Research Idea

Food Insecurity in Kenya's Urban Areas during COVID-19

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Abstract: Studies report damaging impacts of the COVID-19 pandemic on global food insecurity. This paper adds to the literature by examining the pandemic's effect on food insecurity specifically in Kenya's urban areas. Using secondary data, the paper first analyzes major factors that have contributed to increased food insecurity in Kenya's urban areas during the COVID-19 pandemic. The paper next discusses public policies that have been implemented to alleviate food insecurity in Kenya during the pandemic. The paper concludes by describing additional policies needed to alleviate food insecurity in Kenya's urban areas.

Introduction

The COVID-19 pandemic that has engulfed the world since early 2020 has increased global

food insecurity (Nechifor et al., 2021; Erokhin & Gao, 2020; Pereira & Oliveira, 2020). In several sub-Saharan African states, the disruption of trade activities and COVID-19-related panic-buying has exacerbated food prices (Ali Mohamed et al., 2021). Kansiime et al. (2021) assessed COVID-19 implications on household income and food security in East sub-Saharan Africa, using Kenya and Uganda, and found that food insecurity increased by over 38%.

The measures taken by individual countries in the region, including Kenya, to contain the pandemic have had significant implications for the food supply (Kansiime et al., 2021; Yaya et al., 2020). The UN-Habitat & World Food Programme (2020) reported that Kenya's food prices increased 8 to 10% following the start of the COVID-19 pandemic. According to the World Bank (2021) and the Global Alliance for Improved Nutrition (GAIN) (2021), the food insecurity situation in Kenya has worsened since mid-2021, when the month-on-month food price index rose significantly from 0.35% to 1.73%.

Based on a survey conducted by GAIN in mid-2021, the food security situation in Kenya varies widely across urban and rural areas due to factors including COVID-19-induced challenges. A study by Kansiime et al. (2021) showed that the price of vegetables, meat, and fish experienced the highest increase in Kenya's urban areas during the pandemic. The World Bank (2021) reported that 28% of adult

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residents in Kenya's urban areas skipped at least one meal in late March 2021. The situation worsened in early April 2021, rising to 39%. Food security during the pandemic also varied within Kenya's urban areas, with people living in urban informal settlements experiencing the greatest levels of food insecurity (HRW, 2021). Approximately 43% of residents surveyed in 12 informal settlements in Nairobi, Mombasa, and Kisumu experienced high levels of food insecurity from August to September 2020 (IPC, 2020).

Factors Contributing to Increased Food Insecurity in Kenya's Urban Areas during the COVID-19 Pandemic

The first case of COVID-19 within East sub-Saharan Africa was reported in Kenya in early 2020 (Aluga, 2020), and Kenya experienced a higher number of COVID-19 cases compared to other East African countries (UN-Habitat & WFP, 2020). Following World Health Organization (WHO) guidelines, the Kenyan government enacted various restrictions such as lockdowns, dawn to dusk curfews, closure of produce markets and businesses, and travel restrictions to contain the spread of the pandemic within its boundaries (Kansiime et al., 2021; Steverding & Margini, 2020). However, the devastating impact of COVID-19 and some of the measures taken by the Kenyan government to reduce its transmission among the public proved highly disruptive to agri-food supply and delivery chains (Kusmer, 2020) and led to increased unemployment (Pinchoff et al., 2021).

