

Vulnerabilities and Re-prioritization Measures for Fostering the Balance to Food Sufficiency in Africa

Andrew-Essien Elizabeth. Esekong^{1,*}, Bisong Francis Ebuta², Anwana Eno Deborah³,
Ndiyo Ayara Ndem², Okon Asuquo. E², Akintoye Ayorinde Akintoye¹

¹Department of Environmental Resources Management, University of Calabar, Calabar Nigeria

²Department of Geography & Environmental Sciences, University of Calabar, Calabar, Nigeria

³Department of Botany and Ecological Studies, University of Uyo, Uyo, Nigeria

*Corresponding author: liessien@yahoo.ca

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Abstract Human security remains the bedrock of all sustainable development goals. However, a central fulcrum that ties human security to sustainable development is food security. Food security encapsulates environmental and capital resources invested through food production to determine the viability of market prices access, availability, utilization and stability. The dynamics of food security has affected the progressive development of developing countries over the years. The environmental and socio-economic cost of the Covid-19 is evident in the economy- shut-down and its attendant consequences for human security. This paper utilizes situation analysis to project the food production trends in Africa to highlight the imperatives of its re-prioritization. It asserts that failure to mainstream the viability of support-systems to cope with the ripple effects of pandemic-stressors resulting in declined productivity and subsequently economic losses that exacerbate the pandemic-influence to further environmental, health and financial crises. These losses present grave consequences of the attendant effects on food sufficiency in the stride to meeting the sustainable development goals by 2030. The recommended options include the development of cost-effective strategies that include the removal of stringent national and regional trade policies. African leaders must embrace the fact that drivers of food insecurity, such as the current pandemic and associated policies go beyond national jurisdictions, instead it demands a multi-stakeholder response. Importantly, the adequacies and relevance of food security strategies such as the Integrated Food security strategies in Sub-Saharan Africa developed in close association with international donors needs to be re-appraised. Questions of 'one size fits all' should be revised as uniformity is inapplicable across the sub-region, due to contrasting governance structures. Lastly, reprioritizing public and private investments in agriculture are necessary for food sufficiency within the continent if the aim is to end all forms of hunger and malnutrition by 2030.

Keywords: human security, food sufficiency, pandemics-vulnerability, Covid-19, welfare, Africa

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1. Introduction

Building resilience to curb natural and development-induced challenges and vulnerabilities from pandemics, land-use modifications, climate change, poverty, natural resources decline, and low levels of human living standards remain a central focus of global decision-making. Country-level capacities are steadily re-aligned to address the tenets of the Sustainable Development Goals based on their varying resource endowments. The attainment of food security through measures to reduce poverty and hunger is justified as critical to promote the sustenance of human welfare and development [1-6]. However, various dimensions of multi-faceted environmental, economic, social, cultural and political challenges often deter the steady means of

achieving food security. Similarly, unanticipated outbreaks of diseases, epidemics and pandemics, compound the problem, grossly undermining the vulnerability capacity for sustained development. The pressure of dealing with the vulnerabilities that stem from global insecurities such as the Covid-19 and its consequences on food security, livelihood enhancement and the achievement of sustainable development milestones for Africa constitute the focus of this paper.

2. Vulnerabilities and Propelling Containment: Implications for Food Security

Human survival rests on food security that promotes the adequacy, availability, accessibility and affordability of

staple foods for all people at all times as core human requirement for sustenance and existence [7]. The challenges of food security become apparent when the mechanics of socio-economic factors are distorted in the face of unaccounted-for-vulnerabilities especially as it relates to food production, access, food pricing dynamics like international trade, and social exclusion amongst others. The low level of adoption of effective policies and measures for integrating food self-sufficiency at all scales of governance also constitutes a challenge for food self-sufficiency particularly in Africa [8-13]. The population of the world has grown in escalating dimensions such that the Food and Agriculture Organization (FAO) indicates *ceteris paribus* that by 2050, approximately 9.8 billion people will be on earth and a corresponding 70% increase in food productivity will be required for feeding. The escalating human population demands the adoption of concerted efforts in promoting food security by countries and international development agencies. Various decision-makers' measure of advocating for the intensification of agricultural production to meet the demand for food supply will in the long-run not suffice especially in instances of catastrophic disasters [14,15]. Hence, economic goals to maximize human efforts to achieve development objectives, especially within developing countries, will be more severe. This study makes a case that food pricing indices have a tendency to intensify the vulnerabilities of communities or regions to food insecurity. To this effect, it can be surmised that a correlation exists between the influence of domestic pricing and the percentage of the global food prices as illustrated by Benson *et al.*, [16], Minot, [17] and Kalkuhl, [18] who analyzed the price transmission from the global commodity market to domestic food markets to highlight the price transmission for different trade regimes. The findings showed that 90 % of the vulnerable living below \$1.25 daily were from countries where domestic food prices responded to international rates. For example, the global food prices between the period of August 2014 and May 2015 witnessed a 14 % low-turn, as triggered by price transmission, environmental hazards, prevailing inflation, increased oil prices to affect food production and disrupted trade [5]. The outbreak of Covid-19 resulted in the abrupt shut-down of thriving economies and as such, affecting all relevant sectors to undermine the resilience to food stability in developing economies. In this regard, the implication of the pandemic-vulnerability is food shortage occasioned by the reduction of productive capacity and high prices for food; resulting in insecurity, increased hunger, poverty and reduced living standards with associated social vices as outcomes. Food insecurity is indicative of the state of domestic food sufficiency towards mainstreaming food security in broader contexts. This paper makes a strong case for the need to expedite the adoption of sustainable options that influence stability of domestic pricing on global food if the African continent is to progressively move towards achieving the sustainable development goals by 2030.

