



Publisher

<http://jssidoi.org/esc/home>



FOOD SECURITY AND NUTRITION GOVERNANCE POST-COVID-19 IN AFRICA

Shikha Vyas-Doorgapersad¹, Elvin Shava², Akinseye Olowu³

^{1,2,3} School of Public Management, Governance and Public Policy, College of Business and Economics, University of Johannesburg, South Africa

E-mails: ¹svyas-doorgapersad@uj.ac.za; ²ellyshava@gmail.com; ³aolowu@uj.ac.za

Received 5 April 2023; accepted 10 August 2023; published 30 September 2023

Abstract. The article examines the food security and nutrition governance of South Africa, Nigeria and Zimbabwe post-COVID-19 in Africa. Drawn from a qualitative approach that utilises a case study design of multiple cases, this study compared the food security and nutrition governance interventions adopted by the three countries post-COVID-19. Using the Post Development Theory of Food Security, the key findings from the study indicate that, among the three countries, food security was threatened by COVID-19 as the supply chain of all the countries was abruptly disrupted owing to partial and total lockdowns. Reconfiguring the food security landscape to achieve nutrition governance requires the three countries to revisit their agricultural policies in the case of Zimbabwe, where farmers need extensive state support to revitalise grain produce. South Africa also recommends supporting agriculture and subsidies to smallholder farmers, which is fundamental for promoting food security and nutrition governance in many poor rural provinces. Nigeria also needs to improve regarding stakeholder support as agriculture was affected by the lockdown, and farmers' productivity declined. Therefore, the assessment of all three cases led researchers to conclude that state and stakeholder investment is fundamental in agriculture mainly, which is the backbone for promoting food security and food nutrition and safety policies are fundamental for ensuring nutrition governance among citizens. The creation of employment and provision of machinery to smallholder farming can mitigate food insecurity at the household level.

Keywords: food security; nutrition governance; post-COVID-19; Africa

Reference to this paper should be made as follows: Vyas-Doorgapersad, S, Shava, E., Olowu, A. 2023. Food security and nutrition governance post-Covid-19 in Africa. *Insights into Regional Development*, 5(3), 58-72. [http://doi.org/10.9770/IRD.2023.5.3\(3\)](http://doi.org/10.9770/IRD.2023.5.3(3))

JEL Classifications: F53, F55, O13

Additional disciplines public management, development studies

1. Introduction

In South Africa, since the outbreak of COVID-19, many families have struggled to ensure household food security due to either reductions or loss of business viability, among others. The government aid the situation through Social Relief grants, although common criticism point to the weaknesses of this grant as poverty persists. Food insecurity in South Africa because of COVID-19 triggered poverty, which manifests in various forms depending on the context (rural or urban). Katumba, Cheruiyot and Mushongera (2019) affirm that poverty remains a massive impediment in South Africa attributed to weak economic growth, escalating prices of

consumer goods, energy prices, and high unemployment, including policy uncertainty. Although urban sprawl is proliferated everywhere in urban municipalities, various micro-mechanisms were implemented by the government to mitigate poverty, including housing deficiencies.

Due to the declining economy in Zimbabwe, unproductivity in formerly white-owned farms and ailing industry trigger food insecurity challenges. Notwithstanding the effects of climate change, Zimbabwe, a once vibrant agricultural economy, saw citizens battling COVID-19 while guaranteeing household food security. Studies conducted on food nutrition governance have shown that Zimbabwe has been food insecure for the past decade, leading to various interventions from Food Agricultural Organizations (FAO), Red Cross Zimbabwe, and other humanitarian organisations to complement government food security initiatives (Murendo, Manyanga, Mapfungautsi & Dube 2021; Zhou 2020). While contestations arise in relief aid, Zimbabweans are at the most significant risk post-COVID-19. Previous government programmes such as Command Agriculture needed to have revitalised the agricultural economy resulting in dependence on other countries, such as Zambia, for grain. The COVID-19 lockdown measures in Zimbabwe disrupted food supply chains and limited access to food, especially for many urban families that rely on daily purchases of fresh produce (Zhou 2020).

Nigeria, one of the economic powerhouses in Africa, is battling food security following the aftermath of the COVID-19 pandemic. As noted by Obayelu, Bolarinwa and Oyeyinka (2021), Nigeria's agriculture, food security, and nutritional intake were not immune from the COVID-19 outbreak's effects on the disruptions in a wide range of global sectors. On February 27, 2020, the outbreak first hit the nation and had a detrimental impact on the socioeconomic situation and agriculture, food security, and nutritional consumption. The COVID-19 outbreak caused food demand and supply shocks, negatively impacting agricultural, food, and dietary intake. It lowers income and raises food prices. Nigeria's imprecise farming methods meant there needed to be more hired labour for the industry in 2020, resulting in low output and rising food prices. This view concurs with observations from South Africa and Zimbabwe, where food prices increased during COVID-19 due to short supply. Post-COVID-19 in Nigeria requires the government to stimulate agriculture and open markets to smallholder farmers to promote the growth of cheap and quality foods to improve people's nutrition.

This article applies the Post Development Theory to govern food security and nutrition in a few selected nations post-COVID-19. The study responds to the following queries: What has changed in South Africa, Nigeria, and Zimbabwe regarding food security and nutrition governance after COVID-19? Which initiatives have these nations taken to combat food insecurity and solve nutrition governance issues in Africa following COVID-19? And what difficulties do these chosen nations have in maintaining food security and nutrition governance beyond COVID-19?

After the introduction, there is a literature review grounded in theory, followed by a contextual study of food security and nutrition government, encompassing public administration, food security, and nutrition governance in Africa. The plans for achieving food security and nutrition governance post-COVID-19 in Africa and the methods and difficulties involved are covered in the following section. A summary of the study's findings and policy suggestions is provided in the last section.

2. Theoretical Framework: Post-Development Theory of Food Security

The paper draws from the Post Development Theory, which arose after World War II and developed in the 1980s. It embraces new ideologies in the wake of emerging developmental demands in society. It contradicts the Development theory with a bias of Western egocentrism but with merits of improvement and competitiveness. According to Gamble (2021), the ideology promotes modernity comprising the revolution of politics, economy, and arguing that "*If human beings wanted to progress, happiness, and liberty, they had to embrace and fight for the implementation and extension of liberal principles throughout the world*". The Post Development theory is in

tandem with political and economic ideologies. However, one common way of implementing an economic revolution is through liberalism, which supports a market-based economy. The theory posits improved practices and ideas to change underdeveloped or developing countries' prominence into developed ones (Kippler 2010).

