Senegal Learning Event
January 14, 2021

Concept Note

Introduction and agenda

The AKADEMIYA2063-USAID/Senegal learning event will focus on findings from the above workstreams related to diets, markets and trade. Recent research has called attention to the high cost of nutritious foods throughout the developing world, often unaffordable to people living in or near poverty. Access and affordability of nutritious foods has become even further exacerbated in the wake of COVID-19, and there remains few solutions for meeting this challenge. This webinar draws on AKADEMIYA2063's evidence and analysis that sheds light on how dietary adequacy has changed across Senegal since the COVID-19 outbreak and the role that markets and trade are playing in stabilizing nutritious food access and affordability. Also featured will be staff from the USAID Senegal mission engaging this evidence to consider how it can inform mission programming and country decision making.

This event is the first in a series of cross-mission policy learning events and is intended to generate insights that may be broadly applicable to other African missions and beyond.

AGENDA	
9:00 - 9:05	**Introduction**
	RFS/Policy Division, Patterson Brown
9:05 - 9:10	**RFS Center for Nutrition**
	Kelley Cormier / Lourdes Martinez Romero
9:10 - 9:20	**AKADEMIYA2063 Presentation**
	Research and evidence on local market and regional trade impacts on nutritional outcomes in Senegal
9:20 - 9:35	**Mission Questions for AKADEMIYA2063 and Response**
	David Yanggen
9:35 - 9:50	**Facilitated Question from Participants**
9:50 - 10:00	**Final Thoughts and Way Forward - AKADEMIYA2063 and Senegal Mission**
	A2063 Ousmane Badiane and USAID/Senegal David Yanggen

Background and objectives

The COVID-19 pandemic has affected economies through different angles, among others, global financial and capital markets, global commodity trade and markets, local supply and demand of goods and services, and local labor markets and employment. Countries were exposed, in a short period of time, to a systemic shock with various medical, social, and economic challenges.

In Senegal, measures taken by the government to control the spread of the COVID-19 pandemic include a state of emergency, curfews and closed borders which have been progressively lifted. Travel restrictions and constraints to the movement of goods caused logistics breakdowns and labor shortages at different stages along food value chains. The resulting changes have had several impacts on the supply of goods, including crops, livestock and fishery, as well as processed foods. On the demand side, depending on the nature of food items, on average, the net demand effect has been negative in the short run with a decrease in the population's propensity to consume and a decrease in intermediate consumption of firms.

A first implication of Covid-19-related restrictions are disruptions in local staple markets which are likely to affect the cost of food consumed by the poorest and most vulnerable segments of

the population. The effects on food availability and prices as well as changes in incomes may consequently have impacts on dietary patterns and behavior, ultimately leading to deterioration of nutrition status in the form of micronutrient deficiencies, especially for the most vulnerable populations. Price uncertainty and disruption in the supply side could also affect farmers' incomes.

In addition, potential impacts on the agricultural production sector range from market access constraints for crops and inputs to mobility restrictions of farmers and agricultural workers. Collecting timely and accurate information on production systems and food supply is very challenging in this time of crisis, presenting difficulties to planners to anticipate the impact of the disease on production and undertake appropriate measures to prevent food and nutrition security crisis.

Finally, the collapse of global economic output has caused serious disruptions to global trade and markets. Restrictions and lockdown measures put in place to control the spread of the disease have induced changes in global primary commodity markets which can have repercussions on national economies, trade flows, growth and poverty.

AKADEMIYA2063, as part of its mission to support the knowledge and evidence needs of African countries, has developed a broad database, innovative analytics, and communications tools on the impacts of and responses to the COVID-19 pandemic. The overall goal is to provide decisionmakers within and outside of the public sector with research-based *evidence on actual and potential short and medium-term effects* of the COVID-19 pandemic to inform the design of policy responses and other coping interventions. Analytical outputs organized under four workstreams—on mapping community vulnerability, tracking food price changes, predicting production disruptions, and examining the implications of global trade disruptions—are made available on AKADEMIYA2063's COVID-19 web portal to guide the responses of governments and other key actors.

