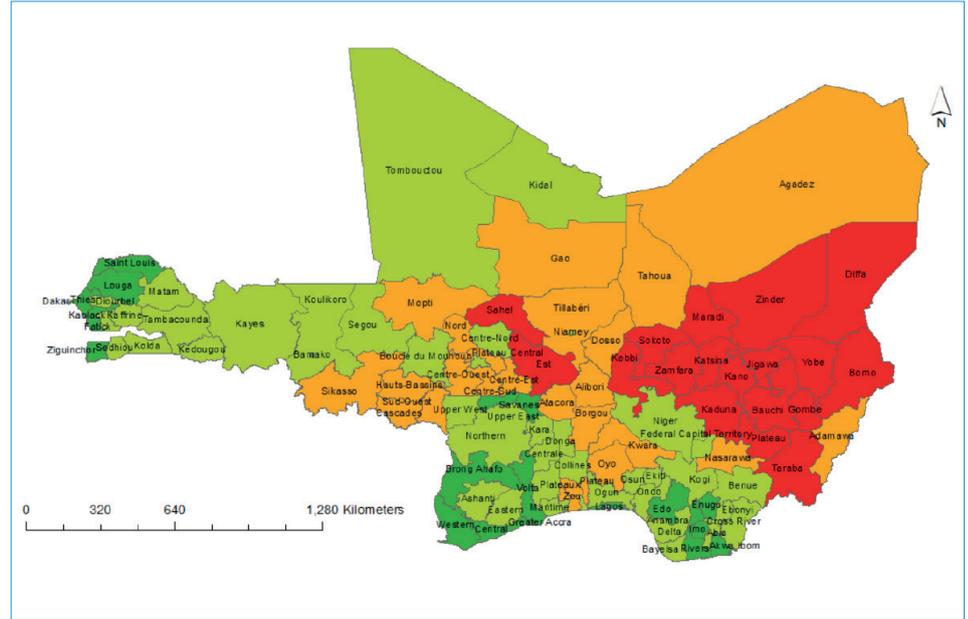
AKADEMIYA2063 COVID-19 Workstreams

The overall goal of AKADEMIYA2063’s COVID-19 analysis is to provide decisionmakers within and outside of the public sector with evidence on actual and potential short- and medium-term effects of the COVID-19 pandemic to inform policy responses and other coping interventions. Through six workstreams, described below, we will examine the immediate effects of COVID-19 and their implications for African countries and local communities.

Workstream 1. Mapping community vulnerability to identify potential major hot spots

Limited resources will require that responses to the pandemic prioritize the most vulnerable communities where the effects are likely to be particularly devastating. We will use data from our ReSAKSS country eAtlases (<https://eatlas.resakss.org/>) and other sources to pinpoint local communities in countries where chronic vulnerability renders the population uniquely susceptible to the effects of the COVID-19 outbreak. Data layers include indicators on nutrition and food security, disease burden, health infrastructure and access, population density, and poverty. Communities that register at the lower end of all these indicators tend to have high levels of chronic vulnerability and are thus prone to be harder hit by sudden shocks. The overlaying of a number of indicators will provide a more

Typology of Vulnerability Hot Spots



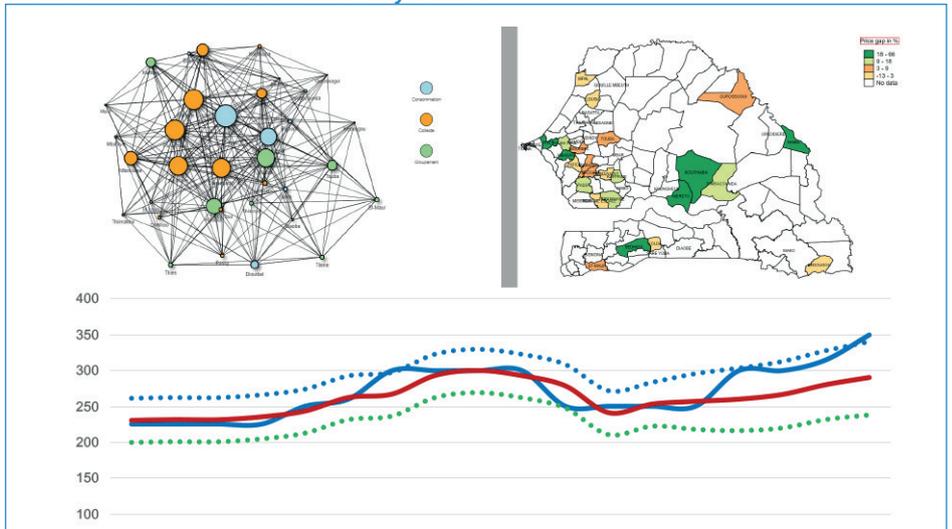
nuanced picture of vulnerability and permit us to identify areas that would be missed if only a few factors were considered. The analysis will allow the team to map potential vulnerability hotspots at the subnational community level.