Nevertheless, the development of food security interventions is included in the pursuit, as it measures economic growth (Manap & Ismail 2019). Building on the premise of the Neo-Malthusian theory, food security and sustainable development are intrinsically linked and must be addressed simultaneously. Likewise, the Post-Development theory advocates for delivering developmental interventions vital for minimising development failures in other societal spheres. However, food security is a controversial concept that invokes debates over population growth and environmental pressure on productive resources.

Consequently, population growth in Africa poses a persistent challenge to the development efforts of governments in the region (Kaba 2020; Casterline 2017). Considering the population growth of Africa, projected at 2.5 billion in 2050 (The Economist 2022), and the renewed focus on food security and nutritional governance in literature (Ogunniyi, Mavrotas, Olagunju, Fadare & Adedoyin 2020; Zanella 2019), there is an urgent need to strategise the approaches to the subjects in public policy. However, public policy is often saturated with various advocacies and criticism, similar to the arguments for and against the Post-Development Theory. While the development theorist questioned the superiority of developed countries over their undeveloped counterparts, the Post Development school of thought, although tagged as ethnocentric, argues that the theory promotes pluralism, giving room to alternative approaches to development. Nevertheless, apart from political activists, other members of the populace may not be interested in governments' policy formulation processes (Olowu 2019) and talk less about the ripple effects of such actions on the economy. For instance, food security is a global top on the list task for policymakers and governance because it impedes efforts at achieving sustainable development targets (Aliyu, Ozdeser, Çavuşoğlu & Usman 2021). However, in the recent reawakening of food security and nutritional governance, these issues concern all and sundry because of their role in ensuring sustainability.

The importance of the Post Development theory is best appreciated in the continent of Africa, which is regarded as the least-developed continent after Antarctica (World Bank 2022), as a result of corrupt governments (Onger'a 2021; Baez-Camargo, Bukuluki, Sambaiga, Gatwa, Kassa & Stahl 2020); the lack of funds and failed central planning (Girón, Kazemikhasragh & Cicchiello 2022), among other reasons. According to the UN (2021), a growing population and government efforts towards food production explain worldwide food scarcity in the long run. Meanwhile, food insecurity has persisted despite Sub-Saharan Africa's position as a net agricultural exporter (Bjornlund, Bjornlund & van Rooyen 2022). Nutritional governance in Africa must therefore take the form of *Schumpeterian's* 'creative destruction' school of thought, which argues that the dictates of capitalism are not static; rather, it continuously evolves in response to changes in new markets and new products entering the sphere (Adler 2019). Reasoning from the same angle, pursuing nutritional governance must follow suit to engender food security across the continent. Thus, to sustain food security, the government must ensure that their current food consumption is managed so that it does not hamper future demands. The Post Development Theory in this paper allows the three governments to become innovative and adopt alternative development models and ideas to address food insecurity while striving to attain nutrition governance among citizens.

3. Literature Review: Public Administration, Food Security and Nutrition Governance in Africa

Public administration in Africa is vital for implementing government policies that can guide food security and nutrition governance. Various public policies are mediums by which African and other bureaucracies address the requests of their citizens through their specific actions defined by their laws, mandates, or regulations established through political processes (Olowu 2019). For instance, in Nigeria, the Federal Ministry of Health, through the National Agency for Food and Drug Administration and Control (NAFDAC), among many other government regulations on food production, is saddled with the responsibility of nutrition governance. NAFDAC promotes

and protects public health by regulating the importation, manufacture, distribution, advertisement, and sale of processed foods within its purview (NAFDAC u.d). However, some countries tend to depend on specific food supplies. Hence, the vulnerability of such a populace is determined by the production of exporting countries as well as world prices.

As noted in Nigeria, public administration must ensure food security and nutrition in a country. The Constitution of the Republic of South Africa 1996, one of the most liberal in the world, was adopted in South Africa to guide the functioning of public administration as enshrined in Chapter 10. The rights to ensure everyone in South Africa's physical well-being and health, such as the right to food, are among the protections the constitution provides. According to Section 27 of the Constitution, the state must take reasonable legislative and other steps, within the limits of its resources, to achieve the progressive realisation of social security, including, if they are unable to support themselves and their dependents, appropriate social assistance, sufficient food and water, and health care services, including reproductive health care (RSA 1996). Besides the constitution, food security and nutrition are governed by various legislation, such as the Integrated Food Security Strategy (IFSS) 2002. When COVID-19 broke out, various measures were the Unemployment Insurance Fund (UIF), Solidarity Fund, National Disaster Benefit, and the COVID-19 Temporary Relief Scheme (C19 TERS). These measures were meant to temporarily assist in boosting household food security and reduce despair among retrenched and unemployed during COVID-19 9 (Zindi & Shava 2022). Other social protection measures, including social grants, were all governed efforts to ensure that qualifying citizens could have some income to put food on the table while providing nutrition. Although criticism surrounds these government social protection systems, these social and economic measures in the short term helped minimise food insecurity and malnutrition among several households in South Africa. Post-COVID-19 has shown that South Africa needs to do more to ensure its citizens' food security and good nutrition. This is because the social grants, for instance, are inadequate to alleviate household poverty and vulnerability due to more local development programmes that generate the income required to safeguard food security. This observation cuts across the three countries as loopholes were identified in the literature concerning food security policies that govern citizens' nutrition. In South African public administration, rural projects can be strengthened and aligned to the government's National Development Plan Vision 2030, which is also crucial for attaining food security and nutrition in South Africa.

In Zimbabwe, the government, through its public administration, has enacted in the past the Food and Nutrition Security Policy (FNSP) of 2013, which offers a cohesive multisectoral approach to enhancing food and nutrition security. The Zimbabwean government also passed the Zimbabwe Agricultural Investment Plan (2013-2017) to help revive agriculture and sustain production by developing the capacity of institutions and farmers, including promoting public-private sector investment while aligning with existing policies. Further efforts to combat food insecurity resulted in the development of the Zimbabwe National Nutrition Strategy (2014-2018), which guarantees nutrition security by implementing integrated nutrition-based interventions that include health services, water, and sanitation. Although food security and nutrition policies in Zimbabwe exist, the Government of Zimbabwe (2022) perceived some challenges that include: poor institutionalisation of nutrition issues into critical sectors (agriculture, social services, education, gender); fragmentation of government departments and ministries; poorly coordinated donor funding that results in segmentation and fragmentation of programs that minimally responds to community problems and the limited investment in urban nutrition programs, just like the three countries ensuring food security and nutrition governance is still a challenge despite the availability of policies. Arguably the role of public administration in the three countries should improve to ensure that food and nutrition policies respond adequately to citizens' plights. The policies should be aligned with stakeholder intervention to improve food access while ensuring stability post-COVID-19.