The AKADEMIYA2063-USAID/Senegal Learning Event intends to **draw lessons from the case study of Senegal, with a focus on the effects of COVID-19 on dietary adequacy and the role of markets and trade in ensuring access to nutritious and affordable food.** The overall objectives are to:

(i) Enhance our understanding of the pandemic's multiple ramifications in Senegal;

(ii) Track its current and future dynamics; and

(iii) Inform the design of appropriate policy responses as well as future efforts to restore the resilience of the food system.

AKADEMIYA2063 COVID-19 workstreams

AKADEMIYA2063's COVID-19 analysis employs a variety of methodologies to generate knowledge to help guide the responses of governments, development partners and other key actors. We examine the effects of COVID-19 and their implications for African countries and communities through four workstreams:

1. **Mapping community vulnerability to identify potential major hot spots:** Limited resources require that responses to the pandemic prioritize the most vulnerable communities where the effects are likely to be particularly severe. We use data from multiple sources to pinpoint local communities in countries where chronic vulnerability renders the population uniquely susceptible to the effects of the COVID-19 outbreak. The team overlays indicators on food security, health, and other dimensions to create a composite indicator of overall vulnerability at the subnational community level. This overall vulnerability indicator addresses the propensity of a community to be exposed to the spread of COVID-19 as well as its capacity to control the pandemic and take care of infected people.

2. **Tracking food staples price changes:** During the evolving COVID-19 crisis, food price data is vital not just to provide a picture of current developments that affect people's ability to maintain healthy diets and the revenue of farmers but also to inform efforts to predict the short- and medium-term effects of the crisis. We collect price data from country sources at a granular level, focusing on local staples that are widely consumed by the poor and vulnerable. The team examines geographic differences within countries, investigates price transmission between markets, and gauges the likely impacts of COVID-19 on prices by comparing predicted with actual prices.

3. **Food production systems disruption:** COVID-19 is expected to have wide ranging impacts on production systems. Under this workstream, we use innovative remote sensing, big data and machine learning techniques to develop near real-time predictions for 2020 production levels prior to harvest. We compare predicted 2020 production with that of a previous year (2017) to flag likely disruptions and identify areas of concern.

4. **Global trade disruption and the effects on economic growth and livelihoods:** The COVID-19 pandemic is affecting African economies through many avenues, including its impacts on global markets. This workstream focuses on the effects of global commodity trade disruptions on trade, growth and poverty in African countries. We use existing single-country Computable General Equilibrium (CGE) models for economywide analysis combined with microsimulation models for poverty analysis. The effects of COVID-19 are evaluated by comparing the socio-economic impact of changes in predicted 2020 prices for 46 key primary commodities before and after the onset of COVID-19.

Preview of findings for Senegal

Analysis under each workstream has provided important indications of the likely effects of COVID-19 in Senegal on agricultural production, nutrition and food security, growth, and poverty in the short and medium terms through a variety of impact pathways. We start by identifying patterns of vulnerability to COVID-19 and its food security impacts at the regional level. We also examine Senegal's vulnerability to hidden hunger by analysing the likely impacts of food price changes in the COVID-19 era on consumption of key micronutrients.

Detailed millet price analysis is carried out under the price tracking workstream, which assesses the interconnectedness of urban and rural millet markets across the country. More specifically, millet prices in surplus and deficit area markets are examined, while also characterizing price changes during the early months of the COVID-19 crisis and comparing predicted with actual prices to identify the effects of COVID-19. Price analysis is complemented by millet production analysis carried out under the production disruptions workstream, which predicts 2020 millet output levels across the country and identifies areas expected to show significant differences in production compared to 2017 levels. Finally, under the global trade disruptions workstream, we examine the effects of COVID-19-related changes in commodity prices on Senegal's imports and exports and simulate effects on Senegal's global trade and consequent impacts on growth and poverty.