Transforming the Public Sector for Climate Governance: The Case of Ghana

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About Ghana

- Ghana formerly Gold Cost
- Gained independence on 6\textsuperscript{th} March, 1957
- Operates constitutional democracy
- Several political phases now 4\textsuperscript{th} Republic
- Population of about 30 million
- Land size of 283,533km\textsuperscript{2}
- Has 93,000km\textsuperscript{2} of forest
About Ghana

- GDP of USD47.33 billion
- Per capita of USD1,642
- Located close to the centre of the world
- Rich in natural resources
- Second largest producer of cocoa
- Produces quality chocolates with natural cocoa
Climate change issues

- Since independence:
  - Lost 24% forest resources
  - Mean annual rainfall dropped by more than 22%
  - Average temperature has risen about 5%
  - Waterbodies are drying up
Small-scale mining (SMM)

- Mining contributes 5% to GDP
- Generates 35% of export earnings
- Small-scale mining employs 1 million and supports 5 million others
- USD2 billion earned annually from small-scale mining
Small-scale mining (SMM)

- Small scale gold exports (1989-2014)
Small-scale mining (SMM)

• SMM is over 2000 years
• Legally regulated since 1989
• Regulation was to address smuggling of gold and diamonds outside the country
• And to sanitise the sector and improve its economic contribution
Small-scale mining (SMM)

- Law required licensing
- Concession limited to 25 acres
- No mining in forest reserves and rivers
- Individuals and groups can register
- Only 300 registered miners
Negative impact of SMM

- Due to poor regulation and monitoring
- Deaths from collapsed pits and drowning
- Soil surface destroyed affected economic activities
- Forests destroyed
- Waterbodies contaminated with toxic
Addressing illegal mining

• Ban announced in April, 2017
• Objective was to stop pollution and sanitise sector
• Interministerial committee set up
• $100 million allocated for afforestation
Addressing illegal mining

• 10,000 youth employed to plant trees
• Operation Vanguard set up to enforce ban
• Public education and alternative livelihood programmes for miners
• Drones and satellite systems deployed
Enhancing climate governance

• Ghana committed to several international protocols
• Promoting renewable energy
• Adopting climate resilient programmes
• Institutional arrangements in place
Governance structure

**National**
- National Climate Change Committee
- Ministries, Civil Society and Private Sector
- Served by 7 Technical Working Groups for priority areas for policy development

**Regional**
- Regional Climate Change Committees
- Regional EPA Offices, Regional Coordinating Councils and others
- Coordinates implementation of climate activities at the regional level

**District**
- District / Local Level
- District Climate Change Monitoring Committees
- Monitoring the operations of the various implementing agencies
Alternative livelihood and reafforestation
Thank You
Salutations

I bring you greetings from the people of Ghana and express my appreciation to the organisers for the opportunity to share with you our thoughts and policies on this important subject. I believe the theme has been aptly chosen for us as public sector players, and that this conference provides a great opportunity for us to assess the programmes in our respective countries to promote processes and practices that have the potential to protect our planet and promote its positive advancement. I have the firm conviction that any small effort in support of good climate governance is worth undertaking, for it is general knowledge that when the last tree dies, the last man dies. And since none of us wants to die, we will help the trees to live.

I am speaking on the topic “Transforming the Public Sector for Climate Governance: The Case of Ghana” and I will focus my presentation on these areas:

- A brief about Ghana, for those who are not familiar with my country;
- Why climate change issues are important to the country, I will focus on only one issue – small-scale and illegal mining. In Ghana, we refer to illegal mining as “Galamsey”, a term derived from the phrase “Gather and sell”.
- Steps the country is taking to address illegal mining, climate change and environmental issues;
- Public sector institutional arrangements to implement climate change programmes in line with the country’s commitment to international protocols
- Conclusion

About Ghana

Ghana, formerly Gold Coast, gained independence from the British on 6th March, 1957. We have since then gone through various political phases. In 1992, Ghana began the 4th Republic
under a constitutional democracy with three independent arms of government: the Executive, Judiciary, and Legislature. The country has a population of about 30 million and a total land area of 238,533km². Ghana is regarded as a middle income economy with a GDP of USD 47.33 billion and per capita income of USD 1,642.¹ 

Ghana has many natural resources and unique geography and physical location. It is the closest land to the point where the Equator intersects the Greenwich Meridian. So, Ghana has been described by many physical geographers as the “Centre of the World”. The land is rich in vegetation, oil and mineral resources such as diamond and gold. The colonial name “Gold Coast” is a testament of this endowment. Ghana is now the second largest producer of cocoa in the world, and produces one of the best chocolates containing 100% natural cocoa. 

Climate change issues are critical to Ghana because of certain experiences arising from the impact of the environment:

- The country has suffered significant deforestation and desertification – (lost about 24% of its tropical forest);
- Volumes of annual rainfall have been dwindling persistently (mean annual rainfall since independence has dropped by more than 22%)
- Temperature levels are rising (about 5% higher since independence)²
- Waterbodies are drying up.

