REVISED VERSION

THE PARIS CLIMATE AGREEMENT "SHALL" FAIL

: Ghana as a Case Study

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I. INTRODUCTION:

The Conference of Parties (COP) 21 held from 28th November – 12th December 2015 in Paris, appears to be the most *'promising'* among all the COP meetings which began some 20 years ago. Promising because about 190 Country Parties to the United Nations Framework Convention on Climate Change (UNFCCC); came to a consensus to adopt a common position that binds them. Hitherto, COP meetings have been classified as just mere 'talk-shops' by some analysts since commitments made are not adhered to especially by the Global North.

As a background, the processes commenced in 1992 when countries joined an international treaty, the UNFCCC, as a framework for international cooperation to combat climate change by limiting average global temperature increases and the resulting climate change, and coping with impacts that were, by then, inevitable. By 1995, countries launched negotiations to strengthen the global response to climate change, and, two years later, adopted the Kyoto Protocol. The Kyoto Protocol sought to ***legally bind developed*** country Parties to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on 1st January 2013 and will end in 2020[1]. However, the protocol didn't become international law until more than halfway through the 1990–2012 period. By that point, global emissions had risen substantially. Some countries and regions, including the European Union, were on track by 2011 to meet or exceed their Kyoto goals, but other large nations were falling woefully short. And the two biggest emitters of all – the United States and China – churned out more than enough extra greenhouse gas to erase all the reductions made by other countries during the Kyoto period. Worldwide, emissions soared by nearly 40% from 1990 to 2009, according to the Netherlands Environmental Assessment Agency.

With the Paris Agreement now in place, the stakes are high for all Parties to ensure that the ambitious agreement to transit towards a **clean economy** while dealing with the impact of climate change is met. The overarching burden by Parties is to limit the global temperature rise not just to **below 2 degrees**, but to **strive for 1.5 degree** and, critically, to **update national targets every 5 years** to keep raising the ambition.

Consequently, Parties to the Paris agreement are expected to implement a number of country specific interventions to be wrapped in their respective Nationally Determined Contributions (NDCs) in order to respond to the obligations in the agreement. Thus, the amalgamation of each country's climate-related actions is expected to feed into the collective global efforts to achieving the long-term 2-degree temperature goal. To reach these ambitious goals, the agreement provides a number of actions to be taken such as an enhanced capacity building framework, including an Initiative for Capacity Building to be put in place: thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement seeks also to enhance transparency of action and support through a more robust transparency framework.

The Paris Climate Agreement was opened for signature by countries Parties on April 22nd, 2016 and will remain open for signature for one year. So far about 175 country parties including Ghana have appended their signature.

[1] http://unfccc.int/essential_background/items/6031.php

In August 2016, the Parliament of Ghana ratified the Paris Agreement thus making it binding on the nation since it has become part of national or local laws. Ghana's Intended Nationally Determined Contributions (INDCs) – now Nationally Determined Contributions (NDCs) – focuses on key areas such as **Mitigation, Adaptation, Means of Implementation, Technology, Transparency Framework and Finance**.

Having committed itself to the agreement, this paper seeks to analyze Ghana's intention and conduct in climate change interventions with the corresponding tenets of the Paris Agreement. This paper argues that Ghana's conduct in the light of the above areas stipulated in the INDCs shall on the contrary lead to a deviation from the Paris Climate Agreement.

Already, there are serious doubts about the commitment of USA and China inspite of the fact that both countries in September 2016 ratified the Paris Agreement. Indeed not only does the Paris Agreement lack punitive actions against country Parties who deviate from the Agreement according to **Article 15**, but quite strangely **Article 28** provides a *"window of escape"* for any Party that chooses to withdraw after three years from the date on which the Agreement enters into force. How does such provision prove serious commitment by country Parties?