3. Food Production and Pricing for Sufficiency in Africa

Economic growth in Africa has steadily increased reaching an estimated 3.5 percent in 2018, with estimated

projections of 4.1 in 2020 [19]. The extent to which this growth can actively trigger the sustainable development of the region remains in doubt when considered in line with external balances, trade and structural finances of other countries. This includes the cumulative consumption contributions to GDP growth, global recession, food pricing and market dynamics; debts, shocks and the unforeseen as the Covid-19 pandemic. Scholars have made impressive contributions to the global and local contexts of promoting human welfare through food security and sufficiency [15,36,37,38,39]. Global food insecurity cross-profile by FAO highlight the distribution of food-insecure people in the world to an approximate total of 2 billion people comprising of 52% (1.04 billion) in Asia; 34 % (676 million) in Africa; and 9% (188 million) in Latin America [17]. The past global food crisis of 2007-2008 induced increased prices of products with down-spiraling consequences on the vulnerability of the food insecure countries. Suffice it to mention that the lessons learnt from the global profile is yet to be effectively addressed as many African countries still lack the technological prowess to upscale independent food production for consumption and export. Minot [17] analyzed over 60 price series from select African countries namely; Cameroon, Ethiopia, Ghana, Kenya, Malawi, Mali, Mozambique, Senegal, South Africa, Tanzania, Uganda, and Zambia, reflected significant ranges of 40%-80% variant changes as a result of price transmissions, inflation and international commercial trade prices. The price trend from 2007-2008 revealed that the estimated degree of food price transmission up-scaled sharply to approximately three-quarters of the proportional increase in world prices owing to the price- index connectivity in the world markets as occasioned by oil price increases. The scenario for the year 2020 is different and presents a bleak economic structure based on the restrictions imposed by the Covid-19 pandemic and rapid measures adopted by countries to enhance the containment measures through social distancing, reductions in business momentum, travel restrictions, and border shut-down on global scales.

4. Pandemic-vulnerabilities and Africa: Reinventing the Wheel?

The shock of the Covid-19 pandemic has induced global socio-economic challenges and uncertainties in human welfare and sustenance. The consequences of this make integrating personal survival -resilience methodologies for off-setting the effects of widespread epidemics more difficult. Studies that bridge the existing theoretical, political and knowledge-base with the realities of natural dynamics warrant the need to upscale development planning based on absolute, relative and generational sustainability of country-level asset development processes for livelihood security and poverty alleviation in line with the changing globalization status [3,19,20,21,22]. Establishment of the existing relationships between pandemics and the levels of economic development such as rising standards of living, access to food and water, cultural attitudes and sanitation have attendant impacts on the susceptibility to prevalence of diseases and poverty, especially within developing countries. Most African

states share common environmental, economic, social and political characteristics which highlight the development gaps in comparison to the advanced countries. The realization that the pandemic wave of the Corona-virus 2019 is redefining countries' identity, vulnerability and adaptation towards building food security resilience, and remains the apex reality especially for the developing world [23]. For rapidly growing economies in Africa like Rwanda, Nigeria, Ghana, Ethiopia, Kenya, Cameroun, Zimbabwe, Angola and Senegal, amongst others, the growth in improved market access, the prevailing economic and environmental challenges, rising debt profiles, recession, climate change, declining agricultural productivity that accelerate multidimensional poverty, will have triple consequences on food sufficiency and security. Scholars affirm that livelihood asset development constitutes the major requirements that characterize the transitional revolutionary progress of any country, especially within West African countries [21,24]. However, the prevalent disconnects that presently strangulates many countries are the environmental vulnerability from shocks and stresses. Such shocks and stresses stem from cultural values and norms that define land-use process-dynamics, change and alterations in addition to investment priorities. The poor investments in agriculture that emphasize shifts from subsistence to agro-processing; healthcare and social security are indicative of the demographic insecurity and vulnerability that present and future pandemics will have on the populace. The global coronavirus pandemic has left policy and decision-makers at a loss as to the future security of the human livelihood, especially food sufficiency. The level of preparedness, technological productivity and capacity to resolve post-Covid-19 realities reflect the need to reprioritize the adaptive capacity of micro and macro-institutional structures that support resilience for the livelihood development of food security. The African continent has a rich development chart as exemplified by the powerful empires and kingdoms that were known for historic trade and investments across the world. Historical recounts of economic growth in the African continent identified economic diversity based on the regional transactions that were driven by massive trading of natural resources such as leather, cotton, gold, and various food stuff between interconnected trade ports, cities and kingdoms. These regional trades offered opportunities for investments in resource development and agriculture thereby providing growth poles of economic hubs along the Saharan trade-routes that fostered food security for human welfare. The collapse of these socio-cultural spatial organizations along the African continent were however, affected by the interplay of internal and external factors that bordered on colonization, governance, power sharing, politics and ethnic identification among other factors. The major factors that act to undermine progressive economic development in Africa as compared to other regions of the world, include endemic poverty triggered by complacent economic growth, famine, internecine wars and the ineptitude of corrupt leadership [25]. These factors have correspondingly resulted in affecting the food security of the populace with devastating consequences. Unfortunately, this region is still struggling to extricate itself from the shackles of staggard development.