² Amisah S., Gyampo, B. A., & Quagrainie, K. K. (2010). Livelihood trends in Response to Climate Change in Forest Fringe Communities in the Offin Basin in Ghana
In Ghana, small-scale mining is one of the key economic activities that have been identified as inimical to the united efforts to combat environmental degradation and climate change.

**Small Scale mining in Ghana**

Mining of Gold and diamond is a major economic activity in Ghana. The mining sector contributes about 5% to Ghana’s GDP, compared to Agriculture that contributes 25%. Ghana is an agrarian economy, so the mining sector contribution of 5% is significant, since it is greater than the annual investment in Defence. Revenue from Mining constitutes 35% of Ghana’s
export earnings\(^3\) and small-scale mining plays a significant role in terms of contribution to mining revenue and employment.

Ghana’s mining is in two categories, the formal large-scale mining which is operated by corporations registered under the Ghana Chamber of Mines. There is also the small-scale mining, which refers to the use of traditional labour-intensive methods for extraction and processing of mineral ore.

The small-scale mining sector provides employment to over one million people and supports close to five million\(^4\) others. About USD2.0 billion in annual export revenue is generated from small-scale mining activities.

However, most of the mining activities take place in our tropical forest which has an area of 93,000km\(^2\). As you are aware, the forest serves as rain-cover to protect the environment and helps in controlling temperature. Also, rivers and other waterbodies in the forests serve as drinking water for the people. Cocoa, one of Ghana’s major exports, as well as other food and cash crops grow in these forests. This implies that mining invariably affects these other activities in terms of competition for land space.

**Illegal Mining (Galamsey) in Ghana**

The challenges with mining exacerbate with regard to illegal small-scale mining. It is estimated that the practice of small-scale mining has been in Ghana for more than 2000 years, but was never regulated legally until 1989. Among the key reasons for regulating the sector was the need to address the smuggling of gold and diamonds outside the country and to formalise the sector to enhance the economic benefits for the country.

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\(^3\) Ghana Statistical Service (2018) Provisional 2017 Annual Gross Domestic Product

\(^4\) McQuilken, J and Hilson, G (2016). Artisanal and small-scale gold mining in Ghana Evidence to inform an ‘action dialogue’
The legal framework regulating the sector allows individuals or groups who want to enter into small-scale mining to register with the Minerals Commission and acquire a license to mine on a concession not exceeding 25 acres of land. Only about three hundred (300) miners have registered legally with the Minerals Commission, but more than one million people are working in the sector. The miners are also required to comply with certain environmental practices, including reclamation of land. They are also not allowed to mine in or close to Forest Reserves as part of the measures to protect the fauna and flora in the reserves. The Environmental Protection Agency is responsible for monitoring the operations of the miners to ensure that they employ environmentally friendly methodologies in line with government policy and laws. Unfortunately, the illegal miners have created difficulties with regulation and compliance with the legal regime.

**Negative Impact of Illegal Mining**

The widespread illegal surface mining, which has led to a high rate of forest destruction and high emissions, and caused climate change and related development challenges have been attributed to government policy to allow surface mining in the country instead of underground mining. Besides the challenges with the enactment of laws for regulating surface mining, poor environmental governance and weak enforcement have compounded illegal mining practices. The result is complete abuse of the concession rights and use of
unapproved methods that have endangered the ecology and created the environmental menace that requires huge investment to address.

**Deaths**

Illegal mining has caused a lot of havoc to the land after the mining activities are done. Pits dug to extract the mineral deposits have become death traps. Many people, including children have died as a result of the collapse of such pits or drowned in the water that filled the pits. In 2013 alone, over 300 people died from the collapse of mining pits. The death toll was projected to be rising annually due to the level of destruction to the land surface.

**Economic Activities**

Most illegal mining activities are done by digging the surface of the land. In rocky areas, dynamites and other explosives are used. This destroys the forest and the land surface, making it unsafe for further economic activity. The activities also cause decomposing rocks to be broken into smaller particles which mix with the soil. Furthermore, the water holding capacity of the soil decreases as water permeability increases with the weak surface soil, making it difficult to use the land for any useful economic activity such as farming.

**Waterbodies**

Besides the destruction to the land, waterbodies are contaminated with dangerous chemicals. A report from the Ministry of Environment, Science, Technology and Innovation indicated that about 57% of waterbodies in mining communities are contaminated with dangerous metals, exposing the community
members to significant health threats. Some of the toxic materials include Mercury (Hg), Arsenic (As), Copper (Cu), Chromium (Cr), Antimony (Sb), Sulphur (S), Aluminium (Al), Manganese (Mn), Cadmium (Cd) and Lead (Pb).

For instance, mercury vapour when inhaled can cause memory and speech loss, numbness, vision problems, convulsion and in some cases death. Dust and fumes from drilling and blasting can also cause serious health complications or death. In 2016, about 100 members of one community died of a strange disease, which was attributed to the illegal mining activities around this community. It is estimated that it will take about 200 years to be able to correct the effect of these chemicals from the environment.