II. OVERVIEW OF THE PARIS CLIMATE AGREEMENT:

The Paris outcome is a 31-page document which is made of two parts - The decision part and the annex to the decision which is the Paris agreement. In all, the agreement has 29 Articles. Out of the 29 Articles, 15 of them contain "active" clauses (Article 2 to Article 15). For the remaining 14 Articles, Article 1 is on definitions, Articles 16 to 19 are on bodies and organs that will serve the agreement, Articles 20 and 21 are on signing and ratification and conditions to give force to the agreement. The rest of them from Articles 22 to 29 are broadly on legal matters. **Article 4 on mitigation** has the most with 19 paragraphs followed by **Article 13 (transparency for action and support)** with 15 paragraphs. **Article 7 on adaptation** has 14 paragraphs. **Articles 6 and 9 on internationally transferred mitigation outcomes (ITMO) and finance** respectively having 9 paragraphs each. The rest on **Article 10 on technology development and transfer** have 6 paragraphs. Looking at the overall characterization of the paragraphs in broad terms it is apparent that the agreement pretty much covered many of the issues in a balanced manner although emphasis appeared to be slightly on mitigation and transparency matters… In terms of active clauses, the agreement had 140 in total. **Out of which 105 are "shall", 20 are "should", 7 are "may", 4 are "encouraged" and 2 are 'will"**. Article 13 (transparency for action and support) have the highest shall clauses of 14 followed by Article 4 with 13 shall clauses. This is followed by Articles 6, 7 and 9 on Internationally Transferred Mitigation Outcome (ITMO), adaptation and finance. The number of "shall" clauses in total makes up 75% of the overall active clauses in the agreement. Having such high number of "obligation clauses" to say the least suggests a certain ambitious focus of the agreement.[2]
Ghana government has conceded that it has certain obligations to fulfill in this new global agenda of combating climate change. The agreement is expected to be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances[3].

[2] Climate Change Unit. (2016). *Ghana's Assessment of Paris agreement and steps on way forward to implementation*. Environmental Protection Agency (EPA) of Ghana.
[3] Paris Climate Agreement, Article 2 (2)

III. GHANA'S READINESS:

Ghana is of the view that the mitigation and adaptation actions in the INDC it has put forward represents a reasonable level of responsibility it can take as its share of the global effort taking into account its socio-economic circumstances. In this regard, Ghana considers its INDC to be fair and ambitious[4].

In all, 20 mitigation and 11 adaptation programme of actions in 7 priority economic sectors have been proposed for implementation over the time frame (2020-2030). The implementation of the actions is expected to help **attain low carbon climate resilience** through effective adaptation and greenhouse gas (GHG) emission reduction in the following priority sectors:

- Sustainable land use including food security
- Climate proof infrastructure
- Equitable social development
- Sustainable mass transportation
- Sustainable energy security
- Sustainable forest management and
- Alternative urban waste management

IV. MITIGATION: ARTICLE 4

Ghana's emission reduction goal is to unconditionally lower its GHG emissions by 15 percent relative to a business-as-usual (BAU) scenario emission of 73.95MtCO_2e[5] by 2030. An additional 30 percent emission reduction is attainable on condition that external support is made available to Ghana to cover the full cost of implementing the mitigation action (finance, technology transfer, capacity building). With this external support, a total emission reduction of 45% below the BAU emission levels can be achieved by 2030[6]

This could be a justification that data gaps, incompatible data formats and poor data quality across inventory sectors, poor documentation of the inventory from data compilation to estimates among others are some of the constraints and challenges facing Ghana. Nonetheless, with such discrepancy in place, it is unclear how government intends to pursue **Article 4: Paragraph 2** of the Paris Agreement which says "Each Party **shall** prepare, communicate and maintain successive nationally determined contributions that it intends to achieve..."

