

COMMENTARY ON COVID-19 AND THE FOOD SYSTEM

Beyond COVID-19: Turning crisis into opportunity in Nigeria through urban agriculture

JAFSCD
Responds to
the COVID-19
Pandemic



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Introduction

Since the outbreak of the novel coronavirus (COVID-19) all over the world, countries have tried several strategies to minimize its impacts on their citizens and the economy. The first case in Nigeria was reported on February 27, 2020, and since then the infection has been spreading like wildfire, making Nigeria one of the three most affected African countries in Africa and the most affected in West Africa (Food and Agriculture Organization of the United Nations [FAO], 2020-a). To slow down its pace, governments at all levels have taken measures to curb its impacts. Measures taken include mandating social distancing, curfews, and, in some cases, complete lockdowns. The lockdown of virtually all sectors of the economy, especially the agricultural sector, has exacerbated food shortages in the country, especially among urban dwellers. Unfortunately, agriculture in most developing countries is highly related to physical, rather than mechanized, labor. The labor shortage due to movement restrictions (both intra- and interstate) and social distancing as a result of COVID-19 are starting to affect agricultural producers in the hinterlands, thus worsening the food supply to urban centers that are coincidentally the epicenters of the disease.

As public life is forced to shut down under the strain of the pandemic, serious concerns over the food supply are making the headlines. This is because agriculture and the food system were under a critical strain before the pandemic. Consequently, the pandemic will worsen an already bad situation—one in which one out of nine people globally do not have sufficient food to eat, meaning that about 820

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million people faced continuous hunger before the pandemic (Food Security Information Network [FSIN], 2020).

With the COVID-19 pandemic, food and nutrition security are expected to nose-dive, while poverty and malnourishment could become worse. The number of the world's hungry are expected to double as an estimated 265 million people around the world are predicted to experience severe food deficit this year alone due to the COVID-19 pandemic (FSIN, 2020). The Economic Communities of West African States (ECOWAS) estimates that COVID-19 pandemic increased the risk of food insecurity and malnutrition for 50 million people between June and August 2020. This is because the pandemic is expected to cause financial stress, inflations and sustained disruption of the food supply system. This will not only affect food availability, but also its affordability, and thus will increase food insecurity across the globe (FAO, 2020-b). This leaves over a quarter of a billion people at the edge of starvation.

Cities and agriculture seem like two incompatible worlds. COVID-19 has clearly demonstrated that change can happen suddenly and dramatically. The pandemic has changed the way people, especially urban dwellers, think about their food supply. The sudden disruption of food supply chains as a result of lockdown shows how easily the food supply can be disrupted and causes many to rethink where and how to get their food. As one consequence, COVID-19 has pushed many urban dwellers to grow their food at their homes, providing a potentially lasting boost to urban agriculture (UA). This increase in UA may be out of boredom or not wanting to be idle during the lockdown, or as a necessity for an alternative food supply.

Impacts of COVID-19 on Food Supply and Demand in Urban Centers

In Nigeria, the mitigation strategies adopted by governments to curtail the impacts of the COVID-19 pandemic include complete lockdown and partial lockdown approaches. In the complete lockdown approach, all activities are expected to close down (excluding essential ones like health services), while in the partial lockdown approach, a curfew is imposed and transportation between urban centers and rural communities is limited, but the rural economy and essential businesses continue. In essence, both lockdown approaches impose heavy economic costs on the populace with major impacts on the food supply and demand system in urban centers.

The food supply is negatively affected by the lockdown through self-isolation, movement restrictions of rural and urban farmers leading to farm-hour loss, and eventually low productivity of essential food crops during the period. There are also challenges in terms of logistics involving the movement of food crops, leading to perishable goods grown within and around urban areas rotting away. Consequently, the prices of food items in markets skyrocketed due to limited supply, making them unaffordable for many urban dwellers. Livestock is also affected due to reduced access to animal feeds, especially the poultry business and including the supply of eggs to urban dwellers. All these are likely to adversely affect the healthy dietary habits of groups vulnerable to the virus, especially the elderly and young children, thereby lowering their immunity.

In terms of food demand, uncertainty made people to spend less on quality food, resulting in noticeable declines in sales and consequently in production. Visits to major food markets also decreased drastically, especially in areas with partial lockdowns because of the contagious nature of the virus.

Potential of Urban Agriculture

UA has been known previously to contribute significantly to achieving the United Nations' Sustainable Development Goals (SDGs), particularly SDGs 1, 2, and 17, which relate to reducing urban poverty, achieving zero hunger, and ensuring environmental sustainability (FAO, 2007).