4. Food Security and Nutrition Governance Strategies post-COVID-19 in Africa

This section focuses on the state of food security and nutrition governance in South Africa, Nigeria and Zimbabwe, looking at the interventions being made and the gaps emerging.

4.1 South Africa

Black Africans were already experiencing moderate to severe food insecurity before COVID-19 owing to unemployment, limited financial support and relocation, to name a few factors. When COVID-19 first appeared in March 2020, it had a detrimental impact on the circumstances that caused moderate to severe food insecurity among South Africans. On a national level, South Africans suffered food scarcity because of job losses, lockdowns, limited access to food supplies, and rising food costs. All nine provinces were impacted within their respective spheres of influence. At both a local and macro level, this idea works against achieving the country's National Development Plan 2030 and Sustainable Development Goal 2: Zero Hunger.

In 2021, a person was regarded as poor in South Africa if their monthly income was less than 890 South African rands (about 62.8 USD) (Galal 2021:1). Under the worldwide absolute poverty line established by the World Bank, 16.3 million people in South Africa were surviving on less than 1.9 US dollars (Galal 2021:1). More people are hungry now than in the past due to the poverty rate. This was supported by van der Berg, Patel and Bridgman (2022) research to examine changes in hunger and food security between May/June 2020 and April/May 2021. The data shows that the percentage of households with insufficient funds for food decreased from 48% in Wave 1 to 38% in Wave 2. In Wave 3, this metric rose and stayed steady at 40% of homes; in Wave 4, it dropped to 37% of households. 35% of households needed more money to purchase food in Wave 5. Based on the findings of van der Berg et al. (2022), it can be deduced that people would have learned to utilise money in various ways as covid waves persisted and evolved with different strains. Some people used their funds and survived the crisis until their savings ran out. People would have acquired knowledge and accomplished cost-cutting measures to lower expenses. The most likely scenario was when many individuals lost their jobs and struggled to afford food.

Unemployment is the main factor contributing to South Africans' post-COVID-19 pain. For instance, Limpopo (47,8%), the Eastern Cape (47,3%), the Free State (45,3%), and the North-West (43%) had the most significant percentages of households without an employed individual in 2020, according to Statistics SA (2022:1). The current track of poor economic growth and rising unemployment in South Africa, particularly after COVID-19, as documented in several statistics releases, is further confirmed by Statistics SA (2022), which shows that eliminating food insecurity would be difficult given these trends.

Patrick, Khalema, Abiolu, Ijatuyi and Abiolu (2021:4) explain that global food supply networks saw fluctuations because of the high illness rates among employees working in the food sector. This led to the closures of several food processing plants, which reduced the purchasing power of individuals who lost their jobs. Additionally, it greatly impacted nutrition and food security, especially for underprivileged people. Additionally, Patrick et al. (2021:4) further highlight that depending on the scope and duration of the pandemic and the efforts made to contain it, there may be future risks to food security and nutrition, including the possibility of reduced food output and development. This is due to the high degree of unevenness and complexity surrounding the virus and its development. Although efforts to ensure food security and nutrition were made by the South African government through the R6,8 billion to the Department of Social Development (DSD), temporary relief was offered to citizens to curb hunger and food insecurity. More could have been done to ensure the safety nets are sustainable and could assist vulnerable families in returning to their feet post-COVID-19. Ensuring equitable food access and stability may require extra government efforts to help stimulate agriculture, promoting food security and nutrition sustainability in rural and urban spaces.

4.2 Nigeria

Presently, Nigeria is experiencing shortages of food supply and increased food prices. Agriculture was the mainstay of the Nigerian economy dating back from its independence in 1960 until 1970, when the nation experienced tremendous growth from its oil revenue, otherwise known as the *oil boom*. Unfortunately, the boom made the country pay less attention to agriculture than the oil industry. However, having realised that the contributions of the agricultural sector to the entire economy must be considered, especially its role in achieving food security, the government has engaged in a plethora of policies aimed at revamping the sector. The two major interventions, among others, put in place to curb the adverse effect of food insecurity are in the following areas:

- 1) Financing food production – a plethora of policies in the form of schemes, initiatives, programmes, and institutions have been advanced by the government to the agriculture sector. Specifically, the target of these financial interventions has been the following: Sectoral allocation of credits, specialised banks for agriculture and concessionary interest rates. The most recent of such was birthed by the Central Bank of Nigeria in 2015, the Anchor Borrower Programme (ABP). In line with the government's developmental agenda, the ABP targets smallholder farmers to increase their access to quality agricultural inputs and improve the quality of products to meet international standards (The Nation 2021). However, some questions arise, such as what effect do these policies have on the performance of agricultural production? It is also pertinent to ask if the existence of these policies translates that agricultural interventions are adequately funded. It is essential to ask if the financing schemes are appropriate strategies for Nigeria's agricultural financing and food security.
- 2) Food quality assurance –NAFDAC plays the role of nutritional governance on food quality and standardisation. The agency was established to control and regulate food production. The following are a few NAFDAC duties that are directly related to the food:
 - (a) registration of all food products produced locally within the country.
 - (b) standard requirements, rules, and recommendations for the manufacture, transportation, delivery, marketing, and selling of food.
 - (c) ensures that all food imported into the country meets prescribed standards of quality, safety, and efficacy.
 - (d) ensures that all processed food, drugs, etc., manufactured in Nigeria meet international safety, quality, and efficacy standards.
 - (e) it undertakes the control and issues quality certification of food.
 - (f) it issues guidelines on the requirements for approval and monitors food advertisements.
 - (g) NAFDAC maintains laboratories and facilities to execute its functions in many parts of Nigeria.

4.3 Zimbabwe

The underperforming agricultural economy in Zimbabwe is attributed to various reasons, such as the Fast Track Land Reform Programme (FTLRP) of 1998-2000, the decline in domestic currency, inflation, and corruption, among other factors (Mambiravana, Shava & Gunhidzirai. 2022; Mazwi, Chemura, Mudimu & Chambati 2019). These challenges, among others, triggered food insecurity woes experienced in Zimbabwe long before the COVID-19 pandemic outbreak. Policy interventions in the form of the Indigenization and Economic Empowerment Act (Chapter 14:3) in 2009 and the, most importantly, Zimbabwe Agenda for Social-Economic Transformation (ZIMASSET) could not effectively guarantee food security and nutrition, which exacerbated a food crisis as most citizens in rural provinces risk starvation amid recurring droughts and failing agriculture (Gunhidzirai 2022). Another strategic food security strategy introduced in Zimbabwe was the Command Agriculture, a contract farming scheme introduced to support the land reform programme that disrupted Zimbabwe's resilience, triggered food insecurity, distorted credit access, and triggered citizens' vulnerability to droughts (Dube 2020). This is because financial institutions were reluctant to give loans to farmers needing title deeds; hence, the government unwisely decided to fund farmers who left a huge taxpayer debt.

