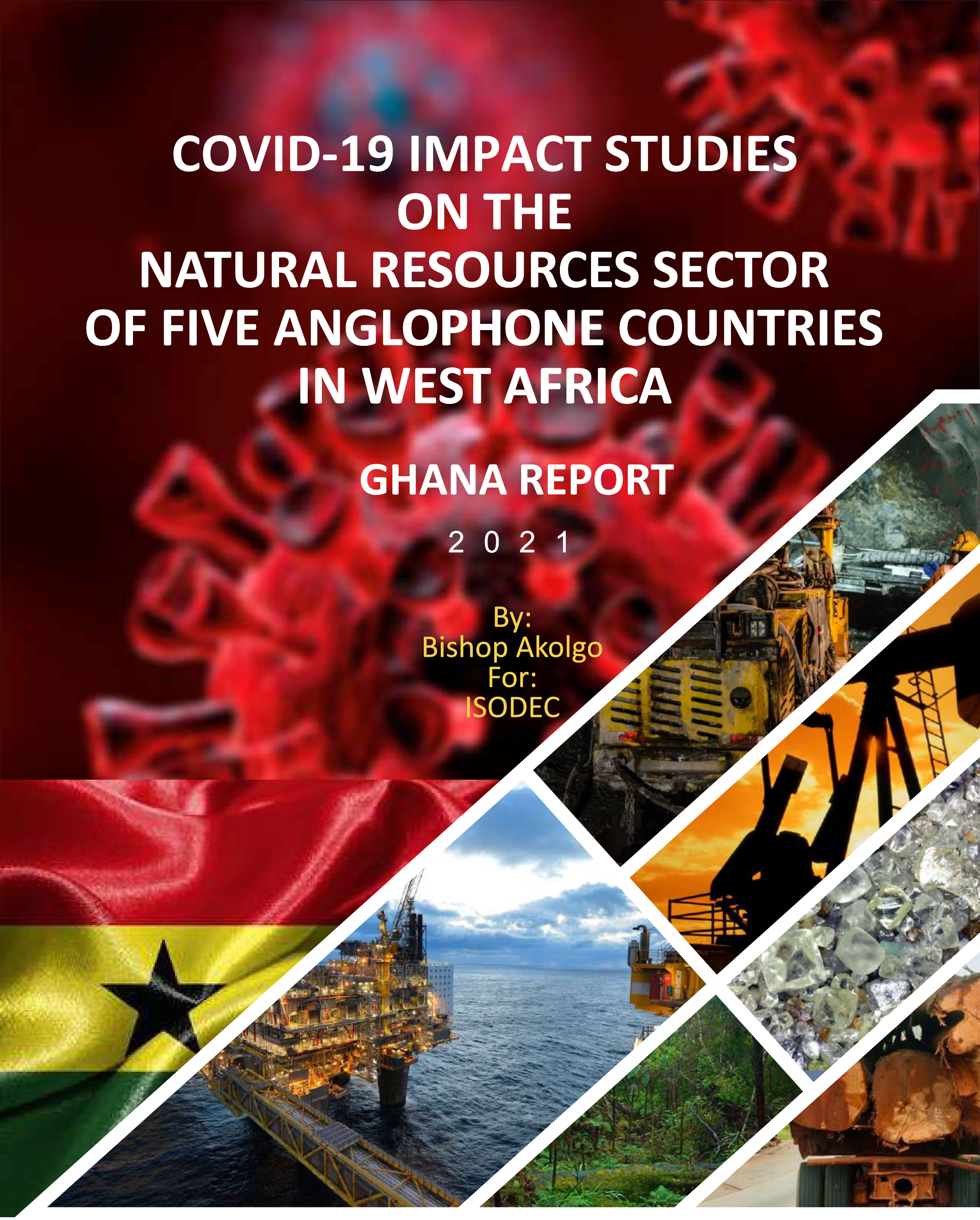

COVID-19 IMPACT STUDIES ON THE NATURAL RESOURCES SECTOR OF FIVE ANGLOPHONE COUNTRIES IN WEST AFRICA

GHANA REPORT

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By:
Bishop Akolgo
For:
ISODEC

FORD FOUNDATION

isodec
"Every Life Matters"
Integrated Social Development Centre

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THE GHANA REPORT

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ACRONYMS

CAP	-	CORONA19 Alleviation Programme
CAPBuSS	-	Coronavirus Alleviation Programme Business Support Scheme
CEA	-	Country Environmental Analysis report
COVID-19	-	Coronavirus Disease of 2019
CSOs	-	Civil Society Organisations
DIDO	-	drive-in drive-out
DSTI	-	Directorate of Science Technology and Innovations
ECOWAS	-	Economic Commission of West African States
EPs	-	Electronic Pass
EVD	-	Ebola Virus Disease
FDI	-	Foreign Direct Investment
FIFO	-	fly-in, fly-out
GDP	-	Gross Domestic Product
GHS	-	Ghana new cedi
GLTV	-	Ghana Learning television
GOG	-	Government of Ghana
GSF	-	Ghana Stabilisation Fund (GSF
IFF	-	Illicit Financial Flow
IFIs	-	International Financial Institutions
IGCs	-	International Global Companies
IMF	-	International Monetary Fund
ISODEC	-	Integrated Social Development Centre
JV	-	Joint Venture companies
LFA	-	lateral flow assay
MDAs	-	Ministries Department and Agencies
ML	-	Mining Lease
MoE	-	Ministry of Education
MOF	-	Ministry of Finance
PHM	-	Public Health Measures
PHSMs	-	Public Health and social measures
POE	-	Point of Entry
PPEs	-	Personal Protective Equipment

PPP	-	Purchasing Power Parity
SMS	-	Short Message System
SUVs	-	State of Utility Vehicles
USD	-	United States Dollars
WB	-	World Bank
WHO	-	World Health Organization

1.0 INTRODUCTION

This analysis looks at the impacts of COVID-19 on the economy and society of Ghana, especially how the government has responded and the impacts of these public health and social measures (PHSMs) on individuals, households and businesses. This study is part of a five-country study on the impacts of COVID-19 on the natural resources sector, economy and larger society in Anglophone West African being undertaken by the Integrated Social Development Centre (ISODEC) and funded by the Ford Foundation-Nigeria Office. Apart from Ghana, the other West African countries are: Liberia, Sierra Leone, The Gambia and Nigeria. This document is structured as follows: Part one is this introduction while part two examines the importance of natural resources in the economy of Ghana, especially contribution to jobs, revenue and GDP as well as its negative effects including social and environmental impacts. Part three looks at the COVID-19 impacts on the economy and society including government response using fiscal and monetary measures. Part four takes up the impacts on labour and labour markets in terms of employment, safety and community livelihoods. Part five examines the impact of COVID-19 on the natural resources sector, given that Ghana depends largely on natural resources for food, energy, exports and jobs. Part six discusses the implication of COVID-19 on illicit financial flows, especially from the natural resources sector. Part seven discussions if COVID-19 and its impacts have given government, its development partners and citizen to rethink the strategic role of natural resources in the economy and society and whether this is an opportunity for serious reflection or it will be business as usual or even worse, little gains made in converting natural resources to lasting benefits to society will be reversed. Part eight examines government and mining/petroleum companies conduct in the face of COVID-19 and impacts on community livelihoods and the environment. Part nine looks at current mitigation as well as required measures to protect lives and the economy. Part ten concludes and makes specific recommendations.

The World Health Organization (WHO) acknowledged COVID-19 as a Public Health Emergency of International Concern on 30 January 2020. Africa experienced its first case on 14 February, in Egypt, and COVID-19 was declared a global pandemic on 12th March. Two months later the disease had spread to every country in Africa, mostly entering capital cities through international flights from Europe and spreading from there through community transmission (Cilliers, et al, 2020).

COVID-19 has hit all nations with unprecedented consequences for households, businesses and communities. These impacts, however, depend on the vulnerability of the individuals, household, community and nation, especially initial asset holding, access to internal and external support and government social development and social protection programmes.

Most Governments are taking unprecedented measures characterised by unanticipated expenditure increases, tax rate reductions and tax deferrals in response to the pandemic. To shoulder these far-reaching fiscal actions, while some governments are borrowing to fund a number of social interventions, some governments have rescheduled some of the debt repayments and obtained or are seeking debt forgiveness aimed at reducing the pressure to borrow.

Advocacy to protect the most vulnerable in society requires an analysis of the impacts of these measures on households, businesses, students and the economy in general. This is critical for protecting the most vulnerable who are least able to respond to the government measures or take advantage of the opportunities offered by various government stimulus measures.

Research/analysis to bring out the empirical evidences on the impact on the Natural Resource sector and its ramification on the economies of countries in the sub-region will be a useful approach to equip both government institutions and civil society organisations with facts and figures to come out with workable proposals to mitigate the impact on the citizenry.

The West African Sub-Region is already counting the cost that COVID-19 has wrecked on their economies. Oil prices have fallen drastically and may remain low for some time; the disruption in supply chains would affect production outputs; impacts on investment flows into the sector could be positive or negative, depending on the balance of impact between the massive liquidity poured into the financial system as part of stimulus packages and falling demand. On the flip side, the price of gold on the international market is on the rise. These factors will affect government revenues directly and indirectly.

The cost to local businesses and their ability to pay taxes are yet to be assessed. Yet, the government's need for revenues to meet escalating debt pressures and for economic recovery is even more urgent. Countries are expected to see significant shortfalls in projected state revenues and will need all the revenues they can get. It is feared that gains made from years of pushing for reforms to the tax incentive regimes in the sub-region could be lost. We could be witnessing a new and intense race to the bottom as countries compete against each other to attract foreign direct investments from Transnational Corporations (TNCs). Also, erosion of gains made in slowing down the spate of illegal mining and destruction of the environment in the sub-region is possible.

There is a consensus among economists that the pandemic will throw the global economy into recession. There is however no agreement on the manner of recovery. To some, a "U" shaped recovery path seems a more likely scenario. However, if fiscal and monetary stimulus falls short of preventing a prolonged deleveraging cycle, an "L" shaped scenario looks possible. These views are supported by the expectation that there will be a resurgence of the pandemic that will prolong economic recovery (KPMG, 2020).

Countries with higher levels of debt will require greater assistance by their governments to prevent "L" shaped (a long period of stagnant growth) economic downturns. The IMF data, however, point to a V shape recovery as it projects the global economy to contract sharply by -3% in 2020 and recover to a stable growth rate of 5.8% in 2021(KPMG, 2020). Sub-Sahara Africa is expected to follow a similar pattern as the projected global trend. GDP growth rate is expected to be -1.6% in 2020 and bounce back to grow at 4.1% in 2021. In the case of Ghana, the outlook may not be a recession. The Ghanaian economy is projected to grow at 1.5% in 2020 and recover to 5.9% in 2021(KPMG, 2020).

COVID-19 could also become a catalyst for economic restructuring, as it provides an opportunity to tackle broad challenges and create agreements to share the burden of painful reforms between various groups in the country. Governments should therefore use the pandemic to carry out the necessary consultations among key stakeholders and citizens to agree on critical reforms towards a job-creating and life-improving structural transformation of economy and society.

Following from above, an impact analysis is essential to guide both Governments and Civil Society Organisations in their post-COVID-19 responses and policy discourse. ISODEC, therefore, undertook an ECOWAS level comparative analysis of the potential impacts of COVID-19 and the policy responses on the extractive sectors, noting in particular, revenue, contracts; tax settlements; investments, Illicit Financial Flows (IFFs) and government expenditure priorities, among others. The study focuses on the five Anglophone countries - Gambia, Ghana, Liberia, Nigeria and Sierra Leone. This study looks at Ghana and highlights the government's stimulus packages and reform plans and their impacts on the sector as well as on the space for civil society activism.

2.0 THE STUDY

2.1 Scope of the Study

The requirements of the terms of reference (TOR)are to produce an analysis of the current and projected impacts of COVID-19 on the natural resource sector of Ghana and the implications for the economy, people, society and the environment. The study therefore assessed and is reporting on COVID-19 and government of Ghana economic/financial measures as well as public health and social measures (PHSMs), thus:

1. **The importance of natural resources**: Highlighting the dominant role or otherwise of extractive resources in the country and their significance for the national economy, society and the environment. Economic significance includes share of national revenue, size of direct and indirect employment and contribution to livelihoods;

2. **Impacts on the macro-economy**: Assessing channels of impact on the sector including current and projected prices, public debt; production, exploration, investment profits and revenues including tax settlements;

3. **Impacts on the labour market**: The current and projected gender-disaggregated impacts of (2) above on the labour market– employment, wages – and on local livelihoods;

4. **Impacts on the governance of the sector:** Highlighting current and projected impacts on the governance of the sector – contract terms, contract renegotiations and whether contracts are suspended, active and inactive, impact on oversight bodies and space for civil society activism;

5. **Impacts on Illicit Financial Flows (IFF):** Exploring impacts on Illicit Financial outflows including IFF risks from the extractives activities under COVID-19 ;

6. **Impact on strategic policy on the role of extractives in development:** whether there is a reassessment of the strategic role of natural resources in economic transformation strategies;

7. **Impact on resource-rich communities and the environment:** especially in relation community voice and rights, protection of the commons, CSR and share of royalties;

8. **Mitigation measures.** What specific measures were introduced to mitigate the impact of the pandemic on (a) the sector) and (b) on the broader economy and social stress including

equitable and green recovery noting the role of fiscal, monetary and debt policies, growth and distribution policies.

a. **The Business environment:** What mitigating measures have been undertaken to protect the business environment in relation to the supply chain; availability of credit, market constraints.

b. External development financing: Access to concessional financing – bilateral and multilateral – and commercial loans including bond markets where appropriate.

c. Potential impacts on public services: how could the COVID-19 impacts on natural resources translate into impacts on health, education, water and sanitation?

2.2 Objectives of the Study

The study TOR articulated four main objectives:

i. Generally, assess how the governments of Gambia, Ghana, Liberia, Nigeria and Sierra Leone and its extractive companies are responding to COVID-19;

ii. Assess how the general business community is responding to and adapting to the new reality;

iii. Assess how households and communities hosting active extractive activities are coping with COVID-19;

iv. Provide evidence for further advocacy towards a more equitable economy and equitable recovery where no one is left behind; and

v. Restart the ISODEC West African research networking and partnerships.

2.3 Methodology

2.3.1 Coverage of the Study

Under the special circumstances of COVID-19, researchers also had to narrow the coverage or number of natural resources. The Ghana study, therefore, examined solid minerals, petroleum and forest, specifically illegal rosewood exploitation and export from the fragile environment of northern Ghana.

2.3.2 Tools And Approaches

Given the challenges and limitations imposed by COVID-19, the researcher explored the use of various methods and tools including literature review, online/web-based questionnaires, telephone interviews, video conferencing, focus group discussions and key informant interviews. This approach was also informed by the numerous studies already carried out or being contemplated to look at the impacts of COVID-19 on businesses, the economy and society as follows that could easily be drawn upon for this report: The following four key studies/reports on impacts of COVID-19 on business, the economy/society largely were drawn upon for this report:

1) Partnership for Evidence-Based (PERC) is a consortium of global public health organizations and private sector firms that brings together findings from a survey conducted March 29-April 17, 2020 in 28 cities across 20 AU Member States, along with epidemiological measures of disease transmission and indicators of population movements and unrest, among others. According to the consortium, the generated synthesized report provides a first-of-its-kind snapshot of baseline conditions in Africa during this rapidly evolving pandemic. In the case of Ghana, PERC partner, Ipsos conducted a telephone poll of a nationally representative sample of 1,338 adults (663 urban, 675 rural) in Ghana between 3-16 August.

2) UNDP/World Bank/Ghana Statistical service survey on Ghana Business Tracker aims at providing critical information to help the Government of Ghana, development partners and other organizations monitor the effects of the pandemic on businesses. The survey interviewed 4311 firms and was conducted between May 26 and June 17, 2020.

3) The Ghana Chamber of Commerce and Industry (GCCI) survey sampled 108 business respondents of the GNCCI membership made up of micro, small, medium and large enterprises across the country. An online questionnaire was used to elicit responses from the business community via emails and social media between 3rd April and 5th May 2020. Simple descriptive statistics as well as non-parametric tests were employed and the results were presented in charts and tables.

4) The Ministry of Finance statement on the economic impact of the COVI19 pandemic on the economy of Ghana on 30th March 2020.

5) World Bank (2020) which models the impact of COVID-19 on African economies drawing on two economywide models: a macro structural model-the world bank macroeconomic and Fiscal Mode (MFMOD) and the World Bank global dynamic computable general equilibrium (CGE) mode (ENVISAGE).

A questionnaire was designed for soliciting views of public sector agencies, CSOs and some businesses and communities on the impact of COVID-19 on their businesses, communities, natural resources sector and the environment. The questionnaire was designed to largely adopt most of the questions asked by the PERC study to allow for some comparison of results.

2.3.3 Profiles Of Respondents and Key Research Reports Consulted

In Ghana, the researcher talked to a cross-section of actors in business, natural resource regulation (like the Petroleum and Mineral Commissions), the Ministry of Finance, Association of Ghana Industries (AGI), CSOs in mining, petroleum and forestry as well as a few small-scale business operators. Telephone conversations were followed up with a web-based lime survey instrument containing 25 questions for completion by each respondent, with 31 completing the questionnaires for Ghana but only 10 completing all the questions.

3.0 KEY FINDINGS OF THE STUDY

3.1 The Importance of Natural Resources in Ghana's Development

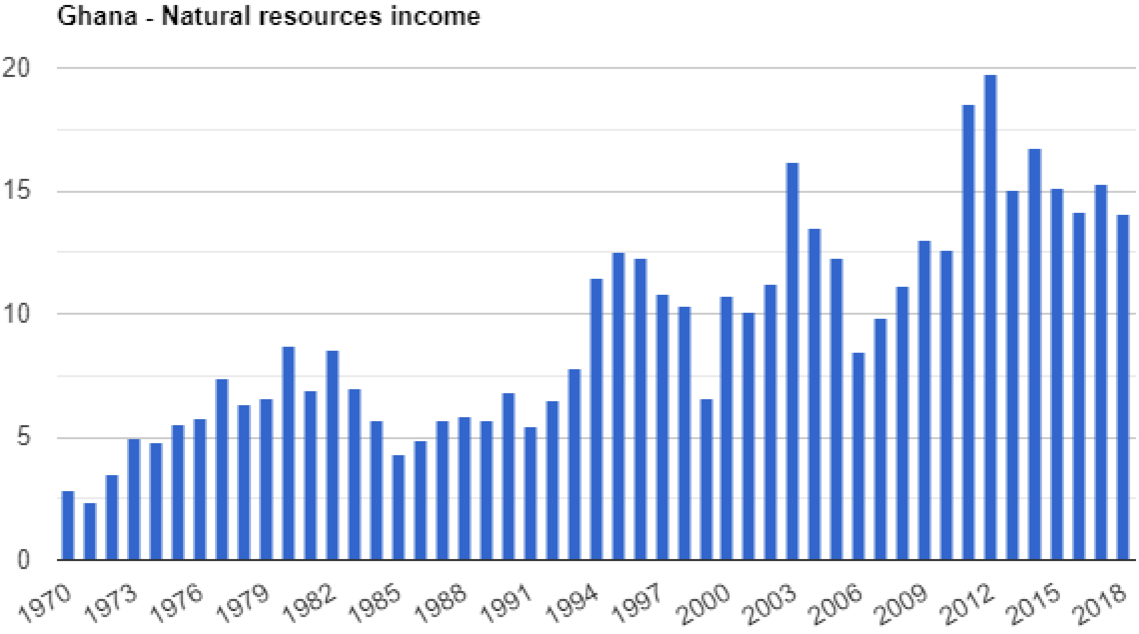
Ghana's growth has historically been fueled by natural resources (NRE). However, recent impressive growth rates, in the range of 6 percent per year, cannot be sustained in the face of alarmingly high rates of NRE depletion, which represents a cost to Ghana's GDP of about ten percent per year. The forestry, wildlife, and mining sectors account for 15 percent of Ghana's GDP, 25 percent of government revenues, and 60 percent of foreign exchange(World Bank, 2020). The resource base is at an important transition point. For instance, forests and non-timber forest product stocks are decreasing rapidly, while wildlife populations and biodiversity are in serious decline. This calls into question the sustained utilization of these resources. Over 70 percent of the population is dependent on natural resources for their basic food, water, and energy requirements. Decreasing environmental quality, notably through air pollution and inadequate water supply and sanitation, drastically constrains the quality of life and productivity of Ghana's population.

According to Global Economy.com(2020), Ghana's income from natural resources, as a percent of GDP from 1970 to 2018 was an average value of 9.42 percent with a minimum of 2.34 percent in 1971 and a maximum of 19.73 percent in 2012. The latest value from 2018 is 14.08 percent. For comparison, the world average in 2018 based on 186 countries is 6.60 percent, thus Ghana's dependence is more than double the world average as shown in figure 1.

Oil accounted for about 20% of export revenues in Ghana in 2018 but with the price of the Brent barrel declining to less than 25 USD, the lowest level since 2002 and nearly half of the projected oil price for 2020, export revenues from oil are expected to significantly decrease. Cocoa, which accounted for 10% of current account receipts in 2018 saw its prices decrease by about 10%, further hurting export revenues. Remittances (which accounted for about 11% of current account receipts in 2018) and tourism revenues accounting for only 4% of current account receipts in 2018 will likely fall as well. A large decrease in Ghana's current account receipts is, therefore, a high possibility. Indeed, despite the 15% rise in the average gold price, which accounts for 23% of export revenues in the past months vis-à-vis 2019, it is not expected to reverse the negative trend in export revenues.

Therefore, Ghana is likely to experience a wide current account deficit in 2020, significantly higher than the previous forecast of around -4% of GDP. Another channel of negative effect is that of FDI and portfolio inflows, the two main sources of financing of the current account deficit, which are likely to drop because of the large outflow of capital from emerging markets, resulting in external payment difficulties. This may be the reason why Ghana requested external assistance of about USD 540 million to the IMF to avoid a possible balance of payment crisis. The government also requested assistance from the World Bank.

Figure 1: *Ghana's dependence on natural resource income as % of GDP-1970-2018*



Source: *Global economy (2020)*

Artisanal and small-scale gold mining (ASGM) is a contributor to national wealth and poverty reduction. Of the 120 MT of gold that Ghana produced in 2016, 39 percent came from ASG miners, an increase from 12 percent in 2004 (World Bank, 2020).

Debt is another problem area. External debt stood at around 50% of GDP at the end of 2019, its highest level since debt relief in 2006, even before the COVID-19 crisis and coupled with the oil price shock, the external debt had already been expected to slightly rise in 2020 and beyond. With the lower GDP growth, the fall in external revenues and external loans from the IMF and the World Bank, the external debt ratio is likely to rise rapidly this year. On top of that, external debt service ratios had already reached relatively painful levels of approximately 20% of current account receipts in 2019. Since Ghana reached lower-middle income status, limiting its access to concessional financing, it has been issuing Eurobonds, raising debt service as financial markets are fleeing to safer havens.

3.2 Impacts on the Macroeconomy and Government Response

In the face of an economic crisis, there is usually a struggle over who will shoulder the burden of economic recovery in the wake of major crises. For instance, during the 2008–2009 financial crisis, many governments responded with large bail-outs for major banks, which were financed in large part with subsequent cuts to social spending. This led to the growth of political movements resisting these ‘austerity’ measures. These struggles over the benefits and negative effects of extraction have intensified because of the COVID-19 pandemic. Moreover, they are likely to further accelerate as mining and oil companies seek to shift the burden of recovery and make opportunistic use of the crisis. Four points of conflict have become more acute and are likely to continue to intensify as the economic implications of the pandemic continue to unfold:1) community health, 2) environmental protection, 3) economic benefits and 4) community rights.

