Journal of Agriculture, Food Systems, and Community Development
ISSN: 2152-0801 online
https://foodsystemsjournal.org

JAFSCD COMMENTARY

Effect of the COVID-19 pandemic on the food system in Abeshge District, Central Ethiopia

Tsegamariam Dula *
Wolkite University

Submitted January 14, 2022 / Published online August 22, 2022

Citation: Dula, T. (2022). Effect of the COVID-19 pandemic on the food system in Abeshge District, Central Ethiopia. *Journal of Agriculture, Food Systems, and Community Development, 11*(4), 13–18. https://doi.org/10.5304/jafscd.2022.114.015

Introduction

The agricultural-food system delivery chain, which connects producers to consumers, incorporates on-farm activities in production and distribution. The chain has faced a challenge during the ongoing COVID-19 pandemic (Fan et al., 2021). It is essential to address COVID-19's existing and potential impacts on the agri-food sector from the perspectives of both food supply and food demand. In this commentary, I report on a study conducted in 2021 to assess the effect of COVID-19 on the food system both in production and distribution aspects in the Abeshge District of central Ethiopia. The survey revealed that residents in the district had an average level of food consumption during the outbreak of COVID-19. The survey also suggests that COVID-19–related restrictions launched by the Ethiopian government could hamper crop value chains, with negative effects on farmers' income from food production and distribution.

* Tsegamariam Dula, Department of Agricultural Economics, College of Agriculture and Natural Resource, Wolkite University; P.O. Box 07; Wolkite, Ethiopia; tsegamariamd@gmail.com

Overview

COVID-19 was first identified in late December 2019, and the World Health Organization (WHO) declared a pandemic on March 11, 2020. The pandemic has affected people on both a national and individual level. But one of the biggest consequences of this pandemic is its disruptive effect on the food system (United Nations, 2020). The impact of COVID-19 on national food systems is expected to be greater in low-income African countries like Ethiopia, which is the focus of this study district location. Therefore, it seems relevant to assess the specific impact of COVID-19 on Abeshge District's food system, from the perspectives of both food supply and food demand.

In the International Organization for Migration's (IOM) (2021) ninth Ethiopian displacement report, internally displaced persons (IDPs) and returnee IDPs were found to be among the most affected groups in Ethiopia. In addition, the report found that 85% of the assessed villagers said that food costs had increased, affecting their capacity to buy food (IOM, 2021).

The food sector requires interventions to significantly protect the health of consumers. The interventions may range from minor to major. The Food and Agriculture Organization of the United Nations (FAO) works with countries to develop systems and capacities to prevent or mitigate food insecurity. Ethiopia has weak food distribution and marketing systems, so the pandemic is having adverse effects on its food supply chains (IOM, 2021). This threat is different from the emergencies that these populations usually face, due to its unprecedented global scale and the fact that it affects both food supply and demand.

In an exploratory survey, I looked at the effects of COVID-19 on the economy of the rural communities in the Abeshge District of central Ethiopia. Abeshge is a district in the Ethiopian Southern Nations, Nationalities, and Peoples Region (SNNPR) and is located in east-central Ethiopia. I conducted brief surveys of 130 households that were selected using a multistage random sampling method[1] using probability proportional to the size of the households that reside in the selected *kebeles* (small administrative units in Ethiopia). In this commentary, I share descriptive statistics from the surveys to describe the status of the food system during the COVID-19 pandemic.

Ethiopia in general and the Abeshge district in particular implemented partial lockdowns, a state of emergency, social distancing, and crowd avoidance in response to the pandemic. While the measures could help mitigate health crises, they also could divert attention from the agricultural sector and negatively affect the district's food system by disrupting food supply chains. The survey in the Abeshge District was an attempt to assess the effects of COVID-19 on both the production and distribution aspects of the food system.

In the survey results, the most common challenge reported was difficulty getting food to eat after the COVID-19 outbreak (due to shortage of income, travel restrictions, or public transport limitations). The study reveals that rural agricultural extension networks can be used to disseminate information on health consciousness and training around both COVID-19 and agricultural activities. The formation of new networks on both the production and consumption ends of the food system can provide opportunities for policy change and advocacy.

