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Impact Of Covid-19 on Government's Reform Programmes in Ghana

FINAL RESEARCH REPORT

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PREPARED BY:
Ghana Center For Democratic Development (CDD-Ghana)
P.O. Box LG 404
Legon-Accra | Ghana
E info@cddgh.org
I www.cddgh.org

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GIZ Country Office Accra
Support to the reform partnerships in Africa
Regional Project
P.O. Box KA 9698
7 Volta Street | Airport Residential Area
Accra | Ghana

T +233 302 760 448
T +233 302 773106
E giz-ghana@giz.de
I www.giz.de/ghana

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Authors
Dr. Gordon Abekah-Nkrumah, Lead Researcher, Senior Lecturer in the Department of Public Administration and Health Services Management, University of Ghana Business School
Mawusi Yaw Dumenu
Research Analyst, Ghana Center for Democratic Development (CDD-Ghana)

Contributors

Dr. Kojo Asante	Director of Advocacy and Policy Engagement, CDD-Ghana
Daniel Armah-Attoh	Research Manager, CDD-Ghana
Mavis Zupork Dome	Research Analyst, CDD-Ghana
Lionel Osse Essima	Research Analyst, CDD-Ghana
Balaarah Abdulai	Program Officer, CDD-Ghana

ON BEHALF OF THE

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Abbreviations

1D1F	One District One Factory
1V1D	One-Village-One Dam
AEOS	Agricultural Extension Officers
CARES	COVID-19 Alleviation and Revitalization Enterprise Support
CSIR	Centre Scientific and Industrial Research
CSOs	Civil Society Organizations
ECG	Electricity Company of Ghana
EPRP	Emergency Preparedness and Response Plan
ESPR	Energy Sector Recovery Programme
FDI	Foreign Direct Investment
FGDs	Focus Group Discussions
GDP	Gross Domestic Product
GHS	Ghana Health Service
GRA	Ghana Revenue Authority
GSS	Ghana Statistical Service
GWh	Giga Watt Hours
ICT	Information and Communications Technology
IDS	Institute of Development Studies
IMF	International Monetary Fund
IPPs	Independent Power Producers
MASLOC	Microfinance and Small Loans Centre
MDAs	Ministries, Departments and Agencies
MMDAs	Metropolitan, Municipal, District Assemblies
MOFA	Ministry of Food and Agriculture
MOTI	Ministry of Trade and Industry
MSDI	Ministry of Special Development Initiative

MSMEs	Micro, Small and Medium Enterprises
MT	Metric Tonnes
MW	Megawatts
NADMo	National Disaster Management Organisation
NBSSI	National Board for Small Scale Industries
NCCE	National Council for Civic Education
NEDCO	Northern Electricity Distribution Company
NHIS	National Health Insurance Scheme
NIA	National Identification Authority
NPK	Nitrogen, Phosphorous and Potassium
PERD	Planting for Export and Rural Development
PFAG	Peasant Farmers Association of Ghana
PFJ	Planting for Food and Jobs
PPE	Personal Protective Equipment
PPP	Private Public Partnership
PURC	Public Utility Regulatory Commission
PWC	Price Waterhouse Coopers
RFJ	Rearing for Food and Jobs
SDGs	Sustainable Development Goals
SSNIT	Social Security and National Insurance Trust
TIN	Tax Identification Number
UNDP	United Nations Development Programme
UNWTO	United Nations World Tourism Organization
VALCO	Volta Aluminium Company Limited
VRA	Volta River Authority

Executive Summary

Since the outbreak of the Novel COVID-19 pandemic, over 216 countries and territories have been affected, with over 180,817,269 infections and 3,923,238 deaths as at 28th June, 2021. The effect of the pandemic on lives and livelihoods has been devastating both in developed and developing countries. Ghana, upon recording its first case on 12th March, 2020, put in place a broad array of measures (both physical and fiscal) to reduce the effect of the pandemic on lives and livelihoods.

In a large chunk of the COVID-19 literature, attention seem to have been focused on two main areas: the effect on lives (morbidity and mortality) and livelihoods. In the livelihood argument, emphasis has been placed more on the effect of the pandemic on economic outcomes.

There is however, less information on the effect of the pandemic on processes such as the implementation of government programmes that ultimately affect economic outcomes and therefore livelihoods. In Ghana for example, the government, prior to the advent of COVID-19 had embarked on a major programme of transformation aimed at putting the government on the path to achieving the vision of "Ghana beyond Aid". As part of this process, the government rolled out novel programmes such as Planting for Food and Jobs (PFJ) policy, Rearing for Food and Jobs (RFJ), Planting for Export and Rural Development (PERD), One District One Factory (1D1F), formalization of the informal sector among others.

Effects on government revenue

The results suggest that the pandemic adversely affected the implementation of government programmes, although not as much as was expected. Key in this regard was revenue reduction. For example, there was a reduction of revenue targets for Ghana Revenue Authority (GRA) and the petroleum and manufacturing sectors from GH¢47 billion to GH¢42 billion and US$1.57 billion to US$660 million respectively. The extent of the reduction was not as severe as expected, as the petroleum sector revenue exceeded the revised target after the pandemic. Modernisation and digitalisation efforts of the government especially at GRA has been credited with the marginal improvements seen after the pandemic.
To contain the pandemic, government implemented a broad array of mitigation measures. The implementation of these measures, especially the partial lock down, resulted in a surge in energy consumption (2020 saw a 1.2%) without a corresponding increase in revenue generation, given that a lot of factories were operating under capacity, resulting in job losses and more people being at home due to the lock down. COVID-19 also affected the operations of energy producers as well as the main distributer. This meant that only 62.5% of targeted revenue for 2020 was mobilised, with 29.6% system losses recorded as against a target of 23%. In addition to the above, it cost government about GH¢240 million a month to provide free energy for all Ghanaians from March to June and GH¢20 million a month for lifeline users only. The petroleum sector also suffered immensely from the pandemic. The decrease in the demand for petroleum products affected the production of oil and gas and resulted in a slowdown and delays with respect to on-going projects and cancelations of contracts worth more than US$389million.

Effects on government programmes

The pandemic also affected the implementation of programmes related to the Sustainable Development Goals (SDGs) given that required resources had to be reallocated to implement pandemic mitigation measures. For example, the long break in the school calendar, coupled with low internet penetration (48% as January 2020) meant restricted access to learning for many-school going children and even those in tertiary institutions.

The COVID-19 pandemic also adversely affected the implementation of flagship government programmes such as the Planting for Food and Jobs (PFJ), Rearing for Food and Jobs (RFJ), One-Village-One Dam (1V1D), construction of warehouses and One District One Factory (1D1F). Except for the 1D1F, all the other programmes were under the Ministry of Trade and Industry (MOTI), which received only 66% of its 2020 budget allocation due to reallocation of funds to implement COVID-19 mitigation measures. For example, the PFJ and RFJ suffered from lack of inputs (fertilizers, day old chicks, feed etc.) and extension services due to the implementation of pandemic restriction measures. The lack of availability of inputs was also compounded by low market demand as a result of the pandemic, thereby causing farmers to

either abandon existing projects or delay new ones. Additionally, reallocation of funds and constraints on labour availability due to COVID-19 meant that only 63 warehouses were completed out of 80 projected for the year 2020. Also, three green houses were established in 2020 with 227 small dams completed by the end of 2020. The challenge though is that most of the dams were deemed by respondents as not fit for purpose. It is important to emphasize that the pandemic did not have a major effect on the construction of warehouses, green houses and dams. The challenges identified are deemed to be unrelated to the pandemic and were in existence before the unset of the pandemic.

Although the pandemic had an adverse effect on the implementation of the 1D1F, the effect was less than anticipated. The adverse effect included delays in obtaining inputs and equipment to carry on with some projects, reduction (34%) in the budget allocation of the Ministry of Trade and Industry (MOTI) as well as restricted access to government officials and complex bureaucratic processes resulting from the pandemic. Notwithstanding the constraints posed by COVID-19, 282 factories out of the over 300 targeted had been built by the end of December 2020 with about 70 of them operational including the VW automobile assembling plant.

To reduce the adverse impact of the pandemic on lives and livelihoods, the government introduced several measures such as free food (cooked and uncooked), free electricity, free water consumption, and a stimulus package for Micro, Small and Medium Enterprises (MSMEs). During the three-week partial lockdown period, all households with lifeline consumers enjoyed free electricity while others above the lifeline paid half of what they consumed. Water consumption was also free, and it is estimated that an amount of GH¢896 million was spent in providing this service. The government established a stimulus package of GH¢600 million (US$104.4 million) in addition to funds (GH¢90 million) from the MasterCard foundation to cushion MSMEs frwwom the effect of the pandemic and help revamp their businesses. By the end of December 2020, 277,511 businesses had been supported with about GH¢412.88 million, in addition to 8,159 people who were trained on Entrepreneurship, Financial Literacy and Bookkeeping to improve business practices. As a long-term measure to mitigate the COVID-19 effect, a GH¢100 billion Ghana COVID-19 Alleviation and Revitalization Enterprise Support (CARES) programme was established. The programme which cuts across several sectors is also to promote economic growth while generating employment especially for those who lost their livelihoods.

The pandemic distorted Ghana's growth trajectory and had an unfavourable effect on the fiscal position, and consequently affected adversely a lot of planned activity. The end of year fiscal deficit was 12% instead of 5% as per the Fiscal Responsibility Act. The cost of the mitigation measures was about GHC 21 billion, increasing the debt to Gross Domestic Product (GDP) ratio from 62.44% in 2019 to 76.08% in 2020. The rising debt to GDP ratio occasioned by extra borrowing to fund pandemic mitigation measures increased associated risk such as high debt servicing, for which government needs to be cautious and equally implement measures to grow the GDP.

Effects on citizen's rights

In many countries, the implementation of COVID-19 mitigation measures resulted in the abuse of citizens' rights, diversion of state resources through corrupt procurement practices and inappropriate and inadequate disclosure of information on the pandemic to the public. The situation was however different in Ghana. Citizens' rights were generally respected, except for a few cases were supposed recalcitrant members of the public were mishandled by security agencies enforcing COVID-19 safety protocols. Information related to the pandemic was appropriately and adequately communicated to the public, except for issues raised especially by the minority in parliament on lack of accountability by the government on COVID-19 related expenditures. There have also been allegation of corruption by state officials in the disbursement of COVID-19 funds even though this is not on a wide scale as has been the case in other countries.

Also, the findings suggest that sectors such as, education, health, micro-businesses, importers and the hospitality industry suffered most from the pandemic, whiles the telecommunications sector, pharmaceutical industry, businesses in e-commerce and on digital platforms and delivery services benefited immensely.

Finally, a major revelation from the study is the mis-targeting of government support aimed at reducing hardships imposed by the implementation of mitigation measures. Regardless of the type of support (distribution of food, free water and electricity, support to businesses etc), there is consensus, especially with the Focus Group Discussion (FGD) participants that the support given benefited more of those who needed the support less.

The findings of the study suggest that the implementation of COVID-19 mitigation measures adversely affected the implementation of government programmes. Areas that were severely affected by the pandemic include, energy and petroleum, flagship programmes such as PFJ, RFJ, 1D1F, 1V1D and construction of green houses and warehouses, education, micro and small business, and the fiscal position of the economy. Given that the spread of the virus continues without knowing when the situation will be brought under control, all measures to improve the current situation will have to be taken in the context of the future trajectory of the virus. In this regard, three main mitigation measures can be considered as the way forward.

The first line of mitigation includes reforms that will ensure that the business of government and its agencies can continue with minimal contact. The programme on digitization and formalization of the economy which is already underway will be crucial in this regard. There will be the need for government to pay particular attention to this programme and support it with needed resources. The success of this initiative will ensure that government services will continue and that the level of disruptions will be minimal and therefore limit the effect of the current and future pandemics on lives and livelihoods. The formalization of the economy, which has been a long-standing issue will also be key in increasing government revenue which is much needed to implement important programmes that are lagging behind because of the need for government to reallocate resources to implement COVID-19 mitigation measures.

The second line of mitigation which the government is already carrying out involves the injection of appropriate resources into those sectors that have been badly affected to improve economic activities, increase revenue generation, absorb those who lost their jobs as a result of the pandemic and reduce the level of unemployment. Important in this regard will be the energy sector as the current energy sector debt constitute a huge challenge to the sector. It is important however to note that additional injection of resources into the economy may have implications for borrowing or the need to rely on Development Partners for grants which may not be reliable. Government will have to be cautious with additional borrowing and seek to ensure that borrowed resources are invested in a way that grows the GDP. In this way, the debt to GDP ratio which is currently getting beyond sustainable levels can be better managed.

Outlook and recommendations

The report suggests that while some sectors have been hard hit and need support, there are others that have profited from the pandemic, with new opportunities that have been created for growth. The government needs to identify the new growth centers and focus on investing in these areas for growth. For this to have optimal impact, there will be the need for government to work with the private sector to identify skill sets need in the new growth centers and work to train citizens, especially those who were already in the labour force but lost their jobs due to the pandemic. If done well, the new growth centers can absorb those who have lost their jobs due to the pandemic as well as those who were looking for jobs before the pandemic. It is commendable that the government at the moment, seem to be injecting funds to support sectors that were badly hit by the pandemic. Even more important will be the need to invest more funds into new growth areas given that they will be key to future growth.