Another weakness of command agriculture as a food security strategy was that it was run by the military, who procured farm inputs, including supervising farmers, despite lacking agricultural skills to drive a vast national programme. Although a sound and economic food security intervention, command agriculture incurs a wasteful expenditure as an estimated US\$3 billion of unbudgeted public funds were spent between 2015 and 2018. Private companies that received funding to procure farming inputs never complied as they admitted before Public Accounts Committee to needing more knowledge and directive to claim repayment of loans from the farmers who benefited from this programme. Although these programmes target poverty alleviation and promote empowerment, their implementation could have been better due to corruption, absence of state capacity, limited stakeholder cooperation, and political interference. For instance, politicians utilised command agriculture and ZIMASSET as tools to champion their political legitimacy and popularity among the citizens. Before COVID-19, Zimbabwe was already experiencing food insecurity, as the previous efforts by the government to rejuvenate the agricultural economy showed signs of failure (Dube 2020). The lockdown measures in Zimbabwe threatened many informal livelihoods. They triggered food shortages, which require a drastic shift in the food policy framework to sustain the economy and ensure nutrition governance in the post-COVID-19 era.

5. Methodology

To understand how South Africa, Nigeria, and Zimbabwe implement Food Security and Nutrition Governance strategies post-COVID-19, the researchers employed a qualitative case study approach that uses multiple cases. A case study method, as affirmed by Creswell (2013), “explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information... and reports a case description and case themes”. This design was useful in comparing the food security and nutrition governance interventions adopted by the three countries to become food secure in the post-COVID-19 period. In this case, official government documents that informed food security and nutrition in the three countries were adopted as they contained statistical and verified information on the nature of food security, including the measures adopted to mitigate food insecurity and ensure nutrition governance in the three countries. To validate the qualitative discussions, peer-reviewed journal articles that inform food security and nutrition governance were drawn from various databases such as Scopus, Science Direct, Google Scholar and Web of Science. The selection of these databases was based on the various scientific studies done in the three countries on food security and nutrition; hence the information was fundamental for corroborating qualitative data from official documents. Content analysis was used to analyse the data acquired from documents and ensure it was relevant to this study.

6. Challenges of Attaining Food Security and Nutrition Governance post-COVID-19 in Africa

This section discusses findings using a document review analysis of the three cases.

6.1 South Africa

Several challenges caused the lack of food, food insecurity, and hunger post-covid. Bridgman noted in a piece that appeared in *The Conversation* on July 21, 2021, that at the end of April 2021, all sorts of emergency aid were ended. Social grant increases in April 2021 that lagged inflation also reduced the value of these grants. This was also accompanied by a decline in food assistance supplied to low-income households by the government, NGOs, and community support organisations. The National School Nutrition Program has not existed in many regions. The safety net was therefore compromised. While unemployment was soaring, millions of individuals were left in a desperate situation. Despite the Social Relief of Distress grant's modest financial worth (R350, or around US\$24 per month), it provided temporary access to over 6 million jobless individuals who were otherwise ineligible for unemployment benefits and the Temporary Employer-Employee Relief Scheme. At the end of April 2021, these advantages ceased to exist, as highlighted by Bridgman (2022). The government has also introduced the special

COVID-19 Social Relief of Distress grant to the unemployed. Despite these measures, challenges were encountered as some could not sustain the impact, and some were terminated due to financial implications.

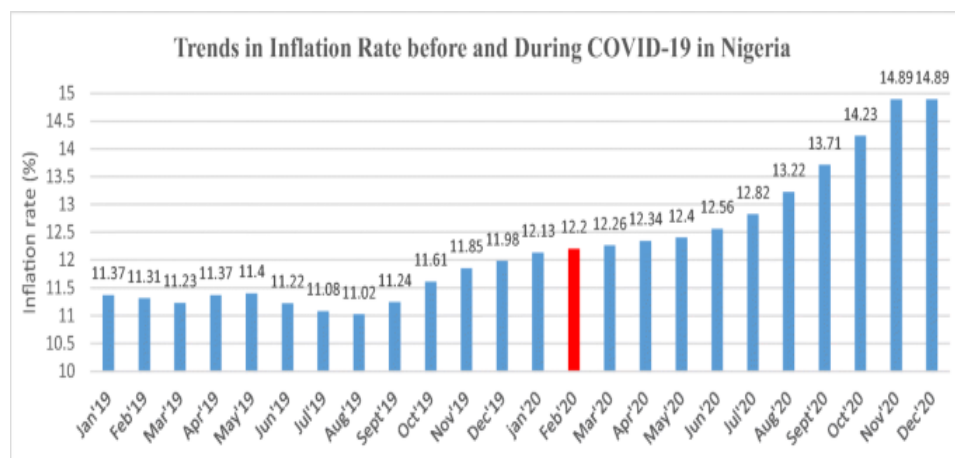
In addition, as highlighted by Chakona and Shackleton (2019; cited in Mlambo & Khuzwayo 2021:9-10), there are five main issues with Food Security and Nutrition in South Africa. First, there must be more safety nets; few wage workers and many dependents characterise impoverished households. Second, more support mechanisms and adequate disaster management systems must be required. South Africa has no formal framework for food security emergencies like droughts or floods. Thirdly, there need to be more predictable food supplies at the home or intra-household levels, leading to inadequate and unstable household food production, hunger, and malnutrition in South Africa. Lack of purchasing power is the fourth issue; in South Africa, most households need more capital to purchase food supplies. Finally, there is the issue of low nutritional status, where one in four children under six (or around 1.5 million children) are stunted because of chronic malnutrition. These issues have a larger impact on South Africa's capacity to guarantee food security for its expanding population under a post-covid situation.

It must be considered that regulations imposed during COVID-19 and inadequate infrastructure also caused challenges to accessing food. This situation is explained by Anelich (2020), who observed that informal traders were prohibited from conducting business during the first few days of the first lockdown since the government did not provide sufficient assistance and understanding. This influences the disadvantaged population's access to and cost of food. Numerous agricultural product providers suffered because of the roughly 40% of food commerce informal dealers carry out. Anelich (2020:12) further emphasised that the government issued restrictions without fully comprehending their implications and effects on the food supply chain.