Africa is recognized in recent times as a significant economic pivot for fostering productive transformation as a means of building resilience towards the changing environmental dynamics. The accounting factor for the consideration includes the rapid population-resource for capacity building in Africa as typified by an ever-increasing estimate of over 1 billion inhabitants. African population projection is set to double within the next thirty years, given the growth rate of 2.7% [19]. The worrisome context of the population increase is that despite the rapid growth, Africa's developmental stride in terms of investments in socio-economic structures ranks low in comparison to other developing regions. Suffice to point out that the major obstacle for growth and poverty reduction present viable opportunities for investments for local and regional economic development. Studies that capture the tangent values of investment from sectors such as infrastructure, communication, tourism, transportation, power and agriculture which have immensely contributed to building the trade-income measures promoting livelihood and food security for many communities and states [3,21,26].

The reality of vulnerabilities such as pandemics constitute significant public concerns when considered from the multifaceted dimensional impacts of functional socio-economic faucets and the verifiable and unverifiable losses for the vulnerable in society. Despite the seemingly solid viable investment-development drives and economic policies that decision-makers have formulated and implemented, the socio-economic challenges of developing countries have only tended to cascade in a downward spiral. A central point that demands answers is how best to minimize the impact of coronavirus on food security even as the continent forges to meet the sustainable development standards of 2030. This is important for building safety nets that can protect the vulnerable populace and also limit the post-impact of the pandemic irrespective of the duration and its spread. African governments have the core responsibilities to streamline measures that should jump-start the prioritization of economic up-turn measures. This is critical to enabling people build resilience for illnesses and diseases to enhance productivity and economic development especially in pandemic-driven instances.

The big question then is, what measures could the African continent adopt to up-scale unanticipated falling market prices for products invested in building livelihood security? Despite concerted efforts at promoting the pace of socio-economic development, significant catalytic pendulum swings arising from a conduit of forces have made it difficult to accelerate development growth processes that align with the sustainability drive of the millennium. The chronic effects of rapid land-use modifications and changes, ecological resources depletion and deforestation amongst others have given credence to the projections that Africa will be severely affected by the Covid-19 pandemic with attendant devastating vulnerability consequences for food security. The characteristic range defining the African environment cuts across the economic, social, cultural and political milieu to reflect gross development traits accompanied by poverty, insecurity and low standards of living. Its attendant impacts crisscross the micro-to macro-level scales where

individuals' liberty, generally social, psychological and economic lock-in became the new global disorder for the vulnerable masses. The present technological revolution that has fast-tracked economic development for countries presents a leverage to enable African countries build resilience to uncertainties and vulnerabilities. It is significant to acknowledge that Africa's unique comparative advantage in agriculture as a result of the vast tracts of suitable landmass presents investment potentials and opportunities for agribusiness with the utilization of the appropriate technological innovation. Hence, increased food production can match lower food prices by a supply response to lead to fewer uncertainties and higher investment in production.

The implication of the pandemic-vulnerability for Africa is likely to be devastating as the various sectors that determine human sustainability are highly prone to intense-impacts especially the economic and health institutions that heavily rely on the advance countries for trade and imports and debt reliefs. Attention on food security for food sufficiency is not new given the recurring interplay of complex environmental, social, economic and political variables [27]. The absence of critical capital, infrastructure, technology, and cultural resources to enable effective and efficient policy- stabilization of agricultural productivity as well as health-facilities and services challenge contingency measures to tackle the Covid-19 pandemic in many African countries. This study is premise on the need to rethinking the upscale measures for economic growth across the African region.

5. Method of Study

This paper seeks to emphasize the need to re-prioritize the existing measures for balancing food security in Africa and hence, adopts the analytical procedure towards highlighting the food sufficiency projection trends through the analysis of proxy data on agricultural productivity from Food and Agricultural Organization (FAO), and related Agencies Departments and Ministries (MDAs) such as

Bureau of Statistics, Ministries of Agriculture, Forestry and Environment, etc. This approach has been considered a valid surrogate measure for assessing pandemic and food security in Africa [18]. Africa's annual production in tonnes of food crops (root, tubers and cereals) and livestock as well as consumer price index were derived from FAOSTAT and projected to 2020. Only averages for five months (January to May) were used to match with 2020 given the substantive state of the pandemic study time-line.