In addition to the above, it will be important for government to work on creating a system that helps to implement government welfare programmes in a manner that is equitable, given that this seems to be a major challenge with the implementation of COVID-19 related welfare support. It is important to emphasize that addressing this challenge will have important and positive implication both for today and the future. For example, social programmes such as the free SHS, the National Health Insurance and future social welfare programmes can rely on such backbone to make the implementation of such programmes, efficient, effective, equitable and sustainable.

Chapter one

Introduction

Chapter one

Introduction

1.1. INTRODUCTION

The novel coronavirus (COVID-19) since its outbreak has been recorded in over 216 countries and territories with over 180,817,269 infections, 3,923,238 deaths as at 28th June, 2021 (World Health Organization (WHO) (2021). From developed to developing and low income to high income countries, the health and economic impact of the COVID-19 pandemic has been devastating, with countries still counting both human and economic cost. Although in Africa, the rate of infections and human cost in terms of mortality has not been as devastating as predicted, the economic cost has been enormous, and the fact remains that health systems in many African countries were nowhere near prepared for a health-related shock of the magnitude of COVID-19. Ghana recorded its first two cases of COVID-19 on 12th March, 2020, and like many other countries, resorted to a broad array of measures to curtail the spread of the disease. These measures included the close down of borders, three weeks' partial lock down in the epicenters (Accra-Tema-Kasoa and Greater Kumasi), ban on all public gatherings, instituting social distancing and enhanced hygiene protocols to curtail the spread of the virus.

According to the World Economic Outlook, the COVID-19 pandemic had a more negative impact on activity in the first half of 2020 than anticipated, and recovery is projected to be more gradual than was previously predicted. Sub-Sahara Africa was expected to contract by 3.2 percent in 2020 (International Monetary Fund (IMF), June 2020). Ghana's macroeconomic performances shows that Ghana's economy has been adversely impacted by the COVID-19 pandemic (KPMG, July, 2020). The pandemic, aside reducing growth in GDP, has resulted in significant shortfalls in petroleum revenues, import duties and in other tax revenues, increased health expenditures, and tighter financing conditions with consequences on the 2020 budget (Ministry of Finance, 2020a). The pandemic has impacted Ghanaians directly and indirectly. As part of efforts to reduce the effect of the pandemic on Ghanaians and the economy, the government undertook a number of interventions which includes provision of intensive testing of suspected COVID-19 cases and contact tracing; allowance for frontline health workers; provision of households with free water and electricity for lifeline users and 50 percent of the consumption of all other users; GH¢600 million to support Micro, Small And Medium Scale Enterprises (MSMEs) under the Coronavirus Alleviation Programme; and recently the COVID-19 Alleviation and Revitalization of Enterprises Support (CARES) programme, which is a GH¢ 100 billion public private partnership programme aimed at mitigating the impact of the pandemic on the lives and livelihoods of Ghanaians (ibid).

In 2018, government mapped a path to achieving its "Ghana beyond Aid" vision. As part of this vision, the government outlined a number of initiatives that it intended to undertake to strengthen the country's capacity to finance its own development. Thus, government rolled out policies and programmes such as Planting for Food and Jobs (PFJ) policy, Rearing for Food and Jobs (RFJ), Planting for Export and Rural Development (PERD), One District One Factory (1D1F), formalization of informal sector among others.

The pandemic undoubtedly has affected the implementation of these programs and policies. However, there have been several academic and policy related papers that have sought to examine the socio-economic effect of the pandemic in many countries; both developed and developing. Unlike existing studies that looked at the socioeconomic effect of the COVID-19 pandemic in general, the current study seeks specifically to examine the effect of the COVID-19 pandemic on the implementation of government reform programmes. Specifically, the paper seeks to:

1. Examine the effect of the COVID-19 pandemic on the implementation of government of Ghana programmes and strategies that have been adopted to mitigate inherent constraints?
2. Examine measures that have been adopted by the government of Ghana, private institutions and international organisations to combat the medium-to-long-term effect of the COVID-19 pandemic.
3. Examine the fiscal impact of the COVID-19 mitigation measures on the public finances of Ghana?
4. Examine the effect of the implementation of COVID-19 mitigation measures on the principles of good governance in Ghana.
5. Identify economic sectors have mostly benefited from the COVID-19 pandemic.

1.2 APPROACH TO THE STUDY

A cross-sectional design based on a three-step approach was used for conducting the study. In the first stage, literature on the effect of the pandemic especially on the implementation of government programmes was reviewed. In the second stage a desk review of government programmes was undertaken. The literature and desk review provided the basis for validating the scope and themes for the study and consequently the development of instruments for primary data collection. In the third and fourth stages, key informant interviews and Focus Group Discussions (FGDs) with key stakeholders were respectively undertaken.

1.2.1 SAMPLING AND STUDY SAMPLE

Given the proposed primary data sources - key informant interviews and FGDs for the study, stakeholder institutions were identified and mapped and a sampling frame created which consisted of Ministries, Departments and Agencies (MDAs), Civil Society Organizations (CSOs), academia, other stakeholders such as Micro, Small and Medium Enterprise (MSME), farmer-based organizations, business associations and business owners.
The study adopted a purposive sampling method to select three regions for the study. However, to ensure that the sample is representative, the country was first divided into three zones; namely the Northern, Middle and Coastal belts. In each belt, one region was purposively selected; Northern Region (Northern belt), Ashanti Region (Middle belt) and Greater Accra (Coastal belt).

In each selected region, purposive sampling was used to select institutions and interviewees within the selected institutions for interviews. In all, 6 FGDs were held (2 in each of the three regions) and 37 key informant interviews were conducted across the three selected regions with the breakdown is as follows:

- Greater Accra – 21 interviews;
- Ashanti Region – 10 interviews; and
- Northern Region – 6 interviews

1.2.2 DATA COLLECTION

Data for the study was collected at three levels. This includes a desk review, key informant interviews and FGDs as follows:
Following from the results of a literature review conducted to validate the scope and develop appropriate instruments for the study, a desk review on key reforms and strategies that the government of Ghana has initiated and how the implementation of these reforms might have been affected by COVID-19 pandemic was undertaken. The review also examined measures put in place by the government, private sector institutions and international organizations to combat the pandemic. The review focused on the impact of the pandemic on key sectors such as energy, agriculture, industry, micro, small, and medium enterprises (MSMEs) sector, public finance etc. The findings of the desk review augmented the literature review and highlighted key issues of interest. The findings of both the literature and desk review formed the basis for sampling institutions and participants for the key informants' interviews and FGDs. Additionally, the instruments used for both the key informants' interviews and FGDs were based on the findings of the literature and desk reviews.

In addition to the literature and desk review, key informants were also interviewed using an interview guide. The cross-sectoral nature of the study necessitated the development of different instruments for each sector given that issues varied from one sector to the other. This meant that participants from different sectors were asked different questions.

Data collected through the desk review and key informant interviews were further triangulated through FGDs. The focus of the FGD was to better understand information earlier collected through the desk reviews and key informant interviews. An FGD guide that focused on understanding the effect of the pandemic on the implementation of government programmes, mitigation measures that have been adopted, impact of the pandemic on fiscal position of the government as well as principles of good governance and finally those who have benefited or lost more from the pandemic.

1.2.3 DATA ANALYSIS

The study adopted a thematic approach based on themes generated from the literature review. Interview transcripts were analyzed and emerging themes consistent with themes generated from the literature review were grouped. Similarly, FGD transcripts were analyzed and emerging themes consistent with those from the literature review were grouped and presented.

Chapter two

Study Findings

Chapter two

Study Findings

2.1 COVID-19 AND IMPLEMENTATION OF GOVERNMENT PROGRAMMES

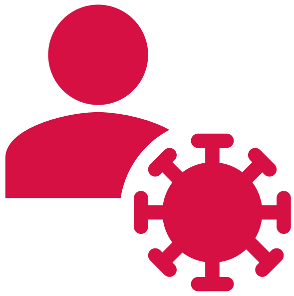
The first case of COVID-19 in Ghana was just three months into the implementation of government programmes and budget in 2020. Usually, business in the first quarter of the year is slow and begins to pick up in the second quarter. In 2020, the government was yet to know the total revenue accrued in the first quarter when the first infection of COVID-19 was recorded in Ghana necessitating increased spending to contain the spread of the virus.

2.1.1 EFFECT OF COVID-19 ON COORDINATED PROGRAMME OF ECONOMIC AND SOCIAL DEVELOPMENT POLICIES (CPESDP)

The Coordinated Programme of Economic and Social Development Policies (CPESDP) is the vision of the president and lays out the direction for the country, provide a blueprint for the preparation of Medium Term Development Plans (MTDP) and guide the budget process of the government. The CPESDP is the umbrella programme under which all Ministries Department and Agencies (MDAs) and Metropolitan, Municipal and District Assemblies (MMDAs) work to contribute to its actualization. It is expected to be implemented between 2017 and 2024. The CPESDP was significantly implemented in 2018 and 2019 and that reflected in the growth rate of around 6.3% and 6.5% respectively. However, due to the COVID-19 pandemic there were distortions in the implementation of the CPESDP and this reflected in how economic productivity was negatively affected and that drove growth downwards to 0.9% in 2020.

"The COVID-19 has affected it because we are currently off track. Because of the COVID-19, many planned activities were not fully implemented, because in some instances budget allocations were diverted to in response to the COVID-19 mitigation measures. Economic productivity went down as a result of the lock down, the restrictions on movements, social distances and closures of the borders all had a lot of effect on the various sectors of the economy."

(Official of the National Development Planning Commission (NDPC), Accra)



As part of the pandemic's effect, the former Ministry of Monitoring and Evaluation could not carry out an end of year assessment of the various ministries to ascertain the extent to which they implemented targets within the CPESDP, but conducted Rapid Evaluation of the Flagship programmes to assess whether they were on track. While the pandemic did not stop ongoing flagship initiatives, it slowed down the processes and delayed the speed at which projected targets could have been achieved. It is anticipated that the implementation of the Ghana CARES programme will revamp the economy and ensure that the CPESDP is pursued in a manner to achieve a growth target of 5% in 2021.

"The Ghana CARES program is meant to help bring us back on track and also provide a firm foundation for accelerated growth."

(Official of NDPC, Accra)

2.1.2 EFFECTS ON REVENUE GENERATION

Revenue mobilization in 2020 was greatly constrained by COVID-19, necessitating the government to revise its revenue and expenditure targets downwards. The revenue generating agencies and industries such as Ghana Revenue Authority (GRA) and the petroleum sector revised their estimated revenue targets. For example, GRA, the petroleum and manufacturing sectors reduced their revenue target from GH¢47 billion to GH¢42 billion and US$1.57 billion to US$660 million respectively. The revision became necessary because businesses were not able to honour their tax obligation, especially in the first six months of the pandemic. This slowed down GRA's plan to increase tax revenue, resulting in an increase in the Tax to GDP ratio from 13 percent to 17.5 percent.

"Tax reliefs granted to businesses by government contributed to our revenue coming down, most... hospitals did not pay their PAYE (Pay As You Earn) tax from April to December and this affected our revenue".

(GRA Official, Kumasi)

To ameliorate the effect on businesses, the government introduced tax concessions and gave businesses extra time to file their returns and meet their obligations. Before COVID-19, the GRA through its three-year strategic plan had initiated reforms to widen the tax net and enhance domestic and custom tax compliance, leveraging on technology, people and administrative centered approaches. COVID-19 prevented GRA from embarking on routine education, revenue collection and enforcing compliance.

"COVID-19 stopped us from embarking on our compliance activities because you need to enforce and conduct Audit and inspection of other things and how do you do this in the heat of the pandemic. You need to protect staff and taxpayers and this negatively affected our revenue mobilization."

(GRA official, Accra)

Despite the effect of COVID-19, revenue variation on the revised target was not too huge as a result of strategies initiated by GRA such as expediting its automation. A clear example is the introduction of online filing and payment of taxes. Taxpayers could also file their returns to designated emails and pay taxes to banks without having to go to GRA offices.

Revenue from the petroleum sector even though generated GH¢3.8 billion (US$666.4 million), a little above its revised target, it signified over 50 percent decline from the projected revenue. This had an adverse effect on upstream operations and consequently reduced the volume of total crude oil produced to 66.91 million barrels by the end of 2020 (Government of Ghana, March 2021) compared to the target of 76.23 million barrels (Ministry of Energy, 2020) for the same period, and 71.4 million barrels for the 2019 (Government of Ghana, March 2021).

"There were some exploration companies that came in for licensing and had to come in for some negotiations but because of COVID-19, all of that had to be postponed and even Aker energy couldn't start their production processes. Once oil production goes down, gas production also goes down because they are associated products."

(FGD Participant, Accra)

On the contrary, the effect of revenue generation from the manufacturing industry was not severe as the sector raised GH¢45 million out of the projected GH¢47.2 million. The Information and Communications Technology (ICT) sector for instance grew from 38.7 percent in 2019 to 67.6 percent in 2020 (Government of Ghana, March 2021), where the telecommunications industry contributed GH¢3.2 billion in taxes and other remittance to the national revenue in 2019 (Ghana Chamber of Telecommunications, 2020). The main reason for the insignificant gap in revenue generation is due to increases in revenue for some companies who benefited from the pandemic such as the telecommunication and real estate companies among others. In 2020, the ICT sector contributed GH¢17.64 million in revenue compared to GH¢9.79 million in 2019 where the communication service tax revenue alone increased by 35percent to GH¢559.4 million in 2020 from GH¢412.3 million in 2019 (Government of Ghana, March 2021).

