

EFFECT OF PARTIAL LOCKDOWN ON FOOD SECURITY DURING THE CORONAVIRUS (COVID-19): THE CASE OF CAPITAL CITY OF GHANA, ACCRA

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ABSTRACT

The partial lockdown has brought insignificant effects on the entire economy. Food security was affected during the partial lockdown in Ghana specifically Accra. This study was conducted to ascertain the effect of partial lockdown on food security in Accra. Accra has been selected as a case site via a purposive sampling technique with the reason that the researcher used a criterion in mind. Both primary and secondary data were used. Content analysis was used to provide the necessary description of the gathered data. 30 respondents were used as sample size. The major findings were; food security in Ghana can be determined by four dimensions namely; availability, accessibility, utilization, and stability as outlined by the World Food Summit held in 1996. Other findings were that partial lockdown in Accra affected the following; food availability, food accessibility, utilization, and stability. It was recommended that the Government should consider food availability, food accessibility, food utilization, and food stability to maintain strong food security in Ghana to reduce adverse effects of partial lockdown in Pandemic like COVID-19.

Keywords: Partial lockdown, Coronavirus (COVID-19), food security, food availability, food accessibility, food utilization, and food stability.

1. Introduction

Coronavirus simply called **COVID-19** is a large group of viruses that is common among animals. It was first identified amid an outbreak of respiratory illness cases in Wuhan City, Hubei Province, China. It was initially reported to the World Health Organisation on December 31, 2019. On January 30, 2020, the World Health Organisation declared the COVID-19 outbreak a global health emergency. On March 11, 2020, the World Health Organisation again declared COVID-19 a global pandemic. Additionally, it is a dangerous disease with an incubation period between 4 to 6 days. It is fatal especially for those with a weakened immune system, the elderly, and the very young. It could also result in Pneumonia and bronchitis (About COVID-19 | Ghana, 2020).

The global pandemic, COVID-19, continues to batter various sectors of the economy, not sparing the agriculture sector, which happens to be the backbone of Ghana's economy. But Ghana is not alone. Every African country has been adversely affected by the pandemic, as, continent-wise, 60 percent of the population is employed in agriculture. The widespread virus has tested and challenged three significant areas of Ghana's agriculture: production systems, supply chains, and food commodity preferences. Ghana's agriculture is rainfed: The majority of farmlands are under rainfed agriculture. Hence, the time to undertake some crucial farm activities is done side-by-side with information on weather conditions and seasonal dates. The food supply chains in Ghana provide a lot of jobs for transport services and women traders who purchase from farmgate and sell to retailers in the towns and cities (Abroquah, 2020).

On Saturday, 28th March 2020 a partial lockdown was imposed on Accra and Kumasi to take effect from Monday, 30th March 2020 for two weeks due to the ongoing coronavirus pandemic.

When the government propounded restrictions on movement and deployed military personnel into towns and cities to enforce the partial lockdown, the activities of food supply chain actors took a direct hit. The already frail rural-urban food network was negatively affected as fewer middlemen moved into farming communities to buy. The drastic reduction in the number of fresh food retailers in the markets and the decision of some managers to close down restaurants, hotels, and other local eateries has massively reduced the bulk purchase of fresh food. Subsequently, a good number of women suspended the carting of fresh foods from rural communities due to fear of spoilage from the slower pace in the purchasing of fresh foods as a result of lockdown measures. While low income earning individuals stay at home adhering to precautionary measures, this has affected the income of families as well as their purchasing power (Abroquah, 2020). Therefore, it is very imperative to research the effect of partial lockdown on food security in Ghana specifically Accra during the partial lockdown of coronavirus (COVID-19).

2. Research objectives

- i. Discover the indicators for determining food security in Ghana.
- ii. Describe the state of partial lockdown on food security in Accra.

3. Research questions

- i. What are the indicators for determining food security in Ghana?
- ii. What is the state of partial lockdown on food security in Accra?

4. Significance of the study

This study will serve as a baseline to know the major indicators for measuring food security in Ghana and the world at large. Future researchers will see this study as a step to conduct other researches into food security as in line with Pandemic such as COVID-19.

5. Methodology

A case study design was used to explore new and well-detailed information about partial lockdown on food security in the case site (Accra). Accra is the capital city of Ghana and the second most populated city as well. Accra has been selected as a case site via a purposive sampling technique with the reason that the researcher used a criterion in mind. Beside, Accra was part of the first cities in Ghana to experience the first-ever partial lockdown hence it qualified for the selection of this study. Both primary and secondary data were used. Content analysis was used to provide the necessary description of the gathered data. 30 respondents were used as sample size with an accessible population of food sellers, food suppliers, and a few consumers.

6. 0. Findings

6.1.0. Indicators for determining food security in Ghana

Food security was agreed to exist when: “All people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 1996).