In a related case, Ghana government announced in January 2016 that it intends to establish a Supercritical (SC) Coal-fired plant. The project known as the "2 x 350MW Supercritical Coal Fired Power Plant" represents the first phase of the development which is to be further expanded either by a 4×350MW (or 2×600MW) supercritical coal-fired generating units. The Volta River Authority (VRA), the arm of government responsible for this project claims that the technology shall adequately take care of carbon emissions thus there should be no cause of alarm. This was confirmed when **350 Ghana Reducing our Carbon (G-ROC)**[7] embarked on a community engagement exercise in the community where the plant is to be cited. *"From the engagement we had with the VRA, the organisation made it clear that the project will not disturb the communities in any way. We understood that the olden day coal technology allowed emissions to be emitted far and near, which causes harm to people and environment. The technology for this one allows for the emission to be kept underneath. The machines to be used are*

[4] Ghana's INDC
[5] Million tonnes carbon dioxide equivalent
[6] Ghana's INDC
[7] 350 G-ROC is an informal network of youth-leaders formed with the aim of partnering with key stakeholders to champion the need for carbon emissions reduction while actively promoting renewable energy systems as a key effort in combating climate change

capable of minimizing the negative effects of coal. People have been criticizing coal but the machine will help to reduce emission into the atmosphere. Rain harvesting is done by people who cannot afford pipe borne water, but having gone on tours organized by the VRA, we have been told that the machines can help to address any damage to water harvested through the rain. We embraced it, the project will come to help the poor get jobs to do and the machines will not bring any disease to people. I am not sure the project will contaminate the atmosphere" – as said by **Donpehene Ekumfi Etubedu, Chief Nana Koji Mensa II**

The team's research report shows that some of the information presented by VRA on the scoping report is inaccurate. For example, Dennis Aidoo, the Spiritual leader at Aboano community refuted the claim that VRA discussed the issue of compensation with them[8] contrary to what the scoping report claims. Meanwhile with coal option, Ghana's own report concedes that associated emission will be 35.3% higher for significant electricity generation to be available in 2040[9].

Table 44 Total emissions for electricity category in $MtCO_2e$

WoM with coal option									
Plant Cluster	2010	2015	2020	2025	2030	2035	2040	2010 share	2040 share
Gas Plants	0.061	2.249	5.48	7.282	9.6	12.424	15.709	2.5%	34.8%
Oil Plants	2.331	2.052	0	0	0	0	0	96.2%	0.0%
Diesel Plants	0.031	0.143	0.135	0.166	0.195	0.209	0.223	1.3%	0.5%
Coal Plant	0	0	2.628	5.309	10.634	18.609	29.242	0.0%	64.7%
Total	2.423	4.444	8.243	12.757	20.429	31.242	45.174	100.0%	100.0%

Source: Ghana's 3rd Communication to UNFCCC

From this above table, government acknowledges that emissions will increase significantly should coal plant be considered; a grave contradiction to the position held by VRA. This is enough bases to conclude that government is not been transparent with the truth and is unfortunately misleading the chiefs and elders of the communities.

The fact that government is considering Supercritical (SC) coal plant when there are better and more efficient technologies such as the Integrated Gasification Combined Cycle (IGCC) plant as shown in the table below shows a gross disregard to its commitments. Indeed, a report[10] examined the role of high-efficient low-emission (HELE) coal-fired electricity generation [including the IEA[11] projections] and concludes that the so-called clean coal technology is incompatible with 2°C pathways**.** What then did President John Mahama mean when he said Ghana is determined to achieve ambitious cuts in greenhouse gases?[12]

[8] Hinneh, S. (2016, June 26). Personal Interview.
[9] Ghana 3rd Communication report to UNFCCC
[10] Wong L., Jager D., and Breevoort P. (2016). *The incompatibility of high-efficient coal technology with 2°C scenarios.* ECOFYS Netherlands B.V.
[11] International Energy Agency
[12] President John Mahama's speech at COP 21

Table 1 Conversion efficiency, CO_2 emissions intensity and coal consumption values for coal technologies[6,7]

Technology	Conversion efficiency[2]	CO_2 emissions intensity (gCO_2/kWh)	Coal consumption (g/kWh)
Subcritical	Up to 38%	≥880	≥380
Supercritical	Up to 42%	800–880	340–380
Ultra-supercritical	Up to 45%	740–800	320–340
A-USC/IGCC	45–50%	670–740	290–320

Source: ECOFYS incompatibility of high-efficient coal technology with 2°C scenarios report, 2016

Ghana's Volta River Authority (VRA) is taking refuge in the fact that more coal-fired plants are planned to be established according to the International Energy Agency (IEA) 2015. The report shows that a total number of 1020 estimated new capacity coal-fired plants are be built by 2030 if announced and pre-planned are cancelled. Otherwise 2440 coal-fired plants have been planned to be constructed within the same period.