2.1.3 EFFECT OF COVID-19 ON THE ENERGY SECTOR

The partial lockdown period in Ghana and the week after, saw an exponential surge in energy utilization without a corresponding increase in anticipated revenue. The consumption of electricity grew by 10.2% in 2020 due to the fact that more people stayed home to observe the restrictions or had lost their jobs leading to a rise domestic demand. The rise in demand was higher than projections made for the year. By May 2020, the peak domestic load recorded 2,696 Megawatts (MW), representing a 10% (246 MW) growth over that of the same period in 2019 (Government of Ghana, 2020a). The projected energy consumption for 2020 was reviewed upwards from 19,594 Giga Watt Hours (GWh) to 19,684.73 GWh. This outstripped consumption for 2019 which was 17,887GWh (Energy Commission, 2021) even though the system peak demand for 2020 was revised downward from 3,115 MW to 3,061 MW because of reduced load uptake by Volta Aluminium Company Limited (VALCO) (Government of Ghana, 2020b). This implied that more funds were needed to produce and distribute energy to homes and manufacturing industries that were still operating. Unfortunately, COVID-19 affected the operations of energy producers and the main energy distributor. For instance, most of the targets set by the Electricity Company of Ghana (ECG) for 2020 including growth in revenue and System Average Interruption Frequency Index were not achieved. Only GH¢760.786 million (62.5 percent) of revenue was collected against the target of GH¢1.2 billion, whiles 29.59 percent system losses were recorded compared to the target of 23 percent.

These targets were not attained because of the electricity subsidy given by the government to lifeline and other category of consumers, the rotational system introduced as a precautionary measure to protect workers from being infected by COVID-19 and limited access to offices and homes. According to data from the Public Utility Regulatory Commission (PURC), it cost government GH¢240 million a month to provide free energy for all Ghanaians from March to June and GH¢20 million a month for lifeline users, even though these costs are yet to be fully paid by government especially to the Northern Electricity Distribution Company (NEDCO).

“The cost of the free power and the subsidised power has to be paid and this is an energy sector which is already overwhelmed with debt. The cash waterfall system helps to ensure that all the IPPs receive some money for the power produced but that was affected by the COVID-19 because the distributors could not collect much of the funds from consumers.”

(FGD Participant, Accra)

Moreover, because of staff rationing, the “CORRECT OR COLLECT” task force and other workers of ECG were limited in undertaking revenue mobilization, routine maintenance of assets, install prepaid meters and conduct factory assessments to ensure its system was in good condition. Even though revenue generated was above average, the ECG was unlikely to meet its obligation to the Volta River Authority (VRA) and other Independent Power Producers (IPPs) who depended on the cash waterfall system to receive funds for power produced and pay their debts with the banks.

“The pandemic really affected our debt recovery because, when the “correct or collect” taskforce was set up, you could see that the revenue was going up and then COVID-19 came in and slowed everything down.”

(ECG official, Kumasi)

The fall in revenue invariably contributed to the already rising energy sector debt and other challenges in the sector. The introduction of the Energy Sector Recovery Programme (ESRP) was meant by government to reduce the energy sector debt by paying off Ministries, Departments and Agencies (MDAs) debt and ensure competitive procurement of fuel and power. However, ongoing negotiation for the implementation of the plan was largely delayed as stakeholders could not meet in 2020 to finalize recovery terms and carry out action plans.

The petroleum sub-sector also had its share of COVID-19 effects, some of which would be felt from the medium to long term. COVID-19 reduced demand and stalled negotiations for production and further exploration. Demand for petroleum decreased and as a result, affected the volumes of oil and gas produced and ongoing projects, compelling energy companies such as Aker Energy, AMNI, GOSCO, Eni, ECO Atlantic, Springfield to cancel over 98 contracts worth more than US$389 million (Thebftonline.com, October 2020) and suspend their programmes due to significant disruptions and delays. For instance, Aker Energy had to suspend their decisions on the Pecan offshore development. In other developments, Eni, the operator of the Cape Three Points Block 4 had to postpone the drilling of the Eban 4-1X exploratory well to the first quarter of 2021 (Public Interest and Accountability Committee (PIAC), 2021). The decrease demand was reflected in daily production of crude oil which was projected to be between 203,000 – 234,000 barrels per day. However, 182,918 barrels were produced per day in 2020 which fell below the minimum projection, and the daily average of 197,305 barrels per day for 2019, representing a decline of 7.3% (Energy Commission, 2021). Besides the drop in demand, schedules for production and maintenance in the oil fields were disrupted because workers had to work on shift. Negotiations with some exploration companies who wanted licenses for operations were postponed whiles the interest of companies wanting to carryout exploration or sign contracts waned. For instance, the Ministry of Energy postponed the planned second open oil licensing, until in September 2020 when it invited the oil and gas companies for direct negotiations over the offshore eastern basin for petroleum exploration and production licenses (Government of Ghana, March 2021).

“The effect of COVID on the energy sector is not just immediate but medium to long term. Contracts of service companies in the upstream who provide support service to exploration companies were terminated because of the COVID. For the downstream, the demand was low because people were home and were not moving cars so they were not purchasing fuel and this affected the tax from fuel.”

(FGD participant, Accra)

2.1.4 EFFECTS ON THE SUSTAINABLE DEVELOPMENT GOALS (SDGS)

The impact of COVID-19 on the Sustainable Development Goals (SDGs) was very high because the targets are currently off track. Ghana has incorporated all 17 goals into its overall development plan. Due to COVID-19, the development plans were not implemented as planned because expenditure allocation was redirected. For instance, in 2020, the country was particularly focused on implementing activities targeted at inclusive education (Goal 4) and inclusive economic growth (Goal 8). But progress on these activities declined. Particularly within the Education Sector, the long break due to the closure of schools as a containment measure against the spread of COVID-19, this retarded progress that has been made. This situation was compounded by the low internet penetration rate, which stood at 48% in January 2020 that did not permit the government to mandate virtual teaching and learning for all students (Ministry of Finance, 2020b). In pursuance of Goal 4, an amount of GH¢5.8 billion was allocated in the national budget in 2020 (Ministry of Finance, 2020b), an increase over an allocated amount of GH¢2.13 billion in 2019 that went to Ministries Departments and Agencies (MDAs) in the Education Sector (Ministry of Finance, 2019).

Similarly, businesses were hard hit by the pandemic and several initiatives such as the Coronavirus Alleviation Program for Businesses (CAPBuss), a GH¢600 million stimulus package was initiated to support businesses and protect livelihoods. An extended measure, the Coronavirus Alleviation and Revitalisation of Enterprises Support (CARES) programme, which would be discussed in a dedicated section was launched to revitalize and transform the economy as the country seeks to shed itself of the ravaging effects of the pandemic. Government expenditure allocations to MDAs and Metropolitan, Municipal, and District Assemblies (MMDAs) for implementation of SDG 8 (Decent Work and Economic Growth) related programs increased substantially by about 193.23% from GH¢143.78 million in 2019 to GH¢421.6 million in 2020.

2.2 EFFECT OF COVID-19 ON GOVERNMENT FLAGSHIP PROGRAMMES

The government of Ghana prior to COVID-19 had intended to support smallholder farmers and the general populace, especially the unemployed through its flagship programmes. The programmes include One District one Factory (1D1F), Planting for Food and Jobs (PFJ), Rearing for Food and Jobs (RFJ), irrigation - One village One Dam (1V1D) and the constructions of warehouses. Government intended to increase beneficiary farmers of the programme, support farmers with farm inputs and extension service, improve food storage, create more jobs through the 1D1F and improve value addition to raw material whiles sustaining Micro, Small and Medium Scale Enterprises (MSMEs). These intended objectives were partly affected by the pandemic. The Ministry of Trade and Industry (MOTI) received only 66 percent of its budgetary allocation in 2020, since the government redirected the funds to highly competing demands such as the procurement of Personal Protective Equipment (PPE) in the health sector, and this was revealed in an interview with an official of the Ministry. The implication was that these flagship programmes suffered a setback in one form or another. Findings on each of the programmes are discussed below:

2.2.1 PLANTING /REARING FOR FOOD AND JOBS

Under Planting for Food and Jobs (PFJ) and Rearing for Food and Jobs (RFJ), farmers' access to inputs such as fertilizer, improved hybrid seeds and day-old chicks were impeded. According to the Ministry of Food and Agriculture (MOFA), the PFJ was not affected much and that there was excess fertilizer from previous stocks. The programme distributed 424,000 Metric Tonnes (MT) of subsidized fertilizers to farmers in 2020 compared to 331,354 MT in 2019, a 28% increase (Government of Ghana, March 2021). Despite the increment, some farmers noted that there was limited or no fertilizer supply by the government.

> *"Last year the fertiliser subsidies meant for the farmers didn't come and the excuse was that the money was diverted to pay for the PPE."*

(FGD participant, Tamale)

The participants asserted that prices of inputs increased because the inputs under the PFJ were in limited quantity coupled with the suspension of subsidy on them. The decline in the availability of fertilizers and the absence of subsidies invariably increased the price, reduced the quantity of fertilizers at the disposal of farmers and impacted the acreage of land the farmers could produce. However, the prices of government's subsidized fertilizer did not change before, during and after the peak periods of COVID-19. The inorganic fertilizer sold at GH¢70 and GH¢75 for 50kg bag for urea and Nitrogen, Phosphorous and Potassium (NPK) respectively, while organic fertilizer was priced at GH¢19 per liter for liquid, GH¢20 for 50kg bag of compost and GH¢45 per 25kg bag for granular fertilizer respectively in 2019 and 2020 (Ghanaweb, January, 2019). Nevertheless, the price of fertilizer on the open market increased due to increased demurrage costs, caused by delays at the port (West Africa Fertilizer Watch, 2020). In addition, smuggling of subsidized fertilizer and hoarding was seen as a factor that limited local farmers' access to the products. This also contributed to the price hikes (Peasant Farmers Association of Ghana (PFAG), 2021). A monitoring report by the PFAG (September, 2020) revealed that subsidized fertilizer on the market sold for about 85% instead of the statutory subsidized price of 50% on the market price. This implies that instead of the fixed price of GH¢42 per 25kg bag for NPK fertilizer, it rather sold for between GH¢42 to GH¢45 by many retailers, depending on the location. Additionally, intra and inter country movement restrictions of persons and goods had a two-way effect on the availability of inputs for the PFJ programme. Whereas the restrictions led to a reduction in the level of smuggling of the limited subsidised fertilizers, available inputs and equipment were not in adequate proportions because the government could not import them.

"The planting for food and jobs programme was to supply inputs such as improved hybrid seeds and fertilizers to the farmers but some of these inputs are imported and the flight restrictions coupled with the closure of borders in Ghana and other countries resulted in the reduction of these supplies."

(FGD participant, Kumasi)

The restrictions further rendered it impossible for available inputs and animals to be transported from the lockdown areas (Accra and Kumasi) to farmers in other parts of the country. In addition, farmers could not be mobilised and provided with the inputs. The farmers themselves could not also mobilise labour to work on the farms nor transport their produce to market centres for fear of contracting the virus.

Poultry farmers under the RFJ on the other hand could not access day-old chicks and feed for their birds due to transportation restrictions and the high cost of grains. Officials of MOFA revealed that a delay in shipment caused the death of over 80 percent of imported day-old chicks because the pandemic made it difficult accessing vessels and containers to ship imports. It emerged from the focus group discussion in Kumasi that high demand for grains, particularly maize, an important component of poultry feed gave rise to an increase in the price per bag. For instance, in October 2019, the average cost of maize and soyabeans were GH¢131 and GH¢240 per 100kg and 109kg respectively. This, however, increased to GH¢154 and GH¢313 during the same period in 2020 (Fugar, 2021). Similarly, varying increases in prices were recorded for other commodities such as millet and rice within January and October period (see Table 1). As a result, an increase in the price of eggs and poultry was recorded. However, demand was low because consumers had totally or partially lost their income and could not afford poultry products.

Table 1: Average wholesale prices of commodities in selected months of 2020

Average wholesale prices for commodities (GH¢)

COMMODITY	UNIT	WEIGHT	JAN'20	FEB'20	MAR'20	SEPT'20	OCT'20
Maize (white, grain)	Bag	100kg	131.29	133.86	138.86	153.86	154.17
Millet (grain)	Bag	93kg	222.43	228.71	230	263.71	311.29
Rice (local-white)	Bag	100kg	316.71	325	329.86	375.14	387.43
Soya Beans	Bag	109kg	243.14	250.57	261	294.57	313.43

Source: Esoko.com

COVID-19 restrictions also had a rippling effect on both crop and poultry farmers as they lost their major market. The sudden closure of schools and restaurants dealt a major blow to the jobs and incomes of farmers and labourers. Schools and restaurants serve as the conduit through which most of the grains and eggs of the PFJs and RFJs are off-loaded. The closure of the schools and chop bars among others led to post harvest losses, surplus food and produce such as yam, rice and eggs in the markets.

“The demand for eggs and other poultry products were really affected by the closure of the schools who are the major customers of poultry farmers. The government needs to turn and look at the poultry sector and stop the importation.”