Food Supply Disruptions

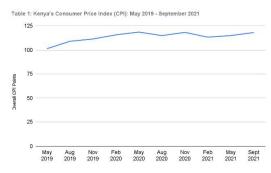
Restrictions enacted by the Kenyan government in response to the COVID-19 pandemic led to secondary effects such as the obstruction of all stages of the food supply chain, including production, distribution, processing, and consumption (Siche, 2020; Torero, 2020). For example, travel restrictions such as COVID-19 testing regimes at national and international borders caused transport bottlenecks (Steverding & Margini, 2020). These bottlenecks impeded traders' and transporters' access to farms and markets or caused delays in delivering agri-food commodities to urban areas (Kinyanjui et al., 2021; Siche, 2020; GAIN, 2021). The sharp decline in food supply led to increased food prices across Kenyan cities (Siche, 2020; Torero, 2020; Nicola et al., 2020; Pinchoff et al., 2021). As a GAIN (2021) survey showed, 8% of businesses stopped food production, 63% decreased their food production capacity considerably, and 26% of businesses decreased food production volume somewhat or slightly. In the same survey, results also revealed that 100% of food vendors reported decreased sales under COVID, and 60.4% of consumers observed changes in food availability, resulting in about 79% of households in Kenya's urban areas experiencing increases in food prices during the pandemic (Kinyanjui et al., 2021).

According to the Kenya National Bureau of Statistics (2021), since the pandemic's start, the Consumer Price Index (CPI) in Kenya's urban areas has gradually increased from 107.46 points in March 2020 to 116.077 points in September 2021. See Table 1. Shupler et al. (2020) also found that 88% of Kenya's urban

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residents could not afford to buy food for basic household consumption during the pandemic.

Table 1: Kenya's Consumer Price Index (CPI)



Source: Kenya National Bureau of Statistics (2021)

Loss of Employment

The food system is key to Kenya's economic development, and it is heavily dominated by informal markets and small, independent transporters that link producers with consumers (Bailey & Turner, 2002). According to GAIN (2021), the food system contributed about 32.4% to Kenya's gross domestic product (GDP) in 2019 and accounts for about 65% of national export earnings. The closure of many of these markets and travel restrictions in urban and peri-urban areas during the COVID-19 pandemic caused high rates of unemployment, which particularly impacted people living in Kenya's urban informal settlements (HRW, 2021) and working mainly in the informal sector (Shupler et al., 2020; Steverding & Margini, 2020). In addition, studies indicate a gender dimension because women living in Kenya's urban informal settlements experienced a disproportionate degree of both pandemicrelated unemployment and food insecurity (HRW, 2021; Pinchoff et al., 2021).

Characteristics of Kenya's urban informal settlements before the COVID-19 pandemic included high rates of poverty and unemployment, high population density, and a lack of basic public services such as running water (HRW, 2021), and the pandemic and related governmental restrictions have worsened conditions. According to the Office of the High Commissioner for Human Rights (OHCHR) (2020) and TIFA Research (2020), 43% of residents in Kenya's urban informal settlements lost their source of income during the pandemic and 69% reported reduced earnings because of the pandemic. Due to a sharp decline in income during the pandemic, the World Bank (2020) defined about 1.7 million people living in urban informal settlements in Kenya as food insecure. As an example, Pinchoff et al. (2021) found that people living in Nairobi's informal settlements and reporting a complete loss of income during the pandemic were 15% more likely to skip meals.

Public Policies Implemented to Alleviate Food Insecurity in Kenya during the COVID-19 Pandemic

After introducing COVID-19 containment measures that adversely altered food mobility and public consumption patterns, the government of Kenya simultaneously enacted measures to mitigate the risk of the collapse of food systems and to ensure the availability and affordability of food. In an effort to achieve this goal, Kenya's Ministry of Agriculture, Livestock, Fisheries, and Cooperatives Section on International and Comparative Administration

(MoALFC) formed a Food Security War Room (FSWR) that took over the monitoring of food prices and other food security metrics to support the country's most vulnerable populations. The FSWR's key interventions included maintaining the flow of produce from farms to markets and access to food by consumers, managing price increases, and supporting continuous extension services to farmers ("Real-time Ag Data for COVID-19 Response in Kenya," 2020). In response to the pandemic, the Kenyan government also implemented a national cash assistance program initially aimed at reaching 669,000 households but ultimately reached half (HRW, 2021; Jerving, 2021). The Human Rights Watch (HRW) report described flaws in the rollout of the program, including the identification of program beneficiaries by the Kenyan government, a difficulty attributed to the government having no centralized database. Many potential beneficiaries did not receive information from the government about registering for the program, and very few people who were supposed to receive the cash transfer ever received any money. Instead, family, friends, and supporters of government officials reportedly found it easier to enroll in the program and receive cash assistance (Igoe, 2021; HRW, 2021).