Achieving food security requires that the aggregate availability of physical supplies of food is sufficient, that households have adequate access to those food supplies through their production, through the market, or other sources, and that the utilization of those food supplies is appropriate to meet the specific dietary needs of individuals. Food security is a complex phenomenon that exhibits itself in numerous physical conditions resulting from multiple causes (Darfour & Rosentrater, 2016).

The World Food Summit of 1996 established four dimensions of food security: availability, accessibility, utilization, and stability. These four (4) dimensions are the major indicators for determining food security in Ghana;

6.1.1. Food availability

FAO (2014) indicated that one of the key determining factors of food security depends on the availability of food and its constituents. There could be the availability of dietary energy but not diversified enough to provide the macro and micronutrients essential for a healthy life.

Information on food available for consumption is mainly obtained at an aggregate level through

food balance sheets, which give data on the quantity of energy and protein available on each day per person at the national level. Dietary energy supply could be a good indicator of food availability, but other indicators, such as food adequacy, are needed to provide information on the gap between food supply and average energy requirements. Between 1990 and 2011, the level of energy supply obtained from cereals, roots, and tubers slightly dropped in West Africa (Darfour & Rosentrater, 2016).

6.1.2. Food accessibility

Hunger will continue to be an issue as long as the available food is not adequately distributed among the population. All people should have access to food physically and economically. Access to food is determined by income ability of households and individuals to access social support and the prices of food. Beyond economic affordability, physical access to food is enhanced by the availability of infrastructures, such as rail lines and tarred roads. As regards roads, in 2005-10, Ghana among the other seven other nations had the highest road density (14 to 110 km per 100 square km of land area). Aggregate FAO projections show that, even with decreasing consumption, global agricultural production still needs to increase by 60% (and nearly 80% in developing countries) in the next four decades to cope with a 39% increase in population and increase global dietary energy supply beyond 3000 kcal per person per day. This translates into the additional production of almost one billion tons of cereals annually by 2050. In 2009 Ghana, among eight other African nations, had the highest food supply of primary food crops, which ranged between 2730 and 3349 kcal/cap/day (Darfour & Rosentrater, 2016).

6.1.3. Food utilization

“Utilization is a measure of a population’s ability to obtain sufficient nutritional intake and nutrition absorption during a given period” (Hauck & Youkhana, 2008). The diversified poor meal is often associated with a deficiency in micronutrient and it is a strong indicator for child stunting and maternal nutritional status (Ruel, 2003; Savy *et al.*, 2005; Ruel *et al.*, 2010). Anemia caused by iron deficiency is known to be very common among individuals with meals low in animal protein and high in rice or whole wheat (Banerjee & Duflo, 2011). Progress in food access and availability is not always associated with progress in food usage. Food handling, preparation, and storage influence food utilization (Darfour & Rosentrater, 2016).

6.1.4. Food stability

This refers to the stability of availability, access, and usage at all times with no risks. The main risks which might have great effects on availability, access, and usage are extreme weather conditions, energy scarcity, economic and social disruption, and poor functioning global markets. Stability emphasizes having mechanisms in place in assuring the availability, access, and usage which is likely to change with risks (Darfour & Rosentrater, 2016). To address such risks, production systems need to be promoted and supported, ensuring sustainable investment in rural development, and improving market governance. The common factors associated with the stability parameters are focused on the availability and access parameters. Over the past 50 years, the world’s crop production has increased three times (Darfour & Rosentrater, 2016). Growth in crop production corresponds to increase in crop yields in the arable land on which crops are planted which together with increases in crop intensification, such as higher multiple cropping, or reducing fallow periods, can lead to an expansion in the harvested area (Pangaribowo *et al.*, 2013).

7.1.0. State of partial lockdown on food security in Accra

The state of partial lockdown on food security in Ghana has been discussed per the (4) indicators of determining food security as outlined by the World Food Summit held in 1996;

7.1.1. Food availability

The COVID-19 affected food security drastically by making food unavailable to the citizens of Ghana when the partial lockdown was imposed on Accra. The movement of people in Accra was restricted during the partial lockdown and this made food unavailable.

7.1.2. Food accessibility

Available food was not accessible to the citizens of Ghana during the partial lockdown because the means of transport were supervised by the Security Agencies such as Ghana Police Service, Ghana Immigration Service, Ghana Fire Service, and Ghana Army Forces that frightened people to move to get access to the available food as at the time of the partial lockdown.

7.1.3. Food utilization

The usage of food during the partial lockdown did not follow the routine of nutritional diet as people were interested in filling their stomachs without concentrating on the nutritional intake of food.

7.1.4. Food stability

The sustainability of food during the partial lockdown was unstable since the sources of food were not certain in terms of supply. Food sellers were seriously having challenges in getting food to be sold to their consumers. Due to the ban placed on the means of transportation, food availability and accessibility were challenged to make food stability frustrated.

8. Recommendation

The government should consider food availability, food accessibility, food utilization, and food stability to sustain food security in Ghana to reduce adverse effects of partial lockdown in Pandemic like COVID-19.

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