(FGD participant, Accra)

The relatively high cost of inputs on the market and the drop-in demand contributed to income losses incurred by farmers.
Farmers also benefited less from extension services. Following COVID-19 restrictions. Thus, contact hours between Agricultural Extension Officers (AEOs) and farmers reduced significantly because the AEOs and other officials from institutions such as Centre Scientific and Industrial Research (CSIR) could not go to the farms to help the farmers. COVID-19 also affected field demonstration, capacity building and training programmes for farmers as well.

“The extension officers also couldn’t go to the farms to help the farmers and this really affected the farmers and their farms.”

(FGD participant, Kumasi)

To stay in contact with farmers, some Agriculture Extension Officers (AEOs) resorted to the use of mobile phones to assist farmers. The AEOs guided and advised farmers as the latter sent farm images/pictures. MOFA also intensified the use of radio platforms to make extension services available to farmers.

“The use of media and other electronic communication channels were very relevant in promoting extension services and delivery of our mandate.”

(MOFA Official, Kumasi)

2.2.2 IRRIGATION (1VILLAGE 1DAM), CONSTRUCTION OF WAREHOUSE AND GREENHOUSES

COVID -19 triggered scarcity of labor for the construction of irrigation dams, warehouses and greenhouses due to the imposition of restriction on movement. This stalled work on the construction of irrigation dams, warehouses and greenhouses for some time. As part of this programme, there were warehouses at different levels of completion before COVID-19. However, some projects were halted due to limited funds for the sector as well as labour shortages occasioned by the imposition of restriction on movements. In the 2020 budget statement, the government projected the completion of all 80 warehouses by the end of the year (Government of Ghana, November 2019). However, an update in the 2021 budget statement indicated that at the end of 2020, MOFA completed 21 out of 30 warehouses, whiles the former Ministry of Special Development Initiative (MSDI) completed 42 out of 50 warehouses (Government of Ghana, March 2021). This brings to a total of 63 completed warehouses out of the 80 that were projected to be completed by the end of 2020. This indicate that an average of 17 warehouses were completed each year prior to COVID-19 and probably if not for the pandemic, the projected warehouses would have been completed.

“In 2016, the baseline warehousing capacity in the country was 34,000 Metric Tonnes (MT). MOFA set out to increase this by an additional 30,000MT by constructing 30 units of 1000MT capacity warehouses with the erstwhile MSDI targeting 50 warehouses with an additional capacity of 80,000MT… About 63 warehouses are now operational and are under the control of National Food Buffer Stock Company (NAFCO).”

(MOFA Officials, Accra)

Inadequate funds resulted in part or no payment of contractors working on the above-mentioned projects. Thus, some of the projects have partially been completed with others abandoned in some of the communities. The slow pace of work on the warehouses means that grains from the PFJ cannot be stored for future consumption by small to medium scale agro-processors, including poultry farmers. For instance, feed for poultry contains about 60 percent of maize and therefore any shortage as a result of limited storage would be catastrophic for poultry farmers. Participants in the Focus Group Discussions noted that besides challenges with funding, labour and movement, COVID-19 could not be entirely blamed for delays in the construction of the dams, warehouses and factories in communities and districts. Some of the warehouses built in some communities have very limited spaces which makes it impossible to store adequate produce such as rice when it is harvested. An example was given of a community with thousands of acres of rice farm but a small warehouse. The farmers have therefore decided to keep fertilisers and other inputs instead of storing food. In addition to the capacity, MOFA officials in Accra noted that the storage of paddy rice in the warehouses were not doing very well as anticipated in comparison with other grains, and this has prompted the need to increase silos for storage purposes.

As part of the PFJ initiative, the government established three training centers at Dawhenya in the Greater Accra Region, Akomadan in the Ashanti Region and Bawjiase in the Central region to train youth who intend to venture into greenhouse farming. At the end of 2020, the three centers were completed. In 2019, the government built 75 greenhouses (dome) at Dawhenya, and sought to build 50 additional domes in 2020. The One Village One Dam (1V1D) was initiated by the government to construct new and expand the dams or dugouts to contain more water for all year-round irrigated farming, particularly dry season farming to augment incomes, watering livestock and for domestic uses. The 2020 budget statement noted that government through the Infrastructure for Poverty Eradication Programme (IPEP) was implementing 560 One Village One Dam projects. However, at the end of 2020 a total of 227 small earth dams were completed which brought the total number of dams under the initiative to 427, as indicated in the 2021 budget statement. However, as noted by respondents during the FGDs, the programme was fraught with problems from the start resulting in poorly constructed dams, many of which could not hold adequate water for both livestock and crops especially in the dry season, a concern already predating the COVID-19 pandemic. An assessment of the 1V1D initiative by the Peasant Farmers Association of Ghana (PFAG) (2020) in 24 communities of the Upper East Region revealed that most of the dams were poorly constructed and below specifications of a dam, had low reservoir capacity and could not contain any meaningful quantity of water to facilitate dry season farming. A follow up exercise was undertaken a year after the PFAG assessment of the 1V1D to ascertain whether government has taken the necessary steps to rectify and improve the dams to make them fit for purpose. The findings of the follow up suggest that not much has been done after the initial assessment (Sore, 2021). Additionally, COVID-19 stalled progress on construction because funds were diverted towards interventions to mitigate the pandemic including the purchase of PPE and other essentials.

"Since payments haven't been fully made for the projects, contractors haven't completed them. In one of the communities for instance, the contractor was to install a stopper which he hasn't and therefore it is not able to dam the water."

(FGD participant, Tamale)

2.2.3 ONE DISTRICT ONE FACTORY (1D1F)

The 1D1F was not spared from the ravaging effects of COVID-19. Similar to difficulties encountered with the importation of farm inputs, business promoters who received funds from government under the programme could not import raw materials and equipment to install in the factories under the 1D1F. An example is a tomato processing factory in Tema that imported some equipment but the foreign engineers to install them could not travel outside their home countries due to the closure of the borders. Again, COVID-19 prevented foreign investors from coming to invest in the programme. Many factories that should have been built or registered as part of the programme delayed.

"Government's locus in the 1D1F is to provide affordable funding, technical support and basic amenities to business promoters to be able to establish the factories. Had it not been COVID-19 which prevented the foreign investors from coming in, the government would have achieved its targets in setting up majority of these factories across the country."

(FGD participant, Accra)

Restrictions during that period made it quite impossible for the staff of the programme to embark on field visits to inspect, assess and meet to take decisions on applications of businesses that wanted to join the programme. The delays on the part of the 1D1F secretariat to approve applications for factories to commence operation occasioned by the pandemic contributed significantly to a number of factories being on the waiting list. Human and bureaucratic challenges served as impediments to increased investment into factories under the 1D1F.

"The district implementation support team could not meet as frequently as they were supposed to due to the restrictions and this stalled the implementation of the programme."

(FGD participant, Kumasi)

To apply to join the 1D1F, a private investor must demonstrate the viability and sustainability of the business. However, given that potential customers (schools, restaurants and other institutions) for the products to be produced by several of the 1D1F factories were shut for a long time, it adversely affected the business viability and sustainability, especially for those who were either at the stage of starting or putting together a proposal for registration. One of the principles of the 1D1F was for the government to partner with the private sector. However, the private sector was badly hit by the pandemic. This did not only reduce their ability to generate revenue but also increased their borrowing risk and thereby making it difficult for them to have access to requisite funding for their 1D1F projects. This reduced the ability of the private sector to partner with government to invest in the 1D1F programme. Also, foreign partners' support to local 1D1F stopped as some of these partners had also been hit by the pandemic in their countries.

In a progress report on the status of the 1D1F initiative, the Ministry of Trade and Industry (MOTI) (2021) pointed that 91 projects were on hold (Ministry of Trade and Industry (MOTI) (2021), and this may be due to various reasons some of which have been highlighted. For the year 2020, GH¢467 million was committed as expenditure for MOTI in the budget, out of which GH¢169 million was dedicated for Industrial Development and Promotion (Government of Ghana, 2019). However, the government's response to mitigate the pandemic affected funds disbursements to MOTI. An official of MOTI noted in an interview that overall, the Ministry received about 66% of its allocation, clearly pointing to a wide variance that has implications for the Ministry and consequently the 1D1F initiative. Information available suggest that before COVID-19, preparations were on-going to have some of the 1D1F factories (earmarked for cassava, watermelon, rice and yam processing) in Savelugu and Walewale to take off. However, work stalled because of limited funding, causing farmers who had invested heavily into the production of watermelon and rice with the hope of offloading their produce to the factories run into huge losses.

"With the rice farmers, the understanding was that the rice was going to be processed by some factories and so they increased production and unfortunately because of COVID-19, the factory didn't happen so selling the rice was a problem."

(FGD participant, Tamale)

Even when the government through its Microfinance and Small Loans Centre (MASLOC) programme wanted to provide financing assistance for farmer groups to scale up and produce enough for the factories, the idea had to be abandoned because the funds were redirected to health. Other companies along the supply chain who provided equipment also suffered losses as there was limited or no procurement from these factories. Notwithstanding, the constraints posed by the pandemic, 282 factories out of the over 300 targeted had been built by the end of December 2020 with about 70 of them operational including the VW automobile assembling plant.

2.2.4 DIGITAL INCLUSION AGENDA

As part of the government's Digital Inclusion Agenda, it recognizes the need to be more efficient, reduce expenditure and diminish the informal sector by increasing the formal sector. Digitalization is a way to grow the economy and integrate informal sector actors into the economy. The government identified that the required building blocks or framework needed to scale up digitalization of the economy was absent, particularly identification and registration of citizens and properties as well as the absence of financial barriers. Thus, the government through the National Identification Authority (NIA) registered citizens and provided them with unique and secured digital identity that can be used as a basis to identify the individual transactions. Through this initiative, over 16 million Ghanaians registered, having unique digital identification and large number of them have received their cards. Again, 16 billion unique addresses of properties across the country were captured as part of the National Digital Property Addressing, out of which 7 million unique addresses have been identified and generated for properties across the country. In essence, every building, structure and property in the country currently has a unique address.

"These developments are helping to improve the financial sector since potential applicants have unique identification and can be traced to an identified and registered property. These can pave the way for driving financial inclusion, catering for the teeming number of traders that require capital but do not have any credit score."

(Official, Office of the Vice President)

Having a unique identification and address is deemed as a good prerequisite for creating a credit reference that will aid financial inclusion. The government in 2018 introduced Mobile Money Interoperability to facilitate mobile money transactions that are dominant in the formal sector. The introduction of the interoperability system has made it relatively easy to send funds from one mobile network to another which was earlier not possible. The relative ease with which funds could be transferred on the mobile money networks led to an exponential growth of mobile money transactions over the years. The onset of COVID-19 and resultant restrictions on movement further increased the use of mobile money, leading to an increase in the volume by 365 percent between 2019 (9 million transactions) and 2020 (43.9 million transactions). In terms of the associated value of transactions, GH¢781.69 million worth of transactions were generated in 2019, increasing significantly to GH¢5,866.81 million in 2020 Ghana Interbank Payment and Settlement Systems Limited (GhIPSS) (2021). As a result of engagements involving the banks and the telecommunication networks, the Ghana QR code was also introduced to speed up transaction processing, make transactions convenient for small merchants and clients, and make it possible for a credit reference bureau to emerge. Other initiatives in the pipeline involve the integration of the Ghana Card with other databases and systems such as Ghana Revenue Authority (GRA), Social Security and National Insurance Trust (SSNIT), National Health Insurance Scheme (NHIS) and a host of other systems to improve government efficiency in service delivery (Government of Ghana, 2021). In addition, the Ghana.gov platform which is a virtual one-stop-shop for accessing and making payments for government services is currently being piloted and is expected to be fully rolled out before the end of 2021.

The COVID-19 pandemic impacted on the timeliness for implementing these initiatives in 2020, and thus pushed for their timelines to be extended to the end of 2021. For instance, the National Identification Authority (NIA) registration was nearly hampered for concerns over the spread of the COVID-19, but was eventually conducted successfully. The land digitalization project was also adversely affected with the onset of COVID-19.

On the digital policy front, the Ministry of Communication and Digitalization is tasked with the broad agenda of digitalization, and is currently reviewing the policy document to guide this process since the last policy document, the Ghana ICT for Accelerated Development (ICT4AD) was developed in 2003, and is in its final stages of roll out (2019 – 2022). This notwithstanding, the Office of the Vice President is spearheading initiatives that are focused on digital financial inclusion that seeks to grow the economy and bring on board all citizens into the digital transaction space as the nation strives for a more cashless economy.

"With the policy document, the Minister [referring to the Minister of Communication and Digitalization] has the policy document and she is refining it to update the new one. At the vice president's office, we are looking at financial inclusion, that is implementing projects that will help to grow the economy and bring along most citizens in the digital transaction network."

(Official, Office of the Vice President).

2.3 MEASURES TO MITIGATE THE EFFECTS OF THE COVID-19 PANDEMIC

To reduce the adverse impact of the pandemic on lives and livelihoods, the government introduced several measures such as free food (cooked and uncooked) free electricity, free water consumption, and a stimulus package for small and micro-enterprises. During the three-week partial lockdown period, all households with lifeline consumers enjoyed free electricity while others above the lifeline paid half of what they consumed. Water consumption was also free, and estimates by the Minister of Sanitation and Water Resources indicate that an amount of GH¢896 million was spent in providing this service (Cobblah, 2021).

> "The free water and electricity were good initiatives that came to help reduce the burden on Ghanaians who were already stressed with job losses and reduction in income among others."