Ghana government must prove how it intends to meet its obligation as captured in **Article 7: Paragraph 13** of the Paris Agreement which states that "Parties shall account for their nationally determined contributions. In accounting for anthropogenic emissions and removals corresponding to their nationally determined contributions, Parties **shall promote environmental integrity, transparency, accuracy, completeness, comparability and consistency,** and ensure the avoidance of double counting…" Already, government admits in its iNDC that some of its projections or estimates will be clarified or confirmed by 2020. This simply means that some data or information submitted is simply provisional or speculative thus cannot be 'trusted'.

As part of its mitigation measures, Ghana has outlined a number of programmes as seen below:

INDC Policy Actions	Programme of Action
Scale up renewable energy penetration by 10% by 2030	Increase small-medium hydro installed capacity up to 150-300MW
	Attain utility scale wind power capacity up to 50-150MW
	Attain utility scale solar electricity installed capacity up to 150-250MW
	Establish solar 55 mini-grids with an average capacity of 100kW which translates to 10MW
	Scale up the 200,000 solar home systems for lighting in urban and selected non-electrified rural households
Promote clean rural households lighting	Increase solar lantern replacement in rural non-electrified households to 2 million
Expand the adoption of market-based cleaner cooking solutions	Scale up adoption of LPG use from 5.5% to 50% peri-urban and rural households up to 2030.
	Scale up access and adoption of 2 million efficient cook stoves up to 2030
Double energy efficiency improvement to 20% in power plants	Scale up 120 MSCF12 natural gas replacement of light crude oil for electricity generation in thermal plants.
Scale up Sustainable mass transportation	Expansion of inter and intra city mass transportation modes (Rail and bus transit system) in 4 cities 13
	Continue 10,000ha annual reforestation/afforestation of degraded lands

Promote Sustainable utilization of forest resources through REDD+	Double 10,000ha annual reforestation/afforestation of degraded lands translating to 20,000ha on annual basis.
	Support enhancement of forest carbon stocks through 5,000ha per annum enrichment planting and enforcement of timber felling standards.
	45%14 emission reduction through result-based emission reduction programme in cocoa landscape.
	Wildfire management in the transition and savannah dry lands in Ghana
Adopt alternative urban solid waste management	Improve effectiveness of urban solid collection from 70% to 90% by 2030 and disposed all to an engineered landfills for phase-out methane recovery from 40% in 2025 to 65% by 2030
	Scale up 200 institutional biogas in senior high schools and prisons nation wide
	Double the current waste to compost installed capacity of 180,000tonne/annum by 203015.
Double energy efficiency improvement to 20% in industrial facilities	Scaling up of installation of power factor correction devices in 1,000 commercial and industrial facilities (capacitor banks).
Green Cooling Africa Initiative	Abatement of fluorinated-gases (HFC-22 and HFC-410) from stationery air-conditioners

Article 4: Paragraph 8 of the Paris Agreement requires all Parties **to provide the information necessary for clarity, transparency and understanding.** Government is hereby required to produce the necessary information towards ensuring the needed clarity, transparency and understanding of the above planned mitigation programmes especially when **Article 4: Paragraph 9** of the Paris Agreement enjoins it to communicate a nationally determined contribution **every five years.**

Measuring or evaluating Ghana government's mitigation programme/projects over the years is difficult if not impossible as information is either unavailable or are not well communicated. For example, Ghana has been supported to implement projects such as Renewable Energy-Based Electricity for Rural, Social and Economic Development in Ghana, Ghana Urban Transport, Energy Development and Access Project (formerly) Development of Renewable Energy and Energy Efficiency, and SPWA-CC: Promoting of Appliance Energy Efficiency and Transformation of the Refrigerating Appliances Market in Ghana by the Global Environmental Facility (GEF) and yet there is very poor public knowledge on the status or impacts of these interventions. The Environmental Protection Agency (EPA) under the Natural Resources and Environment Good Governance (NREG) was to prepare a sustainable development action plan to reduce the effects of climate change by reducing carbon emissions and strengthening MMDAs in environmental management[13] yet till date the status of this plan is unknown.
Similarly, government's indicative plans to start a motor vehicle emission testing in 2014[14] can't be traced.