RESULT ANALYSIS

a. PRODUCTION OF CROPS IN AFRICA

Data on food production from 2010 to 2020 is employed to assess the correlation existing between food availability, food prices and vulnerability to food sufficiency. Figure 1 shows the trend analysis of the average production of annual crops in Africa. Oil and maize were the main products in terms of production. There was a reduction, however, in their total production in 2012 and this continued till 2020. This observed downward decline in the profile is further exacerbated by the abrupt shut-down of economic propellers attributed to Covid-19 that drive the progressive growth and development in any country.

b. THE CONSUMER PRICE INDEX (CPI)

The Consumer Price Index (CPI) measures the average change in prices over time that consumers pay for a basket of goods and services, commonly known as inflation. Changes in the CPI are used to assess price changes associated with the cost of living. The CPI is one of the most frequently used statistics for identifying periods of inflation or deflation. Figure 2 shows the consumer price index for Africa with 2010 as the base year. The data shows an increase in consumer price index within the Covid-19 period. This trend indicates that consumers spend more on purchase of goods and services. The CPI increase from 200.92 in 2019 to 213.84 in 2020. This rise translates to a 6.43% inflation rate which will invariably affect food security.

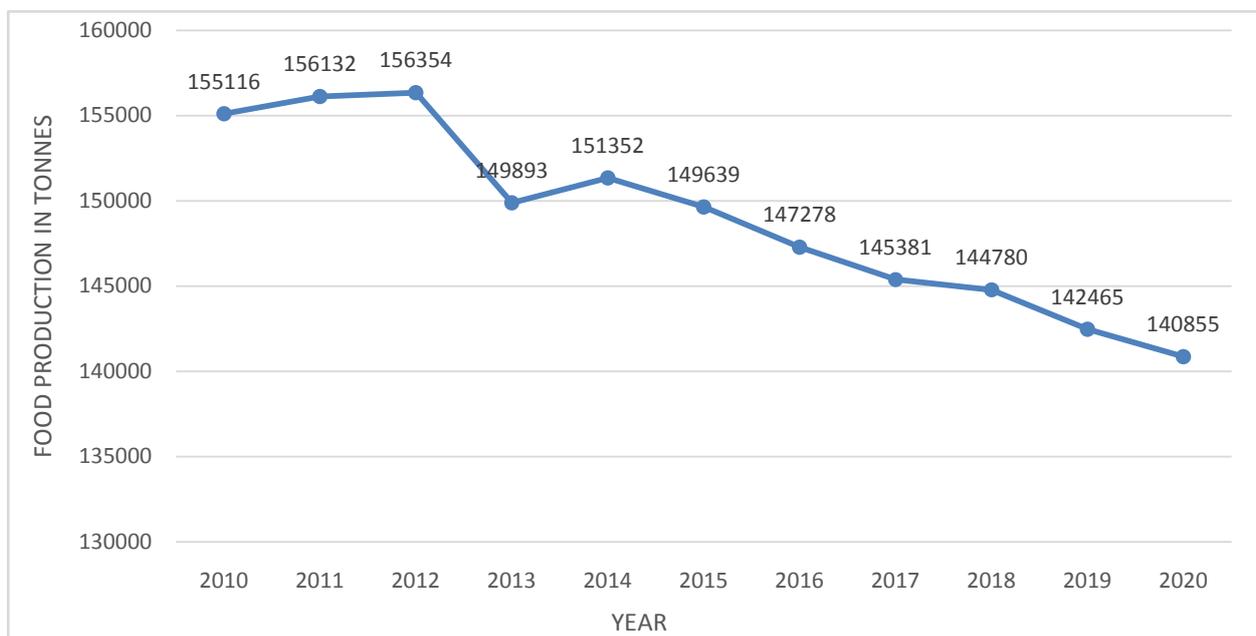


Figure 1. Food Production in Tonnes for Africa (Source: FAOSTAT, 2020(projected))

