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POLICY BRIEF

The State of Ghana's Environmental Media from 2016 to 2022: The Hurdles and the Impact of COVID-19

KEY FINDINGS

- Natural resources have been the beacon of Ghana's socio-economic development.
- Climate change, freshwater pollution, land degradation, and loss of biodiversity have cost the country billions of USD and decreased GDP contributions.
- The country is at risk of an imminent water crisis and the extinction of endangered species in the absence of urgent measures.
- There is continual degradation of the various environmental media notwithstanding the many initiated past and present policies and regulations.

INTRODUCTION

The importance of the environment to social and economic sustainability cannot be overstated. The environmental media – air, water, and land – have been the bedrock of Ghana's socio-economic development, providing natural resources for export, food, and other agricultural products, and jobs for many people. Unfortunately, improper management of the environmental media has created challenges that negate the social and economic benefits. Some of the environmental challenges experienced in Ghana include flash floods, droughts, heat waves, and heightened rainfall variability (Cobbinah, Poku-Boansi and Peprah, 2017).

A multiplicity of factors including, misallocation of resources, weak implementation of policies and poverty have exacerbated the decline in the quality of certain forms of environmental assets in Ghana (Ekpe et al., 2014). These challenges serve as wake-up calls to reposition the management of the natural environment in Ghana.

This policy brief, produced from the Environment Chapter of ISSER's Ghana Social Development Outlook (GSDO) 2022, highlights the state of Ghana's environmental media from 2016 to 2022, with a focus on the hurdles and the impact of COVID 19.

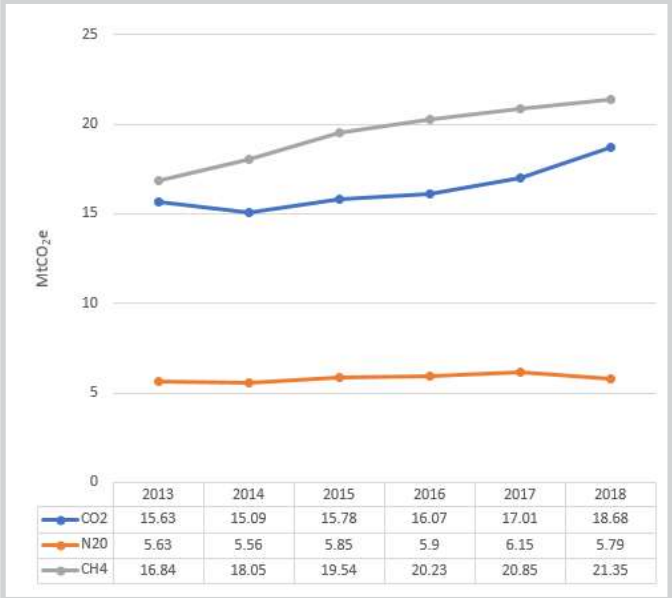
KEY ISSUES

The Hurdles

Climate change and variability

The temperature in Ghana has been rising over the years, with 2020 having the highest increase, followed by 2016. Annual rainfall in Ghana ranges from 1,100 mm in the northern parts of the country to approximately 2,100 mm in the southwest (World Bank, 2021). On greenhouse gases, Ghana's total emissions stood at 58.56 MtCO2e in 2019, representing a 16% increase compared to the baseline year (2016) levels (EPA, 2021). The World Bank (2022) reveals that there has been a consistent rise in the trends of N2O and CH4 emissions from 2013 to 2018, while CO2 emissions fluctuated. Climate change has impacted the country, with unpredictable rainfall patterns, which have led to a reduction in agricultural produce in Ghana and extreme weather events such as floods in the major cities. In terms of policy, the National Climate Change Policy and Master Plan as well as the updated Ghana Nationally Determined Contributions blueprint document (MESTI, 2021) provide the roadmap to address the challenges posed by climate change and variability.