COVID-19's Effect on Involvement in Food Production

The survey results revealed that before the pandemic, farmers were able to move freely to produce food on their farms and others. Only 38.3% of people were involved in food production during COVID-19 (Table 1).

Agriculture extension and advisory services also faced severe disruptions when lockdown measures were imposed, reducing farmers' access during this critical growing period. However, the survey results indicate the pandemic had a positive effect on food production for *some* farmers: those

Table 1. Food Production Involvement During the COVID-19 Pandemic, 2021 (*N*=130)

	Percentage of respondents				
	Low	Moderate	High	Very high	Total
Level of involvement in food production during COVID-19	38.3%	31.0%	10.7%	20.0%	100%
Level of involvement in food sharing during COVID-19	12.8%	48.7%	33.3%	5.1%	100%
Level of food consumption during COVID-19	10.3%	48.7%	38.5%	2.6%	100%

[1] In the first stage, five districts were randomly selected. In the second stage, one district was selected randomly. Finally, a total of 130 rural households were selected randomly using probability proportional to the size of households that resides in the selected district.

who received more agricultural extension services than before the pandemic, in tandem with experts disseminating information about COVID-19. Furthermore, farmers may have had additional labor on the farm, as some adult children came back home from cities due to economic inflation that was making their lives there economically untenable. In addition, rural agricultural extension networks were being used to disseminate information on health awareness and education about COVID-19 and agricultural production. This may provide short-term benefits as well as provide opportunities for longer-term collaborations.

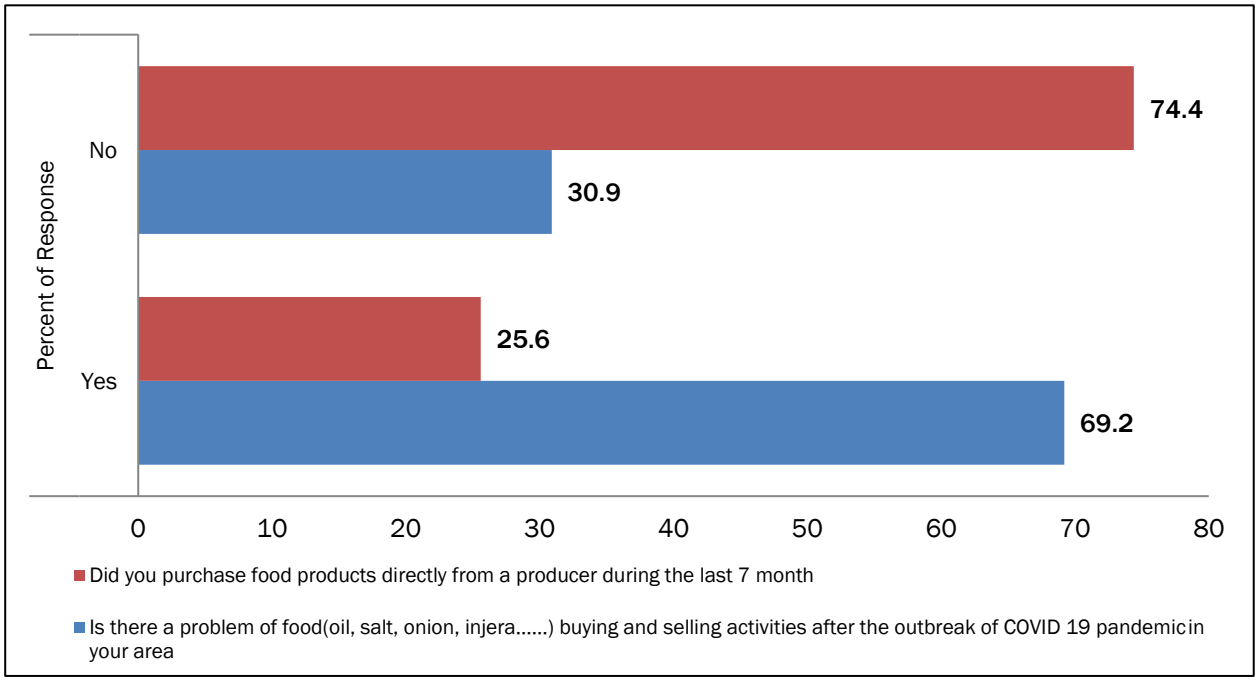
A moderate level of involvement in food sharing during the COVID-19 outbreak existed for 48.7% of the population (Table 1). This was due to the healthcare directives from WHO and the Ethiopian minister of health, such as socially distancing and staying home.