Workstream 2. Tracking food staples price changes and their impact on food and nutrition security

Food prices are a key variable that must be monitored to inform efforts to anticipate and respond to food crises. During the evolving COVID-19 crisis, near real-time food price data is vital not just to provide a picture of current developments that affect people’s ability to maintain healthy diets but also to inform efforts to

predict the short- and medium-term effects of the crisis. Most global efforts track only major commodities, or focus on prices in international markets or in the largest cities in a country. This misses not only the bigger picture of food prices across a country, but also the locally-important foods consumed in vulnerable areas. We will focus on price data at a more granular, community level and primarily for local staples that are more widely consumed by the poor and vulnerable. The team will perform descriptive analysis of the data, characterizing trends over time, assessing volatility, identifying spikes, examining geographic differences within and between countries, and investigating price transmission between markets.

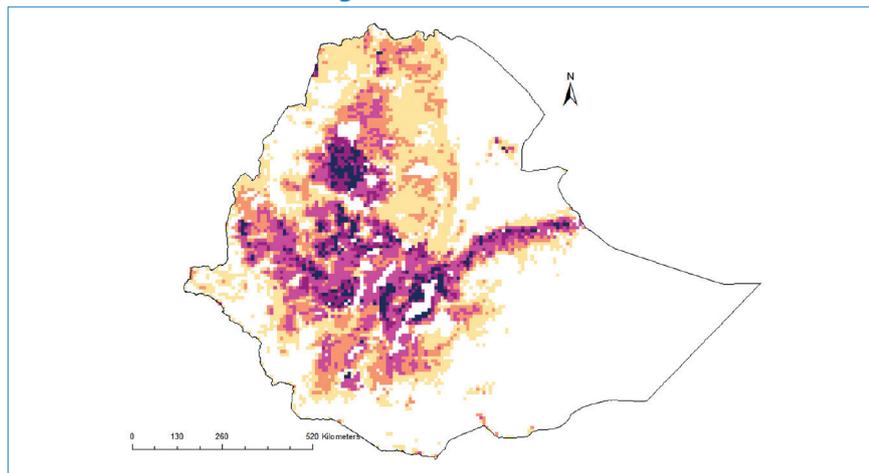
Market Networks and Food Price Dynamics



Workstream 3. Food production systems disruption and effects on communities and the national economy

COVID-19 is expected to have wide ranging impacts on production systems, resulting from a host of disruptions not just to health, but also transport, market and broader food systems. The difficulty of in-person data collection poses

AI Driven Production Modeling



a real challenge to assessing the situation and providing an accurate picture of the crisis' ramifications. Under this workstream, we will use innovative remote sensing, big data and computer learning methodologies to build tools that allow us to evaluate the impact on production systems at the local community level. We will track the growing season for key local staples and apply our tools to issue real time predictions of future food production at community level in a number of countries. Comparisons between predicted 2020 production levels and those of previous years as well as crop modeling techniques will be used to estimate the role of COVID-19 in production disruptions.

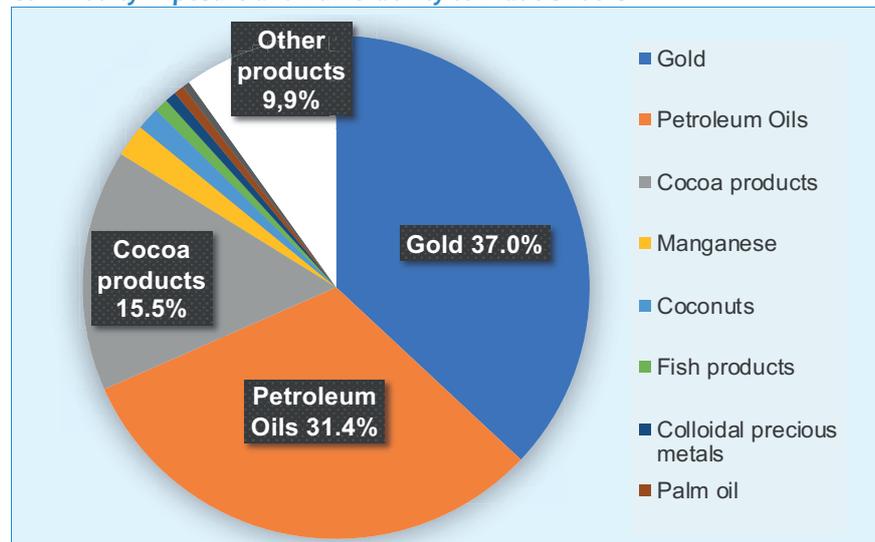
Workstream 4. Global trade disruption and the effects on economic growth and livelihoods