Ghana being an import-driven economy is likely to suffer a significant adverse impact on international trade and reserves. Should COVID-19 persist longer, Ghana could see a significant reduction in government revenue and expenditure with job losses potential, partly eroding gains made over the years and further slowing down economic development. Government estimates a significant reduction of GDP growth from 6.8% to 2.6% for 2020 and could be lower beyond 2020.

Additional borrowing and related expenses could worsen Ghana's debt stock and thus risks which is estimated to result in a budget deficit of 6.6% of GDP, higher than the 5% provided in the Fiscal rule in the Fiscal Responsibility law.

3.2.1 impact on the GDP Growth

(World Bank, 2020a)projects that economic growth in Sub-Saharan Africa will decline from 2.4 percent in 2019 to -2.1 to -5.1 percent in 2020, making it the first recession in the region in 25 years and imposing a cost on the region between US$37 billion and US$79 billion in terms of output losses for 2020.

In the case of Ghana, using a Social Accounting Matrix multiplier model, (Ameu, Asante, Pauw & Thurlow, 2020) show that Ghana's urban lockdown, although in force for only three weeks in April 2020, has likely caused GDP to fall by 27.9% during that period, while an additional 3.8 million Ghanaians temporarily became poor and say their model predicts a contraction of 0.6 to 6.3% for 2020 as against government's revised GDP growth rate of 1.5% for 2020, depending on the speed of the recovery. Should there be a second wave that is as severe or worse requiring further lock down, this could worsen.

3.2.2 Exchange And Interest Rates

Exchange rate changes were one of the first to be affected including the appreciation of the US dollar against most currencies and especially currencies of primary commodity exporters like the Argentine peso, the Brazilian real as well as Australian and Canadian dollars. This could be partly attributed to the sharp decline in prices of commodities like petroleum, metals and energy and maybe agriculture products.

Since the outbreak of COVID-19, interest rates have changed around the world. In general, rates have fallen in high-income countries, following the interventions of central banks, which are lowering refinancing rates for commercial banks and reducing market rates through open market interventions. By 23 March 2020, 39 central banks had lowered interest rates or increased liquidity. Despite these interventions, market rates for borrowing fresh capital have often risen. According to the Jubilee Debt Campaign report, interest rates have on average risen by 3.5 percentage points for low- and middle-income countries since mid-February, and that costs for new borrowing stood at 10 percent. At the same time, prices of products coming from capital-intensive systems, such as maize or soybeans, have declined, further squeezing profit margins for these products, particularly in low-income countries.

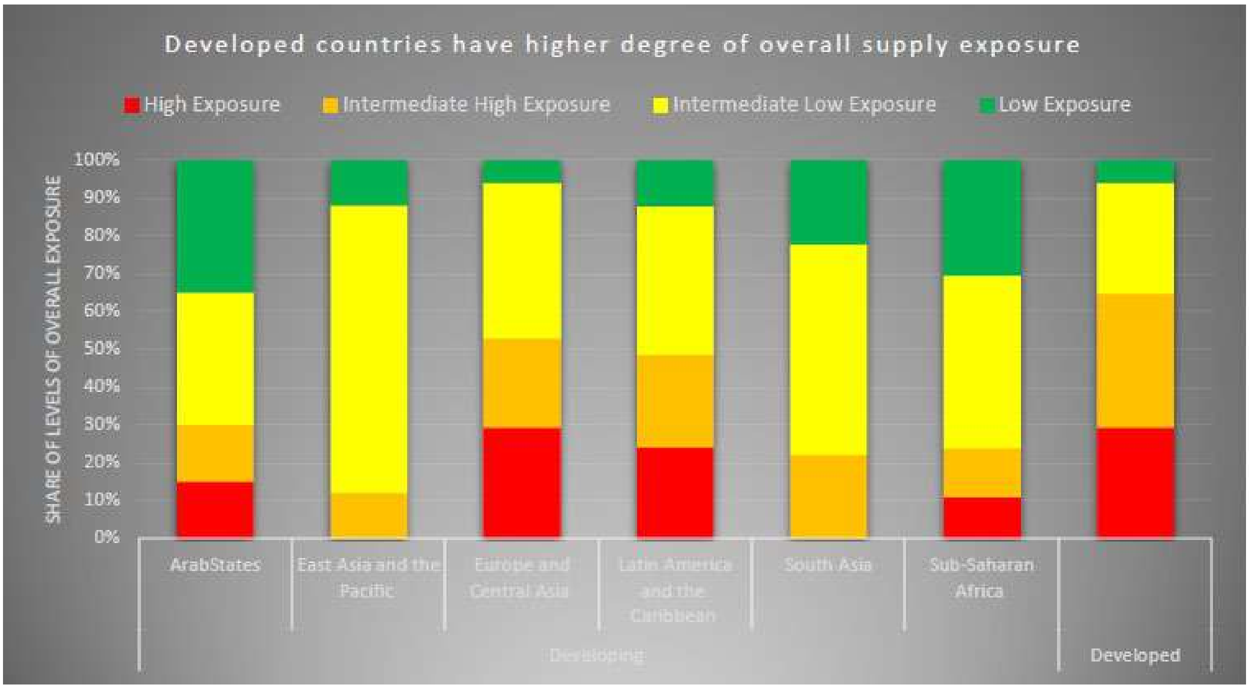
3.2.3 Credit Markets

Countries that depend on capital-intensive agriculture with high debt financing (debt/equity) may suffer shocks to the cost of capital through higher interest rates. This could lead to declines in production and supply and potentially to rising prices as a result. Whether prices actually rise following rising costs of capital depends largely on the debt/equity shares and changes in interests/borrowing costs (Schmidhuberel al, 2020).

3.2.4 Overall Supply and Final Demand Exposure

Generally, while industrialised countries are more adversely affected on the supply side, developing nations are more adversely affected from the demand side.

***Figure 2**:Overall supply exposure of countries*

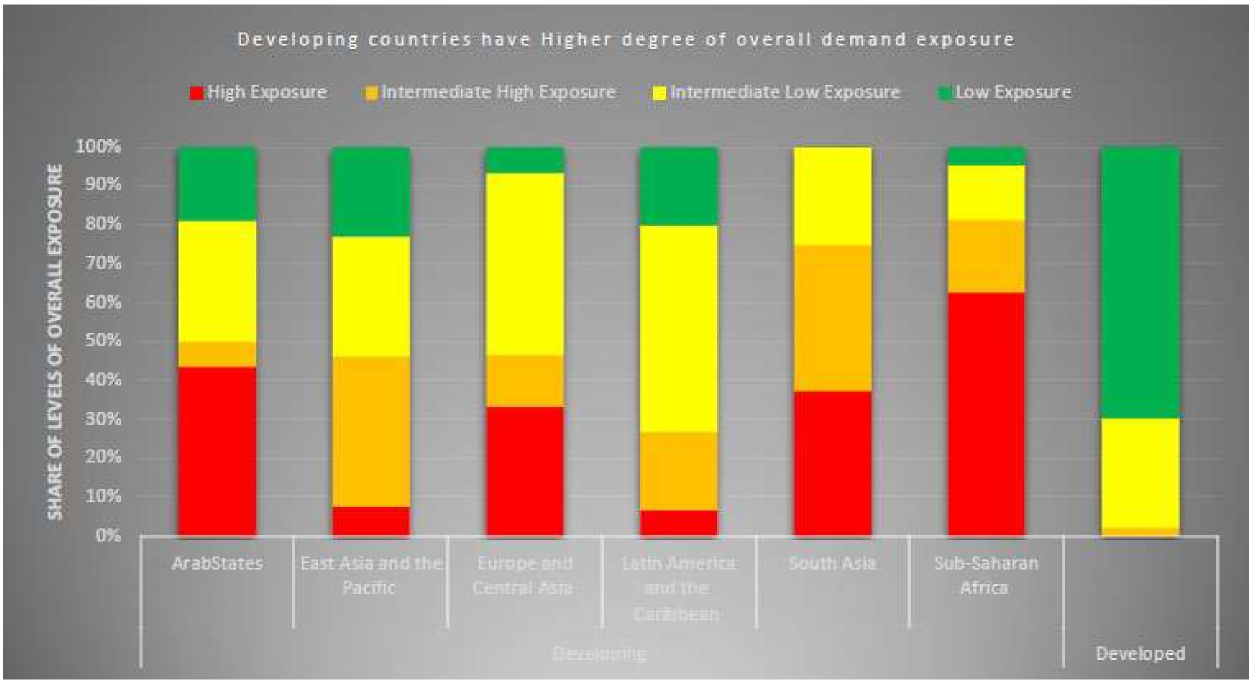


Source: *Schmidhuber et al (2020)*

Developed countries seem to be the most exposed to disruptions in supply when it comes to supply side than developing countries largely because of their capital intensity of production when and if intermediate inputs and fixed capital items supply are disrupted. As figure 2 shows, sub-Saharan African level of exposure is about 10% while that of over 30%, driven largely by Europe and Central Asia.

Given that developing countries that have rudimentary agricultural systems are not so dependent on intermediate inputs and fixed capital but labor-intensive systems will be less vulnerable to supply shocks. Developing countries however are more susceptible to labour shortages as the lockdown limits the movement of labour that may lead to food insecurity especially for the most vulnerable without buffer stocks or reliance on daily purchases from the market.

Figure 3: Overall Demand Exposure of Countries



Source: *Schmidhuber el al (2020)*

Demand side risks are the most significant effects that developing countries face as their citizens are more vulnerable given their under-developed social protection systems, low savings and large size informal sector that depends on daily earnings to purchase essentials. As figure 3 shows, sub-Saharan African high level of exposure is over 70%. In these countries including Ghana, Sierra Leone, The Gambia, Nigeria and Liberia consumers spend a large proportion of their income/expenditure on food, making their countries' food-import dependent.

Schmidhuber et al (2020) however hypothesize that long periods of low GDP growth could lead to low prices of inputs, freight costs, lower import costs and thus food and these could overall cancel out the negative effects of lower income growth.

The level and intensity of exposure of the five Anglophone West African countries as summarized below, presents the possible degrees of exposure derived from share of intermediate inputs, consumption of fixed capital per agricultural worker, gross output per agricultural worker, share of agricultural exports, overall exposure to supply shocks (as integration of the preceding four exposures), share of food expenditures per capita, share of agricultural exports, and overall exposure to demand shocks (as an integration of the preceding two exposures) (Schmidhuber el al (2020).

Ghana has:1) low exposure as a share of intermediate inputs, 2) low exposure as a share of consumption of fixed capital per agriculture worker but, 3) high exposure as share of gross output per agriculture worker and 4) high exposure as a share of agriculture exports, 5) intermediate low exposure as a share of overall exposure to supply shocks. Ghana also has, 6) intermediate-high exposure as share of food expenditures per capita and 7) intermediate exposure as a share of agricultural exports and 8) intermediate exposure as share of overall exposure to demand shocks.

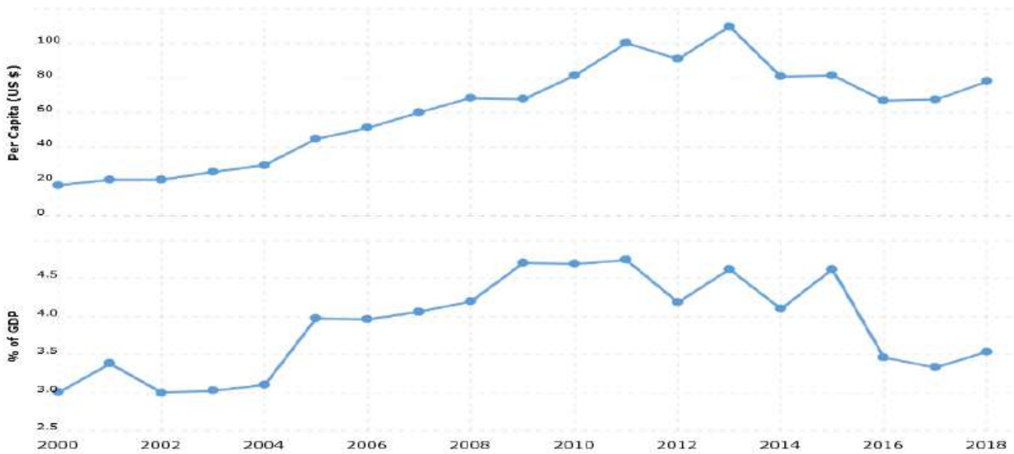
4.0 FISCAL AND MONETARY IMPACTS AND RESPONSE

World Bank (2020) in its modeling of possible impact scenarios on sub-Saharan Africa, identified the following three main channels of transmission:1) Trade and value chain disruptions, 2) foreign financing flows (FDI), and 3) the health channel.

Two stylized facts from the region's trade patterns would exacerbate the impact of the pandemic via trade: (1) primary commodities constitute the main export group of the region's trade with the rest of the world, and (2) China has become the main trading partner of most Sub-Saharan African countries (World Bank, 2020a). Given that both China and the other trade partners of Ghana are affected by this pandemic and thus demand for our commodities like oil, timber and other minerals other than gold will decline, this affects the economy and society. It becomes more difficult not only to sell to these countries but also to import essential inputs and spare parts. Welfare losses could amount to 14 percent relative to the no-COVID scenario if countries were to close their borders to trade as border closings would disproportionately affect the poor, particularly agricultural workers and unskilled workers in the informal sector. Under these circumstances, Ghana and other African countries need to take this opportunity to strengthen regional value chains in the context of the African Continental Free Trade Area.

In the case of FDI, as Ghana's trade partners struggle to restart their economies, FDI, which largely goes to the natural resources sectors, will reduce as lower foreign direct investment for extractives and infrastructure investments, foreign aid, remittances, tourism revenues, as well as capital flight (World Bank, 2020a). For example, nearly 40% of poor households in Nigeria receive either domestic or international remittances (World Bank, 2020c). Reduction/shortage in the inflow of FDI and remittances has already caused instability in the FOREX market (KPMG-Ghana, 2020).

Figure 4*-Ghana per capita and as % of GDP health spending-2000-2021*



Source: *macrotrends (2020)*

The health channel feeds on a number of weaknesses including: limited access to safe water and sanitation facilities, urban crowding, weak health systems, the large informal economy, and insufficient policy space due to high debt may pose challenges to the protection of African lives and livelihoods amid the COVID-19 outbreak. Given the fiscal constraints, priority should be put on strengthening public health human and technical capabilities to respond to the COVID-19 crisis. Resources should be directed toward protecting health workers, equipping them with all the necessary protective gear to avoid a depletion in the already scarce stock of medical personnel (World Bank, 2020a). Already African countries under-spend on health in terms of per capita. While the WHO recommends a minimum of $86 per capita, most are way below this (World Bank, 2020a). Ghana currently spends, 2018 was $78 or 3.54% of GDP, 2017 was $67 or 3.33% or GDP and for 2016 it was $67 or 3.46% GDP 2014 was $81 or 4.10% of GDP, all below the WHO recommended minimum of $86 per capita (Macrotrends, 2020). Ghana's per capita health was highest in 2013 at $110 after starting at as low as $17 per capita in 2000 and ending at an average of $62 for the 19-year period but has since been declining annually (Macrotrends, 2020).

The Government of Ghana anticipates that the total shortfall in petroleum receipts, import duties, tax revenues, the cost of the preparedness plan and the Coronavirus Alleviation Programme will **cost the economy about GH₵9.5 billion.** The primary balance of the economy will worsen from a surplus of GH¢2,811 billion (0.7% of GDP) to a deficit position of GH¢5.6 billion (1.4%) of GDP. Ghana government, therefore, has taken a number of fiscal and monetary policy initiatives as follow:

4.1.1 Fiscal Impacts and Government Policy Response

Government budget in terms of revenue, expenditure and debt were adversely affected. Revenues from tax, remittances, trade taxes have all declined but pressure to spend to address health needs and cushion businesses has increased. To compensate for larger spending related to the COVID-19 crisis, the government plans cutting spending in goods and services, transfers, and capital investment (also reflecting the lower absorption capacity of the economy due to the pandemic), for a total of at least GHc 1.1 billion (0.3 percent of GDP). Also, the government has agreed with investors to postpone interest payments on non-marketable domestic bonds held by public institutions to fund the financial sector clean-up for about GHc 1.2 billion (0.3 percent of GDP). To reduce the financing needs, the government will draw US$218 million from the stabilization fund, and will borrow up to GHc 10 billion from the Bank of Ghana.

Generally, COVID-19 is expected to create a fiscal gap of GH¢11.4 billion and Government is seeking to close the gap with the following measures:

- Obtain an IMF rapid Credit facility of $1.0 billion which will go to improve foreign exchange inflows and but increase government debt.
- Adjust capital expenditure on goods and services to the tune of $1.2 billion. This could adversely affect banks exposed to the construction and international trade sectors in terms of loans and overdrafts;
- Defer interest payments on non-marketable instruments to the tune of $1.2 billion. This could adversely affect the cash flows of banks exposed to these instruments;
- World Bank DPO of $1.7 billion. This may come with conditionalities that may negate some of the measures being taken and worsen the government debt position.

The government has committed US$100 million to support preparedness and response, and about US$210 million under its Coronavirus Alleviation Programme to the promotion of selected industries (e.g., pharmaceutical sector supplying COVID-19 drugs and equipment), the support of SMEs and employment, and the creation of guarantees and first-loss instruments. Additional funds have been earmarked to address the availability of test kits, pharmaceuticals, equipment, and bed capacity. On April 26, a major investment in healthcare infrastructure was announced, including the construction or upgrade of 100 district and regional hospitals.

The government has established a Coronavirus Alleviation Programme (CAP) to facilitate economic recovery. The cap on the Ghana Stabilisation Fund (GSF) has been lowered from the current US$300 million to US$ 100 million to allow for the transfer of excess funds to the CAP. Expenditures on Goods and Services and Capital expenditure (CAPEX) has been reviewed downwards by GHS1.2 bn while the Petroleum Revenue Management Act (PRMA) is being amended to allow for withdrawal from the Ghana Heritage Fund to aid in fighting COVID-19.

4.1.2 Monetary Impacts and Policy Response

COVID-19 has reduced the ability of the Bank of Ghana to conduct its monetary policy business effectively given the general slowdown in economic activity and the need to show flexibility for avoiding a crash of the system.

The Monetary Policy Committee (MPC) cut the policy rate cut by 150 basis points to 14.5 percent on March 18, and announced several measures to mitigate the impact of the pandemic shock, including lowering the primary reserve requirement from 10 to 8 percent, lowering the capital conservation buffer from 3 to 1.5 percent, revising provisioning and classification rules for specific loan categories, and steps to facilitate and lower the cost of mobile payments. The committee also signaled it would continue to monitor the economic impact of COVID-19 and take additional measures if necessary.

At its May 15 meeting, the MPC kept the policy rate unchanged and announced a new bond purchasing program to provide emergency financing to the government in light of a higher projected fiscal financing gap. A 10-year bond with a face value of GHc 5.5 billion (1.4 percent of GDP) has been purchased, and the MPC indicated that future purchases may increase up to GHc 10 billion. The MPC also announced relief measures for small depository institutions and a US$1 billion repo agreement with the U.S. Federal Reserve under its FIMA facility.

The Bank of Ghana (BOG) Act is being amended to allow for the Government of Ghana (GoG) to borrow from BoG in excess of the stimulated threshold if need be. Commercial banks are being engaged to provide syndicated facility of GHS 3 bn to support key industries, with packages including to grant a six-month moratorium on principal repayments for selected businesses; and to reduce interest rates by 200basis points, also to increase credit supply to the private sector.

4.2 Banking, Finance and the Credit Markets

Globally markets have responded swiftly to the pandemic but Ghana's case is slightly different as investors have not followed what is happening at the global level. Out of eight banks listed on the Ghana Stock Exchange, five have seen their shares stay stable but only ECOBANK, Access bank and GCB saw a fall, on the average of 11% of their shares. All other banks saw more or less stable share prices on the Ghana stock exchange between December 2019 and May 2020 (KPMG, 2020).

With treasury bill rates and stock prices falling, gold has become the haven for investors globally. Gold prices are expected to have a positive impact on the Ghanaian Economy and banks with exposure to the mining sector will benefit accordingly.

Between late January to early March 2020, the GHS appreciated against the USD by about 4%. However, there has been significant depreciation since the middle of March (after the first COVID-19 case was recorded). Fluctuations in the FX rates are attributable to the shortage of supply of FX from key sources such as: i. Delays in Cocoa Board loan syndication, ii. Falling crude oil and cocoa prices, iii. Reduction in remittances from abroad, iv. Reduction in non-traditional exports in volumes and value in dollars and, fall in FDI inflows.

All the above developments are expected to impact adversely on banks' foreign exchange trading and remittances fees. Trade volumes both domestic and international are reducing, especially with China which constitutes the highest of Ghana's imports and the second-highest of Ghana's exports. Reduction in international trade volumes will lead to a reduction in expected import duties and a reduction in bank fees from LC and other trade financing activities.

The pandemic has put pressure on the health system and pharmaceutical firms have been tasked to produce medications and personal protection equipment. Banks could take advantage and could increase exposure to hospitals and pharmaceutical companies.

4.3 Current and Projected Prices

Oil accounted for about 20% of export revenues in Ghana in 2018. As the price of the Brent barrel tumbled down to less than 25 USD, the lowest level since 2002 and nearly half of the projected oil price for 2020, export revenues from oil are expected to significantly decrease. Cocoa, another important export product of Ghana that accounted for 10% of current account receipts in 2018, saw its prices decrease by about 10%, further hurting export revenues. Remittances (which accounted for about 11% of current account receipts in 2018) and tourism revenues (of lesser importance, as they only accounted for 4% of current account receipts in 2018) will likely fall as well.

Going by the EITI reports, the extractive sector contributes 17 percent to government revenues and 67 percent to exports and for oil, Ghana assumed a 2020 benchmark price of $62.60 per barrel in its budget and so the drastic fall to less than half and rising slowly is bad news.

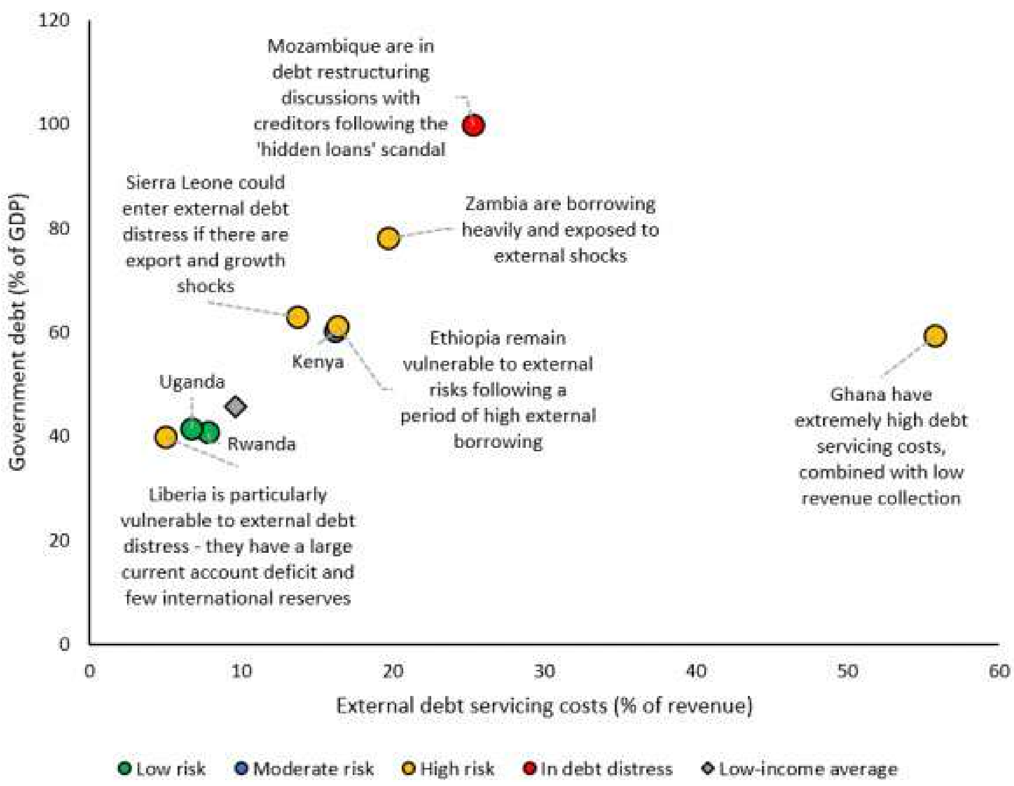
Gold, however, is rising but because of various stability clauses and high capital recoupment, little of that will accrue to the government. The outlook for gold, in terms of prices, is positive. Oil, on the other hand, is uncertain and the current price of about $30, is not certain to continue or improve in the coming months, especially with further lockdowns and restrictions in Europe and the Americas.