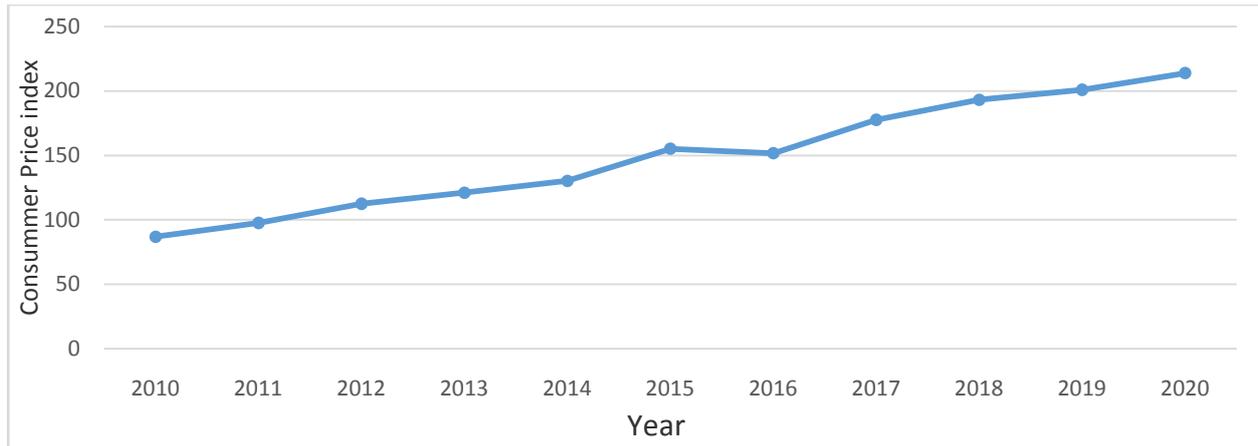


Figure 2. Consumer Price Index (Source: FAOSTAT, 2020(projected))

c. PRODUCTION OF ROOTS AND TUBERS

Production of roots and tubers constitute one of the staple foods in Africa. Production of roots and tubers such as cassava, yam, cocoyam, water yam, potatoes, among others (Figure 3 and Figure 4). Production has been on a steady increase from 2010 as the base year and then reduced in 2017 This trend further worsened within the Covid-19 pandemic period where production decreased from three hundred and six million, nine hundred and forty-five thousand, one hundred and sixty-eight (306,945,168) tonnes in 2019 to two hundred and ninety-three million, two hundred and seventy-five thousand, seven hundred and forty-one (293,275,741)

tonnes in 2020. This represents a decrease of 4.45% with attendant effects on food pricing especially for vulnerable populations. For example, Figure 3 shows trends in the production of yam over the year-period 2010 to 2020. It is observed that yam production had steadily increased over the past seven years (2012-2019) with slight fluctuations. The accounting factors are as a result of potential internal and external economic and political forces in production outputs. The onset of the pandemic (Nov 2019-May 2020), and the restricting economic dynamics has reflected in current production derivatives with a corresponding 0.9% decrease as a result of the pandemic.

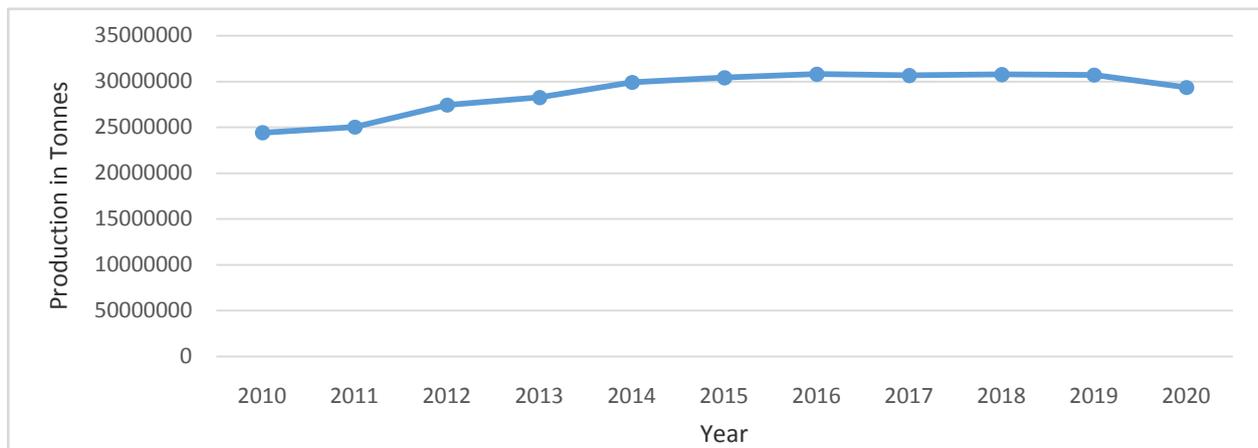


Figure 3. Roots and Tubers Production (Source: FAOSTAT, 2020 (projected))