The COVID-19 pandemic is affecting African economies through many avenues, including global financial and capital markets, global commodity trade and markets, local supply and demand for

products, and local labor markets and employment. This workstream focuses on disruptions in global commodity trade caused by COVID-19 and their effects on trade, growth and poverty in African countries. The analysis employs existing single-country Computable General Equilibrium (CGE) models for economywide analysis combined with microsimulation models for poverty analysis and is informed

by the latest available country survey data, economywide social accounting matrices, international commodity price data and forecasts, and global trade data. The effects of COVID-19 are evaluated by comparing a pre-COVID-19 scenario based on previously existing commodity price forecasts with a COVID-19 scenario based on updated forecasts. A commodity price scenario is built for each country based on the composition of its external trade and is used to assess the impacts of COVID-19-related trade disruptions.

Commodity Exposure and Vulnerability to Trade Shocks



Workstream 5. Assessing and benchmarking COVID-19 policy responses for learning

In response to the COVID-19 outbreak, countries may pursue policies that are likely to ultimately harm their own or their neighbors' populations, such as restrictions affecting cross-border trade, the operations of informal food vendors, prices of food for urban consumers, etc. International efforts to track countries' policy responses to COVID-19 focus mainly on macroeconomic and fiscal responses at the national level, while many of the policies that affect local populations the most are formulated at local government levels. We will work with the three regional ReSAKSS nodes, which will leverage their wide country networks to track government policy responses. The team will evaluate the consistency of policy responses and carry out comparative analyses of strategies in different communities and countries.

Workstream 6. Communications and outreach activities

Findings from AKADEMIYA2063's COVID-19 analysis will be presented in real time and in a variety of formats to reach a range of users, including policymakers, development partners, research practitioners, and decisionmakers in the private sector and civil service. Major communications outlets include newsletters and bulletins in English and French, regular webinars and podcasts, and

an online portal to house and share knowledge products.

In the initial months following its July 2020 launch, AKADEMIYA2063 is focusing its research and analysis efforts on the short- and medium-term ramifications of COVID-19 in Africa, and will therefore be releasing knowledge products frequently. Communications outputs will be organized by workstream, and audiences are invited to follow those topics of greatest relevance for their needs.

Analysis under each workstream covers multiple countries and requires a number of analytical steps; the newsletters provide an opportunity to highlight intermediate findings for a particular location which may be useful for stakeholders in that area.

Daily **newsletters** will present, in 1-2 pages, focused research findings from one topic and/or geography.

Weekly **bulletins** of around 6 pages will present more in-depth analysis by synthesizing findings across topics or geographies. Bulletins will allow for comparative analyses between areas and countries, overviews of multiple trends in a particular locality, or syntheses of findings at the regional level.

Weekly **webinars** will provide a platform to deepen the analysis presented in the newsletters and bulletins and allow for discussion of findings with partners and other stakeholders. AKADEMIYA2063 experts and invited guests will present the latest evidence from their analyses, and presenters and audiences will discuss implications and policy response options.

Biweekly **podcasts** will complement the webinar series by providing a thorough examination findings from AKADEMIYA2063 as well as partners. AKADEMIYA2063 researchers and invited guests will discuss COVID-related findings and lessons through a radio interview format.

These knowledge products will be housed and disseminated via AKADEMIYA2063's online **COVID-19 portal**. The portal will be updated regularly with publications and resources, including all newsletters and bulletins and recordings of webinars and podcasts. In addition, the portal will allow users to access additional data and resources related to each workstream, including datasets, charts and maps, and further information on methodologies. The portal will also include a tool to access the latest data on the spread of COVID-19 in Africa.

Communications & Outreach Products



Besides these regular communication products, targeted **learning events** will be organized in collaboration with partner organizations at the continental and regional levels to review efforts and progress on the ground and disseminate good practices for replication and scaling up.



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