(FGD participant, Tamale)

These measures went beyond the lockdown period lasting initially for three months before it was extended for another three months, especially for lifeline consumers. One hot lunch a day as well as uncooked food items came in handy for the vulnerable: including those living on the streets, kayayei and truck pushers, the elderly and persons with disabilities.

> "The free food was good for the areas that went into lockdown but the food was inadequate."

(FGD participant, Tamale)

The meals created markets for farmers under the PFJs and RFJs, as the government utilised produce from the initiative. The free water, electricity and food according to participants were good initiatives and were impactful in reducing the burden on Ghanaians who were already stressed with job losses and reduction in income. Despite the positive effect, equity gaps were observed in the implementation. It was suggested that as a result of limited or lack of a database on poor and vulnerable people in Ghana, the interventions were ill-targeted. Deprived urban communities did not benefit that much from these interventions as they bought water daily from standpipes and paid an unchanged rate for electricity bills to their landlords, particularly for those who live in compound houses where aggregate consumption is more than the threshold for lifeline consumers, even though individual consumption will be less than the threshold. Thus, non-poor persons and communities rather benefited from the interventions more than the poor. To ensure that farmers continue to work to forestall famine and food insecurity, the government intensified e-extension services to guide farmers during the planting season and ensured access to inputs for the 2021 planting season.

About 22,000 small and medium scale enterprises nearly collapsed due to COVID-19. These businesses lost revenue, leading not only to job losses but it also impacted negatively on the revenue mobilising potential of the state. A survey conducted on the impact of COVID-19 on business by the Ghana Statistical Service (GSS), United Nations Development Programme (UNDP) and the World Bank (2020) indicated that firms recorded over 60 percent decline in sales, amounting to an estimated GH¢115.2 million in April 2020 with an estimated 41,952 workers losing their jobs, 770,124 workers having their wages reduced and the working hours of 695,209 workers also reduced. The government established a stimulus package of GH¢600 million (US$104.4 million), the so-called Corona Alleviation Programme (CAP) in addition to funds (GH¢90 million) from the MasterCard foundation to cushion MSMEs from the effect of the pandemic and help revamp their businesses.

The Ghana Enterprise Agency then National Board for Small Scale Industries (NBSSI) was the agency which disbursed the funds to small and medium scale enterprises that fulfilled requirements for the package. Enterprises who are into education, health, agriculture, tourism, hospitality and informal sector businesses including petty trading, etc submitted applications to the fund (the GH¢600 million stimulus package). Businesses which requested less than GH¢1000 and qualified were not expected to pay back, while those needing above GH¢1000 had a two-year moratorium. The package was oversubscribed, and participants indicated that disbursement was disproportionate to amounts requested by applicants, given that several businesses received less than they applied for or were not given any amount at all. In Kumasi for instance, only 14 out of the 55 members of the association of hotel operators who applied for the stimulus package to pay staff and to run their operations were approved. They received between

GH¢3000 and GH¢8000 which was about 17.5% of the of the amount applied, which ranged between GH¢10,000 and GH¢50,000 respectively.

> “The tourism sector got some funds but none of us in the hospitality industry received the funds because most of it went into revamping tourist sites.”

(FGD participant, Kumasi)

Less than half of private schools that were badly hit by the pandemic received funds and small-scale farmers were also excluded because they did not have some of the information required such as a Tax Identification Number (TIN). In the rush to release funds to businesses, coupled with limited funds, the process for validating applications from businesses was compromised. Responses from several participants in the FGDs suggest that field visits to verify business operations before disbursement did not take place for many businesses. The absence of a rigorous validation process fed into the speculation that the package was disbursed to party faithful. The assertion that only a few of the businesses that applied for funding actually received some funding is supported by the GSS, UNDP and World Bank (2020) business tracker findings, which revealed that at the time of the survey in April 2020, slightly less than 1 in 25 (3.5%) of firms received some government support; with the main reason given by a little over one-third of firms (35.1%) for not getting the support as that they were ‘not aware’ of the intervention.

> “The funds were not made available to the businesses that really needed them but it ended up with politicians and party foot soldiers.”

(FGD participant, Tamale)

> “The way the money was disbursed gives rise to the fear whether all the individuals who applied and got the money can be tracked for repayment.”

(FGD participants, Tamale)

In spite of the inadequacies, the disbursement of the funds has proven to be useful as over 650,000 MSMEs that were at the verge of collapsing and could not sustain their operations, have been revamped and are back to business. By the end December 2020, 277,511 businesses had been supported with about GH¢412.88 million, in addition to 8,159 people who were trained on Entrepreneurship, Financial Literacy and Bookkeeping to improve business practices (Government of Ghana, March 2021).

> “Most of the members who got the funding invested to diversify or expand their businesses. Most of them are now doing more than what they used to do which has a direct bearing on increasing employment.”

(Official of Association of Ghana Industries, Tamale)

Furthermore, the government suspended loan repayment for businesses for a year to enable them to revamp their businesses.

> “Importers had secured loans to get goods from other countries and because of the COVID-19 pandemic the goods took a longer period before reaching here so if not for the freeze, the banks would have hounded them for the loans.”

(FGD participant, Kumasi)

As a long-term measure to mitigate the COVID-19 effect, a GH¢100 billion Ghana COVID-19 Alleviation and Revitalization Enterprise Support (CARES) programme was established. The programme which cuts across several sectors is also to promote economic growth while generating employment especially for those who lost their livelihoods. Components of the Ghana CARES program targets agriculture and is primarily geared towards import substitution for some commodities which are produced locally. The Alleviation (first) phase of the Ghana CARES programme was implemented between March and December 2020 during which period GH¢7 billion was given as support to borrowers through loan restructuring, moratorium on repayments, interest rate reductions, and granting of new facilities (Ministry of Finance, 2020c).

The revitalization and transformation (second) phase of the Ghana CARES programme is being implemented from January 2021 to December 2023. In financing the Ghana CARES Programme, government is seeking to provide GH¢30 billion of the funding requirements, while the rest of the amount, (GH¢70 billion) is expected to be sourced from the private sector. To raise the GH¢30 billion, government intends to improve its tax-to-GDP ratio to about 20% by 2023, narrow the scope of tax exemptions which is currently wide, broaden revenue sources, tighten fiscal discipline, increased efficiency in public investment and procurement, and prioritize external grant and concessional financing. The private sector financing aspect of the programme is targeting about US$3 billion of Foreign Direct Investment (FDI) annually, a minimum of US$3 billion of Private Public Partnership (PPP) investments, particularly in infrastructure, pursue investments through venture capital and equity funding and explore targeted partnerships (Ministry of Finance, 2020c). There is however some amount of skepticism on the ability of government to raise the proposed GH¢100 billion, especially the component expected to be raised from the private sector.

The major question raised is the fact that the private sector has been hard hit by the pandemic and therefore needs help to rebuild and is therefore not likely to be able to generate that level of resources for government. Additionally, the private sector may only invest in a project that is profitable, thus making it difficult for government to attract funding to the aspect of the CARES programme that is likely to generate only social returns.

> "The private sector is already struggling from the effects of COVID-19 and I am wondering how government would be able to acquire enough funds from the private sector to fund the Ghana CARES programme...The private sector would only get into a venture that they deem profitable. The aspect of the program that relates to infrastructure can be financed by government through contracting of loans or Public Private Partnerships (PPPs), eg. road tolls etc."

(Key Informant/Economist, Accra)

An elaborate package was also offered to frontline workers in the health sector. The package included tax exemption for 3 months and an additional allowance of 50% of basic salary. At the initial stage of the pandemic, Ghana could only boast two medical laboratories that had the capability to test for the virus. However, as a result of the establishment of new ones and permitting private sector laboratories to do testing, there has been an increase in the number of testing centres and laboratories in the country. As part of plans to build a more resilient health system that can stand future shocks, the government intends to construct 111 hospitals across the country. This will include new regional hospitals and district hospitals in all districts without one.

2.4 FISCAL IMPACT OF THE IMPLEMENTATION OF COVID-19 ON PUBLIC FINANCES

The pandemic distorted Ghana's growth trajectory and had an unfavourable effect on the fiscal position, and consequently affected adversely a lot of planned activity. The projected deficit for 2020 was 5% or less as per the Fiscal responsibility Act. However, parliament had to amend that requirement in the Fiscal Responsibility Act to allow government to exceed this threshold as a result of implementing the mitigation measures to combat the pandemic. The deficit worsened, since about 12% was recorded at the end of the year 2020. Government revenue declined because businesses were hard hit and were unable to grow and raise expected revenues. On the other hand, government expenditures increased beyond inflows of revenue. It cost the state about GH¢21 billion to fund the mitigation measures outlined by the government and this represented about 13% of GDP. A substantial part of this amount, GH¢18 billion was funded through borrowing while the rest – GH¢3 billion was secured through grants and funds from the Stabilization Fund (Citinewsroom.com, June 2021). Ultimately, these unplanned expenditures added to the debt stock which increased the debt to GDP ratio to 76.08% at the end of 2020 from 62.44% at the same period in 2019 (Government of Ghana, March 2021). This is expected to deepen even as the country is working at revitalizing the economy and building resilience. However, as the state is drawn into a position of borrowing further to finance its plans, the associated risks such as high debts service needs to be minimized and conscious efforts should be made to grow the GDP through increasing the quantum of domestic revenue.

"The most important thing is for the country to grow our GDP. We cannot stop borrowing for obvious reasons, but as the state borrows more money to finance its activities, we need to minimize the risks of borrowing. We need to focus on increasing the GDP and that would intend minimize the debt to GDP ratio. One sure way to do this is enhancing our Domestic Revenue Mobilization (DRM) capacity so that we do not finance every development activity through loans."

(Key Informant/Economist, Accra)

2.5 COVID-19 MITIGATION MEASURES AND ADHERENCE TO PRINCIPLES OF GOOD GOVERNANCE

2.5.1 RIGHTS ABUSE

In Ghana, there has not been any violence as a result of COVID-19, neither has it posed a threat to political stability. Rather, infractions of compliance with restriction laws which led to a couple of abuses and one death on the part of security agencies were recorded. During the three-week partial lockdown period, the government used the military and police to enforce adherence and orderliness in the epicentres to curb the spread of the virus. However, due to the economic situation at the time, people whose sustenance depended on daily menial jobs and petty trading found it tough to observe the lockdown. People who ventured to go out without 'tangible' reasons and nose masks were returned home. Some military personnel met defiant/recalcitrant individuals with unnecessary manhandling and molestation.

"The military should not be doing policing because their training does not help to enforce laws but rather abuse people's right but the citizens also usually want to be forced by the military to do something."

(FGD participant, Kumasi)

The government in its quest to ensure adherence passed a law on COVID-19 restriction. The imposition of the restrictions act gave too much power to the executive to come up with a lot of executive instruments even though there were enough provisions in the existing law to deal with the restrictions.

"The law created the opportunity for the security personnel especially the military to abuse people's rights whiles enforcing adherence."

(FGD participant, Accra)

Instead of the abuses, the security personnel could have prosecuted those who flouted the law or get them to render community service. The height of these abuses was the killing of one person in Ashiaman, a surburb in Tema. Participants also noted that attempts were made to weaponize the restrictions in other to supress voices that criticise government. For example, armed military men were deployed to stop planned protests and mass gatherings by some groups of people even though government and politicians were involved in campaigns and rallies towards the elections. Others noted that excesses by law enforcement personnel could not be considered as abuse of people's rights since to them, the security agencies were doing their work, and punishments meted out was mainly to make people, especially those flouting the law responsible for their actions. It is also believed that some of the abuses were exaggerated. Ultimately, the security personnel were very professional in the manner they approached the assignment and were hence applauded. On the domestic front, violence against women was said to have increased due to the partial lockdown. Findings from a survey conducted by Institute of Development Studies (IDS), Ghana Statistical Service (GSS) and Associates (2016) revealed that women (28%) were more prone to domestic violence than their male counterparts (20%). Given this pre-COVID-19 baseline, it is likely that the cases will increase as a result of the economic and financial burden occasioned by the disruption in economic activities, job losses and the frustration of more people staying at home. However, many of these incidents are likely to go unreported because the patriarchal system in Ghana downplays domestic violence and hence victims may not see the need to report (UNFPA, 2020; Addadze-Koom).

2.5.2 PERCEPTION OF CORRUPTION

There were allegations that COVID-19 created the space for corruption to thrive as the government channelled resources into procurement and the distribution of items such as of PPE and food (cooked and uncooked) for the poor. Constrained by the need to contain the infection rate quickly, some procurements did not adhere to the provisions of the procurement law. This is believed to have adversely affected openness of government transactions in some cases grounds to perpetuate corruption. Even though it is yet to be established if funds were siphoned, it is speculated that people took advantage of the emergency to amass wealth for themselves.

"When unforeseen circumstances such as wars, disasters and pandemics break, it is usually an opportunity for certain officials to go around the procurement systems to enrich themselves. COVID-19 served as a vehicle for corruption due to the emergency that it came with."

(FGD participant, Tamale)

Despite the speculation, some corrupt practices were recorded as relief items like PPE, and food items were hoarded and diverted for sale. For instance, an investigative work by the investigative journalist Anas Aremeyaw Anas revealed that health workers stole PPE and sold them to the general public. There were also perceptions of corruptions in relation to certain contracts for disinfection and procurement and distribution of PPE. Similarly, when the government announced a motivation package for frontline health workers, others such as hospital administrators included their names in the list so that they could also benefit from the package. Furthermore, food items such as rice and eggs meant to cushion poor persons during the lock-down were said to have been re-routed by officials of state institutions such as the National Disaster Management Organisation (NADMO) to the market for sale.