The urban poor constitute a large percentage of urban dwellers. Those in this group spend 50% to

70% of their income on food (FAO, 2007). To these people, UA offers the opportunity for a better diet and an increased free fund from either spending less to buy food or additional income from selling some of their produce. These funds can then be spent on other needs (Rabinovitch & Schmetzer, 1997).

Research indicates that UA was one of the successful strategies employed to combat the negative impacts of the Structural Adjustment Program (SAP) that plagued most African countries in the 1980s (Kareem & Raheem, 2012).

Before the discovery of oil in 1970, agriculture contributed considerably to the gross domestic product (GDP) of Nigeria and employed about 80% of the work force (Adebisi & Monisola, 2012). With the right innovation and institutional framework, UA holds unlimited opportunities, as Nigeria is blessed with fertile land and a good climate for crop production.

UA also offers the potential of improved climate by acting as windbreaks, providing shade, absorbing CO₂, and maintaining biodiversity (Konijnendijk, Gauthier, & van Veenhuizen, 2004). UA also adds aesthetic qualities to cities by helping to beautify them. The application of waste to grown crops can make a considerable impact in easing the existing problem of waste disposal management.

Policy Support to Promote UA in Nigeria

A policy that integrates and regards UA as an integral part of urban income, employment, and the food system will go a long way in tackling some of the challenges faced by UA and a step to innovatively support UA. This will totally change the public's outlook toward UA. Some of the policy supports may include but are not limited to:

- Recognizing UA as a vital land category in the metropolitan area by integrating UA into city planning and establishing greenbelt zones in city master plans;
- Increasing the enlightenment of urban residents on the benefits of UA;
- Establishing appropriate agencies at local and metropolitan government levels to regulate and coordinate UA activities and to provide access to agricultural loans they can disburse to interested urban dwellers;
- Setting up facilities to turn urban waste into compost for large-scale food production within and around cities; and
- Training of urban farmers by extension workers on improved methods of cultivation and developing and implementing curricula in UA at the secondary and tertiary educational levels.

Conclusion and Recommendation

A shortage of food is evident across the world during the COVID-19 pandemic period, but manifests itself more in African countries and especially in urban centers. As we move and/or navigate toward the next phase of the pandemic and accept the new norm it has created, the practice of UA could become a more viable tool to help tackle the problem of food shortages in urban centers under a well-managed system. It holds great prospects for alleviating urban poverty as well as solving the food insecurity challenge in urban centers in Nigeria. It is recommended that governments at all levels should not only take advantage of but also promulgate policies to invigorate UA with the aim of sustaining the food supply in urban centers.



References

- Adebisi, A., & Monisola, T. A. (2012). Motivations for women involvement in urban agriculture in Nigeria. *Asian Journal of Agriculture and Rural Development*, 2(3), 337–343. Retrieved from <http://www.aessweb.com/journals/September2012/5005/1511>

- Food and Agriculture Organization of the United Nations (FAO). (2007). *Profitability and sustainability of urban and peri-urban agriculture*. Rome: FAO. Retrieved from <http://www.fao.org/3/a-a1471e.pdf>
- FAO. (2020a). *COVID-19 and the impact on food security in the Near East and North Africa: How to respond?* Cairo. Retrieved from <http://www.fao.org/3/ca8778en/CA8778EN.pdf>
- FAO. (2020b, April 20). *Urban food systems and COVID-19: The role of cities and local governments in responding to the emergency* [Brief]. Retrieved from <https://www.fao.org/3/ca8600en/CA8600EN.pdf>
- Food Security Information Network (FSIN). (2020). *Global report on food crises 2020*. Retrieved from <https://www.wfp.org/publications/2020-global-report-food-crises>
- Kareem, R.O. & Raheem, K. A (2012). A review of urban agriculture as a tool for building food security in Nigeria: Challenges and policy options. *Journal of Sustainable Development in Africa*, 14(3), 526–542. Retrieved from <http://www.jsd-africa.com/>
- Konijnendijk, C., Gauthier, M. & van Veenhuizen, R. (2004). Trees and cities—Growing together [Editorial]. *Urban Agriculture Magazine*, 13. Retrieved from <https://ruaf.org/document/urban-agriculture-magazine-no-13-trees-and-cities-growing-together/>
- Rabinovitch, J., & Schmetzer, H. (1997). Urban agriculture: Food, jobs and sustainable cities. *Agriculture and Rural Development*, 4(2), 44–45.