The survey reveals that farming activities were indirectly affected by labor shortages induced by COVID-19 lockdowns and the restricted mobility of people across borders. The unavailability of sufficient labor for periods of the peak seasonal labor demand for agricultural production contributed to reduced productivity in agricultural sectors. In the study site, seasonal cereal-producing farmers faced difficulties because of the delay in sourcing inputs due to restrictions on the movement of goods. For instance, in the Gurage zone, about 53% of farmers who produce cereal crops were challenged by the delay of improved varieties, and as a result about 24% of them were using local seed varieties to fulfill their seed requirements in the 2020/21 production year.

COVID-19's Effect on Foodstuff Buying Involvement

After the outbreak of COVID-19, 69.2% of the population was unable to purchase food items (oil, salt, onions, injera, etc.) (Figure 1). On the other hand, 74.4% of the population indicated that they did not purchase food items from their suppliers due to the COVID-19 outbreak. Countrywide lockdown measures, including reduced access to markets, have resulted in job losses and have negatively affected poor people's income-earning opportunities, in turn reducing their purchasing power and pushing them to resort to negative coping strategies. This has widened the poverty gap. Residents also affected are those who work in the agricultural sector, including casual laborers

Figure 1. Respondent Involvement in Food Buying



(including migrant laborers), who support on-farm planting or harvesting activities; transport operators; petty traders; market vendors; and village-based loan and credit operators (Seidel et al., 2021).

The distance to farmers markets was limiting access to nutritious foods such as fresh fruits and vegetables for the urban poor. Job losses, combined with a drop in remittances, will limit households' ability to afford healthy diets and attend to basic needs.

High obstacles to buying food existed for 7.7% of the population. Of the respondents, 28.2% and 30.8% faced slight obstacles and moderate obstacles, respectively, to buying food during COVID-19 (Figure 2).

COVID-19's Effect on Food Consumption Patterns

Figure 3 shows the main challenges reported: difficulty with respondents buying food after the COVID-19 outbreak (due to a shortage of income, travel restrictions, or public transport limitations) was the most common, followed by not enough to eat due to disrupted distribution, low demand, and difficulty importing, sourcing, or installing equipment in the study area. The respondents in the study area show there was a