4.3.1 Debt, Deficit and Borrowing

Given that government's revenues have declined due to the COVID-19 pandemic-induced lockdown its responsibilities for relief and healthcare have increased and will continue to increase, running a budget deficit to finance these is inevitable. At least two factors limit government ability to run budget deficits: 1) that a fiscal deficit beyond a certain limit (usually 3 percent of GDP) *must always be avoided* as it either tends to be inflationary (if it is monetized, i.e. if the additional government borrowing it causes comes from the Central Bank), or 2) crowds out private investment (if the additional government borrowing comes from the private sector). The counter-argument is that in a demand-constrained economy, increase in demand causes an increase in output and supply and not prices (inflation), especially in the face of unutilized capacity existing with unemployment. In the case of the second issue of the government selling assets which are treated more like tax revenue instead of borrowing, it must be pointed out again that in an economy constrained by demand a fiscal deficit if even financed from government borrowing from the central bank cannot cause inflation. This borrowing could cause inflation if supply cannot increase while demand increases at base prices but in a demand-constrained economy, an increase in demand will cause an increase in output and so no issue of inflation.

Since independence, over 60 years now, the country's economy remains dependent on the export of just three primary commodities – gold, cocoa and now oil, which together make up over 80% of Ghana's exports. This dependence on primary commodities was the main cause of debt distress in the global south, including Ghana in the 1980s and 1990s as prices fell at the start of the 1980s, rapidly increasing the size of foreign debt payments which could only be paid out of foreign earnings such as exports. As commodity producers across the world expanded production in order to pay debts, on the advice of the IMF and World Bank, commodity prices stayed low for over 20 years.

Figure 5: *Risks of debt Distress (a measure by the IMF) and the high debt burden of many SSA countries*



Source: *Wilkinson (2020)*

From the mid-1990s the Global Jubilee Movement called for debt cancellation, which led to the creation and enhancement of two debt relief schemes run by the IMF and World Bank, the Heavily

Indebted Poor Countries Initiative and Multilateral Debt Relief Initiative. As a result of this debt cancellation, Ghana’s external debt fell from $6.6 billion in 2003 to $2.3 billion in 2006. Significant improvements in education and healthcare followed, due to money being saved and invested, alongside good government policies, enhancing basic service provision. The proportion of children completing primary school was static at around 60-70% from 1980 to 2006, since then it has increased to almost 100%. The proportion of births attended by a skilled health professional only increased from 44% to 47% between 1998 and 2006, but in the following eight years it increased to 74%.

Ghana however did not learn any lessons on this and dependence on primary commodities continued as prices rose, thus creating more willingness for lenders to give loans off the back of a growing economy. Between 2006 and 2013 Ghana’s GDP per person grew by 44%. However, over the same period the number of people living below the national poverty line only fell by 10%, a slower rate than in the previous seven years when growth had been far lower. The reason was because of inequality as much of the proceeds of growth went to those with the highest incomes. For every GH₵1 increase in income for the poorest 10%, the incomes of the richest 10% increased by more than GH₵9. This increased appetite to borrow and lenders' willingness to lend set the environment, and loans increased steadily from 2008 to 2011. In total, between 2007 and 2015 there were $18.2 billion of external loans and $9 billion of debt payments, leaving $9.5 billion of the additional borrowing to be spent within Ghana.

In early 2013 the price of gold fell significantly, as did the price of oil from the start of 2014. Between 2013 and 2016 the value of the cedi against the dollar fell by 50%. This caused the dollar-denominated size of Ghana’s economy to fall from $47.8 billion in 2013 to $36 billion in 2015. Because external debts are owed in dollars or other foreign currencies, this has, in turn, increased the relative size of the debt and debt payments. External debt has grown from $14.7 billion in 2013 to $21.1 billion in 2016 (an increase of 44%), yet because of the depreciation external debt has gone up from 30% of GDP in 2013 to an expected 56% in 2016 (an increase of 87%).

One response to these economic shocks has been for the government to borrow more money. The interest rates on the new debts are high, including 10.75% on $1 billion borrowed in 2015. For this loan, the World Bank broke its own rules by guaranteeing $400 million of payments if the Ghanaian government fails to make them. The high-interest rate and guarantee mean that if the Ghanaian government were to pay the interest every year until 2024, then default on all other payments from 2025, including the principal, the bond speculators would still have made $90 million more than if they had lent to the US government. This means that the speculators lent to Ghana believing that there was a high chance they would not be fully repaid. For now, those speculators are being paid, in part because since April 2015 the IMF has been lending more money which is being used to meet debt payments, effectively bailing out previous lenders. In return, the Ghanaian government has to cut government spending and increase taxes. Under current plans, government spending per person (adjusted to account for inflation) is projected to fall by 20% between 2012 and 2017 and possibly beyond.

4.4 Production And Economic Growth Projections

Global Situation

According to Deloitte (2020), mining and metal leaders will be defined by how they manage the three dimensions of a crisis: 1) respond, 2) recover and, 3) thrive, especially:

- How to maintain critical services with ensuring the safety of their employees
- Understanding our financial and legal exposure and formulating plans to release cash and maintain financial viability through uncertainty;
- Consider how the crisis can be used as a catalyst to rethink how and where work is done, improve the ability to collaborate remotely and accelerate adoption of automation and digital capabilities.

The executives and boards of mining and oil companies are asking some hard questions with implications for countries fiscals and their labour forces:

- How do we maintain the safety of our own people first?
- As the crisis evolves, how exposed is our supply chain across different geographies?
- Are our current risk systems adequate across our organizations? and,
- How do we prevent aggressive take-overs and mergers?

The COVID-19 pandemic is wreaking havoc on extractive economies globally. The market prices for oil and some metals have undergone steep declines due to a collapse in demand. Physical distancing protocols have caused significant disruptions to the operation of mines, affecting productivity and profitability. As a result, the share prices for several major mining companies have declined significantly.

As observed by GGA (2020) the depressed global oil price, combined with decreased demand from China for natural resources, and lockdowns, present a potential perfect storm for African economies that were already susceptible to global trade and commodity price volatility.

If the lockdowns continue for a long time, production standstills can leave shafts unstable due to shifting ore bodies and gas accumulation. The integrity of support structures designed to prevent rock falls may also become compromised, which renders it crucial for mines to conduct preparatory work before full production can be resumed. It is also apparent that mining companies across the continent are providing resources to address the most immediate impacts of COVID-19 on already-stretched healthcare systems.

On the positive side, the mining sector may contribute to mitigating the impact of the disease because Gold, for instance, is an irreplaceable ingredient in the most promising new wave of lateral flow assay (LFA) COVID-19 rapid antibody tests, which identify biomarkers from the body’s immune response instead of testing directly for the virus itself (though some do this too). Gold particles in LFA tests are used to detect a colour change in the blood and give a reliable result in under 20 minutes in any environment. They are inexpensive and easy to use. With the exponential demand for testing kits that is already under way, gold producers stand to gain large windfalls. The gold price has climbed to current levels of close to $1,700/ oz from $1,458/oz six months ago, as gold is typically a store of value in uncertain times. It now has another reliable future demand driver as LFA test production scales up.

Another positive thing is that energy prices, which constitute 20-22% of direct operating costs, are falling and companies with unhedged positions in energy could benefit from this new pricing regime.

Ghana set a benchmark of $58.66 oil price per barrel until the end of 2020 in the 2020 economic policy and budget statement but oil revenue target is expected to drop by 53%.

As table 1 reveals, there is depreciation of the so-called commodity currencies, i.e. the currencies of commodity exporters, such as the Argentinean Peso and the Brazilian real, but also the Canadian and the Australian dollar. The devaluation and/or depreciation of these currencies reflected, at least to a certain degree, the sharp decline in commodity prices, notably those of petroleum, metals and energy and to a lesser extent those of agricultural products.

Table 1: *Energy and metal prices as at January, 2020*

	Unit Price (Mar20)	Unit Price (Feb20)	Unit Price (Jan20)	Mar/Feb	Mar/Jan
Oil, WTI (USD/Barrel)	22.43	53.78	58.34	-58.3%	-61.6%
Platinum (USD/Ounce)	600.48	982.10	1020.20	-38.9%	-41.1%
Palladium (USD/Ounce)	1703.56	2677.30	2496.41	-36.4%	-31.8%
Silver (USD/Ounce)	12.85	18.40	18.06	-30.2%	-28.9%
Copper (USD/Ton)	4854.85	5729.00	6244.50	-15.3%	-22.3%
Nickel (USD/Ton)	11370.00	12681.50	13842.50	-10.3%	-17.9%
Lead (USD/Ton)	1673.00	1938.75	1952.85	-13.7%	-14.3%
Aluminum (USD/Ton)	1583.00	1711.15	1815.74	-7.5%	-12.8%
Iron ore (USD/DM Ton)	89.57	86.15	94.80	4.0%	-5.5%
Gold (USD/Ounce)	1506.95	1621.31	1560.82	-7.1%	-3.5%

Source: *Schmidhuberel al (2020)*

From table 1 between January and March 2020, oil suffered the most price decline at -61.6%, followed by platinum (-41.1%), then palladium (-31.8%), silver (-28.9%, copper (22.3%), with gold being the metal with the lowest decline at -3.5%. Gold has since then rebounded in price and the metal companies stock prices have also seen an upsurge in stock prices. Should there be a protracted recession or several waves of the COVID-19, in the long term some of the implications for the sector include:

- Those companies with positive and cash flow and balance sheet strength now may take advantage of mergers and acquisitions(M&A) opportunities driving further consolidation in key sectors;

- Before the crisis, liquidity was tight at the Juniors end of the market and this is likely to further worsen;

- Companies, even before the crisis were expected to provide value beyond compliance to communities and host governments and this is likely to accelerate especially given the weak healthcare infrastructure in developing countries like Ghana;

- Some mining companies might see benefits in Integrated Operations Centres (IROCs) long term as well as opportunities for automation of critical roles and functions, with implications for resource-rich country fiscals and labour forces.

Mining companies could also assist in the "Just Transition" where, as part of the transition to a greener development model, that model does not worsen the already existing social inequality, especially losses in fossil-fuel industries and fuel poverty for the socially excluded.

Key players in the gold mining industry in Ghana include: AngloGold Ashanti, Newmont Ghana, Gold Fields Ghana, Chirano Goldmines and Golden Star, Azumah Resources, PMI Mining, Perseus Mining, Noble Mineral Resources and Adamus Resources. There has not been a shutdown of any mining operation in Ghana so far and production is expected to increase from last year's 4 million ounces of gold as AngloGold Ashanti starts production and others increase production in response to the rise in international demand and prices (Chinery, 2020). It is expected that investors who are looking for security of their investments would choose gold and further push its demand and prices even higher given the risk levels of alternative assets.

For petroleum, production levels may not reduce but new wells and new findings may delay as a result of COVID-19. Some of the major oil & gas contractors in Ghana include Tullow Ghana, Kosmos Energy, ENI and Hess Ghana Limited. Their sub-contractors include Schlumberger, Baker Hughes, Weatherford, Ocean Rig and Technip. Currently, there are about 11 Petroleum Agreements, which are agreements between the Government of Ghana, GNPC and petroleum operators signifying the increased interest in Ghana's oil industry but with COVID-19, this atmosphere could change for the worse in terms of not just interests but more importantly their investment and production levels (PWC, 2020).

Mining companies have argued that to maintain pre-COVID-19 production levels and maybe exceed those, especially with respect to gold, will require that the lockdown does not affect mining support services – firms that provide support services to miners and oil/gas companies.

In the case of petroleum, the Petroleum Commission has facilitated exemption for a number of upstream operators. Subsequent to the presidential directive on partial lockdown, and upon the request of some contractors and sub-contractors in the upstream petroleum industry for some exemptions and dispensations, the Commission sought selective exemptions from the Office of the President. Upon a critical consideration of the requests and subject to compliance with applicable

WHO and Ghana Health Service (GHS) protocols by the contractors, the Office of the President granted the following selective exemptions to operators of Ghana's oil fields for travel in a letter dated 31st March, 2020 and referenced SCR/DA304/304(0):

- To bring in critical expatriate staff including personnel of contractors and sub-contractors
- To undertake emergency medical evacuation if need arises
- To clear chemical, materials and spare parts relevant for continued operations
- To bring in Operator designated quarantine facilities
- Landing and Departure of Operator charter flights as and when required.

While Global GDP growth of 3.3%for 2020 slowed to less than 2.9% due to COVID-19, Africa's projected GDP growth of 3.2% for 2020 is now expected to slow to about 1.8%. In the case of Ghana, the government estimates that GDP growth will slow from 6.8% to 2.6% while the IMF estimates GDP growth at a lower level of 1.5% for 2020 (Chinery, 2020).

4.5 Exploration and New Investments

Ghana held its first competitive oil block licensing round in 2018/19 and announced bid winners in August 2019, but negotiations with companies have already been delayed and the coronavirus pandemic worsened this. These bids were held under the new Petroleum Law and would have given Ghana better terms than the existing ones that were largely meant to attract investors. Another bid planned for 2020 has been kept on hold (Chinery, 2020). Explorations and new investment are likely to be adversely affected by COVID-19 and related problems, given that many small explorers were already having cash-flows problems even before COVID-19. Gold mining companies are most likely to intensify current production and efforts and possibly expand to take advantage of the increasing gold prices. In the case of petroleum, there is likely to be fewer new investments and existing minimum investment obligations might be reviewed downwards, delayed, or cancelled altogether depending on how the pandemic pans out in both natural resource-rich countries and capital-rich nations.

4.6 Investments

According to Global Data, prior to COVID-19, CAPEX expenditure was projected to increase by 11% in 2020. A number of projects are now delayed and investments put on hold. The top 20 mining companies have announced significant cuts in their CAPEX for 2020: Glencore plans to cut CAPEX expenditure plans from USD 5.5 billion to USD 4 to USD 4.5 billion; Rio Tinto cut at least USD 1 billion from an initial provision of USD 7 billion; and Anglo American revised its CAPEX guidance by about USD 1 billion.

Those companies whose CAPEX is in non- US currencies may be negatively affected by the rise of the US dollar against most other currencies; some projects may be shelved until more favourable exchange rates are once again in play. Deferred projects will necessarily affect jobs in the sector, either through temporary layoffs or fewer employment opportunities, including temporary construction jobs (Ramdoo, 2020). Aker Solutions has already postponed investments due to COVID-19 and there is the danger that even though existing companies are producing, if the pandemic worsens and oil prices fall further, companies could declare circumstances beyond their control or force majeure.

4.7 Revenue Accruing to Government

The African Development Bank (2020) projects that Fiscal deficits are projected to double, and debt levels are estimated to build up by an additional 10 percentage points of GDP. The fall in oil prices has had a heavy impact on Ghana's oil industry. Having set a benchmark of $58.66 oil price per barrel until the end of 2020, Ghana's oil revenue target is expected to drop by 53%. According to the Minister of Finance (2020), petroleum revenue shortfalls be as follows:

- Stabilisation Fund-GHC 10,058m
- Ghana Heritage Fund-GHC 453m
- Annual Budget Funding Amount (ABFA)-GHC 3,526m
- transfers to GNPC-GHC 642m

Estimated impact on tax revenue will be as follows:

- import duties-GHC 808m
- other non-oil tax revenues-GHC 1,446m

This brings the Total shortfall in non-oil tax revenue to GHC 2,254m.

According to Joy Business (2020), the minister of Roads and highways has disclosed that there will be a delay in the inflows from the $2.5bn bauxite-for-infrastructure deal signed between Ghana and Sinohydro Company of China. The Sinohydro Project is expected to bring some $2 billion, with about $1.5 billion being directed towards major road projects in the country. Four out of 10 road projects have already started but will delay partly because the Chinese cannot be present in Ghana to complete all the modalities for the release of funds (Joybusiness (2020).

In the gold mining domain, the Minerals and Mining Act 703, 2006 revised the old mining law, fixing the royalty rate of 5% which replaced the earlier rate of a range of 3-6%. Before that, the fiscal regime put the range between 3 and 12% but the government, against CSOs and other stakeholders, revised it downwards under industry pressure only for gold prices to hit the roof two years later. The government was not able to harvest any part of the super-normal profits generated as a result.

Small-scale operators and illegal miners used to contribute to revenues but with the ban on their activities and with COVID-19, less is expected from them by way of revenue except for the few illegal operations that are still going on with the active connivance of politicians or on the blind side of the law.

While Gold prices have increased from US$1,479/oz in December 2019 to US$1,621.6/oz, an increase of 9.6% as at 30th March 2020, cocoa prices have declined from US$2,440 MT in December 2019 to US$2,253 MT as at 30th March, 2020. This will further put pressure on government revenue.

4.8 Contracts/Agreements;

In the case of petroleum, in 2019, more than 98 contracts worth over $389million were awarded by Aker, AGM, Eni, GOSCO and Springfield for the provision of various services. Out of the 98 contracts, 22 were to IGCs, 68 to JVs and 8 to foreign companies. Similarly, major sub-contractors who obtained contracts from the Operators awarded over 94 contracts worth over $98.7m; 29 to Indigenous Ghanaian Companies (IGCs).

COVID-19 has led to several Operators reassessing the economics of current and future projects and considering whether to proceed or not. Already, Tullow has terminated a 5-year drilling contract with Maersk. The contract which is expected to end in February 2022 will end in June 2020.

The termination of the contract implies that

- all associated services (subcontracts) for the drilling campaign would be terminated.
- Similarly, subcontracts awarded by various service companies would have to be terminated.
- The consequence is that IGCs who may have obtained such contracts either directly or through subcontracting would be put out of work. (Details in Appendix)

For IGCs and JV companies with existing contracts, the delivery of such supplies may delay and may affect the operations of the project. Oil companies would either suspend or terminate contracts or develop alternative supply chains to support the industry.

Supply chain challenges may lead to oil companies carrying out supply chain activities internally or developing local supply chains where feasible to support their operations.

As part of the Pecan Local Content Plan, 20 IGC start-ups and SMEs were to benefit from a supplier development programme. The companies, through the execution of contracts in the project and other support mechanisms, were expected to become internationally competitive and provide services along the petroleum value chain. This laudable initiative is being suspended following the postponement of the Aker Energy Pecan project.

A number of service companies including Rigworld International, Tetra Oilfield, Amaja Oil field and other companies are scheduled to supply oil and gas services such as supply of bolts, nuts and valves, research in the use of caustic soda in drilling activities and expand capacity of machine shop to enhance pipe threading. Other companies as part of their local content plans had obtained lands for the establishment of drilling bits and calibration workshops, blending facilities, expansion of fabrication and machine shops, among others. It is unclear whether these IGCs and JV companies would be able to recover the cost of investments or progress with the investments.

4.9 Tax Settlements

With all these suspensions and postponements of contracts and other activities, it is doubtful if many of these companies will be able to discharge their tax obligations partially, fully or even at all. Government and its regulators and revenue agencies might have to develop an objective criteria and protocol for examining companies to see which ones qualify for tax postponement, cancellation, etc

Given that Ghana's fiscal regimes for mining and petroleum rely largely on profit-based instruments revenues rise and fall with the profitability of the operations and in a low commodity environment, we agree with the IMF (2020) when they say that the first-best tax policy response is to let the built-in automatic stabilizers in the fiscal regimes take effect while resisting pressure for exemptions or exceptional support to mining or petroleum projects. There is no compelling reason to reduce tax rates or provide tax holidays and there is no reason to single out the extractives industry for special tax treatment and so government should be looking at economy-wide crisis-related tax measures with some possible options including:

- Temporary relief from payroll taxes should be extended to the mining and petroleum sector. Mining projects tend to be relatively more labor-intensive than petroleum.
- VAT refunds should be paid on a timely basis and where there are VAT refund arrears, these should be cleared expeditiously to improve cash-flows. This benefits extractive projects that often are export-oriented.
- The tax loss carry-forward period can be extended to provide certainty that losses can be fully recovered, or loss carry-backward provisions can be introduced with more immediate cash-flow benefits.
- A deferral of royalty payments, a temporary reduction in royalty rates, or a royalty rebate to provide cash-flow relief.
- Periodic limitations on expenditure deductions could be temporarily loosened (e.g., an increase in the cost recovery limit in a production sharing framework).
- Loosening ring-fencing provisions to allow tax consolidation between projects could shift the timing of revenue, although this complicates the application of fiscal instruments linked to cumulative cash-flows (e.g., resource rent taxes or R-factor based profit oil sharing).
- Outside of the fiscal regime, regulators may agree on a temporary basis to defer work commitments agreed with license holders for mining and petroleum projects. Discretionary measures should have a clear sunset provision with an end date and be provided industry-wide with full transparency based on pre-set eligibility criteria, rather than through individual project negotiations.

5.0 IMPACTS ON LABOUR AND LABOUR MARKETS

5.1 Global Trends

Among the most vulnerable in the labour market, almost 1.6 billion informal economy workers are significantly impacted by lockdown measures and/or working in the hardest-hit sectors globally (ILO, 2020). The rate of relative poverty**,** which is defined as the proportion of workers with monthly earnings that fall below 50 percent of the median earnings in the population, is expected to increase by almost 34 percentage points globally for informal workers, ranging from 21 percentage points in upper-middle-income countries to 56 percentage points in lower-middle-income economies (ILO, 2020).

5.2 Employment

In a new survey by the Ghana Statistical service (2020), with the support of the UNDP-Ghana and World Bank, COVID-19 Business Tracker Survey was conducted and the results show that about 770,000 workers (25.7% of the total workforce), had their wages reduced and about 42,000 employees were laid off during the country's COVID-19 partial lockdown. The pandemic also led to a reduction in working hours for close to 700,000 workers (table 2). Also, during the lockdown, about 244,000 firms started adjusting their business models by relying more on digital solutions, such as mobile money and internet for sales. Firms within the agriculture sector and other industries used relatively more digital solutions (56%), with establishments in the accommodation and food sector being the least that adopted digital solutions (28%). During the country's COVID-19 partial lockdown, businesses received shocks in supply and demand for goods and services. Close to 131,000 businesses had challenges accessing finance and expressed uncertainty in the business environment (GSS, 2020).

The average decrease in sales, according to the findings, was estimated at 115.2 million Ghana Cedis, with firms in the trade and manufacturing sectors (including exporting firms) largely affected. More than half of these firms had difficulties in sourcing inputs due to non-availability or increase in costs, leading to challenges in covering revenue shortfalls (GSS, 2020) (Table 2).

