

COVID-19 and nutrition, food security, and dietary diversity and quality

Key Findings from a Phone Survey in Burkina Faso, Ethiopia, and Nigeria



OVERVIEW: The sub-Saharan Africa region is vulnerable to pervasive food insecurity and undernutrition that affects a significant part of the population. COVID-19-related disruptions to food systems, agricultural activities, and the functioning of health systems are likely to compound this problem with substantial impacts on diets, nutrition, and health outcomes. The ARISE Network undertook a multi-country study in Burkina Faso, Ethiopia, and Nigeria to better understand the impacts of COVID-19 on food security and nutrition in sub-Saharan Africa.

FOOD PRICES

90%
of respondents
reported
increased prices
of staple grains
during COVID-19

More than 80% of respondents reported increases in the prices of staples, pulses, vegetables, fruits and animal source foods. Nigeria sites (Lagos and Ibadan) and Kersa in Ethiopia were most affected. In Lagos, at least 98% of respondents reported increased prices for staple grains, vegetables and animal source foods.



FOOD SECURITY

68%
of respondents
reported
worrying about
running out of
food

The majority of respondents had worried about food in the previous month. 34% of respondents skipped a meal (up to 70% in Ibadan and 59% in Lagos) and 15% went a whole day without eating in the previous month. Only 12.3% of households reported accessing social protection services during the COVID-19 emergency, and school meals were available for less than 1%.



DIETARY DIVERSITY & QUALITY

40%
or more
had lower
consumption of
legumes, meats,
poultry and fish,
vitamin A rich
vegetables, and
other vegetables
and fruits

Dietary diversity and quality were low across all study sites and declined modestly during the COVID-19 emergency. At least 50% of respondents reported decreased consumption of staples, and at least 40% reported lower consumption of legumes, meats, poultry and fish, and other vegetables and fruits. In Lagos, at least 50% of respondents had lower consumption of all Dietary Diversity Score (DDS) food groups. Higher pulse prices were associated with less diverse diets. Lower crop production and not engaging in farming were associated with less diverse diets, as was being a farmer or casual laborer compared to being employed.



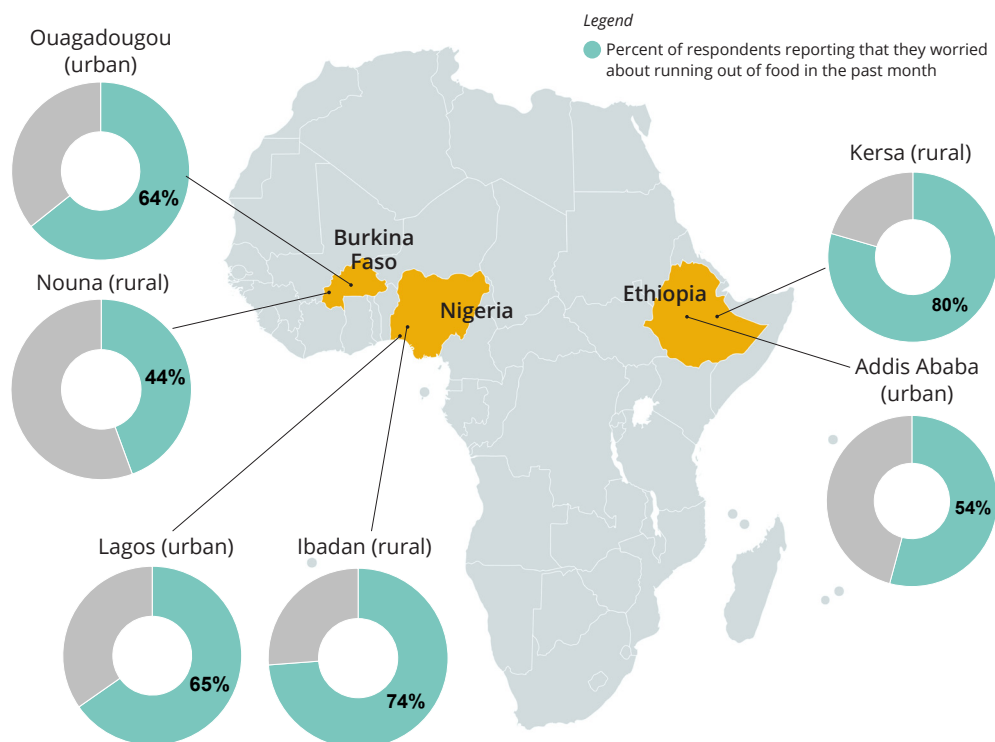
STUDY BACKGROUND

Beyond the risk of morbidity and mortality due to COVID-19, sub-Saharan Africa is vulnerable to related health, social, and economic impacts. COVID-19 mitigation measures such as lockdowns, border closures, and school closures had unintended consequences, disrupting food systems and food value chains, and decreasing access to diverse and quality diets.