6.2 Nigeria

The COVID-19 pandemic had its toll on virtually every sector of the economy. Indeed, its aftermath reshaped global societies and economies (Kalantaryan & McMahon 2020). After the pandemic outbreak in February 2020, the Nigerian agriculture sector, food security, and dietary intake were not exempted from the quack mire. The spread of COVID-19 recorded an unprecedented anomaly of our times to such an extent that economies cannot respond to it quickly and appropriately (Vyas-Doorgapersad & Olowu 2022). Regarding food security and nutritional governance, an analysis conducted primarily by the United Nations Food and Agriculture Organization (FAO) and the World Food Programme found that Nigeria, among other countries, remains at the 'highest alert' as a country with catastrophic conditions (Oluwole 2022). The COVID-19 pandemic made matters worse for food security and nutritional governance. The situation remains worrisome, as over 1.7 million children under five years of age are expected to suffer from acute malnutrition through August 2022 – a 34 per cent increase compared to the same period in 2021 (Oluwole 2022). The post-COVID-19 challenges to food security and nutritional governance in Nigeria are:

- a) *Conflicts* - reflecting on the high numbers of food insecurity, the report noted that the situation remains highly concerning in the conflict caused by the *Boko haram* insurgency affected areas of northern Nigeria, where insecurity and access to farmland challenges are likely to persist, as stressed by Oluwole (2022). Nigeria's *ongoing battle with* insurgent groups threatens farmers and farmland.
- b) *Unfavorable foreign exchange rates* -the agriculture sector heavily relies on importing fertilisers, chemicals and other agricultural equipment. However, the fluctuating rates of the naira against the dollar made the value of the local currency low when compared with the US dollar. Most stakeholders were unable to afford importation expenses. Also, due to the central bank's policy on forex regulation, there needed to be more bureaucracy before the commercial banks could disburse the dollars to people who needed it for business purposes.
- c) *Inflation* - A report by Obayelu et al. (2021) opined that high prices of fuel and inputs harmed the agricultural sector. For instance, farmers needed more money to afford the cost of finance needed for their activities. The prices of raw materials also frustrated the supply of farming inputs (see Table 1).

Table 1. Trends in Inflation Rate before and During COVID-19 in Nigeria

Source: Obayelu et al. (2021)

The increasing costs of imported foods, the persistent weakness of the naira, the high inflation rate, and the fiscal deficit recorded in 2022 will most likely contribute to unfavourable food prices in the future.

d) Political Sabotage of nutritional governance – amid the security challenges and the incapacitation of law enforcement agents to midwife government policies, the food distributional channels are unsafe and susceptible to attacks that are food security counterproductive. However, in its wisdom, the government initiated palliative measures comprised of foodstuffs for the rank and file of society who could not work and get an income during the *COVID-19* lockdown. Unfortunately, it was reported that some miscreants truncated the government's efforts to distribute food during the lockdown period, thereby frustrating nutritional governance at a time of urgent need for such intervention.

6.3 Zimbabwe

The analysis of extant literature has revealed that post-*COVID-19*, Zimbabwe will still be food insecure in Africa due to the declining agricultural sector associated with failing industries and markets, low economic growth, unemployment, minimal stakeholder support institutions that support food nutrition in schools in Zimbabwe bear the brunt of *COVID-19* pandemic severely outbreak which hurts nutrition of learners. This is confirmed by Murendo, Manyanga, Mapfungautsi and Dube (2021), who reiterate that many children in Zimbabwe rely on school nutrition programs. As a country experiencing low economic growth, Zimbabwe finances its food security programs through diaspora remittances. Due to the *COVID-19* outbreak, some families could not become food secure as their breadwinners have been either retrenched or stopped operating their businesses, especially in South Africa, where most diaspora remittances emanate (Murendo et al. 2021). The loss in income created a food ensure situation which later impacted on nutrition governance of many families in Zimbabwe.

Unemployment, poverty, and inequalities are major threats to ensuring food security and nutrition governance in Zimbabwe. Long before *COVID-19*, the Zimbabwean agricultural sector was struggling, and so were the livelihoods of rural and urban citizens. The subsequent lockdown measure by the government worsened the situation; people could no longer trade in local markets; hence informal livelihoods were adversely affected (Gunhidzirai 2022). Resuscitating informal livelihoods and agriculture is a prerequisite for the government to avert food insecurity and increase access to food (Hamblock, Homann Kee Tui & Ojiewo 2020). However, the ravaging hyperinflation constrains such efforts. Unlike the two countries, South Africa and Nigeria, which experienced minimal inflation, the World Bank (2022) study revealed that the situation in Zimbabwe had exposed most citizens to extreme poverty, which impacts food security and nutrition.

Table 2. Food Price Inflation: Top 10 list

Country	Nominal food inflation (%YoY)	Country	Real Food Inflation (%YoY)
Zimbabwe	353	Lebanon	72
Lebanon	240	Zimbabwe	68
Venezuela	131	Sri Lanka	30
Sri Lanka	91	Iran	29
Türkiye	90	Hungary	18
Iran	81	Colombia	14
Argentina	66	Djibouti	14
Moldova	38	Rwanda	14
Ethiopia	36	Burkina Faso	13
Rwanda	34	Costa Rica	10

Source: International Monetary Fund, Haver Analytics, and Trading Economics 2022.

Note: Food inflation for each country is based on the latest month from May to August 2022, for which the food component of the Consumer Price Index (CPI) and overall CPI data are available. Real food inflation is defined as food inflation minus overall inflation (International Monetary Fund, Haver Analytics, and Trading Economics 2022).

From Table 2 above, ensuring food security and nutrition is presently a challenge in Zimbabwe as food prices have skyrocketed to the detriment of many poor citizens. The table shows that Zimbabwe is leading the ten countries adversely affected by food inflation with a staggering 353% (World Bank 2022). These statistics show the extent of food insecurity and vulnerability as many poor urban and rural citizens can afford to purchase basic food, which may lead to malnutrition due to hunger and starvation. Compared to South Africa and Nigeria, a gap is evident in promoting food security measures in Zimbabwe, which leaves the government with the complex task of addressing food prices which is fundamental for attaining nutrition governance.

Preparedness to rejuvenate the agriculture sector is a challenge affecting the Zimbabwean government post-COVID-19. While the latest report from World Bank (2022) shows that in Africa, Zimbabwe remains one of the most food insecure countries, the government has done little to try and address the food insecurity situation, which has already impacted the nutrition status of many struggling citizens. As argued by Murendo et al. (2021), the failure of the government to adequately consult stakeholders to deal with the hunger situation in many Zimbabwean provinces shows the state of unpreparedness on the government's part to address food insecurity in the country post-COVID-19. This gap points to the need for the NGO sector to increase its role in complementing government weaknesses in bolstering food security resiliency and nutrition governance. For this to occur, revision of other inhibiting policies, such as the NGO Bill of 2004, is essential to allow the implementation of private sector projects in an autonomous environment, although aligning with the country's national policies on food security aid.