Table 2: *Channels through which Ghanaian businesses are impacted*

	Operating status during lockdown (April)		Operating status at time of survey (May/June)		Channels				
	Fully open	Closed	Fully open	Closed	Facing decrease in sales	Average decrease in sales	Facing difficulties in finding inputs	Reporting cash flow problems	Facing decreased access to finance
Business establishments*	36.8	35.7	73.8	16.1	91.4	60.6	51.4	75.6	25.4
Household firms	48.2	24.3	78.4	14.6	95.7	66.2	51.2	68.1	29.3
Young SMEs**	49.5	24.2	79.0	10.5	89.9	67.1	48.4	72.1	24.7
Sector									
Manufacturing	36.9	39.8	79.3	11.6	92.7	65.3	47.6	78.2	17.2
Agric & Other Industries	39.4	24.0	73.7	9.5	77.2	43.8	52.2	73.9	29.6
Trade	41.4	30.8	84.1	9.3	93.7	56.6	53.7	82.7	26.2
Accommodation / Food	39.1	36.0	63.9	24.0	91.0	56.7	58.9	67.8	26.9
Other Services	32.7	39.3	66.6	22.2	91.9	65.3	49.7	71.4	27.1
Size									
Micro (1-5)	35.4	37.0	71.6	18.5	92.2	60.9	51.1	75.2	24.7
Small (6-30)	41.9	33.5	82.6	9.1	89.7	60.8	52.3	77.8	26.6
Medium (31-100)	35.1	12.7	66.4	3.5	89.9	62.1	53.7	69.6	34.6
Large (100+)	46.6	20.0	93.3	2.6	45.1	16.0	42.7	47.0	21.9
Age of Firms									
Young (0-4)	42.3	37.9	64.9	17.2	86.5	52.0	58.0	73.5	27.1
Maturing (5-14)	34.8	36.6	73.1	17.1	91.2	60.9	51.9	75.0	23.9
Established (15+)	38.5	33.8	77.0	14.5	92.8	62.1	49.2	76.9	27.0
Other groups									
Informal firms	38.1	35.5	76.1	15.4	90.0	59.2	51.5	78.3	23.9
Exporters	41.8	36.7	62.2	0.0	96.1	68.5	46.5	95.9	11.9

* Based on the 2013 IBES sample. ** Based on SMEs from NBSSI client lists founded after 2013.

Source: *GSS (2020)*

Employment of workers in the mining industry depends on the stage of development of the project and the labour intensity required. At the exploration stage high-tech jobs are the safest while at the construction phase low-tech jobs are the most insecure. In terms of overall insecurity of employment, service providers top the list throughout the phases, followed by suppliers of goods with mid-high risks. Highly skilled jobs are only at low-medium risks in the construction and extraction/operation phase and at medium-high risk at the mineral processing and closure phases (Ramdoo, 2020).

According to Ramdoo (2020), Up to 305 million full-time workers in all economic sectors around the globe could lose their jobs in the second quarter of 2020 due to COVID-19. These losses may disproportionately impact lower-income countries, given their weaker health institutions and sanitary conditions, the number of workers in the informal sector, migrant workers and/or workers holding precarious jobs elsewhere, and the limited fiscal space governments have to mitigate the impacts of the forthcoming recession.

Workers are at the forefront when it comes to COVID-19. Ghana interfaces with the extractives sector through the Ministries of Lands and Natural Resources and its agencies like the (Mineral Commission, Forestry Commission), and Ministry of Energy and its agencies like (Petroleum Commission, GNPC).

Currently, reports have it that the petroleum commission recorded one, rising quickly to four positive cases and curtailing measures has forced the commission to be operating at 20% capacity physically due to COVID-19 infections as staff strength had to scale down so that only 20% are present in their office premises while the rest work from home.

In April an employee at AngloGold Ashanti's Obuasi Gold Mine in Ghana tested positive. Consequently, AngloGold Ashanti increased safety measures and required all non-essential staff to work from home. On 24th April AngloGold Ashanti reported that 164 employees at its Mpoeng mine, the deepest gold mine in the world, had tested positive and this forced the temporary closure of the mine even though majority of those positive cases were asymptomatic, suggesting that there was maybe high levels of immunity among the miners and communities where they lived (Good Governance Africa, 2020).

According to the Petroleum Commission, its plan of engaging or recruiting a total of twenty-seven (27) new staff to support various departments in the Commission has been reduced to ten (10). Additionally, the Commission projected forty (40) technical roles to be localised and assumed by Ghanaians has been suspended. COVID-19 has unfortunately restricted movement and travel, transfer of knowledge and skills. Aker Energy for instance has suspended its operations due to COVID 19 and laid off over 20 employees in Ghana.450 potential job losses are expected during this period due to suspended, disrupted, or terminated drilling campaigns by AMNI, GOSCO, AGM. Additionally, Operators of the three FPSOs (Kwame Nkrumah, John Evans Atta Mills and John Agyekum Kufuor) and the Onshore Receiving Facility (ORF), Sanzule have had to operate with minimum manning personnel onboard facilities instead of the usual manning levels in line with health and safety and distancing requirements. For instance, Yinson, Modec, Tullow and Eni have all reduced Personnel on Board (POB) their offshore facilities.

As Good Governance Africa (2020) notes, mine closures are not only expensive for owners as the ore turns to move when not actively mined, it also poses danger to workers, especially when mining resumes requiring extra safety measures and work culture.

Given that mine closures have affected labour-intensive more than capital-intensive mines during the pandemic, the pandemic may accelerate the pace of technological adoption already in the pipeline to the disadvantage of labour (Ramdoo, 2020).

Before the onset of the COVID 19 pandemic, there was a projection of about 2000 direct and indirect jobs to be created as a result of all drilling campaigns as well as ongoing projects. Plans to engage about 100 fresh graduates as interns (Engineers, HSE, Geologists, Geophysicist etc) for various drilling and other upstream activities postponed (Petroleum Commission, 2020).

Some mine workers are considered "essential staff" because they perform tasks necessary for the functioning of operations and these workers maintain their jobs and salaries even during COVID-19. Others however are able to work remotely and retain their activities and salaries but workers who do not fall under the two categories above are temporarily demobilized. They are more vulnerable to income cuts if there are no agreements and safeguards in place. The situation is more complex for contractual workers, such as fly-in, fly-out (FIFO) and drive-in drive-out (DIDO) workers, and informal or cross-border migrant workers. Layoffs imply the loss of any means of subsistence, and workers who are already ill-equipped to face hardship (in the absence of social safety nets and legal protection for their rights) are likely to be hit the hardest. Local and regional authorities and their communities must prepare to receive and deal with such workers as they could be a social and security problem given that these are used to a high lifestyle and suddenly have to adjust to reduced incomes and conditions.

5.3 Worker Rights and Safety

Continuing production without adequate protection of workers from both COVID-19 and the larger mine environment, especially after short periods of stoppage can be dangerous for workers. Production stoppages leave mining shafts unstable due to shifting ore bodies and gas accumulations, thus undermining the integrity of support structures designed to prevent rock falls. These pose a serious danger to workers requiring that government regulators ensure that enough preparatory work is done prior to reopening of mines.

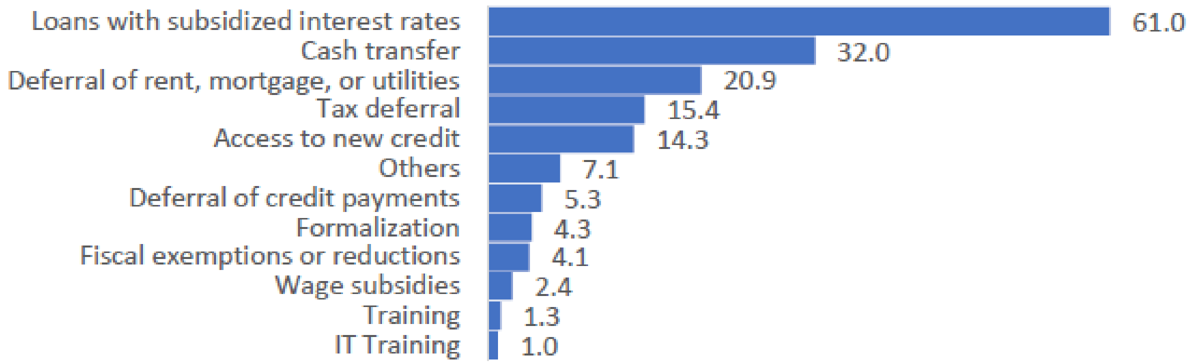
5.3.1 Impact On Labour Incomes:

The pandemic has taken a big toll on family incomes. Markets have been closed, and people are afraid to go out in public. As a consequence, farmers can no longer sell their produces or find themselves selling for very low prices. Moreover, bigger farms do no longer hire labourers, because working in large groups is prohibited. With the closing of businesses, offices, and schools, other income opportunities have decreased too.

This is due to the direct effect of lost earnings because of illness or the need to take care of sick household members who may be already sick or those who have been infected by the virus. There could also be the indirect effect of shocks to earnings and employment, caused by a decline in aggregate demand and supply disruptions. The impacts can take one or more of the following forms: (a) decline in quantity of work, either hours (intensive margin) or employment (extensive margin); (b) decline in wages, which is unlikely for salaried workers in the short-run but may occur over time due to furloughs or wage-cuts by some employers to avoid layoffs; (c) decline in income of self-employed, due to reduction of economic activity (sales, production) in micro and small enterprises due to fall in demand and disruptions in supply of inputs, or due to mobility restrictions, particularly for migrants engaged in seasonal agriculture.

Interviews Tropenbos (2020) conducted as part of a research on COVID-19 in Ghana, Uganda and DRC revealed that: the crisis has caused transportation costs to rise. Very few people have their own means of transport, so they depend on public transportation. Due to the pandemic, buses and motorcycle taxis are not fully operating, or take fewer passengers and charge higher prices. This affects people in numerous ways: Hired labourers are no longer able to travel to other farms; and farmers who try to sell their products in neighbouring towns are no longer able to make a profit. Rising transportation costs are also brought up as the reason for increased prices of products sold in village stores. For the majority in the informal sector and who depend on daily sales to survive this can take a high toll on their incomes and health.

***Figure 6**: Ghanaian Businesses Policy Preferences based on COVID-19 Impact survey*



***Source:** GSS (2020)*

A survey of COVID-19 impacts conducted by Ghana statistical service (GSS), as in figure 7 revealed that in terms of government policy support for their businesses to survive and prosper, the top most five preferences were: loans with subsidized interest rates (61%) -first followed by cash transfers to them (32%), then deferred rent, mortgage or utilities payments (20.9%), tax deferral (15.5%) and access to new credit (14.3%).

5.4 Impacts on Livelihoods

5.4.1 Decline In International (and domestic) Remittances

This could be resulting from the economic impacts of the crisis in places where the migrants are employed, and potentially in private transfers as economic stress can reduce transfers between households or charitable support. Potential change in public transfers – e.g. increase as governments respond to mitigate the impacts of the shock or decrease as fiscal constraints force countries to choose between existing social protection and health care.

5.4.2 Direct Impacts on Consumption

Changes in prices and shortages of basic consumer goods and essentials (such as food and medicines), due to disruptions in the functioning of markets because of a decline in trade (including import or export restrictions) or a fall in domestic production. This effect is in addition to the indirect welfare impact of any increase in the prices of production inputs, which would affect the cost of production and labour income.

Rise in out-of-pocket cost of health care for those directly affected by the pandemic, which may reduce consumption of other necessities among credit-constrained households.

Apart from general reduction in demand, COVID-19 might lead to increasing out-of-pocket health and health-related expenditures as health providers may be over-stretched or may not respect health insurance clients partly due to inability or delays in reimbursement from the government.

Also due to supply disruptions, credit lines for basic food and medications that would normally be available to some non-poor consumers could be unavailable as suppliers struggle to cope with falling suppliers and increasing demand from cash-paying consumers.

5.4.3 Service Disruptions

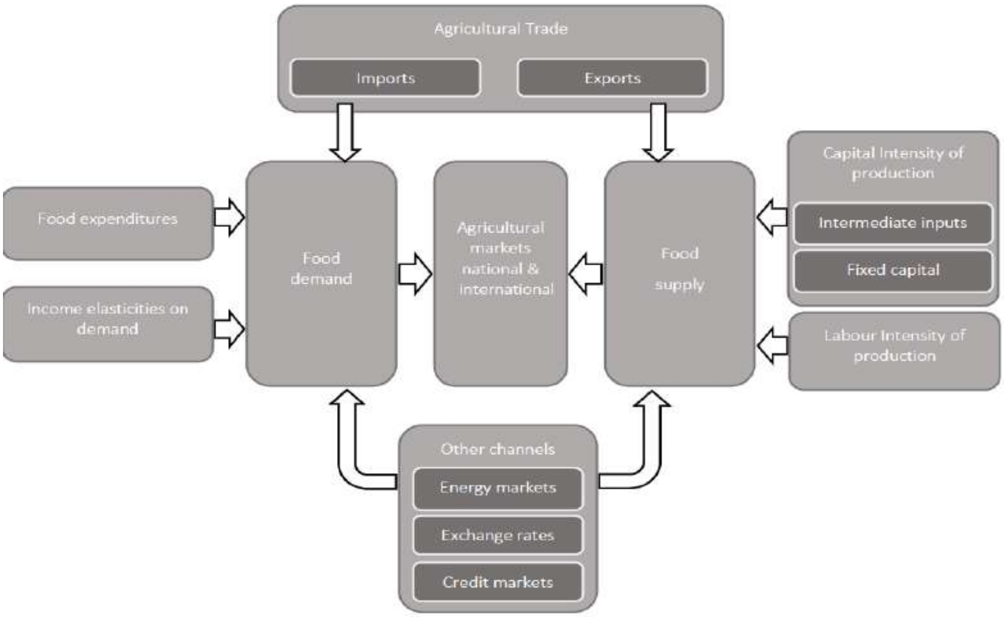
Services disruptions can occur with adverse impact on non-monetary dimensions of welfare including the following:

- Suspension of classes and feeding programs in schools, leading to impacts on student retention, learning, and nutrition.
- Potential saturation of health system in countries with high incidence of COVID-19 , leading to inadequate care for non-communicable diseases.
- Disruptions in mobility, due to quarantines and other containment measures which may drastically reduce public and private transportation service.

5.4.4 Transmission to Food And Exposure to the Effects Of COVID-19

Schmidhuber et al (2020) have carried out an analysis in the identification of the primary channels of transmission and classification of countries based on exposure to the effects of the COVID-19 -induced pandemic.

__Figure 7:__ Basic channels of transmissions of COVID-19



***Source:** Schmidhuberet al (2020)*

According to the Schmidhuber et al (2020) COVID-19 pandemic has a number of channels linking through food and agriculture, especially trade (imports and exports), energy markets, exchange rates, credit markets, intermediate inputs and fixed capital as depicted in figure 7.

5.4.5 Agriculture Trade Channel (Import and export)

Exports:

Many developing countries depend on agriculture and other primary commodities for the bulk of their export revenues and are thus vulnerable to shocks from the agriculture markets. This is especially bad for countries like Ghana and Ivory Coast that depend on a few of these commodities like cocoa, cotton, coffee, etc. for a large part of their export earnings. With COVID-19, there could also be shortage of labour for these farms and if capital costs also rise, then these countries cannot easily fall back on labour-intensive methods if labour is in short supply or its costs also rise. Transportation could also affect how much food and other commodities can be moved from producing areas to consuming centres. Countries exporting perishable goods like flowers and fruits could suffer losses as congestion and delays cause these to go bad before reaching the final consumers. Ghana's fruits like pineapple, mangoes, etc are prime examples.

Imports:

With a slowdown in economic activity, commodity prices could decline so net importers of food could see gains but net exporters could lose and rescue investments in the short to the long run and thus leading to lower supply, giving rise to rising prices in the future. Countries that are dependent on food imports could suffer as disruptions in the food chain/markets could lead to shortages and rising prices.

Restrictions on flights have reduced the supply of certain fruits and flowers usually imported into certain countries and if this continues, could lead to shortages and rising prices.

5.4.6 Welfare and Social Sector-Health and Education

On the 15th of March, the Ghana Government closed down all educational institutions in Ghana, affecting some 9.2 million basic school students (kindergarten, primary and junior high schools) and 0.5 million tertiary education students. The pandemic has changed the lives of large numbers of students, teachers, and parents around the world, with millions now teaching and learning remotely from home.

In an era characterized by extreme inequality, the COVID-19 pandemic is a fundamentally disequalizing event. Its effects are expected to be most damaging for children in the poorest countries, on the poorest households within countries, and on girls within poorest households.

The Ministry of Education (MoE) and the Ghana Education Service (GES) were quick to put in place measures aimed at ensuring opportunities for continuous learning even with schools closed. Soon after school closures were announced, MoE and GES announced the COVID-19 Emergency Support Provision of Distance and Remote Learning Systems Solutions, which was followed by the launch of distance and online learning platforms and the rolling out of lessons broadcast on Ghana Learning television (GLTV) for 1 million Senior High Schools (SHS) students.

These measures however have equity implications, especially between poor and non-poor families and between urban and rural areas. According to UNICEF (2020), many students and their families do not have access to the internet. The Multiple Indicator Cluster Survey (MICS) 2017/18 indicates that only 22% of households in the country have access to the internet at home and only 15% have access to a computer. In comparison, TV coverage (60.4%) and radio coverage (57.2%) are much higher across the country, with radio coverage more widespread in those regions with higher levels of economic deprivation. In this context, internet and TV-based learning serve to accentuate inequalities in access to quality education between the rich and poor and urban and rural students based on their ability to access the internet and TV platforms. Radio broadcasts become a much more equitable tool for reaching learners in more deprived areas.

Many other constraints affect access to online learning like parents' poverty/wealth, access to electricity, food and the general environment for learning. Apart from quality concerns, and learning from the Ebola experience from Liberia, girls are at risk during lockdowns. In the case of Liberia, many girls got pregnant during the lockdown between 2014 and 2016 and in the case of Ghana already schoolgirls drop out due to pregnancy (7,775) will be worsened with a long lockdown (UNICEF, 2020).

UNICEF and the World Bank joined the Ghana Statistical Service (GSS) to launch a new report on the impact of COVID-19 on households and children. This survey is based on phone interviews with 3,000 households and 2,000 caregivers. According to the report, more than half of households interviewed reduced their food consumption to cope with COVID-19. Twenty seven percent of children missed scheduled vaccinations as a result of mobility restrictions. One out of five households admitted increased physical punishments against children and more than 29 percent of households felt more irritated with children after the occurrence of COVID-19.

6.0 IMPACTS ON THE GOVERNANCE OF NATURAL RESOURCES

6.1 Elite Vulnerability and Natural Resources Governance in COVID-19

Ruling elites in all countries have a bad track record when it comes to the governance and management of natural resources from water, land, air to point resources like timber, solid minerals and petroleum. Under COVID-19, most are panicking and are most likely to make dangerous concessions to capital that will further worsen the economy and society. The relation between ruling elites and capital is especially at the core of a country's ability to manage its natural resources sustainably.

The government took a number of measures that CSOs thought were reversing some of the gains made over the years in the sector to increase government take and improve linkages through local content and participation of Ghanaians in the extractives sector. The ExxonMobil and Aker solutions deals are cases in point.

Generally, the government will be under pressure to grant specific concessions to the mining, especially petroleum companies given the declining prices and if the pandemic continues and worsens accompanied by further falling prices.

6.2 Civil Society Oversight of Natural Governance in COVID-19

Even before COVID-19, most CSOs in Ghana were facing an uphill task to raise funds, especially for advocacy activities partly due to declines in donor flows, Ghana's middle-income status that has seen many donors turning their attention to more needy nations.

The CSOs terrain has therefore seen many disappearing or scaling back their activities drastically thus critical voices, especially in the area of natural resource governance have been largely muted. So, therefore, even though physically there is space for CSOs activism, limited resources for mobilization is closing this space. Given the structure of parliament where the government of the day turns to have a majority, little hope can come from there when it comes to protecting the national interest rather than narrow partisan interests.

7.0 IMPACTS ON ILLICIT FINANCIAL FLOWS (IFFS)

According to (Tax Justice Network, 2018) Ghana is ranked 117th on the 2020 Financial Secrecy Index, based on a secrecy score of 52 combined with a tiny scale weighting due to the fact that Ghana accounts for 0.01 percent of the global market in offshore financial services. Many channels and levels of secrecy and policy/practices of her trade partners make her very vulnerable to IFF.

In 2007, Ghana's Parliament amended the banking act to "facilitate the establishment of an international Financial Services Centre that seeks to attract foreign direct investment, income from licence fees payable in foreign currencies, create employment, enhance local skills and knowledge, strengthen the financial sector through expansion in the use of investment banking instruments and to provide for related matters (Tax Justice Network, 2020). Although the scheme was not fully operationalized because of a change in regime in 2009, the legal framework is available and current government officials hint at reviving it.

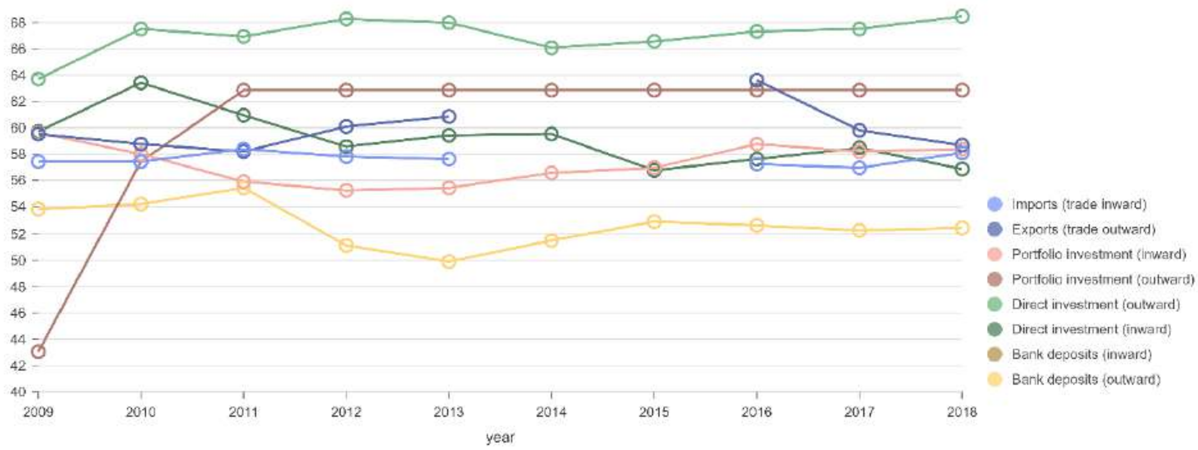
Apart from the various estimates of African country losses of revenues due to illicit financial flows, the African Union High-Level Panel estimates, an ISODEC study of Ghana's trade with the EU and USA for 2000 to 2012 revealed that: the undervalued amount estimated for Ghana's export trade to the EU's data on imports from Ghana was Euro 2.7 billion during the 13-year period, representing 14% of total value of exports to the EU. The undervalued amount estimated for Ghana's export to the USA from the USA data on imports from Ghana was $533 million during the same period, representing 21% of the total value of exports to the USA.

In terms of imports, the overvalued amount estimated for Ghana's import from the EU's data on exports to Ghana was Euro 2.8 billion during the 13-year period, representing 14% of the total value of import from the EU. The overvalued amount estimate for Ghana's import from the USA, from the USA data on exports to Ghana, was $573 million during the same period, representing 8% of the total value of imports from the USA (Pak, 2014).

These estimates do not include other trade partners like China, South Africa and other channels like investments, banking/finance, shipping, real estate, etc. These resources could have been available for national development including tackling COVID-19, education, health and key infrastructures like electricity and roads to support current and future growth.

Among the items of undervaluation from the USA, one that stands out was a petroleum drill downhole wire with an undervalued value of $10 million (Pak, 2014). Other potential areas of IFFs include companies' costs, especially consultancies, management fees and intellectual property rights.