"Plenty, it provided plenty of opportunities for people to engage in corruption. The state is providing monies for relief items and food meanwhile, an MP has put his name and logo on it. This is daylight robbery; the money is not yours but unfortunately because it was an emergency, we turned to overlook so many of these things."

(Official of CSO, Accra)

Food distribution was also not transparent as state agencies at that forefront of distribution inequitably shared the items in favour of party members and sympathisers and used the opportunity to campaign for the re-election of the government.

2.5.3 VOICE, TRANSPARENCY AND ACCOUNTABILITY

As alluded to earlier, regular and in-depth information was delivered by the President of the Republic of Ghana and his Ministers to keep the citizenry abreast with the COVID-19 situation in the country and mitigating measures adopted to address emerging challenges. Likewise, the National Council for Civic Education (NCCE) which was resourced by the government in the heat of the pandemic, educated the public on COVID-19. Nevertheless, except for brief translations into the local dialect by the president, more of the communication was basically in the English language and was shared by the government only. This limited people's ability to grasp the importance of the messages given.

"Press briefings were excellent but were not really translated into local languages for people to really grasp the import of the messages."

(Official of CSO, Kumasi)

Again, the addresses excluded information on COVID-19 expenditure. Participants thought that the decision to establish the COVID-19 fund was without recourse to the legal framework which could have ensured that financial laws regulating such funds were followed through. Thus, government was not transparent with finances and sources of funds that were used in mitigating the effect of COVID-19. There has not been full disclosure and accountability with regards to how much was received as donations into the COVID-19 Trust Fund and how much has been disbursed.

"I did not see anything new the government did in terms of accountability or transparency. We may want to find out how transparent they awarded contracts for the food and PPE, the NBSSI loans they gave to people and who awarded the contract for the COVID-19 testing at the airport and other matters. But it is difficult to get such information."

(Official of CSO, Accra)

For instance, the national COVID-19 fund never updated the public on the fund and there was no platform to hold them accountable. Lack of information on the fund necessitated parliamentarians from the minority side to demand accountability from the executive on funds mobilised and used.

"What is the essence of structures if it is difficult for citizens to relate and get access to necessary information? The government set up the COVID-19 alleviation fund which had a whole secretariat in charge of it but when you need answers on how monies were disbursed, they give you flimsy excuses."

(Official of CSO, Accra)

Parliamentary involvement in providing oversight and supervision of overspending was thought to be below average.

"Besides, passing the restriction Act quickly, MPs hardly called for an update on COVID-19 expenses."

(FGD participant, Tamale)

The government centralised decision making on resource mobilisation and disbursement without the inclusion of local government. It was also daunting getting reliable information from the district assemblies as to how resources given to them were disbursed.

Opinions on transparency surrounding data provided by the government on infection cases were divided. Whilst some people accept as true the statistics provided by the government because it gave an idea of how the disease was affecting the populace, others were of the view that contradictions in data provided by the President and that of the Ghana Health Service (GHS) created room for people to doubt the data supplied. Aside from that, the electioneering period further erased the notion that the virus was still active and spreading because government officials, including the president and his vice and opposition leaders flouted the protocols on social distancing and facial covering.

2.5.4 RULE OF LAW

The speed with which the Imposition of Restriction Act 2020 (Act 1012) was passed has been commended as a step in ensuring compliance to contain the virus. However, the pandemic affected the justice delivery system, reducing its operative capacity to about 20% even though they were exempted from the lockdown. Although the number of cases disposed off increased from 99,518 in 2019 (Judicial Service, 2020) to 102,341 cases in 2020, it fell below the projected number of 116,800 cases for the year (Judicial Service, 2021).

Many courts were closed and thus, access to justice was limited especially in the lower courts because they could not apply technology. The judicial service introduced online platforms to adjudicate some cases but the district courts were exempted because they lacked the technology to do so. Therefore, although cases reduced because people were not filing new cases, the absence of and or rationing of judicial personnel from work created a backlog as more of the cases took longer to finish because some lawyers with underlying conditions and old lawyers could not come to court. For example, in the Northern sector of the country, there is only one appeals court, but without a judge. The restriction on movement made it difficult for judges to travel to that part of the country to preside over cases for the most part of 2020. The prisons and police service could not also send prison inmates to court for their cases to be heard. In this respect, most cases were not called and this affected people who were on remand and invariably curtailing their rights to some extent. The Judicial service also lost some revenue due to the closure of the courts at a time when their operational expenditure increased. As with other sectors, budgetary allocations and release to the service declined below the usual 60-70 percent released to them.

"The revenues that come to lawyers and the courts too reduced because cases were not being filed by individuals."

(FGD participant, Kumasi)

Internal revenues generated also dropped as filing and attestation of legal documents reduced from 150 a day to zero during the lockdown before rising to 50 after the lockdown and then to 250 in 2021. Whiles funding from these sources plummeted, testing and maintenance of the COVID-19 protocols had a toll on the service's internally generated funds. Despite these pitfalls, judicial service workers received their salaries on time.

2.6 SECTORS THAT BENEFITED OR SUFFERED DUE TO THE ADVERSE EFFECTS OF THE PANDEMIC

The pandemic impacted every sector of the economy but with different magnitudes. Sectors that suffered the most comprise, education, health, micro-businesses, importers and the hospitality industry. The first sector that was severely affected was education. Even before the partial lockdown was announced, all schools from pre-school to tertiary institutions in Ghana were shut down. Learning and teaching were disrupted for ten months for basic and secondary schools. Even after schools resumed, pupils were promoted wholesale without assessment. The most devastating effect of the COVID-19 restrictions was experienced by private basic school owners and several teaching and non-teaching staff such as cleaners and food vendors who eked their daily subsistence from the schools. Schooling ended abruptly and therefore providers of private education lost their income which came through school fees. Since their savings could not support the payment of salaries for workers, several of these private schools laid-off teachers or paid them 50 percent of their monthly salary. In many instances some of these teachers had to depend on the benevolence of their families and friends for survival.

> "Those in the services especially the health sector, hotels and the private school owners really suffered and they couldn't really pay their workers so the employees really suffered."

(FGD participant, Tamale)

The services sector especially the hospitality industry in Ghana also experienced serious setbacks. Hotels, guesthouses conference facilities and eateries had to close down for several months because of the ban on gatherings. For this reason, food items that were purchased for events prior to the onset of COVID-19 had to be discarded because those events could not be honored as a result of the restrictions on movements. According to the 2021 budget statement, the tourism and hospitality sector incurred losses running into US$171 million by June 2020. The industry also laid-off workers and had been slow to revamping as some staff remain home. The effect on the hospitality sector adversely affected revenue generation for the state since the Chamber of Commerce did not receive payments for renewals and subscriptions from most of its members in the industry as revealed in one of the FGDs in Kumasi. Other sectors which were also affected include trade (importers), the printing and graphic designing industry as well as beauticians and barbers. For importers, owing to additional COVID-19 charges at the port, duties almost doubled. For example, according to a participant in one of the FGDs in Kumasi, a 40ft container from Japan that was around $35,000 before the COVID-19 rose to between $60,000 and $70,000. Besides that, manufacturers could not import raw materials and equipment for production.

In contrast, COVID-19 created opportunities beneficial to some sectors. The telecommunications sector, pharmaceutical industry, businesses in e-commerce and on digital platforms and delivery services benefited immensely. The period of the lockdown saw a change in most business models. Organizations, large and small resorted to working virtually, schools especially tertiary and private resumed teaching and learning online, while families far and near stayed in touch through the mobile phones and their applications. To this end, data and voice usage surged in Ghana leading to an all-time high profit for telecommunications companies. Besides the use of data and voice, sales of ICT equipment and training also increased as many people including government officials and civil servants built or sharpened their skills in the application of ICT in their work. Similarly, courier services got busy as businesses and individuals depended on them for the delivery of goods including food ordered online and by mobile phone communication.

Pharmaceutical and local manufacturing industries including seamstresses begun the production of sanitizers, nose masks, tissue paper, liquid soap, veronica bucket, and other PPE due to limited availability, high demand and surge in prices. Sales also increased for pharmacies and chemical sellers as many people patronized immune boosters such as vitamin C to keep healthy.

> "The pharmacy industry benefited because of the production of sanitizers because there was demand for them and the prices too shot up in the beginning."

(FGD participant, Kumas

Chapter three

Discussion of Findings

Chapter three

Discussion of Findings

Although the medical cost of the COVID-19 pandemic in developing countries such as Ghana has not been as devasting as in many developed countries, its effect on the implementation of government programmes and by extension the economy and livelihoods have been enormous.

Effects on Ghana's energy sector

The findings of the current study show that COVID-19 adversely impacted Ghana's energy sector, which was already burdened with debts and inefficiencies as in many African countries. The situation of the energy sector had been that of high debt burden, inadequate funding and unprofitable markets which affected their ability to provide affordable, reliable and sustainable energy. Mitigation measures during the pandemic such as the partial lockdown and closure of schools resulted in many people staying at home and raising domestic consumption of electricity (Zhong et al., 2020) whiles usage by factories and industries reduced (Apfalter et al., 2020). Unfortunately, several domestic consumers could not afford to pay for utilities due either to full or partial job loss or reduction in the incomes of breadwinners or households heads. As was the case in many African countries, the government had to intervene by subsidising the cost of electricity for households and in some cases fully absorb the cost. For example, in countries such as Burkina Faso and Cote de' Ivoire, electricity bills were either reduced or absorbed entirely by the state for some category of consumers (Akrofi & Antwi, 2020). As it has been the case in many African countries, the government's absorption of electricity cost further worsened the already bad state of the energy sector, leading to massive dips in revenues and an increase in the debt profile of several independent power producers (IPPs) and thereby threatening their survival (Gebreslassie, 2020).

The findings of the study further suggest that the burden of the energy sector was further exacerbated by reduction in oil and gas (the main source of fuel for IPPs) production occasioned by COVID-19 restriction measures. Consequently, several IPPs had to renegotiate power purchase agreements (PPAs). The experience of Ghana in this regard is comparable to South Africa, where the government had to revised contracts involving the generation of power from independent wind power plants (Shen & Ayele, 2020).

It is important though to emphasize that the effect of COVID-19 on the energy sector in Ghana was not as devastating as it could have been. This according to the Africa Energy Yearbook, (2020) was due to the sector being proactive in developing preparedness plans and allowing some form of flexibility in workflow to reduce disruptions. In addition, prices of oil also dropped. Though the drop affected revenues as in many African countries (Mofijur et al., 2020), it constituted good news for Ghana and many other African that are net importers of crude oil, since the reduction led to savings (Lone & Ahmad, 2020).

Effects on the Implementation of the SDG goals related programmes

The study finding suggest that COVID-19 has adversely affected the implementation of SDG goals related programmes in Ghana due to the need for reprioritisation and allocation of resources to contain the pandemic. There is evidence to suggest that in many developing countries such as Ghana, the COVID-19 pandemic affected progress towards the attainment of the sustainable development goals (Runde et al, 2020). In many of these countries, targets related to the SDG goals are off track due to disruptions in expenditure imposed by reprioritisation of spending and limited revenue availability to implement planned programmes. Particularly, SDG 4 (Inclusive Education) and SDG 8 (Decent work and Economic Growth) and to a large extent Goal 1 (No Poverty) have been the most affected. The low penetration and skewed distribution of the internet and other Information and Communication Technology (ICT) related tools meant that access to education during the pandemic was skewed in favour of the urban rich. Such disparities have the tendency to further deepen existing high levels of inequality and therefore defeat the goal of ensuring inclusive and equitable quality education to promote lifelong learning opportunities (Education Sector Performance Report, 2010; 2012; Buabeng-Andoh, 2012).

Effects on businesses

The findings of the study also point to the fact that the COVID-19 pandemic adversely affected businesses, especially Micro, Small and Medium Scale Enterprises (MSMEs). Disruptions occasioned by the implementation of the different non-pharmaceutical interventions resulted in reduced labour hours and labour availability, savings and revenues of MSMEs, and consequently their ability to pay salaries, and in some instances ability to guarantee employment. In many developing countries such as Ghana, MSMEs constitute the foundation of the economy are mostly responsible for creating jobs, contributing significantly to employing the masses, generating revenue and contributing to GDP growth (Kaberia & Muathe, n.d.; Dzisi & Ofosu, 2014, Neneh & Van Zyl, 2012; Mwarari & Ngugi, 2013). The findings in Ghana is equally consistent with evidence from other countries such as Nigeria, Zimbabwe and Uganda where implementation of mitigation measures led to jobs losses and reduced work schedules (Kanu, 2020; Nyanga & Zirima, 2020 Lakuma & Nathan, 2020). It is important to emphasise that dealing with the current challenges will take extra effort and investments in education, ICT and business infrastructure and funding availability to the schools and MSMEs to make progress towards the attainment of the SDGs.