V. ADAPTATION: ARTICLE 7

Paragraph 5 of the Paris Agreement provides a complete overview regarding how the adaptation mechanism is to be pursued. It states that Parties acknowledge that adaptation action should follow a **country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of**

[13] 2009 National Budget Statement, Ghana
[14] 2014 National Budget Statement, Ghana

indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.

The long-term goal of Ghana's adaptation is to **increase climate resilience** and **decrease vulnerability** for enhanced sustainable development. Adaptation under Ghana's INDC is informed by:

- good governance and inter-sectoral coordination,
- capacity-building, the role of science, technology and innovation,
- adequate finance from both domestic sources and international cooperation,
- promoting outreach by informing, communicating and educating the citizenry; and
- adhering to accountable monitoring and reporting

Ghana government has the following policy action plans to achieving its iNDC adaptation goal.

INDC Policy Actions	Programme of Action
Agriculture resilience building in climate vulnerable landscapes	Modified community-based conservation agriculture adopted in 43 administrative districts
	Scale up penetration of climate smart technologies to increase livestock and fisheries productivity by 10%.
	Promote innovations in post-harvest storage and food processing and forest products in 43 administrative districts.
Value addition-based utilization of forest resources	Governance reform for utilization of forest resources for sustainable energy use and biodiversity business.
	Manage 413,000ha fragile, ecologically sensitive and culturally significant sites in 22 administrative districts in the forest and savannah areas.
City-wide resilient infrastructure planning	Building standards for strategic infrastructure in housing, transport, coastal, waste management, telecommunication and energy) adopted in 10 urban administrative regions.
Early warning and disaster prevention	Expand and modernize the current 22 synoptic stations based on needs assessment, and increase the number to 50 stations for efficient weather information management
Managing climate-induced health risks	Strengthen climate related disease surveillance in vulnerable communities in 3 Districts.
	Adopt climate change informed health information systems including traditional knowledge on health risk management.
Integrated water resources management	Strengthen equitable distribution and access to water for 20% of the population living in climate change risk communities.
Resilience for gender and the vulnerable	Implementation of community led adaptation and livelihood diversification for vulnerable groups

Source: Ghana's iINDC

The plans largely are quite opaque and do not provide much details to help ensure transparency and accountability as the Paris agreement seeks to achieve. Every intervention must be measurable and verifiable. Standing on Paragraph 5, Ghana government must prove how it intends to ensure a *country-driven, gender-responsive, participatory and fully transparent approach* in pursuing the above programmatic interventions.

Consequently, it is prudent for government to provide detailed information about each of the 43 administrative districts targeted for the climate smart agriculture. What are the current community-based conservation agriculture practices in those districts that government intends to modify? Similarly, what are the current climate smart technologies in livestock and fisheries production that government plans to

scale up 10%? Such strict proof must be applied to each of the adaptation policies above as required per the Paris Agreement towards ensuring transparency and accountability.

Meanwhile, a couple of government's intention is worth commenting on. It will be useful to know (with verifiable mechanism) if all the various on-going infrastructural developments in Ghana are climate compliant in terms of design and materials used for such infrastructure. At least, this can serve as a test case for government's commitment towards its **City-wide resilient infrastructure planning policy.**