Additional Policies Needed to Alleviate Food Insecurity in Kenya's Urban Areas

Although multiple policies are needed to alleviate food insecurity in Kenya's urban areas, the need to improve road networks throughout the country deserves emphasis. The supply chain for Kenya's urban food system depends on distant food production locations, creating challenges for the country's transportation infrastructure (Opiyo & Ogindo, 2019). Due to the poor condition of Kenya's road networks and the distance between food sources and cities, transport serves as the highest cost to urban food retailers other than stock. The resulting increased cost to transport food to Kenya's cities leads to higher food prices in cities which in turn limits access to food by urban residents, particularly low-income urban residents, and worsens food insecurity in Kenya's cities (Opiyo & Ogindo, 2019).

Improved road networks and innovations in food distribution including improvements in refrigerated transport will not only allow farmers to ship perishable food over greater distances (Rees, 2013) but also help lower the cost of supplying food to cities and could therefore reduce food prices in cities which may help to alleviate urban food insecurity. As evidenced in the literature, innovations in food production and distribution, including improved road networks and new technology for storing and moving produce, have provided the bulk of the world's food over the 20th century. For example, many authors, including Rees (2013) and Smil (2004) have argued that innovations in food production and distribution have helped U.S. farmers to ship perishable food over greater distances, thus, making the country a major exporter of world food, especially during times of scarcity and pandemic (Fornari, 1976).

In addition, urban planning currently gives little attention to the urban food system and urban food security issues in Kenya even though city and county actors help to shape

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these systems (Hayombe et al., 2019). Greater formal involvement of local actors in urban food security issues should be encouraged. One way that local actors may positively influence urban food security is by promoting urban agriculture. Urban agriculture serves as an adaptive response by urban households to improve their food situation and diversify their livelihood options under persistent economic uncertainty and declining purchasing power (Mougeot, 2000; Foeken & Owuor, 2000; Foeken & Mwangi, 2000).

While rarely enforced, colonial-era by-laws prohibiting urban agriculture in Kenya are still in place today (Hayombe et al., 2019). To authentically promote urban agriculture, Kenyan authorities must first recognize it as an acceptable activity, not only in words but also in law and policy. Because developing land proves more profitable than using it for food production (Hayombe et al., 2019), attempting to increase urban agriculture in Kenya's cities will likely have a minimal effect on overall urban food security. Nevertheless, the additional use of urban agriculture by some percentage of Kenya's urban residents may enable them to grow a small portion of their food to supplement the food they purchase.

Conclusion

Global food insecurity has received increased attention since the start of the COVID-19 pandemic. This paper aimed to examine the pandemic's effect on food insecurity in Kenya's urban areas using secondary data. The paper described how food supply disruptions and loss of employment and income during the pandemic served as two main factors contributing to increased food insecurity in Kenya's urban areas. The paper also described the FSWR program and the national cash assistance program that the government of Kenya implemented during the pandemic to address food insecurity. In addition, the paper discussed the need for improved road networks throughout Kenya to lower the cost of supplying food to cities which could reduce food prices and may help to alleviate urban food insecurity. The paper also recommended that local actors such as planning officials take a greater role in addressing food insecurity in Kenya's cities.

References

- Ali Mohamed, E. M., Alhaj Abdallah, S. M., Ahmadi, A., & Lucero-Prisno, D. E. (2021). Food security and COVID-19 in Africa: Implications and recommendations. *The American Journal of Tropical Medicine and Hygiene*, *104*(5), 1613–1615. Advance online publication. https://doi.org/10.4269/ajtmh.20-1590
- Aluga M. A. (2020). Coronavirus disease 2019 (COVID-19) in Kenya: Preparedness, response and transmissibility. *Journal* of Microbiology, Immunology, and Infection, 53(5), 671–673. https://doi.org/10.1016/j.jmii.2020.0 4.011
- Bailey, C., & Turner, J. (2002). Social security in Africa: A brief review. *Journal of Aging & Social Policy*, 14(1), 105-114.