Figure 8:*The evolution of the total IFFs Vulnerability of Ghana-2009-2018*



Source: *Tax Justice Network (2018)*

For bank deposits (outward) for 2018, Ghana lost $157,890,653($85 million lost to global tax abuse committed by multinational corporations and $73 million lost to global tax evasion committed by private individuals in tax every year to global tax abuse, equivalent to 2.3% of tax revenue (Tax

Revenue: $7 billion) and equivalent to the loss of $5 per member of the population (Population: 29 million) (Tax Justice Network, 2018).

Currently, Ghana's IFF vulnerability is 52/100 and contributes **0.04%** of global tax losses ($96 million by enabling global corporate tax abuse and $55 million by enabling global private tax evasion. The Inflicted tax loss to other countries is equivalent to the yearly salaries of 12,019 nurses.

The social impact of the lost tax is equivalent to 15.72% of the health budget and to 5.04% of education spending or Suffered tax loss equivalent to paying yearly salaries of 54,591 nurses (Tax Justice Network, 2018).

With the global decline in oil prices, as in 2009 after the global recession, national regulators and companies usually sit down at the table and review all costs to reduce them according to the global situation. It is expected that, as was done by the Ghana Petroleum Commission in the past, company costs will be reviewed downwards to free up resources for tax purposes.

The government granted companies exemptions from the lockdown and border closures and thus procurement that used to go through strict scrutiny by regulators could now be a source of IFFs for a number of reasons.

The author was a member of the Ghana Petroleum Commission Board and used to serve on the local content and participation committee of the board. This committee used to interrogate all procurements to ensure necessity and value-for-money but with the pandemic, most staff work from home and so meetings and interactions with companies are limited. Given the tight timelines for the submission and approval of procurements including employment, many will not be scrutinized and costs could be inflated and or unnecessary jobs lost;

The use of fly-in, fly-out (FIFO) and drive-in drive-out (DIDO) workers, as part of the emergency exemption granted companies under COVID-19 could be a source of three other problems: 1) first these could be preferred over permanent workers as companies can reduce their liabilities like social security, pensions, allowances, etc. permanent workers could easily lose their jobs to them, 2) secondly, they could be a source of illicit financial flows out of the country as payments to them could be done without taxes and costs could be inflated to increase the cost of production and thus reduce taxable incomes if these staff are from a related company, and 3) local workers could easily be replaced by expatriate ones, depriving Ghanaians of jobs and incomes;

Companies would be tempted to revert to their traditional supply chains and hubs, bypassing local content requirements and if these suppliers are from related entities, transfer-pricing would be difficult to enforce during this emergency period, with revenue loss implications.

In the mining sector, illegal mining, known as "galamsay" intensified during the lockdown as many people who used to be critical of these activities are not as mobile as the criminals and so less scrutiny of their activities including the smuggling of minerals using unapproved and closed borders. Several media reports of the invasion of forest reserves, cocoa farms and water bodies attest to this, resulting in the government re-launching a military and police operation to flush these criminals out. The illegal felling and export of Rosewood is another source of illicit financial flows as the lockdown has disempowered communities and activists from monitoring the activities of these gangs.

8.0 IMPACTS ON STRATEGIC POLICY ON THE ROLE OF EXTRACTIVES IN NATIONAL DEVELOPMENT

8.1 Current Policy Environment

COVID-19 and its impacts might also provide an opportunity for natural resource-rich countries to reassess their governance and management of natural resources. For instance, with the discovery in 2007 of petroleum in Ghana in commercial quantities, expectation was very high regarding how this can be used to catalyse and transform the structure of the national economy to deliver a higher quality of life for citizens. Three factors have combined to largely influence energy politics and economics in the Gulf of Guinea of which Ghana is a part: 1) the two Asian giants of China and India have awoken and are playing catch-up with industrialised countries based on an energy-hungry development strategy, 2) a number of new producers like Russia and others from Latin America and Asia have joined the traditional seven sisters (now consolidated into 4) and, 3) a number of small, slim and smart independent operators have joined the party who are prepared to do business with natural resource-rich countries, thus diluting further the monopoly of the giants. With COVID-19, these dynamics are changing and Ghana must adjust accordingly without lowering environmental and social standards.

Ghana is uniquely endowed with significant amounts of valuable natural resources. Indeed, Ghana is among a few select nations where oil and gas have been discovered together with endowments of gold, diamond, salt, bauxite, limestone, iron ore, and manganese. These natural resources create the possibility for a gold refinery, and industrial complexes embracing aluminum, petrochemicals, fertilizer, iron and ferro-manganese production, and value-added industrial and consumer products linked to the outputs from these basic industrial goods. The transformational opportunity is presented for successive Governments to take a strategic view of the development prospects available from the linked endowments in oil and gas, bauxite, salt, and limestone, as well as iron ore and manganese. These endowments make Ghana one of the few nations to be in such a position with the opportunity to leverage the natural resources to achieve a quantum leap in economic development.

For Ghana to convert these endowments and opportunities into lasting benefits for her citizens, there are, at least, five major challenges: 1) Technical challenge in providing oversight and incentives for improved oil recovery so that most of the oil/gas is recovered, 2) macroeconomic challenge in managing the challenges of managing a finite resources with a volatile prices and high expenditure expectations and 3) a political economy dominated by corruption and rent-seeking thus a challenge in promoting competitive local businesses at arms-lengths, thus without partisan politics in the choice of businesses and ensuring that targets are met and to avoid perpetual support and 4) defining and choosing the strategic role of the state in investing in strategic interventions that are market-enhancing including the strategic role of the GNPC and proactive use of a platform of local content and participation, value-addition and indigenisation, and 5) The nation's efforts and aspirations are also challenged by prevalent socio-cultural dynamics –public morality, attitudes, behaviours, conduct, responsiveness, time-consciousness, among others - that weaken national capacity to achieve and significantly undermine the impact of policy efforts.

Ghana's success or failure to use natural resources, especially petroleum, as a catalyst for transforming the national economy will depend largely on the type of politics that is played by the ruling elite. Will rents in Ghana' natural resources sector be deployed to promote economic goals or will they form part of a strategy of maintaining networks of political clientelism, patronage and support? The DFID-led drivers of change analysis of Ghana come in handy here.

According to this strand of literature, Donors and other reform-minded actors in development often complain of the lack of political will and policy ownership by the ruling elite to implement necessary reforms to spur on sustained and pro-poor growth but little articulation is usually provided to unpack political will. Recent studies have sort to do just that by trying to fully understand the interrelationships between political and economic institutions and processes thus adopting a multi-disciplinary approach combining the insights of political economy, and the new institutional economics and the study of social processes, cultural norms and ethnicity. These studies have become known as the New Political Economy Approach. This approach has guided recent DFID studies (drivers of change) in Ghana, Nigeria, Malawi, etc to better understand the politics of development to enable them to define an intervention strategy.

The two key prepositions of the above approach are: 1) In order to understand how policies favorable to development can be put in place it is essential to analyse the incentives that influence the decisions of governing elites, other powerful interest groups and change agents in civil society, the private sector and the government bureaucracy, 2) These incentives result from the pursuit of economic interests and restraint of formal institutions. They are also heavily dependent on the informal social rules that govern behaviour, define the social hierarchy, create and perpetuate embedded power structures and generate reciprocal social obligations often shaped by and perpetuated by historical, cultural and ethnic influences.

A key assumption of the new political economy approach school of thought is that key and vital reforms needed are usually resisted by vested interests who benefit from maintaining the status quo, especially where political power is concentrated in the hands of a few individuals and small interest groups and where policy is determined through narrow personalistic relations of patronage with strong ethnic ties (Landell-Mills, Williams and Duncan (2007).

Series of studies seeking to understand why despite the seeming progress in electoral politics, the economy and social developments have not improved appreciably in Ghana have confirmed the above political economy problems and pointed to the enduring nature of entrenched and vested interests that have undermined sustained and pro-poor growth.

The recent debate on how to manage revenues from petroleum (creation of savings and future generations fund, allocation to Western Region) can be a guide to the stance of the ruling elite when it comes to natural resources management and the potential for building and sustaining coalitions to support growth-enhancing investments.

8.2 National Consensus on Natural Resource Governance

The debates and negotiations that went into the drafting and passing into law, the Petroleum Revenue Management Act 815 shows that it is not impossible to build national synergy or consensus on how to govern our natural resource endowments.

The key features of the Petroleum Revenue Management Law include: 1) establishment of funds to insulate the national economy from the direct hit from oil revenues, 2) a stabilisation fund to ensure we smooth expenditure irrespective of oil prices, 3) a future generations fund to save for future generations, 4) investment of saved revenues so that the money will not lose value over time, 5) public accountability and oversight over the funds, 6) numerous reporting mechanisms and 7) strong legislative oversight.

Citizens and legislative vigilance on the implementation of the law will further show if this coalition for transparency, accountability, equity and sustainability in the governance of natural resources will be a model for the region in the judicious management of natural resources revenues.

8.3 Need For New Natural Resource-Based Development Framework

As part of the reforms of natural resource governance under the Extractives Industry Transparency (EITI) there were suggestions from the World Bank and Civil Society Organisations for a more equitable natural resource management framework called the "Staples-plus" to enable natural resource-rich countries to convert their natural resources into lasting benefits for their citizens. As Innis[i](1976) of Canada argued, European expansionism was motivated by the desire to export staples to enrich the homeland (heartland) while the producers of the staples suffered underdevelopment. Innis further explains that there are **three ways** a staple-based economy can develop with varying degrees of success:

1. An economy is ***most successful*** when it moves past staples production into manufacturing that supports staples industries. In time manufacturing becomes more important than staples production and the economy ceases to be a staples producer;

2. An economy is ***moderately successful*** when it is flexible and can shift from one staple to another based on demand;

3. An economy is ***unsuccessful*** when it continues to rely on staples even when there are no longer enough staple products to provide adequate income.

Ghana seems to belong to the third group as timber and cocoa are now subordinated to oil. Now is the time to reactivate that discussion but the elite is too engrossed in elections and little scope is provided for these types of discussions in the various political campaigns even though the major political parties have made promises in their manifestos to address the issue if they win. The biggest problem is the lack of elite consensus on how to convert our natural resources into lasting benefits for society. While a majority of the ruling elite are happy to continue as a "staple producer and lazy rent collector, a few critical voices think we need to restructure our approach to allow for the optimization of benefits while protecting the environment and future generations.

CSOs would have to come up with concrete proposals on a staple-plus natural resource development framework, as was done with the EITI and extractives revenue management as well as the new Exploration and production law.

9.0 IMPACTS ON COMMUNITIES AND THE ENVIRONMENT

The government generally had no documented policy strategy for its response to COVID-19 , but has resorted to pronouncing directives and touting the implementing of a targeted and proactive so-called approach of ‘3T’s’ (i.e., Tracing, Testing, and Treatment) as its main COVID-19 response. An analysis of actions, directives, and speeches by government and public health officials leading the fight shows that Ghana’s response strategy can be categorized into five-part policy programs:(Hagan Sibiri, Prahb David & Zankawah, Mumuni, 2020) as:

> First, limit and stop the importation of new cases; second, prevent community spread; third, isolate, treat and take care of the sick; fourth, ensure self-reliance and expand the domestic capability; last but not least, limit the impact on social and economic life. Although the cases keep rising, these approaches, in general, have been a success in minimizing critical cases and case-fatality rates (Hagan Sibiri, Prahb David & Zankawah, Mumuni, 2020).

9.1 Impacts on Resource-Host Communities

Community Rights:

In a report jointly produced by Earthworks (USA), Institute for Policy Studies - Global Economy Program (USA), London Mining Network (UK), Mining Watch Canada, Terra Justa, War on Want (UK), and Yes to Life No to Mining, with input from numerous partner organizations and communities in different parts of the world, workers and community rights are or will be impacted as follows:1)Mining companies are ignoring the real threats of the pandemic and continuing to operate, using any means available, including lobbying governments to lower and or suspend labour and environmental standards, 2)Governments around the world are taking extraordinary measures to shut down legitimate protests and promote the mining sector with the excuse that it is an essential service for both COVID-19 and post-COVID-19 recovery of the economy, 3)Mining companies are using the pandemic as an opportunity to hide their dirty track records and present themselves as public-minded saviours through partly donating PPEs to some host communities but doing little to protect workers and when these workers are infected, they pass on the virus to communities where they live, and 3)Mining companies and governments are using the crisis to secure regulatory change that favours the industry at the expense of people and planet

In April, 2020 some communities in South Africa had to go to court to seek clear regulations to protect them from COVID-19. The Association of Mineworkers and Construction Union (AMCU) has, therefore, launched an urgent application in the Labour Court calling for the Minister to ensure that mineworkers are properly protected in line with the Mine Health and Safety Act.

The government will also come under pressure to consider relaxing or allowing mining in protected and more fragile areas including commonly held areas like forests, indigenous lands, etc. Once government and companies make jobs and revenue offers to communities, civil society organisations will have a hard time convincing them to continue to resist in the face of COVID-19 lock downs and effects on livelihoods.

The government might also be pressurized to lower taxes and or royalties for some projects in the name of restarting the economy or creating jobs and obtaining revenue for development. Companies might also renege on promises and commitments made to the government and communities regarding corporate social responsibilities (CSRs).

Host communities hosting rosewood in the fragile eco-environment in northern Ghana found themselves at a disadvantage because lockdown did not allow them to continue to monitor the activities of illegal loggers. Illegal loggers, therefore, had a field day to enter bushes and forest reserves to cut down rosewood and transport it during the night.

9.2 Impacts on the Environment

According to World Bank (2008) estimates the mean estimated annual cost of natural resources and environmental degradation in Ghana is nearly US$730 million or *9.6* percent of GDP in 2003. This cost represents almost one-half of Ghana's US$1.5 billion annual Official Development Assistance. The degradation of agricultural soils and forests and savannah woodlands costs at least US$405 million annually (5.3 percent of Ghana's annual GDP). Environmental health effects account for nearly US$325 million (or about 4.3 percent of GDP) from (a) urban air pollution (US$30 million); (b) inadequate potable water supply, sanitation, and hygiene (US$180 million); and (c) indoor air pollution (US$115 million). While health effects from mining pollution and vector-borne diseases, such as malaria, are a concern and might be severe in some locations, they are often difficult to estimate. The estimated health costs are therefore understating the total magnitude of the problem.

Already reports from NGOs from the fragile upper East regions reveal that illegal rosewood exported have taken advantage of the COVID-19 lock down and the fact that most rural communities host to these forest resources are busy on their farms to cut and pile up rosewood in forest reserves and hard-to-reach bushes in Sandema and Chiana areas of the Upper East region.

Over the past 30 years, an increase in the price and production of cocoa, gold, and oil helped transform Ghana: real GDP growth quadrupled, extreme poverty dropped by half, and in 2011, Ghana moved to a Lower Middle-Income Country status. The fundamental question is: How can this impressive development, anchored firmly on natural capital, continue to deliver gains in macroeconomic growth and poverty reduction? (World Bank, 2020).

The World Bank (2020) Country Environmental Analysis report provides information on the scale, scope, and economic effects of environmental degradation on society like air, plastics, and water pollution and how these affect health and hygiene; gold mines, unmanaged solid waste, and contaminated sites release hazardous chemicals; land degradation, deforestation, and overfishing heavily impact livelihoods and limit drivers of growth.

According to the above World Bank (2020) CEA report, environmental degradation costs $6.3 billion or nearly 11% of Ghana's 2017 GDP. On the other hand, non-renewable resources such as gold and oil cannot sustain growth as resources deplete while renewable resources like cocoa, timber, and other tree and food crops, depend on good environmental stewardship. There are clear signs and scientific evidence that the erosion of the natural capital may put at risk growth, livelihoods, and human health (Srivastava, and Pawlowska, 2020). Unfortunately, the government, at this point in time, is more concerned with jobs and revenues to maintain human lives and businesses and so communities and civil society will have to take the lead role in finding the balance between lives and nature.

With COVID-19, these situations will be worsened as both government and poor communities struggle to maintain a balance between lives and nature. While government and mining companies, especially petroleum and logging companies try to maintain their revenues amid disrupted supply chains and reduced markets, gold mining companies will be trying to expand production, possibly into previously restricted sites to take advantage of high prices. Given that government is vulnerable at this point as revenues are declining but health and other economic stimulus needs are mounting so any proposals from mining companies with a promise to provide revenues and jobs, if even there are likely to be high environmental and social costs, are likely to be too tempting for the government to refuse. A summary of the CEA report is presented in Box 1 as follows:

Box 1-Summary of the Ghana's Environmental challenges

Air pollution, the number one environmental risk to public health, costs roughly $2 billion per year and causes the premature death of nearly 16,000 people each year. Elderly account for most of the deaths, while more than half of the deaths from pneumonia in children under five is associated with air pollution.

Water Pollution causes significant damage equivalent to 3% of the GDP. This is due to the health effects of inadequate water supply, poor sanitation, and discharge of solid industrial and toxic waste into water systems.

Plastics pollution is rising to crisis proportions. Each day, over 3,000 metric tons of plastic waste is produced with much of it dumped as litter or placed into improvised landfills. This waste clogs open drainage systems and pollutes the ocean.

E-waste, associated with the Agbogbloshie dumpsite, is Accra's main source of air pollution. Here, burning electronic parts cast carcinogenic compounds into the air while deposited toxic metals enter waterways and oceans. Each year, exposure to lead and mercury-causing diseases and the lost IQ points in children cost $440 million.

Poor land management leads to **land degradation**, costing over US$500 million a year and to **deforestation** costing US$400 million a year: five million hectares of forest was lost between 2001 and 2015. Over the past decade, **artisanal gold mining** aggravated the degradation as streams and rivers were dug up to find gold. Miners' exposure to the toxic mercury also costs $240 million in health costs.

Ghana loses about 2.7 million m^2 of its shore every year, with 80% of the shoreline actively eroding. **Coastal erosion and flooding** are particularly serious in Greater Accra where sea level rise increases erosion intensity and raises the chance of flooding by 20%. This puts at risk communities and UNESCO World Heritage sites such as Cape Coast and Elmina. Overfishing cost $233 million and could lead to the collapse of small pelagic fisheries and the loss of half a million jobs.

Climate change heavily affects climate- sensitive sectors on which Ghana's growth is based - agriculture, forestry, and energy. It also triggers environmental disasters: in the last 40 years, floods affected four million people and a 2015 flash flood in Accra caused $55 million in damages.

Source: (Srivastava, and Pawlowska, 2020),based on World Bank (2020)

Ghana needs to respond urgently to protect the natural capital through evidence-based actions and concrete steps to save lives and nature and current and future growth, especially in terms inclusive and green and equitable COVID-19 recovery, largely based on green growth, food/livelihoods security and human development.

The above report warns that two economic indicators are flashing warning signs that environmental mismanagement may impair future economic growth. The first is a gauge of growth sustainability called *national wealth*, which measures a country's asset classes (produced, natural, and human capital, as well as net foreign assets). Ghana's recent wealth growth came with liquidation of non-renewable assets (gold, oil) and losses to renewable stocks (forests, air quality) (Srivastava, and Pawlowska, 2020**)**. The second indicator is a measure of how wealth changes over time, *adjusted net savings* (ANS), which is defined as gross national saving adjusted for gains made in education spending and losses through natural resource rundown. When ANS is negative it indicates a country is consuming more than saving, using up assets to fuel present growth, and ultimately undermining the sustainability of long-term economic growth (Lange et al., 2018). Ghana's ANS has been negative since 2007. Together the two indicators help inform an understanding of the linkages between environment and natural resource management and Ghana's ability to foster future growth by investing in its people(Srivastava, and Pawlowska, 2020**),**

10.0 MITIGATION MEASURES

This section examines government and mining/petroleum companies conduct in the face of COVID-19 and impacts on community livelihoods and the environment. The type and extent of mitigation measures the government takes depend on their understanding, reading and projection of the direction and intensity of COVID-19. The World Health Organization (WHO) acknowledged COVID-19 as a Public Health Emergency of International Concern on 30 January 2020. Africa experienced its first case on 14 February, in Egypt, and COVID-19 was declared a global pandemic on 12 March. Two months later the disease had spread to every country in Africa, mostly entering capital cities through international flights from Europe and spreading from there through community transmissions.

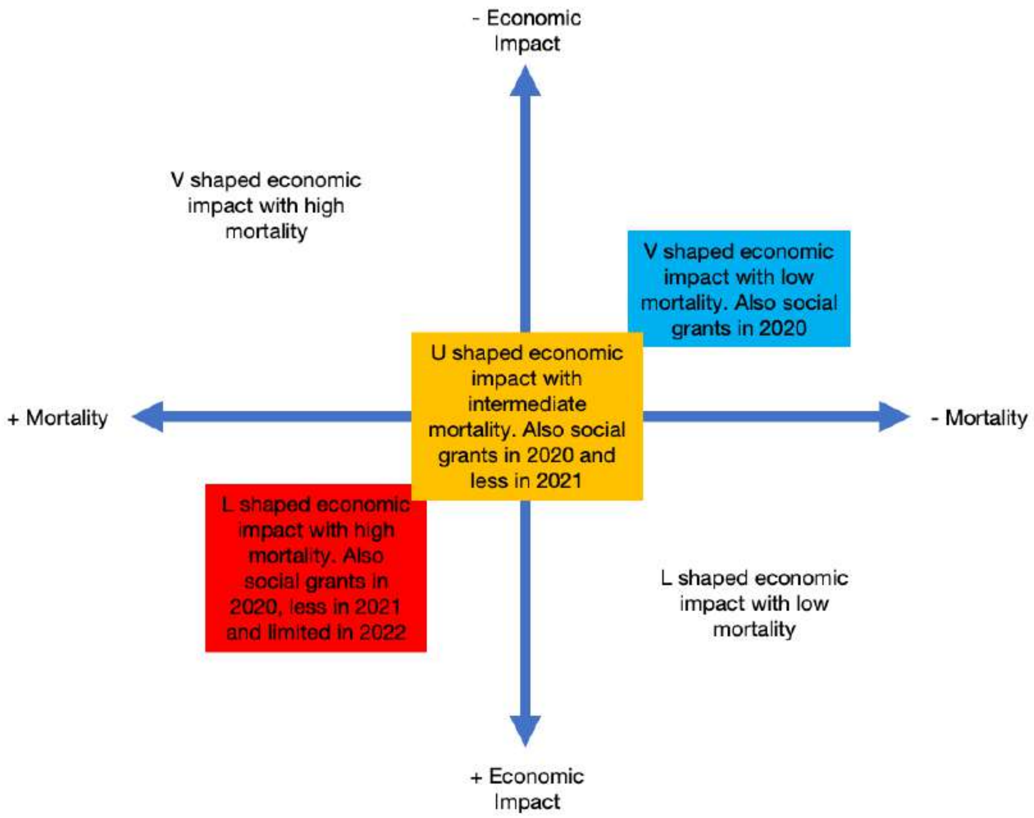
> "The impact of the pandemic has been described by the United Nations (UN) as 'the greatest test that we have faced since the formation of the United Nations, 'and described by the International Monetary Fund as 'the worst economic fallout since the Great Depression" (Cilliers el al, 2020:5).

Globally, COVID-19 has caused disruptions in supply chains, with significant supply shortages and consequent price hikes. There is also the general slowdown in investments and remittances and resulting job losses. There is also the volatility and collapse of stock markets due to uncertainties, the decline in oil demand leading to a decrease in oil prices and cut in revenue for oil-exporting countries including Ghana. For those nations depending heavily on tourism, there has been a decline in tourism and international travel and resulting in job losses. Socially, there is an unanticipated increase in health expenditure and resulting upsurge in public debt burden.

According to the World Bank (2020), growth in Sub-Saharan Africa will decline from 2.4 percent in 2019 to -2.1 to -5.1 percent in 2020, the first recession in the region in 25 years and will cost the region between US$37 billion and US$79 billion in terms of output losses for 2020.