**School dropout and teenage pregnancy**

Illegal mining activities have attracted children of school going age. These children drop out of school and the girls among them indulge in sexual activities leading to teenage pregnancy and attendant challenges. These are just a few of the problems the Government of Ghana is dealing with regarding human activities that are threatening the environment.

**Addressing Illegal Mining**

The Government of Ghana regards climate issues as developmental and has therefore instituted some measures to improve climate governance. It was against the commitment to protect the environment that a moratorium was placed on all small-scale mining activities to take effect from April 2017. The objective was to:
• Stop the pollution of water bodies;
• Halt deforestation;
• Halt land degradation;
• Stop illegal small-scale mining activities, including:
  o diversion of tailings into water bodies,
  o mining in river beds (dredging),
  o mining on riverbanks,
  o mining in forest reserves,
  o degrading and/or non-reclamation of land,
  o use of dangerous chemicals such as mercury,
  o engagement of small-scale mining activities by foreigners, and
  o use of heavy earth moving equipment such as excavators.

As part of the measures to enforce the ban and to ensure steps are taken to address the challenges associated with small-scale mining in a sustainable manner, an interministerial committee was established to strengthen governance systems and stakeholder engagements to sanitise the regulatory regime. To implement its mandate, the interministerial committee set up a taskforce, referred to as “Operation Vanguard”, to ensure compliance with the ban or arrest recalcitrant miners and seize their equipment. Operation Vanguard comprised 400 officers from the Ghana Armed Forces and the Police Service.

Apart from the ban, Government instituted measures to reclaim lands devastated by illegal mining operations. An amount of one hundred million United Stated Dollars (USD100.0million) has been earmarked for land reclamation for areas destroyed by illegal mining activities. About 10,000 youth have been employed to replant trees in the forest areas.

Other measures established to improve regulatory compliance include:

• Public education on the negative effects of small-scale mining;
• Provision of training on sustainable environmental practices for small-scale miners and alternative livelihoods;
• Deployment of drones and satellite technology to monitor mining in targeted areas.
Government is currently considering a review of the small-scale mining operations, with a view to making regulatory changes, if necessary, to stop surface mining.

**Measures to Enhance Climate Governance**

Beyond illegal mining, Government has identified the need to strengthen climate governance through cross-sectorial activities. It is observed that climate issues are multisectoral. Therefore, it is necessary to bring these sectors together to work on common projects to mitigate climate challenges in a sustainable manner.

Ghana’s commitment to efficient climate governance and a clean planet is evidenced in its active participation in international conferences such as the 2015 United Nations Climate Change Conference of Parties (COP21) in Paris. Ghana has initiated various programmes to implement the recommendations from the Paris Agreement, which provides a pathway to limit global temperature rise to below 2 degrees.

Ghana submitted a total of 20 mitigation and 11 adaptation programme actions in 7 priority economic sectors. These sectors comprise energy, land, forestry, transport, waste, health and industry. These sectors were carefully selected based on the country’s peculiarity and obligations under international protocols such as the UN Framework Convention on Climate Change (UNFCCC).

Some of the adopted initiatives include policy and regulatory reforms with the aim to manage climate risk, increase low-carbon electricity supply, scale up adoption of renewable energy, promote sustainable transport, reduce deforestation, mobilise finance and facilitate engagement with relevant stakeholders through outreach.
programmes. These initiatives are already yielding positive results in building resilience, saving Green House Gas (GHG) emissions and putting the economy on a sustainable pathway to facilitate speedy socioeconomic development of the country. Ghana has also signed the MINAMATA Convention. The Convention seeks to reduce the use of mercury in artisanal mining activities in order to reduce health risks. Based on this, the United Nations Industrial Development Organisation (UNIDO) is collaborating with Ghana to carry out projects related to mercury pollution abatement.

In order to ensure effective implementation and monitoring of the initiatives outlined under these programmes, some institutional arrangements have been established at all levels of the Governance structure. Each of the entities has a clear mandate, support systems and scope of work.

**Climate Governance Structure**

**National**
- National Climate Change Committee
- Ministries, Civil Society and Private Sector
- Served by 7 Technical Working Groups for priority areas for policy development

**Regional**
- Regional Climate Change Committees
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**District**
- District Climate Change Monitoring Committees
- Monitoring the operations of the various implementing agencies
- • District / Local Level
Conclusion

Ghana has had and continues to have an unpleasant experience about the negative effects of environmental degradation. The lessons from the negative impact of surface mining are helping the nation to unite to find ways to address the issues of land degradation, pollution of waterbodies, destruction of aqua life, health and other climatic issues. All stakeholders have joined the campaign against illegal mining and consideration is being given to move away from small scale mining completely, if necessary.

Ghana remains committed to its international obligations under conventions and protocols it has acceded to. Forums such as CAPAM also provide additional opportunities to learn more from colleagues and to share our lessons to foster common and united action towards enhancing climate governance. I thank you for your attention.