Again, the only action government has under **Early Warning and disaster prevention** is to expand and modernize the current 22 synoptic stations based on needs assessment, and increase the number to 50 stations for efficient weather information management. While this is laudable, the issue of Early Warning Systems (EWS) goes beyond just availability of equipment. Establishment of community based early warning system has been tested and proven to be a successful intervention. For instance, Youth in Nepal have been trained as actors and playwrights with the goal of reaching poorly educated rural residents ill-equipped to tackle local problems and development issues through drama. Street drama as a social empowerment and awareness tool on climate change has been adopted. Additionally, Emergency and Maintenance Funds; Search and Rescue (S&R) among other initiatives have been established all in the quest to provide young people opportunity to be part of solution-providers. Interestingly, the National Disaster Management Organisation (NADMO) in Ghana formed volunteer groups to support disaster victims with relief items. It also reduced the number of flood disaster victims through desilting of drains in major flood prone areas and public education on disaster prevention and mitigation. NADMO embarked on aggressive public education on disaster risk reduction and climate change adaptation in all the 10 regions through its Flood Disaster Preparedness Programme[15]. However, NADMO does not yet have a central system to record disaster impacts at the national level, which reduces its ability to prepare well[16]. This is likely to affect the accuracy of national data or information on Ghana's disaster impacts.

The National Platform on Disaster Risk and Climate Change Adaptation[17] put in place measures to prepare the citizenry for the 2010 rainy season, including identifying the causes of flooding, alerting the communities likely to be affected, and to plan for their timely and effective search and rescue, evacuation, and relief operations during flood emergencies. It is unclear if such platform still exists and functioning as required.

On the issue of **Resilience for gender and the vulnerable policy plan**, the Ministry of Women, Children and Social Protection (MoWCSP) intended to minimize the impacts of climate change on the poor and vulnerable groups, especially women and children, through the provision of alternative livelihoods training programmes. In addition, the ministry planned to also create awareness amongst its constituents on climate change impacts, natural disasters and risk reduction strategies for sustainable development[18]. The outcomes of these interventions are also publicly unknown thus raising concerns about Ghana government's plan of implementing tailored-made community-led adaptation and livelihood diversification for gender (women, men, girls & boys) and vulnerable groups. Already, women's participation in decision making remains very low[19] which ought to be cured. Even though climate change affects women and girls more than men and boys; the National Gender Policy of Ghana launched in 2015 unfortunately has no policy commitment on Gender and Climate Change. Promoting a gender perspective in climate change adaptation is critical for improved impacts on development[20]

[15] 2014 National Progress Report (Ghana)
[16] National Climate Change Policy (NCCP) of Ghana
[17] 2010 Annual Progress Report (Ghana)
[18] 2012 National Budget Statement (Ghana)
[19] Ghana Millennium Development Goals Report (2015)
[20] National Climate Change Policy (NCCP) of Ghana

As mentioned under **Article 4 (Mitigation)**, Ghana also received support from GEF (beside other donors) to implement climate adaptation projects such as Integrating Climate Change into the Management of Priority Health Risks and Promoting Value Chain Approach to Adaptation in Agriculture. Similarly, there is limited or very poor public knowledge on detailed status or impacts of these interventions.

The following obligations under the Paris agreement with respect to Adaptation are instructive for action:

*Paragraph 7. Parties should strengthen their cooperation on enhancing action on adaptation, taking into account the Cancun Adaptation Framework, including with regard to:
(a) **Sharing information, good practices, experiences and lessons learned**, including, as appropriate, as these relate to science, planning, policies and implementation in relation to adaptation actions;
(b) **Strengthening institutional arrangements,** including those under the Convention that serve this Agreement, to support the synthesis of relevant information and knowledge, and the provision of technical support and guidance to Parties;
(c) Strengthening scientific knowledge on climate, including research, systematic observation of the climate system and early warning systems, in a manner that informs climate services and supports decision-making;
(d) Assisting developing country Parties in identifying effective adaptation practices, adaptation needs, priorities, support provided and received for adaptation actions and efforts, and challenges and gaps, in a manner consistent with encouraging good practices;
(e) Improving the effectiveness and durability of adaptation actions.

*Paragraph 9. Each Party shall, as appropriate, engage in adaptation planning processes and the implementation of actions, including the development or enhancement of relevant plans, policies and/or contributions, which may include:
(a) The implementation of adaptation actions, undertakings and/or efforts;
(b) The process to formulate and **implement national adaptation plans;**
(c) The assessment of climate change impacts and vulnerability, with a view to **formulating nationally determined prioritized actions,** taking into account vulnerable people, places and ecosystems;
(d) Monitoring and evaluating and learning from adaptation plans, policies, programmes and actions; and
(e) Building the resilience of socioeconomic and ecological systems, including through economic diversification and sustainable management of natural resources.