Mitigation measures and programmes

As measures to mitigate the effect of the pandemic on livelihoods, the government rolled out programmes such free food, electricity, and water as well as a stimulus package for small and micro-enterprises. As indicated in the findings, the programme targeted vulnerable sections of the population such as kayayei, truck pushers, the elderly, and persons with disabilities who due to the lockdown lost their jobs and incomes. The government in an attempt reduce famine and food insecurity, also promoted e-extension services to ensure that farmers had access to relevant information. Furthermore, mitigating measures that provided financial support to MSMEs, health workers such as the GH¢560 million Emergency Preparedness and Response Plan (EPRP) and the GH¢600 million Coronavirus Alleviation Program were all regarded as laudable initiatives that indeed motivated people to work and secured their livelihoods. The mitigation measures implemented in Ghana are in line with a broad array of instruments implemented by developing countries to protect the lives and livelihood of their citizens. For example, interventions such as cash outs to workers, delays in tax payments, controlling the prices of gas and staple food, social insurance and labour regulations that prevented staff lay-off were implemented in Burkina Faso, Cape Verde and Ethiopia (IMF, 2020; Bodewig et al., 2020). In Nigeria and Eritrea, seeds and ruminants were given to farmers for production (Oxford Business Group, 2020; Obasanjo & Boshe, 2020). In spite of the success of these interventions, it is important to emphasise that they have mostly been financed by donors. The challenge however is the sustainability of these programmes, especially when it is not possible to determine the end of the COVID-19 pandemic and whether donors will honour their pledges to developing countries such as Ghana.

Effects on the the government's fiscal position

The findings of the study indicate that the pandemic adversely affected the fiscal position of the government. Increased expenditure (13.7% above projected) in the mist of reduction in revenue (20% of projected) because of the implementation of measures to protect lives and livelihoods, led to an overrun of the 5% threshold for the fiscal deficit as stipulated by the Fiscal Responsibility Act, 2018 (Act 982) to 11.7% (Price Waterhouse Coopers (PWC), 2021). This in turn impacted negatively on growth from 6.9% to 0.9%. In several African countries, the drop in revenue generation was not commensurate with increased expenditure due to the implementation of mitigation measures. Governments had to resort to borrowing. For example, aside the Ghana case, the IMF (2020) notes indicates that Morocco adopted a decree to enable increased borrowing of external funds beyond its fiscal ceiling.

The study also identified several infractions during the implementation of mitigation measures that raised some human rights concerns. A few people were physically abused, with a single life lost. This notwithstanding, it is important to emphasise the implementation and management of mitigations measures in Ghana was generally smooth and safe compared to other African countries such as Sudan, South Sudan, Somalia etc were implementation of such mitigation measures resulted in high levels of violence (Kraemer et al., 2020). Thus, Ghana to a very high extent adhered to the call by the United Nations Office of the High Commissioner for Human Rights for countries to respect the human rights of people and also protect the vulnerable. (The Office of the High Commissioner for Human Rights (UN Human Rights, 2020; Kupferschmidt, & Cohen, 2020).

Information flow on the pandemic was adequately delivered by the government. However, in-depth information on funds raised/accrued, spent and on which areas were excluded in information delivered to the citizenry. Anti-corruptions agencies in Ghana have on several occasions called for the government to improve the quality of information on the pandemic delivered to citizens and to also ensure transparency in the expenditures on the pandemic. The minority in parliament have also called for the need for the government to account for expenditures made on the pandemic. The government is nonetheless yet to provide any information that matches the request made by the public and their representatives in parliament. There is evidence in the literature to suggest that in emergency situations such as pandemics, the urgency of dealing with challenges to minimise the effects of such pandemic on livelihood and economies in general, serious procurement breaches and diversion of funds, goods and service are rampant. As the findings of the study suggest, perceived corrupt practices and serious breaches of the procurement law were recorded. In other African countries, allegations of corruption have been well documented (Schipani, 2020; Business Tech, 2020).

Finally, the study findings suggest that the effect of the pandemic was not equal across the board. Sectors such as tourism, education, health, hospitality and micro businesses were the hardest hit in Ghana. This situation is not unique to Ghana. The United Nations World Tourism Organization (UNWTO) (2020) suggest that international tourist arrivals in Africa fell by about 45% from February 2020 to March 2020, reducing injection of foreign income in countries which rely heavily on tourism. In the education sector, the closure of schools impacted over 1.2 billion learners globally, majority of whom lacked access to technology that could aid in virtual learning. The impact on the health sector revealed major weaknesses and lack of preparedness in Ghana in particular. The government of Ghana as part of its mitigation measures redirected financial resources to the health sector to fight the pandemic. A substantial proportion of the money allocated to the health sector was to provide support for the pharmaceutical sector to improve it capacity to supply COVID-19 related medicines, the provision of Personal Protective Equipment (PPE), other equipment, build and or upgrade 111 district and regional hospitals, improve the availability of test kits and bed capacity (IMF, 2020).

On the contrary, the telecommunications, pharmaceutical industry, businesses in e-commerce and on digital platforms benefited the most. Increased usage of data, pharmaceuticals and mobile service delivery, resulting from a shift from normal work to virtual means of working by many organisations including schools, caused a boom and increased profits of these sectors as observed by the study. The 2020 unaudited first quarter results for MTN Nigeria for instance showed an average of 20.3% growth in revenue; with data, fintech and voice growing at 32.4%, 22.9% and 12.7% respectively (KPMG, May 2020). For the same period, the profit after tax for MTN Ghana grew by about 61.2%, with data and mobile money revenues increasing by 19.4% and 30.4% respectively.

Chapter four

Conclusion and recommendations

Chapter four

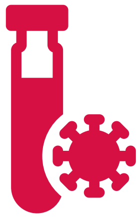
Conclusion and Recommendations

4.1 CONCLUSION

The study affirmed that revenue generation was massively affected as a result of the pandemic, GRA was able to meet their revised targets. The decline in the revenue was largely underpinned by a corresponding reduction in petroleum revenues. On the other hand, the advent of the pandemic pushed for automation of services and moving some processes such as filing of payments online. The effect of the pandemic on the energy sector is without question. During the peak of the pandemic domestic demand for power increased, but this was not associated with increased revenue. Targets for the sector were mainly missed particularly for distributors as a result of the subsidy given by the government to cushion consumers. This has implication for the cash water system as obligations to stakeholders within the energy sector are not being met. Demand for crude oil reduced and this affected production and subsequently revenues, and contributed in stalling ongoing negotiations with sector players. Mitigation measures implemented and the consequential reallocation of funds/resources meant that some SDGs (SDG 4 Inclusive Education) and (SDG 8 Decent Work and Economic Growth) received a bit more attention as reflected in the increased allocations to these goals as government sought to cushion and revamp businesses through interventions such as the CAP and the Ghana CARES Programme respectively.

Government flagship programmes were generally not halted by the pandemic. However, there was a slowdown in implementation as a result of the lockdown, closure of borders in country and in most countries globally, and the attendant disruption of global supply chains. Official responses on the Planting for Food and Jobs indicated that the pandemic did not affect it substantially as it increased the supply of subsidized fertilizer to beneficiaries. However, beneficiaries had a different opinion which included limited access to inputs such as fertilizers, seeds and day-old chicks for the Rearing for Food and Jobs (RFJ). An interplay of global factors and already existing challenges with smuggling and hoarding of these agricultural inputs drove the prices up. Food prices, particularly grains such as maize and soya beans had a disrupting influence on the poultry industry, coupled with reduced demand for poultry products brought about by the closure of schools, hotels and a ban on social gathering. The Food Security Committee that was set up during the pandemic should not relent in its efforts aimed at monitoring food prices and taking the appropriate remedies to address artificial hikes. The findings on the Planting for Food and Jobs (PFJ) highlight the need for MOFA and its agencies to work at addressing smuggling and hoarding of farming inputs, particularly fertilizer. Targets for the One District One Factory (1D1F) were not attained for 2020 primarily because projects stalled, and are attributed to diversion of funds by the government to deal with the public health emergency. With regards to the 1D1F, notwithstanding the aforementioned challenges which inhibited foreign investors and partners from coming into the country, imported machinery and technical expertise delaying, and administrative processes stalling, the initiative was able to make some gains by bringing up-stream, a significant number of factories. Implementation of the CPESDP was on course until the pandemic struck and drove growth figures to an all-time low. While the pandemic impinged on the timelines for consolidating and making gains with the digitalization agenda, it underscored the need for a robust national data system and the need for all initiatives in that regard to be scaled up and expedited to ensure the nation reaps the dividends of a digitalized economy.

The government's intervention to cushion citizens that included free water, subsidized electricity for different category of customers and provision of meals to the vulnerable were noted to be very helpful. On the contrary, the targeting of beneficiaries could have been done better for persons that actually need the interventions to benefit. The CAPBUSS relief packages was very helpful to business, and was oversubscribed. Participants were of the view that disbursements were disproportionate to requests. In extending government interventions beyond the initial phase, the Ghana CARES programme was introduced and it holds promise to revamp the economy. As the nation seeks to bounce back from the destabilizing effect of the pandemic, it is obvious that government would borrow more to finance its agenda. The government is cautioned to take advantage of concessionary loans which have low interest rates



and equity financing through PPPs to minimize the risks associated with borrowing and the implications it has on the debt to GDP ratio.

The findings of the study suggest that the implementation of COVID-19 mitigation measures adversely affected the implementation of government programmes. Areas that were severely affected by the pandemic include, energy and petroleum, flagship programmes such as PFJ, RFJ, 1D1F, One Village One Dam (1V1D) and construction of green houses and warehouses, education, micro and small business, and the fiscal position of the economy. Given that the spread of the virus continues without knowing when the situation will be brought under control, all measures to improve the current situation will have to be taken in the context of the future trajectory of the virus. In this regard, three main mitigation measures can be considered as the way forward.

4.2 RECOMMENDATIONS

The first line of mitigation includes reforms that will ensure that the business of government and its agencies can continue with minimal contact. The programme on digitization and formalization of the economy which is already underway will be crucial in this regard. There will be the need for government to pay particular attention to this programme and support it with needed resources. The success of this initiative will ensure that government services will continue and that the level of disruptions will be minimal and therefore limit the effect of the current and future pandemics on lives and livelihoods. The formalization of the economy, which has been a long-standing issue will also be key in increasing government revenue which is much needed to implement important programmes that are lagging behind because of the need for government to reallocate resources to implement COVID-19 mitigation measures.

The second line of mitigation which the government is already carrying out involves the injection of appropriate resources into those sectors that have been badly affected to improve economic activities, increase revenue generation, absorb those who lost their jobs as a result of the pandemic and reduce the level of unemployment. Important in this regard will be the energy sector as the current energy sector debt constitute a huge challenge to the sector. It is important however to note that additional injection of resources into the economy may have implications for borrowing or the need to rely on Development Partners for grants which may not be reliable. Government will have to be cautious with additional borrowing and seek to ensure that borrowed resources are invested in a way that grows the GDP. In this way, the debt to GDP ratio which is currently getting beyond sustainable levels can be better managed.

The report suggests that while some sectors have been hard hit and so need support, there are others that have profited from the pandemic, with new opportunities that have been created for growth. The government needs to identify the new growth centers and focus on investing in these areas for growth. For this to have optimal impact, there will be the need for government to work with the private sector to identify skill sets need in the new growth centers and work to train citizens, especially those who were already in the labour force but lost their jobs due to the pandemic. If done well, the new growth centers can absorb those who have lost their jobs due to the pandemic as well as those who were looking for jobs before the pandemic. It is commendable that the government at the moment, seem to be injecting funds to support sectors that were badly hit by the pandemic. Even more important will be the need to invest more funds into new growth areas given that they will be key to future growth.

In addition to the above, it will be important for government to work on creating a system that helps to implement government welfare programmes in a manner that is equitable, given that this seems to be a major challenge with the implementation of COVID-19 related welfare support. It is important to emphasize that addressing this challenge will have important and positive implication both for today and the future. For example, social programmes such as the free SHS, the National Health Insurance and future social welfare programmes can rely on such backbone to make the implementation of such programmes, efficient, effective, equitable and sustainable.

References

References

Addadze-Koom, M. E. (2020). Locked Down with Abusers: COVID-19 and Access to Justice for Domestic Violence Victims in Ghana . Institute for African Women in Law. Retrieved June 5, 2021, from https://www.africanwomeninlaw.com/post/locked-down-with-abusers-covid-19-and-access-to-justice-for-domestic-violence-victims-in-ghana

Africa Energy Yearbook (2020) A unique opportunity to target a global audience and key stakeholders in the energy sector

Akrofi, M. M., & Antwi, S. H. (2020). COVID-19 energy sector responses in Africa: a review of preliminary government interventions. Energy Research & Social Science, 68, 101681.

Apfalter, S., Hommes, M., Pereira Mendes, M., & Toba, N. (2020). Lessons for Electric Utilities from COVID-19 Responses in Emerging Markets.

Arhinful, E. (2021, June). COVID-19 cost Ghana GHS21 billion – Charles Adu Boahen. Citinewsroom. Retrieved June 4, 2021, from https://citinewsroom.com/2021/06/covid-19-cost-ghana-ghs21-billion-charles-adu-boahen/

Bodewig, C., Gentilini, U., Usman, Z., & Williams, P. (2020). COVID-19 in Africa: How can social safety nets help mitigate the social and economic impacts? In World Bank. https://blogs.worldbank.org/africacan/covid-19-africa-how-can-social-safety-nets-help-mitigate-social-and-economic-impacts

Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption and integration of information and communication technology into teaching: A review of the literature. International Journal of Education and Development using Information and Communication Technology, 8(1), 136–155.