Minimal stakeholder support in Zimbabwe's food security programmes is constrained by the government's attitude and policy actions towards private sector organisations. As argued by Shava (2021), the existing legislation, such as the Public Order Security Act (POSA), including the NGO bill of 2004, discourages NGOs from increasing their role in complementing government food security and nutrition governance programs. The idea of signing Memorandums of Understanding (MoUs) and state interference in donor aid has resulted in ideological and methodological conflicts in delivering food programmes. Because stakeholders stick to their principles and beliefs for humanitarian assistance in Zimbabwe, the state is well known for dictating and attempting to redirect NGO aid which leads to either termination of food security programmes by NGOs or minimal funding from the donor community for such programmes such as fears of corruption, human rights abuses may evolve amid state

interference. Further analysis of the literature has shown that the Zimbabwean government needs an enabling regulatory environment that allows stakeholders to invest in food security programs while ensuring that nutrition governance is achieved primarily in school nutrition programs, where learners risk malnutrition, among other diseases.

Conclusion

The study employed the Post Development Theory to examine how the three countries (South Africa, Nigeria, and Zimbabwe) could ensure food security and nutrition governance post-COVID-19 in Africa. The analysis of the document has shown a cross-cutting impediment that may affect all three countries in terms of food security. Minimal investment in rural livelihoods has been noted as a challenge that affects agricultural productivity while triggering nutrition deficiencies, especially among poor households. Secondly, the public policies regarding food security and nutrition in all three countries have shown many loopholes as they fail to cushion the citizens during the COVID-19 era; hence, to guarantee food security enabling food policies are required to ensure investment is increased in agriculture, where most rural citizens seek economic refuge in. The participation of stakeholders is one of the missing links in food security intervention in South Africa, Zimbabwe, and Nigeria, as farmers, for instance, have a limited say on how they should be assisted with agricultural inputs and farm machinery. Only in cases where commercial farming is concerned agriculture thrives compared to smallholder farming. To survive post-COVID-19, including key stakeholders is critical in food security programmes that ensure that citizens consume nutritious food regulated in line with food safety standards.

Inflation has been depicted as a challenge that may prevent one of the African countries from attaining food security and nutrition governance post-COVID-19 in Africa. Zimbabwe is experiencing the highest inflation in Africa, which threatens food security. For instance, agriculture is becoming less profitable due to poor local market pricing and the unavailability of agricultural equipment and inputs to stimulate commercial and smallholder farming. Many citizens are adversely affected by the rising prices; hence, the government alone cannot combat the looming hunger in many provinces; hence, a widening gap may require stakeholders' intervention. South African economy has been staggering, with the prices of goods going up following what many attributed to the war in Ukraine, which triggered a rise in oil prices. Nigeria also suffers from political corruption, which sabotages relief food security packs during COVID-19. As noted in the review, politicians seize the opportunity to seek public sympathy while trying to achieve self-aggrandisement. This view is also shared in South Africa, where many cases of corruption on COVID-19 relief packages were recorded, threatening food security among vulnerable households. There need to be more support mechanisms identified in the three countries. For example, providing safety nets in South Africa is affected by limited support. Local authorities often need more funds to support disadvantaged households, threatening the attainment of nutrition governance. In Zimbabwe, support mechanisms must be improved as the state relies more on importing grain than promoting local agricultural production to feed its population. The role of NGOs is under threat owing to political interference; hence this disrupts food security and nutrition aid. In Nigeria, support mechanisms are lacking, and the insurgency emanating from Boko Haram in North Nigeria triggers limited stakeholder investment in farmlands. In this case, ensuring food security and nutrition governance in conflicted zones is complex. Deducing insights from the Post Development Theory, the three countries can create an enabling environment that supports alternative approaches to development, as attaining food security in line with SDG 2 (Zero hunger) require a network of actors that can pool their human and financial resources together to finance and support food security and nutrition programmes that culminate into successful nutrition governance.

References

- Adler, D., 2019. Schumpeter's Theory of Creative Destruction. Retrieved from <https://www.cmu.edu/epp/irle/irle-blog-pages/schumpeters-theory-of-creative-destruction.html>
- Aliyu, U.S., Ozdeser, H., Çavuşoğlu, B., and Usman, M.A.M., 2021. Food Security Sustainability: A Synthesis of the Current Concepts and Empirical Approaches for Meeting SDGs. *Sustainability*, 13(21), 1-25. <https://doi.org/10.3390/su132111728>
- Anemic, L. 2020. The impact of government responses in the management of Covid-19 on the food supply chain in South Africa. Retrieved from <https://www.gtac.gov.za/wp-content/uploads/2022/03/Anelich-2020a.pdf>
- Baez-Camargo, C., Bukuluki, P., Sambaiga, R., Gatwa, T., Kassa, S. and Stahl, C. 2020. Petty corruption in the public sector: A comparative study of three East African countries through a behavioural lens. *African Studies*, 1-18. <https://doi.org/10.1080/00020184.2020.1803729>
- Bjornlund, V., Bjornlund, H. and van Rooyen, A., 2022. Why food insecurity persists in sub-Saharan Africa: A review of existing evidence. *Food Security*, 14, 845-864. <https://doi.org/10.1007/s12571-022-01256-1>
- Bridgman, G. 2021. The COVID-19 pandemic has triggered a rise in hunger in South Africa. *The Conversation*. Retrieved from <https://theconversation.com/covid-19-pandemic-has-triggered-a-rise-in-hunger-in-south-africa-164581>
- Casterline, J.B. 2017. Prospects for Fertility Decline in Africa. *Population and Development Review*, 43, 1-16. <https://doi.org/10.1111/padr.12055>
- Chakona G., and Shackleton, C. 2019. Food Taboos and Cultural Beliefs Influence Food Choice and Dietary Preferences among Pregnant Women in the Eastern Cape, South Africa. *Nutrients*, 5(11), 2668. <https://doi.org/10.3390/nu11112668>
- Creswell, J.W. 2013. *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Dube, L.M. 2020. Command Agriculture and Food Security: An Interrogation of State Intervention in the Post-Fast Track Land Redistribution Era in Zimbabwe. *Journal of Asian and African Studies*, 57(7), 1-18. <https://doi.org/10.1177/0021909620979330>
- Galal, S. 2021. The national poverty line in South Africa 2021. Retrieved from <https://www.statista.com/statistics/1127838/national-poverty-line-in-south-africa/>
- Gamble, A. 2021. Moving beyond the Western Ideology and creating a more inclusive multilateral order is a herculean task. London School of Economics, British Politics and Policy. May 17th, 2021. Retrieved from <https://blogs.lse.ac.uk/politicsandpolicy/western-ideology/>
- Girón, A., Kazemkhasragh, A., and Cicchiello, A.F. 2022. Financial Inclusion Measurement in the Least Developed Countries in Asia and Africa. *Journal of Knowledge Economy*, 13(4), 1198–1211. <https://doi.org/10.1007/s13132-021-00773-2>
- Government of Zimbabwe. 2010. *Indigenisation and Economic Empowerment Act (Chapter 4:33)*. Government Printer, Harare.
- Government of Zimbabwe. 2007. *Private Voluntary Act (PVO) of 2007*. Harare: Government of Zimbabwe.
- Government of Zimbabwe. 2013. *Food and Nutrition Security Policy (FNSP) of 2013*. Harare. Government Printer.
- Government of Zimbabwe. 2013. Zimbabwe Agenda for Sustainable Socioeconomic Transformation (ZimAsset) – October 2013 – December 2018, Retrieved from <http://www.herald.co.zw/wp-content/uploads/2014/01/Zim-Asset.pdf>
- Government of Zimbabwe. 2013-2017. *Zimbabwe Agricultural Investment Plan (2013-2017)*. Harare. Government Printer.
- Government of Zimbabwe. 2014-2018. *Zimbabwe National Nutrition Strategy (2014-2018)*. Harare. Government Printer.
- Government of Zimbabwe. 2022. Multisectoral Nutrition Needs and Gap Analysis. Zimbabwe Presentation. Retrieved from <https://pubdocs.worldbank.org/en/825961538777240208/pdf/Oct-3-S3-Zimbabwe-Presentation.pdf>