The downward growth revision in 2020 reflects macroeconomic risks arising from the sharp decline in output growth among the region's key trading partners, including China and the euro area, the fall in commodity prices, reduced tourism activity in several countries, as well as the effects of measures to contain the COVID-19 global pandemic. This reduced growth prospect is driven by Africa's three largest economies—Nigeria, South Africa, and Angola—in a context of persistently weak growth and investment, and declining commodity prices. While crude oil prices have fallen as much as 50%, that of metals is about 11% between December 2019 and March 2020 and growth is projected to decline between 6.9 and 8 percentage points for countries dependent on oil and metals (World Bank, 20220). Then there are the tighter global financing conditions despite interventions through monetary policy to cut policy rates.

Figure 9:*Framing of the COVID-19 impact scenarios*



Source: *Cilliers el al (2020)*

Using the International Futures forecasting platform (Ifs) Cilliers et al (2020) provide scenario analysis of the COVID-19 pandemic based on three possible COVID-19 scenarios consisting of three reasonable alternatives – namely:1)a V-shaped, 2)U-shaped and, 3)L-shaped scenario, using the letter in the alphabet that most closely resembles the anticipated shape of the GDP growth curve. According to Cilliers et al (2020) each scenario consists of a set of three interventions in the IFs forecasting system that relate to economic growth, additional mortality and additional social grants. The interventions are made in 2020 for the V scenario (V-shaped economic impact with low mortality and some grants), in 2020 and 2021 in the U scenario (U-shaped economic impact with intermediate mortality and social grants in 2020 but less in 2021 and from 2020 to 2022 in the L scenario (L-shaped economic impact with high mortality, social grants in 2020, less in 2021 and limited in 2022. The subsequent forecasts are generated by Ifs.

According to Cilliers et al (2020) in April 2020 the IMF updated its global growth forecast to include the potential impact of COVID-19, and forecast an average contraction to -2.7% of GDP for Africa in 2020, with a sharp correction in 2021. This essentially amounts to a V-shaped economic recovery, meaning the long-term impact of this scenario is a forecast of an average growth rate of 3.2% to 2030 in the IFs forecasting platform, instead of the 3.8% reflected in the Reference or pre-COVID growth scenario, a modest difference of 0.6 percentage points of growth. Cilliers et al (2020) then used the April 2020 IMF growth forecast, a basis for the V scenario and includes a rapid economic recovery in 2021. Under these scenarios, in the U scenario, Africa is only expected to recover by 2022; whereas in the L scenario recovery occurs in 2023.

As at the time of writing this report, Europe and the Americas are going through a second wave of COVID-19 which seems to be more intensive and extensive, causing more deaths and forcing more extensive lockdowns in many countries. **The outlook for Ghana is not a recession**. The Ghanaian economy is projected to grow at 1.5% in 2020 and recover to 5.9% in 2021(IMF, 2020).

10.1 Specific Mitigating Measures on The Natural Resources Sector

Government has not yet introduced any special mitigating measures for the extractives sector apart from the exemption from the lockdown to bring in labour and inputs from outside Ghana.

Conditions for State Support-If governments provide important financial relief to their mining sector, whether directly or through tax exemptions, it should come with certain conditions attached. For instance, during the period that companies benefit from state aid, governments could require them to:

- Retain all workers, or at a minimum an agreed percentage of workers, at regular salaries.
- Withhold bonuses, and salary increases for company executives and potentially defer payment.
- Cancel dividend payments to shareholders except those connected to the government's equity stake.
- Abandon all artificial tax avoidance arrangements (e.g., treaty shopping, BEPS, tax havens). Governments could do this by requiring companies to adopt the B-team principles on responsible tax and become an EITI supporting company. They could also require company directors to sign a public pledge making them personally liable for aggressive tax planning, and subject to corresponding penalties.
- Adopt modern, transparent, and fair transfer pricing practices.
- Adopt transparent pricing for all mineral sales, based on international benchmark prices.

Governments could also take this as an opportunity to strengthen their fiscal regimes and ensure that in the future companies pay their fair share of taxes and help rebuild government finances. In addition to some of the above, this could also include the following:

- Introduce an excess profit tax that kicks in once companies make substantial levels of profits.

- For royalties' systems, consider some forms of state aid as a capital injection in the mine, giving the government the right to additional equity or repayment in future mineral production.

Some companies might also be considering automation to reduce reliance on manual labour. The Syama underground gold mine in Mali, became the world's first fully autonomous mine operation. Designed in partnership with Swedish engineering company Sandvik, the mine operates with fully automated trucks, loaders and drills. The fully autonomous operation means that the mine can operate 24 hours a day, with all operations overseen from a remote operation centre.

10.2 COVID-19 Burdens and Mitigating Measures on Economy And Society

Government Immediate measures have supported business cash-flow, household income and employment and so governments' economic policy responses have been rapid and extensive. The fiscal packages so far have aimed at cushioning the immediate impact of the sudden drop in economic activity on firms and households and preserving the country's productive capacity.

10.2.1 Burdens Of COVID-19

Burden of Public Health and social measures (PHSMs)

Essential Health Services The COVID-19 epidemic can disrupt essential health services through the burden it places on health systems, disruptions to medical supply chains and restrictions on movement. People may also be hesitant to seek care due to the risk of transmission or inability to pay for care. Evidence from past epidemics and initial reports from COVID-19 suggest that the indirect health effects can be far larger than the direct effects of the disease. Closely monitoring essential health services can inform policies to adapt PHSMs and maintain essential care. Data on disrupted services should be interpreted within the *context of a country's disease burden and health care utilization patterns.*

Surveyed households in Ghana are experiencing severe disruptions to essential health services during the COVID-19 outbreak. Four out of ten survey respondents who needed care reported delaying or skipping health visits, while three out of ten found it difficult to obtain medicines; those with longstanding illnesses were affected the most for both measures. The majority of those who did skip a health care visit were worried about the risk of catching COVID-19 in a health facility. While more than 40% of skipped visits were reportedly for general check-ups, 20% were reported to be for malaria and 8% for antenatal care, which could have significant short and long-term health impacts.

In the survey for this report, respondents said even though the government recognised the danger early enough, it did not take immediate measures like closing borders and airports on time (40%) or relaxed them too early(20%) while 30% said the government acted timely (see appendix 1 for details).

Economic Burden and Food Security

PHSMs that restrict economic activity—such as workplace closures, restrictions on the movement of people and goods, and stay-at-home orders or curfews— place high burdens on people by disrupting livelihoods and access to markets. Monitoring household economic burdens and food security can help identify people in need of support and inform the design of appropriate relief measures. A large majority of respondents in Ghana have experienced severe economic hardships during the COVID-19 crisis. Many face difficulties in accessing food due to high food prices and income losses. Nearly 70% of respondents reported facing at least one barrier to purchasing food in the previous week, and the same proportion reported that their income was less than the same time last year. The significant burden on livelihoods was also identified in posts from social and traditional news media. The government has announced many social assistance measures, including food assistance and national coverage of water and electricity bills, and waived fees on mobile money transfers. One in three surveyed had received additional aid from the government in the previous month, even though the government planned to end all assistance programs related to COVID-19 in June. Most of this assistance was in the form of free or subsidized services (22%), while 4% received food assistance. Low-income households were both more likely to report barriers to food access and income losses, and less likely to have received government assistance, suggesting that support is not reaching those most in need.

Security

A rise in unrest or insecurity—including peaceful protests as well as riots and violence by and against civilians—can affect adherence to PHSMs and serve as a warning sign of the burden such measures are imposing on people. In Ghana, a handful of enforcement actions and anti-enforcement protests have taken place between March and August. However, the majority of security incidents were other demonstrations, including five incidents of protests against the establishment of COVID-19 health care sites in local neighborhoods. Approximately half of all incidents included reports of violence, which could potentially exacerbate the spread of the virus. Activity levels were highest in April and have dropped off considerably since.

What has largely contributed to increasing infections is political activities including the compiling of a new voters register and campaign gatherings by political parties in preparation for general presidential and parliamentary election in December, 2020. The government and the electoral commission have refused to listen to wisdom and not embark on the compilation of a new voters register and many political activists were seen largely ignoring social distancing and the wearing of masks during political rallies.

Plight of Migrants

The International Organisation for Migration (IOM) has warned that COVID-19 restrictions are impacting mobility, including disrupting circular mobility and trade at cross-border markets such as those in Aflao, Elubo and Sampa. An estimated 21,000 migrants are stranded at various borders in the West and Central Africa region as well as an estimated 2,500 migrants, including Ghanaian citizens, are waiting in transit centres in countries such as Niger. While some are stranded, other migrants are attempting to enter and/or leave Ghana through irregular means, increasing their risk to personal risks and smuggling of migrants.

COVID-19 has raised concerns about the protection of vulnerable migrants in Ghana such as domestic labourers and female migrants, with increasing incidence of GBV globally, especially affecting women and girls. National protection systems need to remain functional while they also adapt to evolving protection concerns occasioned by the pandemic (IOM, 2020).

According to IOM (2020), anecdotal evidence shows that there has been a significant return of migrant workers to their places of origin – both internally and across borders - in response to the pandemic, which could have an unintended impact on communities in that these would lack the capacity to cope with the socioeconomic effects of these spontaneous returns and also lack the capacity to provide isolation/quarantine facilities, testing and treatment. Many migrants live in areas of high population density, such as Greater Accra, Greater Kumasi, Kasoa, and Tema. Highly congested areas are at risk of the rapid spread of the virus, thus putting pressure on the limited health infrastructure for testing and case management. In addition, migrants risk being stigmatized by misperceptions of being vectors of the disease, while simultaneously being excluded from infection prevention and control (IPC) sensitization due to language barriers or the use of inappropriate mediums to transfer the message.

10.2.2 Initial Government Response

The first two cases of COVID-19 were reported in Ghana on 12 March 2020 by the health ministry. As a first response, on 15 March all public gatherings were banned, all schools and universities were closed, and on 23 March all of the county's borders were closed. In the interest of public safety, a partial lockdown was introduced on 30 March in areas identified as "hotspots". This was lifted on 19 April.

The government set up an Inter-Ministerial Committee on Coronavirus Response chaired by President Nana Addo Dankwa Akufo-Addo. The key objectives of the committee were: limit and stop the importation of the virus; contain its spread; provide adequate care for the sick; limit the impact of the virus on social and economic life; and inspire the expansion of domestic capability and deepen self-reliance.

The committee swiftly announced some measures to contain the spread of COVID-19. Some of these measures include a travel advisory, which strongly discourages all travel to Ghana except for citizens and persons with residence permits. A mandatory 14-day self-quarantine and testing period for travelers entering Ghana was imposed.

In addition to suspension of all public gatherings and closure of all schools and universities, businesses and establishments—such as supermarkets or shopping malls that were allowed to operate—were advised to strictly observe enhanced hygiene procedures and social distancing.

Following an ongoing increase in the total number of cases, the committee imposed stricter measures, especially in Accra, Tema, Kasoa, and Kumasi, which were identified by the Ghana Health Service as 'hotspots'. A partial lockdown was therefore imposed on 30 March 2020 that restricted movement of persons in the Greater Accra Metropolitan Area (GAMA) and the Greater Kumasi Metropolitan Area and contiguous districts, for a period initially of two weeks but ultimately lasting until 19 April.

The lockdown was largely meant to facilitate the scaling up of effective contact tracing of persons who had come into contact with infected persons, test them for the virus, and, if necessary, quarantine and isolate them for treatment. In order to accelerate the scaling up of contact tracing capacity, the military and police were drafted in to assist health authorities. The policy of tracing and testing all contacts of people tested positive was also introduced. One thousand community health workers and an additional thousand volunteers were recruited and adequately resourced to work effectively.

Even though the lockdown was lifted, the suspension of all public and social gatherings was extended and remained in effect through May 2020. On 31 May, the government announced a phased easing on the restrictions to occur over the next month, including the permission of public gatherings with a maximum attendance of 100 persons with appropriate social distancing precautions beginning 5 June, and the re-opening of junior and senior high schools and universities starting 15 June. Large sporting events, political rallies, festivals, and religious events remain suspended until 31 July. Nightclubs, bars, beaches, and cinemas will also remain closed during that time. In addition, the general public was encouraged to wear face masks when going out, and the Regional Coordinating Councils mandated the use of face masks in public for the Greater Accra, Ashanti, and Central Regions. Ghana's international land, air and sea borders will remain closed to human traffic until further notice, with signs that this will be reopened in September.

In an attempt to ensure a more coordinated approach, the finance minister was tasked by the president to prepare and present to parliament a Coronavirus Alleviation Programme (CAP) to address the disruption in economic activities, the hardship of the people, and to rescue and revitalize industries. The CAP included the following measures:

- A minimum of GH¢1 billion was to be made available to households and businesses, particularly small and medium-scale enterprises (SMEs).

- In response to the Bank of Ghana's 1.5 percent decrease in the policy rate and 2 percent in reserve requirement respectively, it is expected that commercial banks will provide a GH¢3 billion to support industry—particularly in the following sectors: pharmaceutical, hospitality, service, and manufacturing.

- Additional reliefs to be provided by the government include:

    - extension of the tax filing date from April to June;

    - a 2 percent reduction of interest rates by banks, effective 1 April 2020;

    - the granting by the banks of a six-month moratorium of principal repayments to entities in the airline and hospitality industries, i.e. hotels, restaurants, car rentals, food vendors, taxis, and uber operators;

    - mobile money users can send up to GH¢100 for free; and

    - a 100–300 percent increase in daily transaction limits for mobile money transactions.

- The establishment of a COVID-19 fund, to be managed by an independent board of trustees and to receive contributions and donations from the public, to assist in the welfare of the needy and the vulnerable.

- The ministries of gender, children and social protection, and local government and rural development, and the National Disaster Management Organization (NADMO), working with Metropolitan, Municipal and District Chief Executives (MMDCEs) and faith-based organizations at the district and local level, will provide food (dry food packages and hot meals) for up to 400,000 individuals and homes in the affected areas of the restrictions.

By way of initial social intervention, the Ghana Water Company Ltd and the Electricity Company of Ghana were directed to ensure a stable supply of water and electricity during the lockdown period. In addition, there was to be no disconnection of supply. Government absorbed the water bills for all Ghanaians for the three months of April, May, and June and this was later extended to the end of the year. All water tankers, publicly and privately owned, were to be mobilised to ensure the supply of water to all vulnerable communities. Government was also to fully absorb electricity bills for the poorest of the poor, defined as lifeline consumers who consume zero to 50 kilowatt hours a month for this period. For all other consumers, residential and commercial, the government was also to absorb 50 percent of electricity bill for this period. This was being done to support industry, enterprises, and the service sector in these difficult times, and to provide some relief to households for lost income. Government also attempted the distribution of food to distressed street people in Accra but this was largely not successful.

The partial lockdown was lifted on April 23 following aggressive contact tracing, expansion of treatment and isolation centers, enhanced testing capacity, better understanding of the virus contagion dynamics, increased capacity to produce sanitizers and medicines, and severe impact of the lockdown on the most vulnerable. Stage one of the process of easing restrictions began on June 5. Religious services for fewer than 100 congregants are allowed, provided social distancing restrictions are met. Starting June 15, schools and universities re-opened to allow final year junior high, senior high and university students to resume classes ahead of exams, again with smaller class sizes and other social distancing restrictions in place. Ghana's border, by air, land and sea, remains closed until further notice for human traffic.

In May the government announced reopening dates for tertiary and basic schools. While basic schools (forms one and two would resume in October 2020, all others including kindergarten, primary schools reopened in January 2021.

7,791 health facilities and 18 intensive care units (ICUs) were used to respond to COVID-19. In late April, the government announced that three new infection centres were being built at Ho, Navrongo and Tamale. In April 5, the president announced the following four health incentives for health workers:

1. Exemption from the payment of tax on their employment emoluments for a three-month period starting April 2020. (This was extended for another three months by the president in his 13th address.)
2. A daily allowance of 150 Ghanaian cedis (approximately $26) for workers doing contact tracing.
3. An additional allowance of 50 percent of monthly basic salary for front-line health workers for four months starting March. The allowance has since been extended by three months.
4. An insurance package, with an assured sum of 350,000 cedis (approximately $60,345). It was increased to 10 million cedis on July 23.

As at 30 April: The initial COVID-19 Preparedness and Response Plan was set at USD 6.5 million, but this was revised to USD 100 million (from 0.01% to 0.2% of GDP). Ghana has also announced a USD 166 million Coronavirus Alleviation Program (CAP) to support the economy. Total financing requirement is USD 266 million (0.4% of GDP) (IMF, 2020).

10.2.3 Economic Mitigating Measures

Generally maintaining business cash-flow has been a core goal of the fiscal policy measures that have been introduced, supported by monetary and financial policies. Measures have included extending deadlines for tax filing, the deferral of tax payments, the provision of faster tax refunds, more generous loss offset provisions, and some tax exemptions, including from social security contributions, payroll taxes or property taxes.

COVID-19: expected financing requirement

30 April: The initial COVID-19 Preparedness and Response Plan was set at USD 6.5 million, but this was revised to USD 100 million (from 0.01% to 0.2% of GDP). The authorities have also announced a USD 166 million Coronavirus Alleviation Program (CAP) to support the economy. Total financing requirement is USD 266 million (0.4% of GDP).

Domestic and external financing

On 2 April, the World Bank agreed to provide USD 100 million (roughly 0.15% of GDP) to Ghana to assist the country in tackling the COVID-19 pandemic, available to the government and the people of Ghana as short, medium and long-term support. This financing package includes USD 35 million in emergency support to help the country provide improved response systems. Other measures were as follows:

1. On 13 April, the IMF approved the disbursement of SDR 738 million (about USD 1 billion- approximately 1.5% of GDP) to be drawn under the Rapid Credit Facility. This will be direct budget support.
2. 15 April: The President has established a COVID-19 Fund, to be managed by an independent board of trustees, chaired by a former Chief Justice to receive contributions and donations from the public to support the welfare of the needy and the vulnerable. The fund's mandate extends to all activities that complement the efforts of the government to combat the pandemic.
3. 16 April: The government has agreed with investors to postpone interest payment on non-marketable domestic bonds held by public institutions to fund the financial sector clean-up for about GHc 1.2 billion (USD 204 million, or 0.3% of GDP).
4. 7 May: In order to reduce financing needs, the government will draw USD 218 million (0.33% of GDP) from the stabilization fund.
5. 15 May: In Ghana, the French National Research Institute for Sustainable Development (IRD), funded by AFD will fund a 2-year research-action on the pandemic, as part of the Ghanaian government's response.
6. 16 May: Under the bank's emergency financing provisions, which permits it to increase the limit of purchases of government securities, BOG said it had purchased the government's

COVID-19 relief bond with a face value of 5.5 billion cedi (USD 935 million, or 1.4% of GDP) at the monetary policy rate with a 10-year tenor and a 2-year moratorium of principal and interest. 26 June: The state will borrow up to GHc 10 billion (USD 1.7 billion or 2.6% of GDP) from the Bank of Ghana.

7. 9 September: African Development Bank Group supports Ghana's COVID-19 response plan with a USD 69 million (0.1% of GDP) grant.

Monetary and Macro financial Measures

The Monetary Policy Committee (MPC) cut the policy rate cut by 150 basis points to 14.5% on March 18, and announced several measures to mitigate the impact of the pandemic shock, including lowering the primary reserve requirement from 10 to 8 %, lowering the capital conservation buffer from 3 to 1.5 %, revising provisioning and classification rules for specific loan categories, and steps to facilitate and lower the cost of mobile payments. The committee also signaled it would continue to monitor the economic impact of COVID-19 and hold emergency meetings if necessary.

Beginning on Friday, March 20, 2020, all mobile money transfers of GH¢100 (USD 17,28) and below will be free of charge from service providers for the next 3 months.

On 15 May, the Monetary Policy Committee of the Bank of Ghana decided to keep the policy rate unchanged, given its decrease in March by 150 basis points. 2

5 June: The MPC provided relief measures for small depository institutions and a GHc 5.7 billion (USD 1 billion or roughly 1.4% of GDP) repo rate agreement with the United States Federal Reserve under the FIMA facility.

It will be interesting to compare the above summary finding from the PERC survey to the one to be undertaken here and see congruence and divergence. Key questions in the upcoming survey will be aligned as far as possible, with the above survey.

10.3 Mitigating Measures For Businesses

Partly as a result of COVID-19, Businesses are increasingly exposed to solvency risks in addition to liquidity risks as the crisis continues and the government had to intervene appropriately. In May the Government waived VAT on the donation of stock of equipment and goods for fighting the COVID-19 pandemic and in June, tax payers were permitted to deduct donations and contributions towards COVID-19 as an allowable expense for tax purposes. Companies and trusts had six (instead of four) months after the end of their financial year to file their income tax returns. Therefore, companies with year-ends up to end-December 2019 had until end-June 2020 to file their returns. Companies with 2020 year-ends up to end-June 2020 are required to now submit their returns by end- December 2020.

In September the government used GHc 10.6 billion (USD 1,8 billion or 2.8% of GDP) under the Coronavirus Alleviation Programme to support selected industries (e.g., pharmaceutical sector supplying COVID-19 drugs and equipment), support SMEs, finance guarantees and first-loss instruments, build or upgrade 100 district and regional hospitals, and address availability of test kits, pharmaceuticals, equipment, and bed capacity.

Financing social assistance and food relief

In March, the government, through the Ministries of Finance and Gender, Children and Social Protection, embarked on a food distribution drive to ensure that needy people in areas under the restriction of movement directive lived in comfort. In March, Ghana extended health insurance to all health workers and in April the government implemented a waiver of personal income taxes for all health workers (241 million cedis), allowance for 50% basic salary for all frontline health workers for 4 months, transport of health workers in Accra, Tema, Kumasi and Kasoa and covered water and sanitation bills of GHS 200 million.

In April Food packages and hot meals for at least one million people, procurement of food from Ghana National Buffer Stock Company to support the exercise, Government made payment of 3-months water bill for all Ghanaians, later extended to end of the year, and provided water through water tankers.

In May the government announced hotlines for the needy communities and households to reach them for their food items during the COVID-19 lockdown This provided food for 400, 000 individuals and homes in the affected areas of restrictions. Total cost is 280 million cedis.

Also In May, taxpayers who pay their outstanding debts due to the GRA by 30 June 2020 were granted a remission of penalties on the principal debts. Taxes on selected third-tier pension withdrawals were waived. Incentives for frontline health workers: Exemption from the payment of tax on their employment emoluments for a three-month period commencing from April 2020. A daily allowance of GHS 150 (approx.USD 26) payable to those undertaking contact tracing. Insurance package, with an assured sum of GHS350,000 (approx. USD60,345). To enable everyone to wash their hands frequently, The government will absorb the water bill of every resident individual for a three-month period commencing April 2020.

In June, the government implemented a scheme whereby a tax waiver was available to employees who have lost their permanent employment due to COVID-19 and to self-employed individuals who have lost capital due to the pandemic.

Policies to support firms include providing grants and wage subsidies to firms to minimize layoffs and supporting micro and small enterprises through measures such as tax exemptions, delays, or waivers targeted to small firms, soft loans, and grants.

Active labour market programmes to facilitate the transition of workers who have lost jobs that are not coming back into training or new jobs. Facilitate entry in “contactless” service economy among the self-employed and those displaced from micro, small, and medium enterprises–through measures like temporary subsidies for internet services through mobile phones, increased access to (subsidized) credit with asset collateralization, and/or subsidized leasing arrangements to facilitate purchase of small productive assets.