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Erokhin, V., & Gao, T. (2020). Impacts of COVID-19 on trade and economic aspects of food security: Evidence from 45 developing countries. *International Journal of Environmental Research and Public Health*, *17*(16), 5775. https://doi.org/10.3390/ijerph171657 75

Foeken, D., &. Mwangi, A. M. (2000).
Increasing food security through urban farming in Nairobi. In N.Bakker et al., (Eds.), *Growing cities, growing food: Urban agriculture on the policy agenda* (pp. 303-328). Feldafing (Germany): Deutsche Stiftung für internationale Entwicklung (DSE).

Foeken, D., & Owuor, S. O. (2000). Urban farmers in Nakuru, Kenya . Leiden: African Studies Centre, Working Paper 45.

Fornari, H. D. (1976). US grain exports: a bicentennial overview. *Agricultural History*, 50(1), 137-150.

Global Alliance for Improved Nutrition. (2021).

Impact of COVID-19 on Kenya's food systems. Retrieved from https://www.gainhealth.org/resource s/reports-and-publications/impactcovid-19-kenyas-food-systems.

Hayombe, P. O., Owino, F. O., & Awuor, F. O.

(2019). Planning and governance of food systems in Kisumu city. In J.

Battersby & V. Watson (Eds.), *Urban* food systems governance and poverty in *African cities* (pp. 116-127). Routledge.

HRW. (2021). We are all vulnerable here: Kenya's pandemic cash transfer program riddled with irregularity. Retrieved from https://www.hrw.org/report/2021/07 /20/we-are-all-vulnerablehere/kenyas-pandemic-cash-transferprogram-riddled

Igoe, M. (2021). Devex newswire: What happened to Kenya's COVID-19 cash? Retrieved from https://www.devex.com/news/devex -newswire-what-happened-to-kenya-scovid-19-cash-100424

IPC. (2020). Kenya urban acute food insecurity analysis. Retrieved from https://www.ipcinfo.org

Jerving, S. (2021). Who received that money? Report probes Kenya's COVID-19 cash program. Retrieved from https://www.devex.com/news/whoreceived-that-money-report-probeskenya-s-covid-19-cash-program-100421

Kansiime, M. K., Tambo, J. A., Mugambi, I., Bundi, M., Kara, A., & Owuor, C. (2021). COVID-19 implications on household income and food security in Kenya and Uganda: Findings from a rapid assessment. *World Development*, 137, 105199.

Kenya National Bureau of Statistics. (2021).

Kenya's Consumer Price Index (CPI): May 2019 – September 2021. Retrieved from https://www.knbs.or.ke.

Kinyanjui, G., Rubatsimbira, D., & Wiedemann, V. (2021). Tracking prices during COVID-19 in Kenya and Uganda. Retrieved from https://www.theigc.org/wpcontent/uploads/2021/07/Wiedmann -et-al-June-2021-Final-report.pdf.

Kusmer, A. (2020). Coronavirus - and locusts -

threaten Kenya's food security. The World. Retrieved from: https://www.pri.org/stories/2020-05-13/coronavirus-and-locusts-threatenkenya-s-food-security.

Mougeot, L.J.A. (2000). Urban agriculture: Definition, presence, potentials and risks. In N. Bakker et al., (Eds.), *Growing cities, growing food: Urban agriculture on the policy agenda* (pp. 1-42).

Nechifor, V., Ramos, M. P., Ferrari, E., Laichena, J., Kihiu, E., Omanyo, D., & Kiriga, B. (2021). Food security and welfare changes under COVID-19 in sub-saharan Africa: Impacts and responses in Kenya. *Global Food Security*, 28, 100514.