- Gunhidzirai, C. 2022. An exploration of government policies for supporting informal entrepreneurship in Zimbabwe. *International Journal of Management Practice*, 1-18. <https://doi.org/10.1504/IJMP.2023.10048537>
- Hambloch, C., Homann Kee Tui, S., and Ojiewo, C. 2020. Stronger local food value chains can leave Eastern and Southern Africa more resilient post-COVID-19. Agri-Buzz, ICRISAT. Retrieved from <https://www.icrisat.org/stronger-local-food-value-chains-can-leave-eastern-and-southern-africa-more-resilient-post-covid-19/>
- Kaba, A.J. 2020. Explaining Africa's Rapid Population Growth, 1950 to 2020: Trends, Factors, Implications, and Recommendations. *Sociology Mind*, 10(04), 226-268. <https://doi.org/10.4236/sm.2020.104015>
- Kalantaryan, S. and McMahon, S. 2020. COVID-19 and Remittances in Africa, EUR 30262 EN, Publications Office of the European Union, Luxembourg. <https://doi.org/10.2760/86710>
- Katumba, S., Cheruiyot, K., and Mushongera, D. 2019. Spatial Change in the Concentration of Multidimensional Poverty in Gauteng, South Africa: Evidence from Quality-of-Life Survey Data. *Social Indicators Research*, 145(1), 95–115. <https://doi.org/10.1007/s11205-019-02116-w>
- Kippler, C. 2010. Exploring post-development: Politics, the state and emancipation. The question of alternatives. Retrieved from <http://www.polis.leeds.ac.uk/assets/files/students/student-journal/ug-summer-10/caroline-kippler-summer-10.pdf>
- Mambiravana, T., Shava, E., and Gunhidzirai, C. 2022. Currency Collapse and Middle-Class Livelihoods in Zimbabwe: The Case of Msasa Park Suburb in Harare. *Mankind Quarterly*, 62(3), 555-578. <http://dx.doi.org/10.46469/mq.2022.62.3.9>
- Manap, N.M.A., and Ismail, N.W. 2019. Food Security and Economic Growth. *International Journal of Modern Trends in Social Sciences*, 2(8), 108-118. <https://doi.org/10.35631/IJMTSS.280011>
- Mazwi F, Chemura A, Mudimu, G.T. and Chambati W. 2019. The political economy of command agriculture in Zimbabwe: A state-led contract farming model. *Agrarian South: Journal of Political Economy*, 8(1-2), 232–257. <https://doi.org/10.1177/2277976019856742>
- Mlambo, V.H. and Khuzwayo, N.N. 2021. COVID-19, Food Insecurity and a Government Response: Reflections from South Africa. *Technium Social Sciences Journal*, 19, 1-14.
- Murendo, C., Manyanga, M., Mapfungautsi, R. and Dube, T. 2021. COVID-19 nationwide lockdown and disruptions in the food environment in Zimbabwe. *Cogent Food & Agriculture*, 7(1), 1945257. <https://doi.org/10.1080/23311932.2021.1945257>
- Non-Governmental Organisations (NGO). 2004. *Bill of 2004*. Harare: Government of Zimbabwe.
- Obayelu A.E., Obayelu O.A., Bolarinwa K.K., and Oyeyinka, R.A. 2021. Assessment of the Immediate and Potential Long-Term Effects of COVID-19 Outbreak on Socioeconomics, Agriculture, Security of Food and Dietary Intake in Nigeria. *Food Ethics*, 6(1), 5. <https://doi.org/10.1007/s41055-021-00085-w>
- Ogunniyi, A, Mavrotas, G, Olagunju, K.O, Fadare, O. and Adedoyin, R. 2020. Governance quality, remittances and their implications for food and nutrition security in Sub-Saharan Africa, *World Development*, 127, 1-14. <https://doi.org/10.1016/j.worlddev.2019.104752>
- Olatunde A. 2021. Anchor Borrowers' Programme (ABP) Guidelines. Development Finance Department Central Bank of Nigeria publication.
- Olowu, A.U. 2019. Public Policy and Entrepreneurship Performance: The Divide and Nexus in West Africa. Retrieved from <https://scholar.sun.ac.za/handle/10019.1/107197>
- Oluwole, V. 2022. The food crisis in Nigeria is extremely concerning - World Food Programme (WFP) July 18, 2022. Retrieved from <https://africa.businessinsider.com/local/markets/the-food-crisis-in-nigeria-is-extremely-concerning-world-food-programme-wfp/2713hd2>
- Onger'a, A. 2021. Corruption: Africa's Encumbers. *International Journal of Scientific and Research Publications (IJSRP)*, 11(3), 152-159. <https://doi.org/10.29322/IJSRP.11.03.2021.p11121>
- Onwughai, E. 2021. Covid-19 and the Nigerian Economy: Evidence from the Foreign Exchange Rate. V., 181-185.