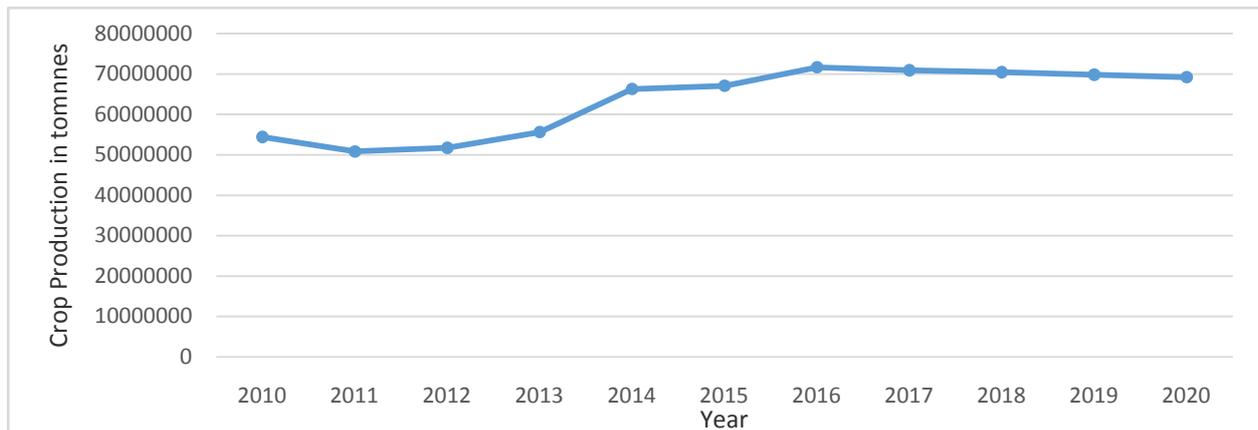


Figure 4. Yam Production in Tonnes (Source: FAOSTAT, 2020(projected))

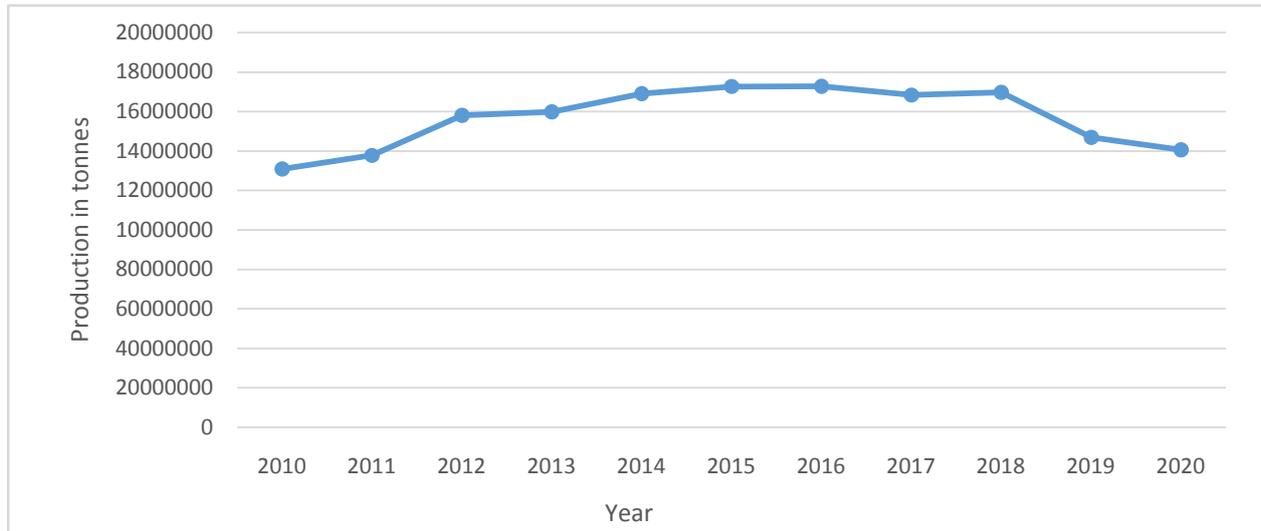


Figure 5. Cassava Production in Africa in Tonnes (Source: FAOSTAT, 2020 (projected))

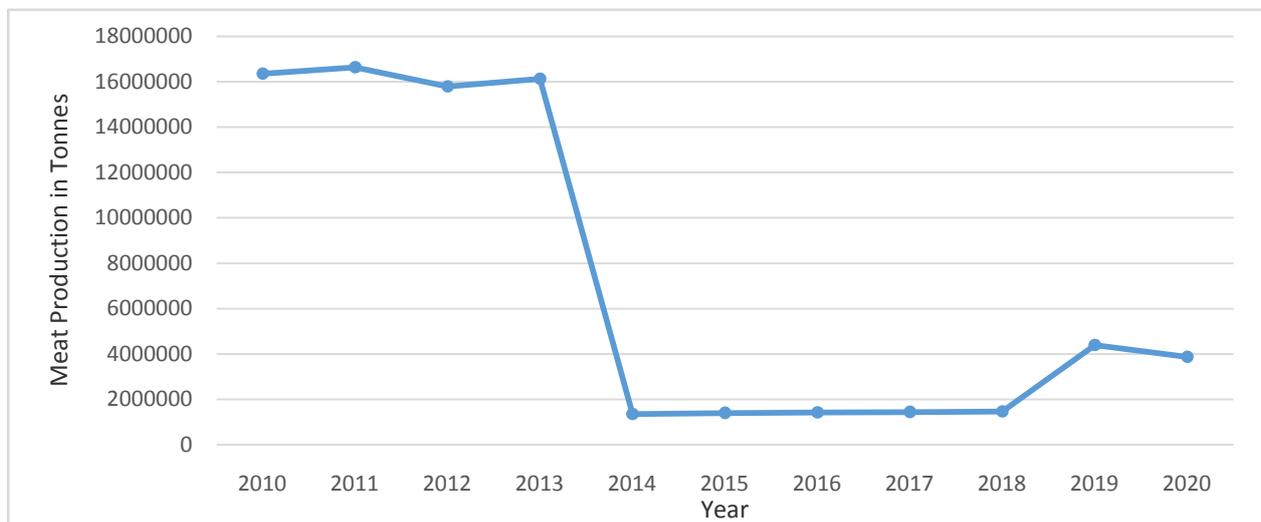


Figure 6. Livestock Production in Tonnes (Source: FAOSTAT, 2020 (projected))