Nicola, M., Alsafi, Z., Sohrabi, C., Kerwan, A.,

Al-Jabir, A., Khan, M., & Agha, R. (2020). The socio-economic

implications of the coronavirus and COVID-19 pandemic: A review. *International Journal of Surgery*, *78* (3): 185-193.

- OHCHR. (2020). Monitoring human rights impacts of COVID-19 in informal settlements in Kenya. Social Justice Center Working Group.
- Opiyo, P. O., & Ogindo, H. O. (2019). The characteristics of the urban food system in Kisumu, Kenya. In J. Battersby & V. Watson (Eds.), Urban food systems governance and poverty in African cities (pp. 182-194). Routledge.
- Pereira, M., & Oliveira, A. M. (2020). Poverty and food insecurity may increase as the threat of COVID-19 spreads. *Public Health Nutrition*, *23*(17), 3236–3240. https://doi.org/10.1017/S1368980020 003493.
- Pinchoff, J., Austrian, K., & Rajshekhar, N. (2021). Gendered economic, social and health effects of the COVID-19 pandemic and mitigation policies in Kenya: Evidence from a prospective cohort survey in Nairobi informal settlements. *BMJ*, 11. doi: 10.1136/bmjopen-2020-042749.
- "Real-time Ag Data for COVID-19 Response in Kenya." (2020). Retrieved from https://www.data4sdgs.org/sites/defa ult/files/file_uploads/Realtime%20Ag%20Kenya%20COVID-19_0.pdf.

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- Rees, J. (2013). *Refrigeration Nation: A History of Ice, Appliances, and Enterprise in America.* Johns Hopkins University Press.
- Shupler, M., Mwitari, J., Gohole, A., de Cuevas, R. A., Puzzolo, E., Cukic, I., & Pope, D. (2020). COVID-19 lockdown in a Kenyan informal settlement: Impacts on household energy and food security. MedRxiv.
- Siche, R. (2020). What is the impact of COVID-19 disease on agriculture? *Scientia Agropecuaria*, 11(1), 3-6.
- Smil, V. (2004). Enriching the earth: Fritz Haber, Carl Bosch, and the transformation of world food production. MIT press. Steverding, J., & Margini, F. (2020). Economic impacts of and policy responses to the coronavirus pandemic: Early evidence from Uganda.

Steverding, J., & Margini, F. (2020). Economic

> impacts of and policy responses to the coronavirus pandemic: Early evidence from Uganda.

TIFA Research. (2020, June 30). Covid-19 global pandemic in Nairobi's lowincome areas socio-economic impact. Retrieved from www.tifaresearch.com/wpcontent/uploads/2020/06/TIFA-Research_Impact-of-Covid-19-on-the-UrbanPoor_Economic-Impacts_June-2020.pdf. Torero, M. (2020). Prepare food systems for a long-haul fight against COVID-19. Washington, DC: IFPRI. Retrieved from https://www.ifpri.org/blog/preparefood-systems-long-haul-fight-againstcovid-19.

UN-Habitat & World Food Programme (2020).

Impact of COVID-19 on livelihoods, food security & nutrition in East Africa: Urban focus. Retrieved from https://unhabitat.org/sites/default/fil es/2020/08/wfp-0000118161_1.pdf.

- World Bank. (2021). Food security and COVID-19. Retrieved from https://www.worldbank.org/en/topic /agriculture/brief/food-security-andcovid-19.
- World Bank. (2020). Kenya receives \$150 million to improve living conditions for 1.7 million residents in urban informal settlements-firms-kenya. Retrieved from https://www.worldbank.org/en/news /press-release/2020/08/07/kenyareceives-150-million-to-improve-livingconditions-.
- Yaya, S., Otu, A., & Labonté, R. (2020).
 Globalisation in the time of COVID-19: Repositioning Africa to meet the immediate and remote challenges. *Globalization and Health*, 16(1), 51. https://doi.org/10.1186/s12992-020-00581-4.

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