- Patrick, H.O., Khalema, E.N., Abiolu, O.A, Ijatuyi, E.J., and Abiolu, R.T. 2021. South Africa's multiple vulnerabilities, food security and livelihood options in the COVID-19 new order: An annotation. *Journal of Transdisciplinary Research South Africa*, 17(1), 1-9. <https://doi.org/10.4102/td.v17i1.1037>
- Republic of South Africa. 1996. *Constitution of the Republic of South Africa (1996)*. Pretoria. Government Printers.
- Republic of South Africa. 2002. *The Integrated Food Security Strategy (IFSS) of (2002)*. National Department of Agriculture. Pretoria. Government Printer.
- Shava, E. 2021. Financial sustainability of NGOs in rural development programmes. *Development in Practice*, 31(3), 393-403. <https://doi.org/10.1080/09614524.2020.1853059>
- Statistics South Africa. 2022. How COVID-19 affected food security in SA. Retrieved from <https://www.statssa.gov.za/?p=15273>
- The Economist 2022. Africa's population will double by 2050. Retrieved from <https://www.economist.com/special-report/2020/03/26/africas-population-will-double-by-2050>
- The Nation. 2021. Anchor Borrowers' Programme raises smallholder farmers' funding hopes by The Nation Retrieved from: <https://thenationonlineng.net/anchor-borrowers-programme-raises-smallholder-farmers-funding-hopes>
- UN/DESA Policy Brief #102: Population, food security, nutrition and sustainable development. Available: <https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-102-population-food-security-nutrition-and-sustainable-development/>
- Van der Berg, S., Patel, L., and Bridgman, G. 2022. Food insecurity in South Africa: Evidence from NIDS-CRAM wave 5, *Development Southern Africa*, 1-17. <https://doi.org/10.1080/0376835X.2022.2062299>
- Vyas-Doorgapersad S., and Olowu A. 2022. The Diasporan Economic Strength and COVID-19: A comparative analysis of selected African economies (Under review) *Africa Development / Afrique et Development*.
- World Bank. 2020. May 14. World Bank statement on COVID Support to Zimbabwe. Retrieved from <https://www.worldbank.org/en/news/statement/2020/05/14/world-bank-statement-on-covidsupport-to-zimbabwe>
- World Bank. 2022. Food Security update. Retrieved from <https://www.worldbank.org/en/topic/agriculture/brief/food-security-update>
- Zanella, M. 2019. Governing food systems in a multi-stakeholder era, an example from Brazil: Is the Brazilian CONSEA a 'multi-stakeholder process' or a platform for participatory politics? Retrieved from <https://foodgovernance.com/2017/01/11/governing-food-systems-in-a-multi-stakeholder-era-the-example-from-brazil/>
- Zindi, B, and Shava, E. 2022. Confronting the Monster': Exploring the Implementation of Social Protection Measures Amid COVID-19 in South Africa. In: Usha, R and Govender, J (eds) *Exploring the Consequences of the Covid-19 Pandemic*. Apple Academic Press. pp. 3-19 <http://dx.doi.org/10.1201/9781003277286-2>

Data Availability Statement. More information concerning this research is available upon request.

Author Contributions: Conceptualisation: *Vyas-Doorgapersad, Shava, Olowu*; methodology: *Vyas-Doorgapersad, Shava, Olowu*; data analysis: *Vyas-Doorgapersad, Shava, Olowu*, writing—original draft preparation: *Vyas-Doorgapersad, Shava, Olowu*, writing; review and editing: *Vyas-Doorgapersad, Shava, Olowu*; visualisation: *Vyas-Doorgapersad, Shava, Olowu*. All authors have read and agreed to the published version of the manuscript.

Shikha VYAS-DOORGAPERSAD is a Full Professor at the School of Public Management, Governance and Public Policy at the University of Johannesburg, South Africa. Her previous lecturing experience includes International College for Girls (India), University of Zululand, and North-West University (South Africa). She holds degrees of M.A., M.Phil., and PhD in Public Administration from the University of Rajasthan (India). She has presented research findings at international conferences worldwide. She has authored two books (University Book House, Jain Prakhan Mandir [Publishers in India]), has been Editor of three books (Taylor and Francis, Routledge [Publishers in New York]), contributed chapters in books and has published articles in national and international accredited journals. She serves as Editor-in-Chief, Guest Editor, Associate Editor, Editorial Board Member, and reviewer to South African and international journals. She is a member of the International Advisory Board and International Scientific Committees at worldwide conferences. She is an Adjunct Research Professor in the School of Business and Management of Uganda Technology and Management University. She is appointed as a Visiting Professor at the Riara School of Business, Riara University in Kenya. She serves as External Moderator/Examiner for MAs and PhDs for several universities in South Africa. She has published 100 articles in scientific journals. Degree: PhD. Research interests: Her research interests are in Public Policy, Gender Issues, and in Municipal Governance.

ORCID ID: <https://orcid.org/0000-0002-8146-344X>

Elvin SHAVA is a Senior Post-Doctoral Research Fellow in the School of Public Management, Governance and Public Policy within the College of Business and Economics at the University of Johannesburg in South Africa. Dr Shava's research focuses on Poverty & Inequalities, Accountability, Public Service Delivery and Smart Governance.

ORCID ID: <https://orcid.org/0000-0001-8721-4666>

Akinseye OLOWU is a Post Doctoral Research Fellow in the School of Public Management, Governance and Public Policy at the University of Johannesburg, South Africa. He is a development finance expert and entrepreneurship lecturer with years of experience as a researcher focusing on public policy and entrepreneurship performance. He holds degrees of M.Phil. and PhD in Development Finance from the University of Stellenbosch, South Africa. He has presented research findings at international conferences worldwide. He authored a book on 'The efficiency of macroeconomic policies in entrepreneurship in West Africa', published by Lambert Academic Publishing, Saarbrücken, Germany. His areas of interest are entrepreneurship, public policy analysis, Development finance advocacy, Gender & Disability management & evaluation and business feasibility studies. He has published 20 articles in scientific journals.

ORCID ID: <https://orcid.org/0000-0003-1124-3465>

To make your research more visible, join the Twitter account of INSIGHTS INTO REGIONAL DEVELOPMENT:

@IntoInsights

This is peer-reviewed scientific journal <https://jssidoi.org/ird/page/peer-review-policy>

Copyright © 2023 by author(s) and VsI Entrepreneurship and Sustainability Center

This work is licensed under the Creative Commons Attribution International License (CC BY).

<http://creativecommons.org/licenses/by/4.0/>