d. CASSAVA PRODUCTION

The production of cassava, a major staple for most African households is regarded as vital to mainstreaming food security in Africa. The period 2010 to 2020 has also witnessed a steady fluctuation in cassava production (Figure 5). Cassava production shows a sharp decrease of 4.3% within the first five months of 2020. Thus, cassava production decreased from one hundred and forty-six million, eight hundred and ninety-three thousand, eight and seventeen (146, 893, 817) tonnes in 2019 to one hundred and forty million, five hundred and seventy-one thousand, five hundred and twenty-one (140, 571, 521) tonnes in 2020.

e. LIVESTOCK PRODUCTION

The domestic production of livestock such as cattle, goat, sheep and chicken for consumption is integral to livelihood sustenance in most African countries. It is seen that meat production drastically reduced in 2014 (Figure 6) accounting for a 91.6% drop from the production trends of 2013. This observed trend was largely attributed to the Ebola epidemic outbreak in 2014. There was a slight increase in 2019 and then an 11.9 % short-fall in 2020 orchestrated by the pandemic which has generally affected the production of livestock meat for consumption.

6. Implication of the Pandemic on Agricultural Production and Pricing

Africa's state of vulnerability and contingency preparedness is challenged by the pandemic-mitigation measures especially the shut-down. The global implication of Covid-19 induced food insecurity is particularly disturbing for energy and food export-dependent countries that are ill-equipped to be self-reliant or agriculturally-capable, the Covid-19 triggered economic down-turn will translate to higher spending, more country-debts and ultimately more vulnerability.

The lockdown in economic activities significantly affected both small and medium-scale enterprises. The economic decline was further compounded by the global economic downturn as a result of travel ban and similar effects on revenue loss from dropped oil prices in critically unexpected ways. The action of Covid-19 pandemic increased the vulnerability intensification for ill-prepared countries of the world as found in Africa and other developing countries of the world. This situation brings to the fore critical concerns of the livelihood security of the developing countries populace in the

face of deadly pandemics threats. The concerns about livelihood security is a 'warning bell' to decision-makers to begin to re-examine and re-invent the necessary socio-economic options of transformative propellers that can withstand the economic shocks and stresses for food security through re-prioritization to find value in the global market.

The above brings to the fore, the need to highlight the nexus of inputs and the global capacity for aligning investments processes determine the level of growth and development within such regions as the African countries where vulnerability to food security have significant sustainability outcomes.

7. Reprioritizing the Adaptive Capacity for Future Food Sufficiency: The Way Forward

The African Development Bank estimates that the Covid-19 could cost Africa a GDP loss between \$22.1 to \$88.3 billion in the worst-case scenario. The realization that the pandemic is incurring losses will be evident in the reduced living standards that deter the rapid move towards attaining the global sustainable development goals. This makes food security a critical developmental imperative for Africa. The actions of economy-shut-down and social distancing rules as containment protocols for the ongoing pandemic, strain agricultural production. This is particularly true as viable supply chains require human contacts to bring agricultural products from producers to consumers. Reduction in food supplies leads to increased food product prices, which limit food sufficiency, availability and access as characteristic of the prevailing situations with the closure of borders across African states and other regions of the world. Consequent upon border closures, the prices of essential imported commodities such as cereals have spiraled to an all-time high based on scarcity, making it difficult for poor households to maintain access throughout pandemic challenging periods. The absence of efficient storage mediums promotes food waste and food loss on a wide scale. Also, local production and internal supply chains have been crippled by interstate bans and prohibitions leading to *ad hoc* government food bank arrangements and palliatives. Instructively, Africa since the 1980s has been a net food importer despite having more than half of the world's agricultural arable land [28]. One of the nagging problems is proper inventories and accountability. For instance, Nigeria recently enunciated the need to upscale the existing 38,000 tonnes of grains in government-controlled strategic reserves with 100,000 additional tonnes. The Nigeria region has among the lowest inventories relative to consumption. As a result, current export restrictions translate to shortages of grains such as rice [29]. The dependence on imports has made Africa vulnerable to international market forces and trade barriers that threaten local production, storage and export performance. The current situation fueled by the pandemic reveals the unpreparedness of the continent's governments to a food crisis. Internal grown crops and cereals lay waste on agricultural farms, whereas imports from major South East

Asian countries have also stopped. Other multiple stressors in the continent reinforce the food crisis. For instance, is the traditional agricultural practices; the majority of African communities are still dependent on rain-fed agriculture, which revolves around the annual cycles of the dry and wet season. However, this system is endangered and less viable, as global environmental change, such as climate change has brought on untold hardships for farmers. Rain-fed agriculture is characterized by low productivity, low technology and high labour intensity [30]. More so, climate change exacerbates traditional planting regimes and indigenous knowledge, as farmers no longer can predict the onset of rains, leading to crop failure. Additionally, changes of weather patterns induce natural disasters such as flooding, droughts, pest infestation and diseases [31]. Thus, in the context of shocks, trends and stresses to the agricultural sector; on one end of the spectrum is climate change, whereas on the other end is the coronavirus disease, COVID-19.