Figure 1: Trends in total CO2, N2O and CH4 emissions in Ghana, 2013-2018 (MtCO2e)



	2013	2014	2015	2016	2017	2018
CO2	15.63	15.09	15.78	16.07	17.01	18.68
N20	5.63	5.56	5.85	5.9	6.15	5.79
CH4	16.84	18.05	19.54	20.23	20.85	21.35

Source: Author's construct based on World Bank data, 2022

Fresh water pollution

Freshwater pollution has been a worrisome phenomenon in Ghana, exacerbated in recent years due to the prevalence of illegal small-scale mining ('galamsey'). Ghana's water resources cover an area of 11,000 sq. km (MoFA, 2021). However, the majority of the water bodies have declined in quality. According to the Water Resources Commission of Ghana (WRC), as of 2017, 60 percent of water bodies in Ghana became polluted because of galamsey, industrial and household waste, farming, and other activities. As of June 2021, the turbidity levels of water bodies in illegal mining areas far exceeded the acceptable value for drinking despite the operations of various governmentstask forces to curb the situation. According to the Ghana Water Company Ltd. (GWCL), the country potentially faces an imminent freshwater availability challenge in the near future if adequate measures are not taken to tackle the pollution situation in the freshwater bodies (Figure 1).

Plate 1: Consistent pollution of River Ankobrah by galamsey

Source: https://thecustodianghonline.com/galamsey-pollutes-60-of-ghanas-water-bodies

Loss of biodiversity (forests and wildlife)

Ghana is endowed with bountiful biodiversity, enhancing its socio-economic development. The forest resources of Ghana cover 39 percent of the total land area (MLNR, 2016; FC, 2016). While the total forest area in Ghana has risen gradually over the period 2015-2020, there has been a rise in the depletion of forest stock due to galamsey, illegal logging, and unsustainable farming practices across the country. The contribution of forestry to foreign exchange has fallen considerably to only 1.7 percent of GDP in 2019 (MoF, 2020) because of forest depletion. The minimal available data on wildlife shows

that of the 157 species of freshwater fish, 9 are endangered and declining overall. Endangered species of wildlife in Ghana include the blue whale, common chimpanzee, Egyptian vulture, African grey parrot, and Baker's wood mouse. Despite the various reforestation initiatives in the country, especially the annual Green Ghana Day Event, there is a lack of clarity regarding the survival rate of the planted tree seedlings.

Land Degradation

Land cover in Ghana has been classified into agriculture, bare area, built-up, forests, grassland, other vegetation, water bodies, and wetland (Ampim et al., 2021). The country receives significant revenue through the exploitation of minerals from the land and the cultivation of cocoa and other agricultural products. However, about 35 percent of land in the country is under threat of desertification. As of 2016, 31 percent of all areas within forest reserves were classified as degraded by the Forestry Commission (NDPC, 2017). In 2020, agriculture contributed only 20.5 percent to GDP. The Ghana Landscape Restoration and Small-Scale Mining Project and the Ghana Coordinated Programme of Action (2017-2024) aims to reverse land degradation and restore degraded areas within and outside forest reserves respectively.

The Impact of COVID-19

The COVID-19 pandemic had both negative and positive influences on the various environmental media between 2019 and 2021, as it did on social development . Globally there was a decrease in greenhouse gas emissions, an improvement in air quality, and a reduction in water pollution during the peak of the pandemic because of the restriction in movement and the slowdown of socio-economic activities. Global CO2 emissions also fell by 5.4 percent, methane emissions were estimated to have also diminished by 10 percent while a reduction in nitrogen oxide emissions led to a slowdown in global ozone depletion (Silva et al., 2021; and Rume and Islam, 2020).

However, at the height of the pandemic, there was a sharp increase in solid and medical waste generation, which is presently endangering marine wildlife and other ecosystems due to improper disposal. In Ghana, the forestry sector got impacted due to illegal loggers taking advantage of the restrictions of movement and lockdowns. The Forestry Commission Illegal Timber Task Force of Ghana intercepted several trucks loaded with illegal timber in the Oti Region in 2020 (ITTO, 2020).

CONCLUSION AND POLICY RECOMMENDATIONS

A healthy environment is a sine qua non for social development in Ghana. Regrettably, human indiscipline and weak enforcement of policies and regulations -- evidenced by the level of environmental degradation that has occurred between 2016 and 2022 -- continue to hamper the capability of the environment to support a resilient socio-economic development of the country. There is a multiplicity of policies, programmes, and regulatory instruments for the governance of the country's environmental media. However, other strategic measures and actions are required to revitalize the management of the environment to foster development in the country.

The following policy measures are recommended:

- Speed up the implementation of the Long-term National Development Plan of Ghana (2018-2057).
- Empower environmental sustainability enforcement bodies and institutions.
- Invest in and promote climate-smart agricultural practices.
- Implement speedily the community mining module.
- Increase sensitisation on the role of environmental resilience.
- Track the growth of trees under the 'Green Ghana Agenda'.

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*For a full version of this Policy Brief see 'Environment' chapter in Ghana Social Development Outlook 2022 published by ISSER

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