Government, in collaboration with the National Board for Small Scale Industries (NBSSI), Business & Trade Associations and selected Commercial and Rural Banks, was to roll out a soft loan scheme up to a total of GH¢600 million, which was to have a one-year moratorium and two-year repayment period for micro, small, and medium-scale businesses.

In September 2020, the government launched a COVID-19 resilience programme to support about 25,000 micro small medium enterprises (MSMEs) These businesses were to receive financial assistance to support their businesses The programme, dubbed: 'The Nkosuo Support' the programme is a collaboration between the National Board for Small Scale Industries (NBSSI) and the MasterCard Foundation, and it aims to strengthen businesses in the MSME sector that is adversely affected by the COVID-19 pandemic. In all about 90 million Ghana cedis will be disbursed in grants and loans to MSMEs in agriculture and agro-businesses, water and sanitation, healthcare and pharmaceuticals, trade and commerce, garment and personal protective equipment, the creative arts industry, manufacturing, food and beverage among others(Ekuful, 2020). Before this launch, the government had already provided 750 million Ghana cedis to be disbursed for businesses under the Coronavirus Alleviation Programme Business Support Scheme (CAPBuSS).

Earlier in May, The National Board for Small Scale Industries (NBSSI) received close to 5,000 applications days after the government launched the GH¢1 billion COVID-19 Alleviation Programme (CAP) business support scheme to cushion businesses negatively impacted by the coronavirus (COVID-19) pandemic. Jointly funded by the government and some commercial banks in the country, the scheme which is being managed by the National Board for Small Scale Industries (NBSSI) is expected to help micro, small and medium enterprises (MSMEs) back onto their feet. The scheme, which has been grouped into two, namely Adom and Anidaso, will make available funds to smaller enterprises and larger companies respectively.

A release from the Ghana Investment Promotion Centre (GIPC) said the government had instituted a GHC1.2 billion stimulus package for 180,000 businesses to boast their operations under the Coronavirus Alleviation Business Support Programme to support Micro, Small and Medium Enterprises (MSMEs) affected by the COVID-19 pandemic. The amount is expected to support businesses in areas such as agriculture and agribusiness, manufacturing, tourism and hospitality, education, food and beverages, technology, transportation, commerce, healthcare and pharmaceuticals, and textile and garments. The business support programme is expected to help minimize job losses in the wake of the outbreak of the COVID-19 pandemic. The GIPC said further that out of GH¢1.2 billion earmarked for the programme, GH¢600 will be disbursed as soft loans to MSMEs with one-year moratorium and two years repayment at an interest rate of 3 percent per-annum and selected participating banks will provide negotiated counterpart funding to the tune of GH¢ 400 million. The scheme is expected to reach 180,000 beneficiaries across the country.

The GIPC said further that the COVID-19 pandemic has shown that Ghana has the capacity to produce most of the goods and services that would otherwise have been imported. This ties in with government's agenda to accelerate industrialization and local production to spur job creation and improve livelihoods. It is crucial that businesses are positioned to take advantage of the new opportunities that have arisen from the crisis.

10.4 Survey Respondents' views On Government Handling of COVID-19

An online quantitative questionnaire was administered to collect views on the impact of COVID-19 and government handling of the pandemic and below is a summary of the key issues while the detailed summary is attached as appendix 1.

Government initial response: On whether Government response to COVID-19 was timely including Lockdown and relaxation based on science and not partisan politics, 40% of the respondents said that even though government recognised the danger early enough, it did not take immediate measures like closing borders and airports on time, 20% said the measure were relaxed too early for political activities seek, with 30% holding that government took the right measures at the right time and relaxed them based on scientific evidence and not based on partisan politics to protect citizens and the economy.

On the effectiveness of government fiscal and monetary policies in response to the pandemic, only 10% said Government fiscal and monetary policy interventions were timely and effective in cushioning affected businesses and households, while most respondents (70%) said both fiscal and monetary policy interventions were not enough to protect and balance lives and economy and a further 10% said Government monetary policy interventions were effective but not fiscal policies.

In the case of whether the Government's public health and social measures were underpinned by effective and comprehensive COVID-19 communications strategy including periodic presidential and daily briefings and public education messaging to build public support for lockdown and social distancing, while half (50%) said yes, a third (30%) said there was no monitoring for feedback and to improve, with 10% holding that there was no comprehensive communication strategy.

For the level of public support and adherence to PHSMs, while 30% said there was widespread support for government PHMs and this was continuously monitored for continued public support, adherence, and overall trust and confidence in the government response, another 30% said this support is declining and another 10% said there is no support.

On whether government consulted and built a cross-partisan political support for its PHSMs and monetary/fiscal policies, most (60%) said there was no cross-party support and its operations were not transparent and accountable to citizens while 20% said government built a cross-party response and made finances available for combating the COVID-19 without waiting for outside help and its operations were transparent and accountable to citizens.

On the issue of whether government was conscious of the underlying economic conditions of the economy, especially in its borrowing and debt sustainability, 40% said Government is only focused on borrowing while 30% Government is mindful of its underlying economic conditions and not worsening country debt stock by extensively borrowing under the cover of COVID-19 instead of seeking for debt cancelation working with AU, with 20% saying government is seeking debt relief.

Natural resource impacts: In the specific case of the natural resources sector, while 30% said Production is increasing for only gold but the rest are declining, another 30% said Production is declining even with gold prices increasing and only 10% said Production for all extractives have collapsed and not sure when these will resume. On the COVID-19 impacts on employment and wages in the extractives sector, while 40% said there were both temporary and permanent business closures with the more permanent closures and Employment and wages are falling as there are mass layoffs and most workers' wages frozen and or falling, 20% said there were both temporary and permanent business closures and workers remaining has wages reduced, surprisingly another 40% held that there were no business closures and Employment and wages improvising with increasing prices of especially gold. Regarding the conduct of mining companies in the face of COVID-19 impacts and existing and new mining rights assignments, 30% said Government is not under pressure to revise contracts and agreements and new rights assignment of mining rights are open and transparent and existing contracts contain enough stabilisers to weather COVID-19 while another 30% think otherwise in the sense that the Government is reviewing contracts to favour mining companies and new rights assignments are done by secret negotiations with watered down fiscal, environmental and social terms.

On the ability of companies to pay their taxes and other obligations, 20% said Companies are paying their due taxes timely while 40% said Government is not under undue pressure to lower taxes and other standards to favour mining companies but 20% said Government is under pressure to lower taxes and provide other incentives including lowering environmental and social standards to favour mining companies. 10% hold that, the Government is under pressure to lower taxes but not other standards to favour mining companies and yet another 10% said the Government is under pressure to bail out mining companies.

In the case of impacted on illicit financial flows-IFFs situation, while 30% said Companies are not taking advantage of COVID-19 to reduce tax liabilities through cost escalation and rolling back gains made in local content, participation and building economic linkages between extractives and the national economy with IFF implications, 10% think the opposite is happening and further 60% said companies are either resorting to their traditional supply hubs and chains only partially with IFF implications, or Companies are taking advantage of COVID-19 to reduce tax liabilities through cost escalation and rolling back gains made in local content, participation and building economic linkages between extractives and the national economy and resorting to their traditional supply hubs/chains exclusively with IFF implications.

Communities/larger societal impacts: Talking about those most affected negatively by COVID-19, half (50) said Hospitality, entertainment, Tourism and travel, 20% said Farmers and small-scale producers and Informal sector operators and another 20% said Food and agribusinesses while 10% said international trade and financial flows.

In the case of the government expenditure priorities, especially on the vulnerable and productive sectors to adequately protect both economy and society, an overwhelming 80% said providing Health, essential services and social welfare and supporting small businesses and vulnerable households. On opportunities COVID-19 offered for building linkages between natural resources sector and the rest of economy and regional integration, 30% said Government is leveraging COVID-19 to explore all economic linkages between extractives and national economy as working with ECOWAS and AU to take advantage of gold for test kits production and other pharmaceutical opportunities, with 40% holding Government is supporting the pharmaceutical industry to manufacture PPEs locally to harvest benefits for jobs but 30% said Government is not thinking about these as it is focused on COVID-19 . In the case of the COVID-19 impacts on community rights in mining areas, half (50%) said they were either not sure or that there was not much discussion on community rights in the pandemic period and so mining companies are producing in peace.

On the COVID-19 impacts on workers' rights in mining and oil companies, there were mixed views. While 10% said their condition improved, 20% said it remains the same and another 20% said it is worsening while a further 20% said companies are taking advantage of the situation to practice poor working conditions and or abuse human rights. In the case of how PHMs affected the access of the vulnerable to livelihoods sources, markets and food, 50% said Government PHMs are not unduly disrupting livelihoods and access to markets but there is only erratic monitoring of household economic burdens and food security to ensure easing of difficulty in accessing food due to high food prices and income losses while the rest were mixed views: 20% said PHSMs are not unduly disrupting livelihoods and access to markets and there is continuous monitoring of household economic burdens, 10% said there is no continuous monitoring of household economic burdens, another 10% said the continuous monitoring of household economic burdens and food security are not fed back into system and yet another 10% said Livelihoods are disrupted and there is no access to markets and food due to a combination of high food prices and loss of incomes. On whether COVID-19 has worsened or improved existing and possibly new waves of inequality in the country, while 10% said Government response was such there was minimal loss of employment and production and did not worsen existing inequalities or trigger new ones, 40% said it might have worsened existing inequalities or trigger new ones while another 40% held that Government had no strategy for its response in terms of dealing with existing inequalities or new ones and yet 10% said that there were a lot of loss of employment and production and worsened existing inequalities or trigger new ones.

11.0 RECOMMENDATIONS

Rebooting the National Economy

COVID-19 has given countries the opportunity to reboot their economies to a more green and equitable ones and Ghana is no exception. To build up the war chest to help countries weather the storm, the IMF (2020) recommends, over the medium term, many countries will have to increase their revenue—including through greater tax compliance, progressive taxes for individuals as well as companies that have made windfall profits during the crisis, and by reducing poorly targeted and wasteful spending. The Fund also says that, to ensure that developing countries can finance critical spending, concessional credit must be made available for a prolonged period. The global financial safety net should be strengthened—and in some cases, global coordination will be required to re-profile or restructure debt.

Fiscal and Monetary Policy Tools:

Fiscal policy should lead the green equitable recovery starting with plugging all loopholes in the tax system. Ghana currently collects only 12-13% of its GDP in taxes and this figure compares unfavourably with an average of over 25% for middle-income countries and the performance of key African peers such as Rwanda (15%), Cote d'Ivoire (18%), Kenya (18%), South Africa (28%) and Seychelles (32%) (Kwakye, 2020).

Potential basket of fiscal policy tools should COVID-19 worsen beyond 2021: (i) delay or cancellation of specific taxes or contributions(e.g., VAT, sales taxes, fuel-taxes, payroll taxes) for a given time period; (ii) tax cuts and subsidies for basic commodities affected by price increases(e.g., food, fuel), the effectiveness of which is likely to be lower in countries with high levels of informal employment and illegal electricity connections; (iii) universal (or quasi-universal) transfers, which are simpler to administer but may be unaffordable for many LICs and MICs that are already in fiscal stress.

Natural Resource Taxation:

> "For decades, our minerals have been mined by foreign companies that have been offered generous concessions, including disproportionate shares of the minerals, liberal tax rates and export retention rights. The result of these lavish concessions has been the impoverishment of our economy and mining communities. When we discovered oil in 2007 and started commercial production in 2010, it was thought that we would learn from the mistakes of the defective mineral fiscal regimes. Unfortunately, we have been repeating the same folly of signing concession contracts whereby investors are given ownership of oil blocks while Ghana barely benefits from meagre royalties, taxes and carried and participatory interest. Since the onset of oil production, Ghana's share of the total output is estimated at about 15% and valued around U$5 billion. This means that foreign oil companies have pocketed 85% or nearly US$30 billion of the total proceeds" (Kwakye, 2020:7).

Given that natural resources are finite and prices are too volatile for meaningful planning, we need to tax them optimally to fund the building of alternative economies and to help move away from economic activities subjected to diminishing returns into those subject to increasing returns like manufacturing (Reinert, 2011).

Monetary Policy:

The Bank of Ghana (BOG) must resume its developmental role in supporting government efforts by providing direct support to the economy, including through financing of development projects, creating a regime of low-interest rates and directing lending to strategic sectors like agriculture and industry, especially manufacturing.

Tackling Illicit Financial Flows:

IFFs should be tackled seriously and real time monitoring and collection of under-invoicing and over invoicing stopped in our import and export trade. Ghana is losing, on the average, two billion dollars annually to IFFs and this is enough to restart the economy (Pak, 2014). Ghana must also acquire the capacity to conduct periodic risks assessment of not just import and export but also investments, banking and finance.

Even though Ghana and other African countries appear to be particularly ill-equipped to deal with the impending onslaught of COVID-19 , however, with smart decision-making, they can both supply the gold required for test production and, in the process, produce their own testing kits. This will enable context-specific and appropriate public health responses at the same time as earning foreign exchange revenue to compensate for the revenue lost as a result of falling commodity prices and the lockdowns.

Governance Reforms Opportunity

There is also a governance reform opportunity. Given that natural resource-rich countries turn to have poor development outcomes as revenues largely accrue to power elites who are reluctant to reform the system to expand and extend the tax base, this crisis calls for a more pro-people, pro-development political settlement. This will help restore one of the important variables, transparency, accountability and responsiveness of state and government, in an improved state-citizen relations chain (Good Governance Africa, 2020). This helps in no small measure to achieve the African Union mining vision.

Ghana and other African countries that have been overly natural resource-dependent (especially on oil) have an opportunity to implement governance reforms towards greater protection of property rights and the formation of a broad tax base that will reduce reliance on oil and mineral rents;

Mining companies should employ the lessons learned across the continent in addressing other major infectious diseases such as HIV and AIDS, TB and Ebola and continue to be at the forefront of providing resources where possible to complement governments' responses;

As part of the governance reforms, Ghana should consider moving beyond reliance on "Staples" production (oil, gold, timber, cocoa) and design and implement a 'Staples-plus development strategy that uses natural resources as a catalyst for green and equitable development. All existing contracts and agreements must be recalibrated towards this agenda and those firms not able or willing to fit into this new scheme should have their licenses/agreements revoked/cancelled.

Diversification of Both Trade and Trade partners:

Ghana and other African countries over-reliance on China for exports of primary commodities needs to be re-examined given that even before the COVID-19 pandemic, trade between Africa and China was already down from 20% growth to 2.2% and COVID-19 will worsen this situation.

Compensating For the Loss of Labour And Non-Labour Income:

With the following objectives for the poor and the vulnerable: (i) improve food security, nutrition, and ability to procure other necessities;(ii) prevent over-indebtedness and protect productive assets; and (iii) support employability and the relocation of workers across sectors;

In the immediate-to-short term: Expansion in shock-responsive safety net programmes to provide more or larger fast-disbursing cash transfers to existing beneficiaries, who are usually the poorest in society. Increase in coverage of existing safety net programs to new beneficiaries based on geography (e.g. the areas with the highest levels of community transmission and/or economic disruptions),or sector of employment, or focusing on at-risk categories(e.g. families with young children, pre-existing health conditions, and elderly family members) may also include non-poor, low-income households with migrant workers (like the kayaya)who are likely to suffer a negative income shock as a result of the decline in daily earnings and remittances. Portability of safety net programme benefits, to ensure predictability of coverage as urban migrants will be likely to return to rural areas.

- Suspension of group activities and conditionalities to reduce the risk of contagion for all safety net programmes.
- Targeted one-off payments to specific vulnerable groups of workers (e.g. those in the tourism sector).

In the short to medium term:

- Temporary bans on eviction and/or temporary moratoria in the payment of (public) utility bills could provide some relief for the households.
- Waivers for financial fees for domestic and international remittances.
- Public work programmes could be effective in providing employment opportunities for the poor and the vulnerable in both rural and urban areas. But activities must be such that they can be performed with social distancing or adopted only in the post-pandemic economic recovery phase in a country. Alternatively, public work programmes can be temporarily transformed into cash transfer programmes to avoid social gathering.

Mitigating The Direct Effects

There is the need to deal with actual and potential direct impacts on consumption due to higher food prices, potential food shortages, and unexpected medical costs. Continuing the provision of targeted meal programmes even if food distribution mechanisms (e.g. use of packaged/dried food) need to be modified to account for the risk of contagion to mitigating the impact of unexpected medical costs through, for instance, waivers of Public procurement and distribution of basic food items. This could be done in combination with private sector/CSO actors.

Mitigating the Effects of Widespread Disruptions to Public Service Delivery

Scaling up public health diagnostics and care capabilities in underserved areas

Measures to compensate for the loss of months of learning at school: e.g. expansion of distance education; training for teachers in distance education; equipment and connections for children without access to ICT; providing additional schooling during the summer of 2020. As part of efforts to compensate for school closures, the Ministry of Education (MoE) and the Ghana Education Service (GES) were quick to put in place measures aimed at ensuring opportunities for continuous learning even with schools closed. A COVID-19 Emergency Support Provision of Distance and Remote Learning Systems Solutions, which was followed by the launch of distance and online learning platforms and the rolling out of lessons broadcast on Ghana Learning Television (GLTV) for 1 million senior high school (SHS) students. Digital content developed for 8.2 million kindergarten (KG) through junior high school (JHS) students for TV, radio, and online learning is being launched from the third term (UNICEF,2020). These measures have however raised serious concerns about equity in access to education for many households.

As noted by UNICEF-Ghana, many students and their families do not have access to the internet. The Multiple Indicator Cluster Survey (MICS) 2017/18 indicates that only 22% of households in the country have access to the internet at home and only 15% have access to a computer. In comparison, TV coverage (60.4%) and radio coverage (57.2%) are much higher across the country, with radio coverage more widespread in those regions with higher levels of economic deprivation. In this context, internet and TV-based learning serve to accentuate inequalities in access to quality education between the rich and poor and urban and rural students based on their ability to access the internet and TV platforms (UNICEF, 2020).

Natural Resource Extraction And Industrial Policy In The Face Of COVID-19 And After

> "A continent of 1.2 billion people should not have to import 99% of its vaccines. But that is the tragic reality for Africa. Fixing the lack of home-grown manufacturing capacity has become a top priority for Africa's policymakers "(Africa Focus, 2021).

As the above quote reveals, there is the urgent need to build back, expand and improve African manufacturing capacity. According to the Nature magazine editorial, April 21, 2021, Last week, 40,000 people, including researchers, business leaders and members of civil-society groups, joined heads of state for a two-day online summit designed to share the latest developments and kick-start fresh thinking on how to bring vaccine manufacturing to Africa (AfricanFocus, 2021). It is hoped these kinds of initiatives can help reduce the inequality gap between Africa and the rest of the world when it comes to access to medicines

Over-reliance on Chinese demand for African raw materials has exposed vulnerabilities in the structures of a number of African economies. COVID-19 has exacerbated these vulnerabilities and at the same time presents an opportunity for structural transformation. Countries with abundant resources to fuel global energy and transport revolutions (such as gold, chrome, manganese, copper, cobalt and lithium) should embrace the opportunity for governance reform now to reduce dependence on hydrocarbons and develop global markets for other materials, preferably with some level of value-addition prior to export.

COVID-19 offers an unexpected opportunity for scholars and policy makers to re-consider industrial policy in developing countries. As countries run out of personal protective supplies, hand sanitisers, testing kits, and ventilators, which in some cases have been pirated by the United States, we must take these lessons seriously. Countries that have applied some form of import substitution have fared better to ramp up testing and meet their population's healthcare needs. Senegal for instance, has produced its own diagnostic tests. South Africa and Kenya are also dabbling in manufacturing of ventilators and hand sanitizers. Open-source options for ventilators can currently be easily replicated in Latin America and African countries and then 3-D printed. Industrial policy is central to the role of the state in the economy, but we need to imagine it as critical beyond the present circumstances.

After the crisis, one wonders what will happen next. These capabilities need to be preserved so that countries are not caught out during the next public health emergency, especially as owners of capital may wish to enforce their 'property rights' in the future. Despite these supposed low-hanging fruit and short-term gains in production of required supplies in some developing countries, the fact remains that countries like China and Germany with strong manufacturing sectors are doing better. Many have noted that things cannot return to 'business as usual', and the same is true for industrial policy. In recent times, economists sadly do not have clear, suitable guidance for countries starting from a low manufacturing base or those countries hoping to transition into manufacturing, especially as they face an even harsher global economic environment. As noted by Kwakye (2020), a member of Bank of Ghana Policy Committee and former staff of the IMF, we need to leverage our natural resources to support industrialisation and post-Covid recovery.

As Perry (2019) has noted, we need to critically review the dominant approaches to the economics of innovation in contemporary developing societies, namely new institutional economics (NIE) and

National Innovation Systems (NIS). These approaches attempt to explain capitalist development in late-industrializing countries using underlying assumptions and logics of advanced industrialised societies with respect to transaction costs, path dependence, the nature and structure of institutions and economic history (Perry, 2019). NIE has become an essential analytical toolkit of mainstream economists and international organisations promoting competitiveness in developing countries. Analyses of the economic performance of developing countries have thus diverged from structural perspectives on development, attributing instead lacklustre technological deepening to certain national features, institutional gaps or linkage failures (Perry, 2019). These approaches do not take into consideration power asymmetries, historical factors and constraining forces in the global capitalist system generate unevenness in productive forces and technological progress. We need an approach that explicitly takes on board the structural, technical and socio-political interdependencies and tensions that underpin transformative policies to improve technological, coordination and collective capabilities in the economic system in Ghana and other developing countries. This, however, needs to go beyond the FDI-oriented industries that provide short-term success and more importantly consider long-term perspectives like pro-active strategies to transfer technology from foreign firms to the domestic economy and the creation of backward linkages from foreign to domestic firms (Hague, 2019).

An objective criterion for possible bail-out in the form of investment, co-investment, tax postponement, tax cancellations is required before companies take advantage of Ghana.

Build a more resilient supply chain

Before COVID-19 disruptions of mining and petroleum supply chains, both government regulators and companies did not need to understand the complexities across their supply chains (and usually lacked the data, contingency plans and crisis incident management to do so), but the impact of COVID-19 highlights the shortcomings. Navigating this and being ready for future events demands that government and mining and metals companies take steps now to mitigate disruption and develop a deeper understanding of supply chain risks:

Government could work with companies to build more resilient supply chain including:

Conduct an end-to-end supply chain risk assessment to develop a calculated risks index. The assessment should include demand and supply risks, operational performance, global trade implications and the impact on customers and the workforce.

- localizations of some of the items;
- Cloud-based networked ecosystems will create supply chains where disruptive events are visible to all stakeholders in real time and acted on simultaneously, with capacity building for local suppliers to participate effectively;
- 3D and additive printing may gain more traction to manufacture essential components on-site, with capacity building for local suppliers to participate effectively.

Protection of mine workers jobs and livelihoods and security

Workers in mining and petroleum do not have the same status as this depends on the phase of the operation and the skill sets required. Some mine workers are considered "essential staff" because they perform tasks necessary for the functioning of operations. These workers maintain their jobs and salaries. Others who are able to work remotely retain their activities and salaries. Workers who do not fall under the two categories above are temporarily demobilized and are therefore more vulnerable to income cuts if there are no agreements and safeguards in place, with the situation being more complex for informal or cross-border migrant workers. Layoffs imply the loss of any means of subsistence, and workers who are already ill-equipped to face hardships, especially in the absence of social safety nets and legal protection for their rights. Local and regional authorities and their communities must prepare to receive and deal with such workers as they could be a social and security problem given that these are used to a high lifestyle and suddenly have to adjust to reduced incomes and conditions. Other recommendations include:

- Radically change the "Politics of Development and Governance through the adoption and operationalisation of democratic Developmentalism
- consider reconstructing Elite consensus on taxation beginning with reducing/eliminating tax exemptions, illicit flows and raising taxes on immovable property to fund industrialization.
- build and sustain national consensus on a broadly shared national vision and development strategy. Consolidate these into a formal "social Pact" between the ruling elite and citizens with an active citizen's voice and effective legislative and citizen's oversight.
- Domesticate and operationalise the AU AMV and adopt a continental integrated approach, starting with the Implementation of all the recommendations of the AU AMV and HLP recommendations on IFF
- Use the hydrocarbon and solid mineral endowments to catalyze the transformation and diversification of the national economy within the framework of AfCFTA
- Shift tax mix away from profit taxes (where developing countries like Ghana currently do not have the capacity to manage) toward less pricing-manipulating taxes like production-based taxes (e.g. royalties, which are easier to administer)
- Government should tax the "unearned increment" of rising land prices and use the funds to ameliorate the misery caused by poverty, inequality and pay cost of industrialization.