Business Tech. (2020, July 26). Billions of rands looted by South Africa's 'Covidpreneurs': report. Business Tech. Retrieved June 5, 2021, from https://businesstech.co.za/news/government/419769/billions-of-rands-looted-bysouth-africas-covidpreneurs-report/

Cobblah , M. A. (2021, June). Covid-19: Government has paid ¢500m out of ¢896m for free water supply – Cecilia Dapaah. Myjoyonline.com. Retrieved June 29, 2021, from https://www.myjoyonline.com/covid-19-government-has-paid-%c2%a2500m-out-of-%c2%a2896m-for-free-water-supply-cecilia-dapaah/

Dzisi, S., & Ofosu, D. (2014). Marketing strategies and the performance of SMEs in Ghana. Marketing, 6(5), 102–111.

Education Sector Performance Report. (2010). Accra: Ghana Ministry of Education.

Energy Commission (2021) Energy Sector Outlook for Ghana. Demand and Supply. Retrieved from http://www.energycom.gov.gh/planning/data-center/energy-outlook-for-ghana

Fugar, S. (2021, January). With Schools Reopening, Can We Expect Any Impact On Maize Prices? Esoko.com. Retrieved June 3, 2021, from https://esoko.com/with-schools-reopening-what-impact-can-we-expect-on-maize-prices/

Gebreslassie, M. G. (2020). COVID-19 and energy access: An opportunity or a challenge for the African continent? Energy Research & Social Science, 68, 101677.

Ghana Interbank Payment and Settlement Systems Limited (GhIPSS) (2021) 2021 GHIPSS Annual Media Engagement. Retrieved from https://ghipss.net/publications#

Ghana Chamber of Telecommunications. (2020). Mobile Industry Contributes Total Tax of GHC3.2Bn in 2019. Retrieved June 3, 2021, from https://telecomschamber.com/news-media/industry-news/mobile-industry-contributes-total-tax-of-gh-3-2bn-in-2019

Ghanaweb. (2019, January). GHC400m subsidy for 1 million farmers. Ghanaweb. Retrieved June 3, 2021, from https://www.ghanaweb.com/GhanaHomePage/business/GHC400m-subsidy-for-1-million-farmers-717844

Government of Ghana. (2021, March). The Budget Statement and Economic Policy for the 2021 Financial Year. Retrieved May 27, 2021, from https://www.mofep.gov.gh/sites/default/files/news/2021-Budget-Statement_v3.pdf

Government of Ghana. (2019, November). The Budget Statement and Economic Policy of the Government of Ghana for the 2020 Financial Year. Ghana: Ministry of Finance.

Government of Ghana (2019) Appropriation Act, 2019 (Act 1008). Retrieved from https://mofep.gov.gh/sites/default/files/budget-statements/2019-Appropriation-Act.pdf

Government of Ghana (2020a) 2020 Electricity Supply Plan for the Ghana Power System. A mid-year review of the power supply outlook for 2020. Retrieved from http://energycom.gov.gh/files/2020%20Supply%20Plan%20Mid%20Year%20Review.pdf

Government of Ghana (2020b) 2020 Electricity Supply Plan for the Ghana Power System: A Power Supply Outlook with Medium Term Projections. Retrieved from http://energycom.gov.gh/files/2020%20Electricity%20Supply%20Plan.pdf

Government of Ghana (2021) The Presidency: "Gov't Using Digital Technology to Stimulate Growth in Economy" – President Akufo-Addo. Retrieved from https://www.presidency.gov.gh/index.php/briefing-room/news-style-2/1926-gov-t-using-digital-technology-to-stimulate-growth-in-economy-president-akufo-addo

GSS, UNDP and World Bank (2020). The Ghana Statistical Service 2020. How COVID-19 is affecting firms in Ghana Results from the Business Tracker Survey. Retrieved from

https://www.gh.undp.org/content/ghana/en/home/library/poverty/ghana-covid-19-business-tracker-report.html

Institute of Development Studies (IDS), Ghana Statistical Services (GSS) and Associates. (2016). Summary Report: Domestic Violence in Ghana: Incidence, Attitudes, Determinants and Consequences. Brighton: IDS. Retrieved June 5, 2021, from https://www2.statsghana.gov.gh/docfiles/publications/DVSummary_Report.pdf

International Monetary Fund (IMF) (2018). Regional Economic Outlook (World economic and financial surveys), 0258-7440, Washington, D.C., U.S.A

International Monetary Fund (IMF). (2020, June). World Economic Outlook Update, June 2020. A Crisis Like No Other, An Uncertain Recovery. World Economic Outlook. Retrieved June 3, 2021, from https://www.imf.org/en/Publications/WEO/Issues/2020/06/24/WEOUpdateJune2020

International Monetary Fund (IMF) (2020). Policy Responses to COVID-19. Retrieve from: https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#G

Judicial Service. (2020). Judiciary and Judicial service. Programme based budget estimates For 2020. Medium Term expenditure Framework (MTEF) For 2020-2023. Retrieved June 4, 2021, from https://www.mofep.gov.gh/sites/default/files/pbb-estimates/2020/2020-PBB-JS.pdf

Judicial Service. (2021). Judiciary and Judicial service. Programme based budget estimates For 2021. Medium Term expenditure Framework (MTEF) For 2021-2024. Retrieved June 4, 2021, from http://ftp.mofep.gov.gh/sites/default/files/pbb-estimates/2021/2021-PBB-JS.pdf

Kaberia, S. K., & Muathe, S. (n.d.). Effect of Covid-19 Pandemic on Performance of Women Owned Micro, Small and Medium Enterprises in Kenya. International Journal of Social Science Studies, 9(1), 7–21.

Kanu, I. A. (2020). COVID-19 and the economy: an African perspective. Journal of African Studies and Sustainable Development, 3(2).

KPMG, (July, 2020). Highlights of the 2020 Mid-year Budget Review and Supplementary estimates of Government of Ghana for the 2020 financial year. Retrieved from https://assets.kpmg/content/dam/kpmg/gh/pdf/GH-2020-Mid-Year-Budget-Review-final.pdf

KPMG (May, 2020) COVID- 19 and the Nigerian Telecommunication, Media and Technology (TMT) Sector. KPMG in Nigeria. Retrieved from https://assets.kpmg/content/dam/kpmg/ng/pdf/advisory/covid-19-and-the-nigerian-telecommunication-media-and-technology-(tmt)-sector.pdf

Kraemer, M. U., Yang, C. H., Gutierrez, B., Wu, C. H., Klein, B., Pigott, D. M., ... & Scarpino, S. V. (2020). The effect of human mobility and control measures on the COVID-19 epidemic in China. Science, 368(6490), 493-497.

Kupferschmidt, K., & Cohen, J. (2020). Can China's COVID-19 strategy work elsewhere?.

Lakuma, C. P., & Nathan, S. (2020). Impact of COVID-19 on micro, small, and medium businesses in Uganda. Special Issue, 01.

Lone, S. A., & Ahmad, A. (2020). COVID-19 pandemic–An African perspective. Emerging Microbes & Infections, 1–28.

Ministry of Energy, Programme-Based Budget Estimates for 2020. Retrieved from https://www.google.com/search?q=Ministry+of+Energy%2C+Programme-Based+Budget+Estimates+for+2020&rlz=1C1SQJL_enGH852GH852&oq=Ministry+of+Energy%2C+Programme-Based+Budget+Estimates+for+2020&aqs=chrome..69i57.2372j0j15&sourceid=chrome&ie=UTF-8

Ministry of Finance (2020a), Economic Impact of the COVID-19 pandemic on Economy of Ghana. Retrieved from http://www.food-security.net/wp-content/uploads/2020/04/Ghana-Economic-Impact-of-COVID-on-Ghanas-Economy.pdf

Ministry of Finance (2020b) SDGs Budget for 2020, page 27. Retrieved from https://mofep.gov.gh/sites/default/files/reports/economic/2020_SDGs_Budget_Report.pdf

Ministry of Finance (2020c). Ghana COVID-19 Alleviation and Revitalization of Enterprises Support. Retrieved from https://www.mofep.gov.gh/sites/default/files/news/care-program.pdf

Ministry of Finance (2019) SDGs Budget for 2019, page 24. Retrieved from https://www.mofep.gov.gh/sites/default/files/news/Ghana-SDGs-Budget-Report-July-2019.pdf

Ministry of Trade and Industry (2021) 1D1F. Progress report. Retrieved from https://moti.gov.gh/article.php?id=NDU=

Mofijur, M., Fattah, I. M. R., Alam, M. A., Islam, A. B. M. S., Ong, H. C., Rahman, S. M. A., Najafi, G., Ahmed, S. F., Uddin, M. A., & Mahlia, T. M. I. (2020). Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. Sustainable Production and Consumption.

Mwarari, M. M., & Ngugi, P. K. (2013). Factors influencing listing of Kenyan SMEs in the securities market for capital raising opportunities. European Journal of Management Sciences and Economics, 1(2), 99–115.

Neneh, N. B., & Van Zyl, J. H. (2012). Achieving optimal business performance through business practices: evidence from SMEs in selected areas in South Africa. Southern African Business Review, 16(3), 118–144.

Nyanga, T., & Zirima, H. (2020). Reactions of small to medium enterprises in masvingo, Zimbabwe to covid 19: Implications on productivity. Business Excellence and Management, 10(5), 22–32.

Obasanjo, O., & Boshe, H. D. (2020). COVID-19 response must target African agriculture and the rural poor. https://www.ifad.org/en/profile/id/330937581

Oxford Business Group. (2020). How can Africa's Covid-19 food insecurity challenge be tackled? | [term:name] 2020 | Oxford Business Group. https://oxfordbusinessgroup.com/news/how-can-africas-covid-19-food-insecurity-challenge-be-tackled

Peasant Farmers Association of Ghana (PFAG) (September 2020). Fertilizer Watch. Monthly update on Fertilizer Subsidy Programme in Ghana September 2020. Retrieved from https://peasantfarmers.com/upload/Fertilizer%20watch%20final.pdf

Peasant Farmers Association of Ghana (PFAG) (2021) Smuggling, hoarding major challenges of fertilizer subsidy programme. Retrieved from https://peasantfarmers.com/2021/06/15/smuggling-hoarding-major-challenges-of-fertiliser-subsidy-programme/

PFAG (2020). An Assessment of the One Village One Dam (1V1D) Initiative. Voices of the people. See: https://peasantfarmers.com/upload/An%20assessment%20of%20the%20One%20Village%20One%20Dam%20Initiative%20July%202020.pdf

Price Wterhouse oopers (PWC). (2021). 2021 Budget Highlights. Economic Revitalisation through Completion, Consolidation & Continuity. Ghana: PWC. Retrieved June 5, 2021, from https://www.pwc.com/gh/en/publications/budget-highlights.html

Public Interest and Accountability Committee (PIAC) (2021). Annual Report on the Management of Petroleum Revenues for January – December 2020. Pg. 13. Retrieved from https://www.piacghana.org/portal/files/downloads/piac_reports/piac_2020_annual_report.pdf

Runde, D. F., Metzger, C., & Abdullah, H. F. (2020). Covid-19 Demands Innovative Ideas for Financing the SDGs. CSIS Briefs, May.

Shen, W., & Ayele, S. (2020). COVID-19 and the African Energy Sector: Energy Insight.

Schipani, A. (2020, September 1). Africa's Covid-19 corruption: 'Theft doesn't even stop during a pandemic. Financial Times. Retrieved from https://www.ft.com/content/617187c2-ab0b-4cf9-bdca-0aa246548745

Sore, A. (2021, May). 'One Village, One Dam': Government yet to improve on poorly constructed dams. Myjoyonline.com. Retrieved June 3, 2021, from https://www.myjoyonline.com/one-village-one-dam-government-yet-to-improve-on-poorly-constructed-dams/

Thebftonline.com. (2020, October). Over US$389m upstream contracts cancelled due to COVID 19. B&FTOnline. Retrieved June 3, 2021, from https://thebftonline.com/13/10/2020/over-us389m-upstream-contracts-cancelled-due-to-covid-19/

The Office of the High Commissioner for Human Rights (UN Human Rights) (2020). COVID-19 guidance.

United Nations Population Fund (UNFPA) Ghana. (2020). COVID-19 Impact on Gender-Based Violence. The Socio-Economic and Health Impact of Covid-19 on Sexual and Gender-Based Violence (SGBV) in Ghana. Briefing Note No.2. UNFPA Ghana. Retrieved June 5, 2021, from https://ghana.un.org/sites/default/files/2020-04/COVID-19_UN%20Ghana%20Briefing%20Notes_No.2_2020_04_14.pdf

UNWTO (2020). World Tourism Organization Underscores Tourism's Importance for COVID-19 Recovery in Audience with the King of Spain.

West Africa Fertilizer Watch (2020) 5 June 2020 – Bulletin no. 9. Providing weekly information on the impact of covid-19 on the West Africa fertilizer market. Retrieved from https://ifdc.org/wp-content/uploads/2020/06/West-Africa-Fertilizer-Watch-No-9-June-5-EN-1.pdf

World Health Organization (WHO) (2021). WHO Coronavirus (COVID-19) Dashboard. Retrieved from https://covid19.who.int/

Zhong, H., Tan, Z., He, Y., Xie, L., & Kang, C. (2020). Implications of COVID-19 for the electricity industry: A comprehensive review. CSEE Journal of Power and Energy Systems, 6(3), 489–495.