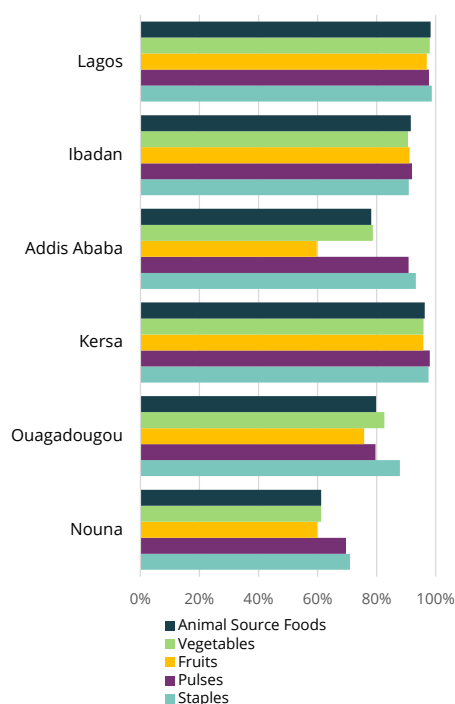
To understand these impacts, the ARISE Network conducted rapid phone surveys with 1,797 adults in urban and rural sites in Burkina Faso, Ethiopia, and Nigeria. Adults aged 20 and above were sampled from Health and Demographic Surveillance Systems and other surveys. Data were collected from July to November 2020 using computer-assisted telephone interviews (CATI). Dietary diversity was measured using the FAO Minimum Dietary Diversity for Women (MDD-W) index. Diet quality was measured using the Prime Diet Quality Score (PDQS).

The ARISE Network is conducting additional surveys to continue building the evidence base on impacts of COVID-19 in sub-Saharan Africa.

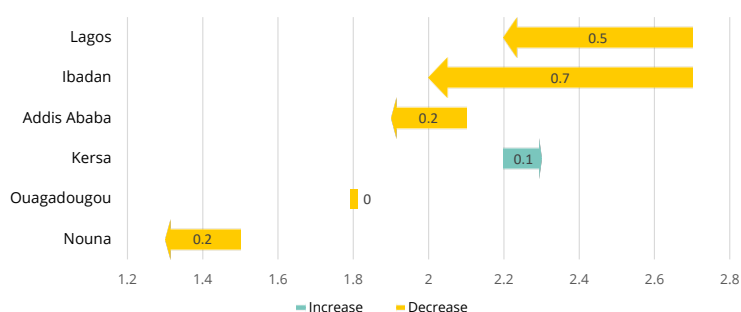
Food security and COVID-19: Respondents worried about running out of food in the previous month



Respondents reporting price increases for key food groups since the start of COVID-19

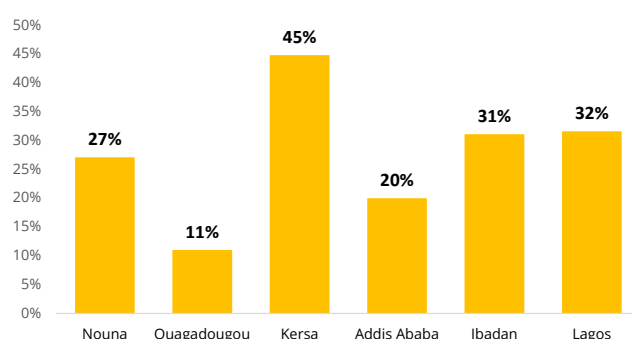


Average change in Dietary Diversity Scores (DDS) during COVID-19 compared to before the pandemic



Dietary diversity scores range from 0-10 and are computed as the number of food groups consumed, with a greater score indicating higher dietary diversity.

Respondents reporting decreased crop production during the COVID-19 emergency



Policy Recommendations

Potential negative effects of COVID-19 (both direct and indirect) on agriculture production, food prices for staples and other nutrient-dense food crops, food security, and dietary diversity and quality were observed in Burkina Faso, Ethiopia and Nigeria. These factors may impact nutrition and health for vulnerable groups in these countries, and they require scrutiny by policymakers and programs. Our findings underscore the following policy recommendations:

1. The observed price increases and worsening dietary diversity and quality call for social protection and other strategies to increase the availability and affordability of nutrient-rich foods during the COVID-19 pandemic and public health emergencies.
2. Monitoring and tracking of changes in these factors within and across countries is imperative for informed decision-making and quick responses to address and mitigate potential negative effects on health and nutrition.
3. Sustaining livelihoods and agriculture production in both urban and rural locations is key for protecting dietary diversity and quality in the study areas, particularly for vulnerable households

This study was undertaken by the Africa Research, Implementation Science, and Education (ARISE) Network and supported by the Bill and Melinda Gates Foundation, Heidelberg Institute of Global Health, and Harvard T.H. Chan School of Public Health. For more information, see Madzorera et al. (in press). Impact of COVID-19 on Nutrition, Food Security, and Dietary Diversity and Quality in Burkina Faso, Ethiopia and Nigeria. *American Journal of Tropical Medicine and Hygiene*, 2021.