Figure 2. Barriers to Buying Foodstuff During COVID-19

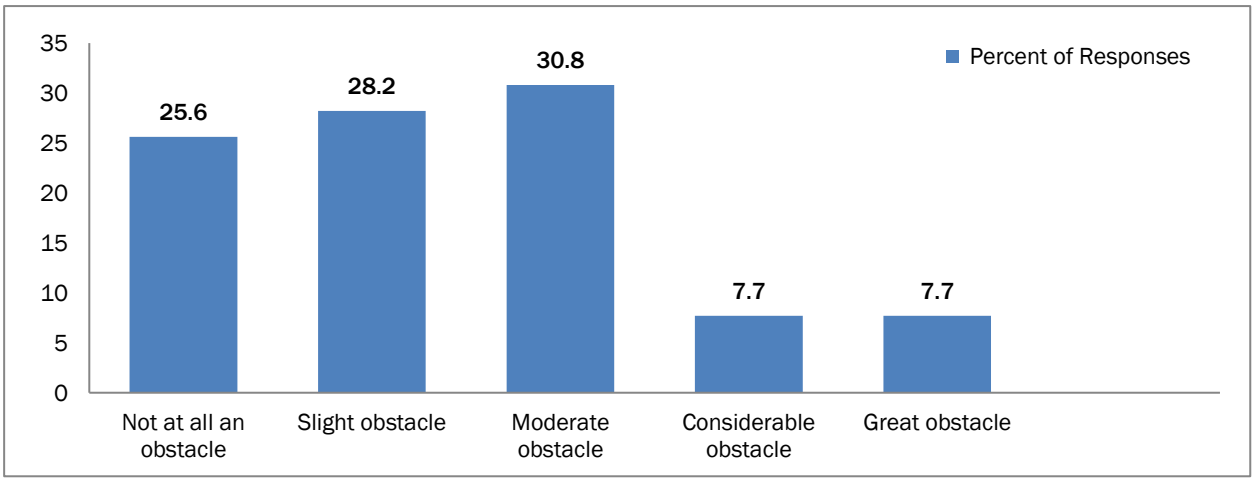
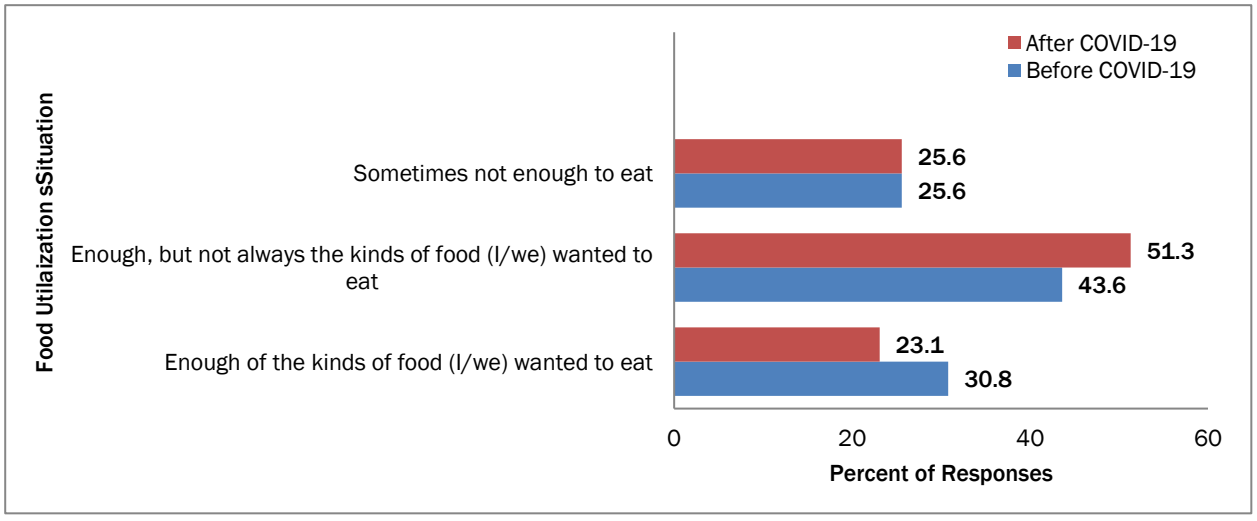


Figure 3. Food Consumption Patterns in the Household Before and After the Outbreak of COVID-19



difference between before and after the outbreak of COVID-19 related to their food consumption patterns.