APPENDICES

Appendix 1-Online survey results of Ghana response to COVID-19 and impacts

COVID-19 Impact study Ghana report-May2021		
Issue	**Response**	**percentage**
Summary for Q1		
Was Government response to COVID-19 timely including Lock down and relaxation based on science and not partisan politics?		
Answer	Count	Percentage
1.Government recognised the danger on time and took the right measures at the right time, relaxed them based on scientific evidence and not based partisan politics to protect citizens and the economy (Q11)	3	30.00%
2.Government recognised the danger on time and took the right measures at the right time but relaxed them at the right time based on based partisan politics to protect citizens and the economy (Q12)	1	10.00%
3.Government recognized the danger early enough and took the right measures but relaxed them too early for political activities seek (Q13)	2	20.00%
4.government recognised the danger early enough but did not take immediate measures like closing borders and airports on time (Q14)	4	40.00%
5.government did not recognise the danger early enough and so did not respond appropriately (Q15)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for Q2		
What and how effective were government Fiscal and monetary policies in response to the pandemic?		
Answer	Count	Percentage

1.Government fiscal and monetary policy interventions were timely and effective in cushioning affected businesses and households (QA21)	1	10.00%
2.Government fiscal policy interventions were effective but not monetary policies (QA22)	1	10.00%
3.Government monetary policy interventions were effective but not fiscal policies (QA23)	1	10.00%
4.Both fiscal and monetary policy interventions were not enough to protect and balance lives and economy (QA24)	7	70.00%
5.Government fiscal and monetary policy interventions were not timely and neither wee they effective and balancing lives and economy (QA25)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QA3		
Did government build Regional and international solidarity to fight the COVID-19 ?		
Answer	Count	Percentage
1.Government is building international solidarity for combating COVID-19 together with ECOWAS, AU,EU, North America, World Bank, IMF and has received substantive resources (QA31)	3	30.00%
2.Government is building international solidarity for combating COVID-19 together with ECOWAS and AU (QA32)	2	20.00%
3.Government is building international solidarity for combating COVID-19 together with EU, North America, World Bank, IMF and has received substantive resources (QA33)	1	10.00%
4.Government is borrowing heavily to fight COVID-19 (QA34)	4	40.00%
5.Government is going it alone without outside assistance (QA35)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%

Summary for QB1		
Were government public health and social measures sensitive to local context so that the public will support them even beyond the initial phase-Testing and contact tracing capability and action?		
Answer	Count	Percentage
1.Government public and health measures like testing, contact tracing, lockdowns, quarantine and treatment were sensitive to the local context and sensitive to particularly those in the informal sector including daily laborers who depend on daily earnings without safety nets put in place effective testing and contact tracing and effective quarantine regime to minimize community infections (QB11)	3	30.00%
2.Government public and health measures like testing, contact tracing, lockdowns, quarantine and treatment were sensitive to the local context and sensitive to particularly those in the informal sector including daily laborers who depend on daily earnings without safety nets put in place effective testing and contact tracing and effective quarantine regime to minimize community infections (QB12)	2	20.00%
3.Government public and health measures like testing, contact tracing, lockdowns, quarantine and treatment were sensitive to the local context and sensitive to particularly those in the informal sector including daily laborers who depend on daily earnings without safety nets put in place effective testing and contact tracing and effective quarantine regime to minimize community infections (QB13)	1	10.00%
4.Government public and health measures like testing, contact tracing, lockdowns, quarantine and treatment were sensitive to the local context and sensitive to particularly those in the informal sector including daily laborers who depend on daily earnings without safety nets put in place effective testing and contact tracing and effective quarantine regime to minimize community infections (QB14)	2	20.00%
5.Government public health measures were not sensitive to local context and were thus not supported (QB15)	2	20.00%
Other	0	0.00%
No answer	0	0.00%

Not displayed	0	0.00%
Summary for QB2		
How effective were Government overall COVID-19 communication strategy to build and sustain support for balancing lives and livelihoods?		
Answer	Count	Percentage
1.Governemnt's public health and social measures were underpinned by effective and comprehensive COVID-19 communications strategy including periodic presidential and daily briefings and public education messaging to build public support for lockdown and social distancing (QB21)	5	50.00%
2.Government's public health and social measures were underpinned by effective and comprehensive COVID-19 communications strategy including periodic presidential and daily briefings and public education messaging but this was not monitored for feedback to build public support for lockdown and social distancing (QB22)	3	30.00%
3.Government's public health and social measures were not underpinned by any effective and comprehensive COVID-19 communications strategy even though there were periodic presidential and daily briefings and public education messaging to build public support for lockdown and social distancing (QB23)	1	10.00%
4.Government had periodic presidential and daily briefings but no comprehensive communication strategy (QB24)	1	10.00%
5.Government does not have any COVID-19 communications strategy (QB25)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QB3		
What was the level of public support and adherence to PHSMs?		
Answer	Count	Percentage
1.There is widespread support for government PHMs and this is continuously monitored for continued public support, adherence,	3	30.00%

and overall trust and confidence in the government response. (QB31)		
2.There is widespread support for government PHMs and this is continuously monitored for contined public support, adherence, but this is not used to ensure overall trust and confidence in the government response. (QB32)	1	10.00%
3.There is widespread support for government PHMs and this is continuously monitored for continued public support, adherence, but overall trust and confidence in the government response is declining. (QB33)	3	30.00%
4.There is widespread support for government PHMs but this is not continuously monitored for continued public support, adherence, and overall trust and confidence in the government response. (QB34)	2	20.00%
5.There is no widespread support for government PHMs and this is not continuously monitored for continued public support, adherence, and overall trust and confidence in the government response. (QB35)	1	10.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QB4		
Did citizens have a clear perception and understanding of the dangers of COVID-19?		
Answer	Count	Percentage
1.citizens have a clear perception of the risks associated with COVID-19 and have adequate information to protect themselves, families and businesses and have the incentive to support government PHMs (QB41)	2	20.00%
2.citizens have a clear perception of the risks associated with COVID-19 and have adequate information to protect themselves, families and businesses but do not have the incentive to support government PHMs (QB42)	5	50.00%
3.citizens do not have a clear perception of the risks associated with COVID-19 and do not have adequate information to protect	1	10.00%

themselves, families and businesses but have the incentive to support government PHMs (QB43)		
4.Citizens do not have enough information on COVID-19 and do not support government PHMs (QB44)	0	0.00%
5.citizens do not believe in COVID-19 and the risks associated and do not believe in government either (QB45)	2	20.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QC1		
What were the government Fiscal and monetary policies in response to the pandemic?		
Answer	Count	Percentage
1.Government built a cross-part response and made finances available for combating the COVID-19 without waiting for outside help and its operations were transparent and accountable to citizens (QC11)	2	20.00%
2.Government did not build a cross-party response but made substantive funds available to tackle the pandemic (QC12)	1	10.00%
3.Government did not build a cross-party response but made some funding available and was transparent and accountable in dealings to citizens; (QC13)	1	10.00%
4.Government did not build any cross-party response but made some limited funding available and there was no transparency and accountability in its dealings (QC14)	6	60.00%
5.Government did not make any finances available (QC15)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QC2		

Did government make adequate funds and other logistics available to health and emergency system to adequately deal with the pandemic?		
Answer	Count	Percentage
1.Government made adequate and timely resources available to the health, emergency and productive sectors for combating COVID-19 (QC21)	4	40.00%
2.Government made adequate and timely resources available to the health, emergency but not the productive sectors for combating COVID-19 (QC22)	1	10.00%
3.Government did not make adequate and timely resources available to the health, emergency and productive sectors for combating COVID-19 (QC23)	2	20.00%
4.Government did not make adequate and timely resources available to the health, emergency and productive sectors for combating COVID-19 and its response was erratic and not coordinated (QC24)	3	30.00%
5.Government did not make any money available for combating COVID-19 (QC25)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QC3		
What were the underlying economic conditions and borrowing and debt sustainability?		
Answer	Count	Percentage
1.Government is mindful of its underlying economic conditions and not worsening country debt stock by extensively borrowing under the cover of COVID-19 instead of seeking for debt cancelation working with AU (QC31)	3	30.00%
2.Government is mindful of its underlying economic conditions and not worsening country debt stock by extensively borrowing under the cover of COVID-19 but also seeking for debt cancelation working with AU (QC32)	2	20.00%

3.Government is mindful of its underlying economic conditions and not worsening country debt stock by extensively borrowing under the cover of COVID-19 but also seeking for debt cancelation but working alone (QC33)	0	0.00%
4.Government has no underlying economic conditions and not worsening country debt stock by extensively borrowing under the cover of COVID-19 and does not need debt cancelation (QC34)	0	0.00%
5.Government is only focused on borrowing (QC35)	4	40.00%
Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
Government is mindful of it economic condition and borrowing to address the effects of the pandemic on its economy by engaging other financial agencies whilst mindful of both positive and negative effects on the economy.		
Summary for QD1		
What has been the general COVID-19 Impacts on the natural resources sector-production levels in solid minerals, oil/gas, marine and forestry?		
Answer	Count	Percentage
1.Production is increasing for all resources, especially with gold prices increasing (QD11)	1	10.00%
2.Production is the same as before even with gold prices rising (QD12)	1	10.00%
3.Production is declining even with gold prices increasing (QD13)	3	30.00%
4.Production is increasing for only gold but the rest are declining (QD14)	3	30.00%
5.Production for all extractives have collapsed and not sure these will resume (QD15)	1	10.00%
6.Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%

unfortunately there isnt data to make an informed decision on this issue,however,the mining sector operated during the lockdown period .Coupled with the increase in gold prices the gold mining industry may see some growth.		
Summary for QD2		
How has COVID-19 impacts on employment and wages in the extractives sector?		
Answer	Count	Percentage
There were no business closures and Employment and wages improvising with increasing prices of especially gold (QD21)	4	40.00%
There were temporary business closures and Employment and wages at same levels before COVID-19 (QD22)	0	0.00%
There were many permanent closures and Employment and wages at falling as result of COVID-19 (QD23)	0	0.00%
There were both temporary and permanent business closures and workers remaining has wages reduced (QD24)	2	20.00%
There were both temporary and permanent business closures with the more permanent closures and Employment and wages are falling as there are mass layoffs and most workers wages frozen and or falling (QD25)	4	40.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QD3		
What has been the COVID-19 impacts on government revenues?		
Answer	Count	Percentage
1.Overall Government revenue increasing in spite of falling oil prices but with rising price of gold and national debt is at a sustainable level (QD31)	1	10.00%
2.Overall government revenue remaining the same even with increasing prices of gold and falling oil prices and debt levels sustainable (QD32)	1	10.00%

3.Overall government revenues falling with slight debt unsustainability problem (QD33)	1	10.00%
4. Overall government revenues falling with debt unsustainable but not yet at distress levels (QD34)	2	20.00%
5.Overall government revenue falling in spite of rising gold prices and there is debt distress (QD35)	3	30.00%
Other	2	20.00%
No answer	0	0.00%
Not displayed	0	0.00%
Do not have data from the requisite government body to make informed decision on this issue		
12	Not sure	
Summary for QD4		
How has COVID-19 impacts on existing and new mining rights assignments?		
Answer	Count	Percentage
1.Government is not under pressure to revise contracts and agreements and new rights assignment of mining rights are open and transparent and existing contracts contain enough stabilisers to weather COVID-19 (QD41)	3	30.00%
2.Governemnt is not under pressure to review contracts and new rights assignments are done through open auctions (QD42)	2	20.00%
3.Government is under pressure to review contracts but no new rights assignments are being done (QD43)	0	0.00%
4.Government is reviewing only selected contracts with unfavourable stability provisions and new mining rights are frozen for now (QD44)	0	0.00%
5.Government is reviewing contracts to favour mining companies and new rights assignments are done by secret negotiations with watered down fiscal, environmental and social terms (QD45)	3	30.00%
Other	2	20.00%
No answer	0	0.00%

Not displayed	0	0.00%
Government is not under pressure to review contracts and assign new mining leases with companies..		
12	Not sure	
Summary for QD5		
How has COVID-19 impacted on ability of companies to pay their taxes and other obligations?		
Answer	Count	Percentage
1.Companies are paying their due taxes timely and Government is not under undue pressure to revise tax rates and lower other standards to favour mining companies (QD51)	2	20.00%
2.Government is not under undue pressure to lower taxes and other standards to favour mining companies (QD52)	4	40.00%
3.Government is under pressure to lower taxes but not other standards to favour mining companies (QD53)	1	10.00%
4.Government is under pressure to bail out mining companies (QD54)	1	10.00%
5.Government is under pressure to lower taxes and provide other incentives including lowering environmental and social standards to favour mining companies. (QD55)	2	20.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QD6		
How has COVID-19 impacted on decisions of companies to follow through existing investments and new ones?		
Answer	Count	Percentage
1.Companies are not taking advantage of COVID-19 to reduce and or move investments to other jurisdictions and gold mining companies and other profitable ventures provide government chance to harvest part of the supernormal profits accruing from increasing world prices (QD61)	3	30.00%

2.Companies are not taking advantage of COVID-19 to reduce and or move investments to other jurisdictions but investments are staying same and gold mining companies and other profitable ventures provide government chance to harvest part of the supernormal profits accruing from increasing world prices (QD62)	1	10.00%
3.Companies are not taking advantage of COVID-19 to reduce and or move investments to other jurisdictions and gold mining companies and other profitable ventures provide government chance to harvest part of the supernormal profits accruing from increasing world prices but new investments are contemplated or envisioned (QD63)	5	50.00%
4. Companies are taking advantage of COVID-19 to reduce and or move investments to other jurisdictions and gold mining companies and other profitable ventures do not provide government chance to harvest part of the supernormal profits accruing from increasing world prices (QD64)	0	0.00%
5. Companies are taking advantage of COVID-19 to reduce and or move investments to other jurisdictions and gold mining companies and government is not taking advantage of other profitable ventures to harvest part of the supernormal profits accruing from increasing world prices (QD65)	0	0.00%
Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
With the lockdown not affecting the mining sector coupled with the increase in gold price there will be the tendency for mining firms to follow up on their investments.		
Summary for QD7		
What has COVID-19 impacted on illicit financial flows-IFFs situation?		
Answer	Count	Percentage
1.Companies are not taking advantage of COVID-19 to reduce tax liabilities through cost escalation and rolling back gains made in local content, participation and building economic linkages between extractives and the national economy with IFF implications (QD71)	3	30.00%

2. Companies are not taking advantage of COVID-19 to reduce tax liabilities through cost escalation but gains made in local content, participation and building economic linkages between extractives and the national economy are being reduced drastically (QD72)	1	10.00%
3. Companies are not taking advantage of COVID-19 to reduce tax liabilities through cost escalation and rolling back gains made in local content, participation and building economic linkages between extractives and the national economy but are resorting to their traditional supply hubs and chains mostly with IFF implications (QD73)	0	0.00%
4. Companies are taking advantage of COVID-19 to reduce tax liabilities through cost escalation but are not rolling back gains made in local content, participation and building economic linkages between extractives and the national economy but are resorting to their traditional supply hubs and chains only partially with IFF implications (QD74)	3	30.00%
5. Companies are taking advantage of COVID-19 to reduce tax liabilities through cost escalation and rolling back gains made in local content, participation and building economic linkages between extractives and the national economy and resorting to their traditional supply hubs/chains exclusively with IFF implications (QD75)	3	30.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QA2		
What where the channels through which COVID-19 impacted the economy and society?		
Answer	Count	Percentage
1.Farmers and small-scale producers and Informal sector operators (QE11)	2	20.00%
2.Hospitality, entertainment, Tourism and travel (QE12)	5	50.00%
3.Food and agribusinesses (QE13)	2	20.00%
4.International trade and financial flows (QE14)	1	10.00%

5.Mining and oil companies (QE15)	0	0.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QE1		
What has been government expenditure priorities, especially on the vulnerable and productive sectors to adequately protect both economy and society?		
Answer	Count	Percentage
1.Providing Health, essential services and social welfare and supporting small businesses and vulnerable households (QE21)	8	80.00%
2.Supporting manufacturing (QE22)	0	0.00%
3.Improving Infrastructure and providing incentives to mining companies (QE23)	0	0.00%
4.Bailing out of banks and big businesses (QE24)	0	0.00%
5.None of the above (QE25)	1	10.00%
Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QE2		
What opportunities have COVID-19 offered for building linkages between natural resources sector and the rest of economy and regional integration?		
Answer	Count	Percentage
1.Government is leveraging COVID-19 to explore all economic linkages between extractives and national economy as working with ECOWAS and AU to take advantage of gold for test kits production and other pharmaceutical opportunities (QE31)	2	20.00%
2. Government is leveraging COVID-19 to explore all economic linkages between extractives and national economy as working	0	0.00%

with ECOWAS and AU but not to take advantage of gold for test kits production and other pharmaceutical opportunities (QE32)		
3. Government is leveraging COVID-19 to explore all economic linkages between extractives and national economy but not working with ECOWAS and AU to take advantage of gold for test kits production and other pharmaceutical opportunities (QE33)	0	0.00%
4.Government is supporting the pharmaceutical industry to manufacture PPEs locally to harvest benefits for jobs (QE34)	4	40.00%
5.Government is not thinking about these as it is focused on COVID-19 (QE35)	3	30.00%
Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
ID	Response	
12	Don't know	
Summary for QE3		
What has been the COVID-19 impacts on community rights in mining areas?		
Answer	Count	Percentage
1.Government and mining companies are taking advantage of COVID to review mineral host communities' rights to participation and prior and informed consent and COVID-19 support is extended to them (QE41)	0	0.00%
2. Government and mining companies are taking advantage of COVID to review mineral host communities' rights to prior and informed consent and COVID-19 support is extended to them (QE42)	0	0.00%
3 Government and mining companies are taking advantage of COVID to improve host communities' conditions and COVID-19 support is extended to them (QE43)	3	30.00%
4. Government and mining companies are taking advantage of COVID to override host communities concerns and objections to mining in the name of restarting the regional and national economies (QE44)	1	10.00%

5.Government and mining companies are taking advantage of situation to practice poor working conditions and or abuse human rights and no support has been extended to host communities (QE45)	1	10.00%
Other	5	50.00%
No answer	0	0.00%
Not displayed	0	0.00%
Not sure	**Response**	
government		
Not sure		
Not much discussion on community rights in the pandemic period. Mining companies are producing in peace		
18		
Summary for QE4		
How has COVID-19 impacted on workers' rights in mining and oil companies?		
Answer	Count	Percentage
1.Improving (QE51)	1	10.00%
2.same as before (QE52)	2	20.00%
3.Worsening (QE53)	2	20.00%
4.Taking advantage of situation to practice poor working conditions and or abuse human rights (QE54)	2	20.00%
5.Do not know (QE55)	2	20.00%
Other	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
ID	**Response**	
Summary for QE5		

How has PHMs affected the access of the vulnerable to livelihoods sources, markets and food?		
Answer	Count	Percentage
1.Government PHSMs are not unduly disrupting livelihoods and access to markets and there is continuous monitoring of household economic burdens and food security to ensure easing of difficulty in accessing food due to high food prices and income losses (QE61)	2	20.00%
2. Government PHMs are not unduly disrupting livelihoods and access to markets but there is only erratic monitoring of household economic burdens and food security to ensure easing of difficulty in accessing food due to high food prices and income losses (QE62)	5	50.00%
3. Government PHMs are unduly disrupting livelihoods and access to markets but there is no continuous monitoring of household economic burdens and food security to ensure easing of difficulty in accessing food due to high food prices and income losses (QE63)	1	10.00%
4. Government PHMs are unduly disrupting livelihoods and access to markets but continuous monitoring of household economic burdens and food security are not fed back into system to ensure easing of difficulty in accessing food due to high food prices and income losses (QE64)	1	10.00%
5.Livelihoods are disrupted and there is not access to markets and food due to high food prices and loss of incomes (QE65)	1	10.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for QE6		
Has COVID-19 worsened or improved existing and possibly new waves of inequality in the country?		
Answer	Count	Percentage
1.Government response was such there was minimal loss of employment and production and did not worsen existing inequalities or trigger new ones (QE71)	1	10.00%

2. Government was such there was minimal loss of employment and production and but might have worsened existing inequalities or trigger new ones (QE72)	4	40.00%
3. Government response was neutral as it led to job losses for all and did not worsen or improve inequality (QE73)	0	0.00%
4. Government response was such that there were a lot of loss of employment and production and worsened existing inequalities or trigger new ones (QE74)	1	10.00%
5.Government had no strategy for its response in terms of job losses and mindful of existing inequalities or if new ones would be triggered (QE75)	4	40.00%
Other	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for BI1		
Which country are you completing survey about?		
Answer	Count	Percentage
Gambia (BI31)	0	0.00%
Ghana (BI32)	10	100.00%
Liberia (BI33)	0	0.00%
Nigeria (BI34)	0	0.00%
Sierra Leone (BI35)	0	0.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for BI2		
What is you Gender(Sex)?		
Answer	Count	Percentage
Male (BI21)	8	80.00%
Female (BI22)	2	20.00%

No answer	0	0.00%
Not displayed	0	0.00%
Summary for BI3		
What is your area of work or interest?		
Answer	Count	Percentage
International development practitioner (BI11)	0	0.00%
Development Economics and other social science (BI12)	0	0.00%
Public sector worker (BI13)	2	20.00%
Civil society activist (BI14)	7	70.00%
Community activist or devvelopment worker (BI15)	1	10.00%
No answer	0	0.00%
Not displayed	0	0.00%
Summary for BI4		
What is your name?		
Answer	10	100.00%
No answer	0	0.00%
Not displayed	0	0.00%
Respondents's name		
Augustine Niber		
Bernard Anaba		
Kwaku Afari		
Isabella Assensoh		
Vincent Yankey		
Ben Boakye		
Steve Manteaw		
Ibrahim Amina		

Clement Aapengnuo		
Bismark'Adongo Ayorogo		
Summary for BI5		
What is your organisation or affiliation?		
Answer	10	100.00%
No answer	0	0.00%
Not displayed	0	0.00%
Respondents organisation		
Center for Public Interest Law (CEPIL)		
Tax Justice Coalition-Ghana		
Wacam		
St John Ambulance - Ghana		
Petroleum Commission, Ghana		
ACEP		
ISODEC / Civil Society Platform on Oil and Gas		
Empowerment Center For Women and Children		
Center for conflict transformation and peace studies.		
Northern Patriots in Research and Advocacy **Affiliated to Ghana CSOs Platform on SDGS, CSOs Platform on Oil and Gas and Coalition of Social Movements on Mining in Upper East Region**		

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[i] Harold Innis inaugurated his research into Canadian economic history (staples studies) to countervail the purportedly universalist claims of mainstream economics; he believed the mainstream "justified" exploitation of the developing world by the wealthiest countries. Conversely, he sought out universalist principles in his media/communication work in order to countervail omnipresent misunderstanding in the world; he hoped to establish thereby a common ground conducive to world peace (Babe, 2015)