Furthermore, is the issue of conflicts/insecurity in various regions across the continent; situations such as the lingering Fulani herdsmen conflicts in northern Nigeria are complex and diverse, and their effects on the food insecurity challenges are not quickly quelled [32]. These stressors worsen the levels of hunger, poverty and suffering of poor households within the continent. More than ever before African nations need to come together to implement and complement each other's food security policies to increase the probability of food access to the continent's population, especially for the vulnerable groups. This situation will help reduce the projected over 300 million numbers of hungry people and malnourished children by the year 2020 [33]. As further posed by Rukuni, each African state must develop a cost-effective strategy to ensure food availability through local production, storage and trade.

8. Policy Trends

The resilience of the African continent in the struggle with the crisis of pandemic is not in doubt and must not be taken for granted. However, one trigger point of the Covid-19 reality is based on the fact that the unexpected can birth and require countries to shut their borders in order to survive. This will have severe socio-economic implications for export-dependent countries owing to the product and food scarcity that can result with potentially debilitating consequences. A case in point is the global restrictions of travels, interactions and closure of business opportunities for trade and exchange that have affected the world. The gradual balance to the normal is likely to take time as the post-Covid realities will restructure and affect the way businesses and social interactions occur for a long time. Reforms that address the vulnerabilities of the African people towards building resilience for sustainable development are urgently needed. This must as of necessity, include good governance that advocate for effective institutions at all levels to meet the basic needs of the populace while balancing food pricing through investments in manufacturing and processing. In addition, if further food crisis is to be averted in the future, then

reprioritization must be considered as critical index of the sustainable development drive for Africa. To this effect, African leaders and decision-makers must recognize that the drivers of food insecurity, such as the current pandemic, climate change and conflicts/insecurity and associated policies to address them go beyond national governmental jurisdictions [33], instead it demands functional multi-stakeholder responses [32]. These stakeholders will include; national governments, private sector, regional economic associations and international development organization partners. Hence, policies must be robust and integrative. Some countries have fared better than others as political reforms have included both decentralization and an increased role for civil society, including non-government organizations and independent farmer organizations [35]. Yet, in others, food safety systems show a rather patchy work of regulations and organizations [28].

Importantly, its high time national governments reappraise the adequacies and relevance of food security strategies such as the Integrated Food/nutrition security strategies in Sub-Saharan Africa developed in close association with international donors. Questions of one size fits all must be addressed as uniformity may not be as effective across the sub-region, due to the dynamics of peculiar governance structure. Lastly, reprioritizing public and private investments in agriculture is necessary for food sufficiency within the continent if the aim is to end all forms of hunger and malnutrition by 2030.

In Nigeria, for example, cash crops earned significant revenue before the oil boom of the 1970s, but that is not the current trend. The preponderance of oil gained priority over the years at the expense of agriculture; this has resulted in leaving Nigeria highly vulnerable to fluctuating oil prices on the world market [36]. African countries must, as of necessity, drive the educational platforms that support the reprioritization of food sufficiency through agricultural production as a means driving the adaptive capacity for people. The promotion and utilization of modern technological resources will serve to harness the food productive capacity for present and future purposes. Other pre-requisites for promoting food security include enhancing investment in agribusiness through comprehensive 'back to land' programs that will include engaging and equipping young people in agriculture in line with development global standards.

As part of re-prioritization, investments and deliberate budgetary allocation must be channeled towards reforming the agricultural sector across African states, especially those of Sub-Saharan Africa. Agricultural policies should be cast towards building farmers resilience to shocks, enhancement of inputs and credit facilities that will boost food production. Indeed, we acknowledge the existence of some of these policies; for instance within the West African sub-region, as part of its "Agricultural Transformation Agenda" the Nigerian government committed to expanding its "agricultural insurance scheme" to 15 million smallholder farmers by 2017, yet needy farmers are barely beneficiaries of this scheme, as corruption, lack of transparency and accountability mutilate such good-will programmes and several others within the sector. So much so that many small-holders farmers especially in the southern part of the country are

not even aware of national constituted schemes and bear fully the brunt of inadequate farm inputs and attendant low yields. The resultant effect is increasing farmers' debt profile and as such are not able to break out of the vicious poverty circle.

The coronavirus pandemic is an insight to the fact that the future can be adequately catered for through effective re-prioritization of policies to food sufficiency. This becomes the engine of growth through the mobilization of capital resources for promoting sustainable development. Building resilience for adaptive capacity will require the strengthening of regional economic growth to integrate inclusivity and infrastructural upscaling towards investment and enhanced local-content produce exportation.

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