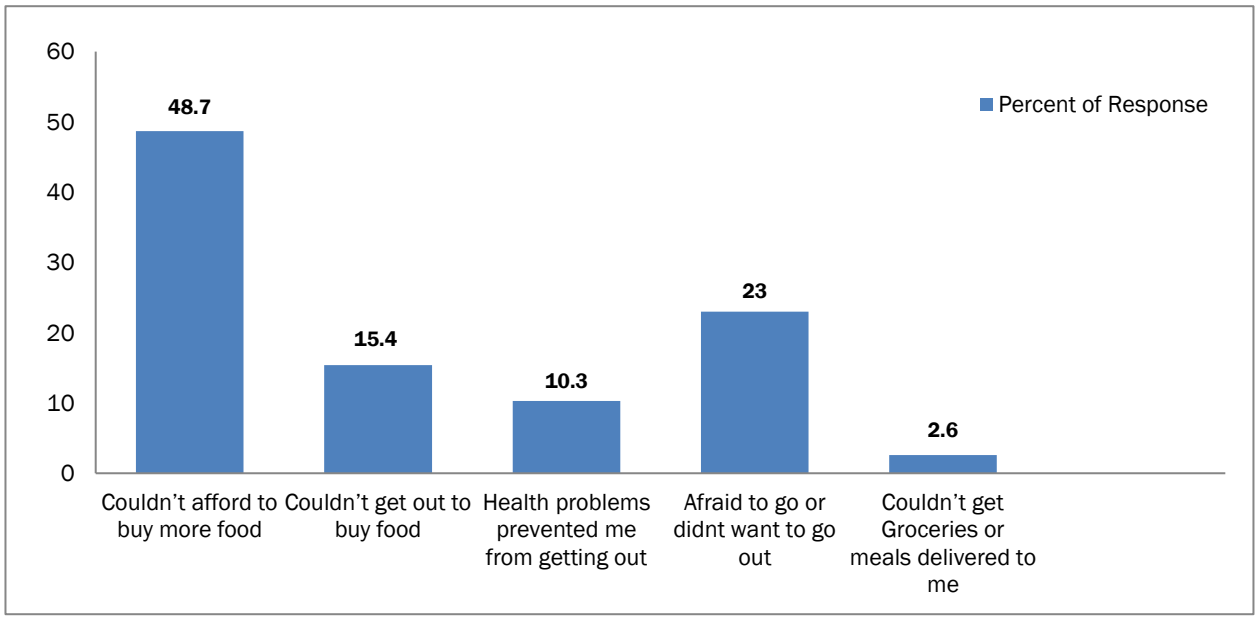
Due to the shortage of income and the inability to afford and access food items near their residences, many residents were forced to go a far distance to buy food, which incurred additional transportation costs (Johanssen, 2021).

Figure 4 shows that the people in the study area could not buy food due to the global epidemic. The study indicates that being unable to afford to buy more food (48.7% of respondents) and the risk of contracting the disease (23%) were the major impediments to buying the needed food.

This commentary has revealed the most common challenge to getting food to eat after the COVID-19 outbreak (due to shortage of income, travel restrictions, or public transport limitations). It has revealed that rural agricultural extension networks can be used to disseminate information on health consciousness and training around COVID-19 and agricultural activities. The formation of new networks on both the production and consumption ends of the food system can provide opportunities for policy change and advocacy.

Therefore, now and after COVID-19 abates, supporting farmers—who are fundamental players in food systems—to improve their access to and utilization of resources for the production and distribution of food products is vital in the effort to build sustainable food systems for all consumers.

Figure 4. Why Did You Not Have Enough Food to Consume?



References

Fan, S., Teng, P., Chew, P., Smith, G., & Copeland, L. (2021). Food system resilience and COVID-19—Lessons from the Asian experience. *Global Food Security, 28,* Article 100501. https://doi.org/10.1016/j.gfs.2021.100501

International Organization for Migration [IOM]. (2021). *Ethiopia National Displacement Report 9: Site assessment round 26 & village assessment survey round 9: June–July 2021.* https://dtm.iom.int/reports/ethiopia-%E2%80%94-national-displacement-report-9-june-%E2%80%94-july-2021

Johanssen, R. (2021, June 29). *America's farmers: Resilient throughout the COVID pandemic* [Blog post]. U.S. Department of Agriculture. https://www.usda.gov/media/blog/2020/09/24/americas-farmers-resilient-throughout covid-pandemic

Seidel, M., Murakami, C. D., Egan, J. F., Pope, J. D., & Tsai, C.-L. (2021). Impact of COVID- 19 on Pennsylvania farm revenue: Looking back at the 2020 season. *Journal of Agriculture, Food Systems, and Community Development, 11*(1), 21–26. https://doi.org/10.5304/jafscd.2021.111.015

United Nations. (2020, June). *Policy brief: The impact of COVID-19 on food security and nutrition*. https://unsdg.un.org/sites/default/files/2020-06/SG-Policy-Brief-on-COVID-Impact-on-Food-Security.pdf