*Paragraph 10. Each Party should, as appropriate, submit and update periodically **an adaptation communication**, which may include its priorities, implementation and support needs, plans and actions. Paragraph 11 further adds that this communication must be presented as a component of or in conjunction with other communications or documents, including a national adaptation plan, a nationally determined contribution and/or a national communication.

According to the Paris Climate Agreement, the planning and implementation of the Adaptation mechanism must take into **consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems.** Presently, information on traditional knowledge and local knowledge systems are either unavailable or fragmented. For example**, Ada Totope Community in the Greater Accra region of Ghana has been severally devastated by sea erosion or storms.** A considerable portion of the community including the chief's palace has been submerged by the sea. Interestingly, the people believe that the sea becomes 'rough' when a dead person or corpse in it is not removed as soon as practicable. Thus anytime someone drowns or dies in the sea, an announcement has to be made to immediately mount a search for the

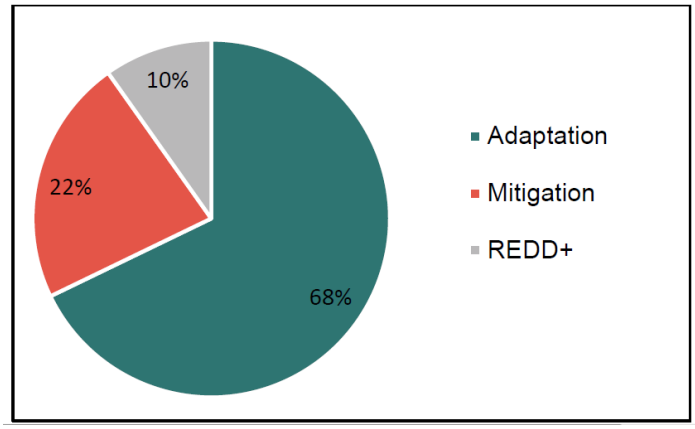
supposed dead body. This is the local knowledge largely held by the community people which mean that climate change education needs to be intensified.

VI. FINANCE: ARTICLE 9

This article sets the tone for financial arrangements in the implementation of the Paris Agreement. The onus lies largely on developed country parties to provide financial resources to assist both developing and least developed country Parties which has been the norm.

Outlook of Ghana's climate change financial disbursement:

Figure 5.2: Climate change strategies, 2011 - 2014



Source: Climate Finance report, Ghana

This above table shows that almost 70% of Ghana's climate change financing goes into Adaptation. Thus conducting programmatic audit will be an important exercise to evaluate such investment during that period.

However, for the five dominant sources of flow of climate finance, mitigation activities attracted the most funds followed by activities on means of implementation and adaptation. For instance, for bilateral, multilateral and GEF sources, more than eighty per cent of the financing went into supporting mitigation activities. In 2011, Ghana government indicated that it is formulating national legislation leading to the setup of the "Ghana Green Fund" with GHS 5,000,000 (equivalent of USD 1.4 million at an exchange rate of 3.7) [21]. The status of this Fund is currently unclear.

[21] Ghana's 3rd Communication Report

3.2 Sources of Finance

No	Sources	Indicative Amounts (Billion) - ($)	% of total investment
Domestic sources			
1	National Budget	1.4	6.2
2	Corporate Social Responsibility	1.7	7.5
3	Commercial facilities	3.2	14.2
International sources			
3	Green climate fund	5.0	22.1
4	Other multilateral funds	1.1	4.9
5	Bilateral agreements	2.8	12.4
6	Private capital investment	3.8	16.8
7	International carbon market	3.6	15.9
Total		22.6	100

[8] The cost of adaptation is indicative. Revised cost from financial analysis will be presented before 2020

Source: INDC

Ghana government intends to mobilize USD 22.6 billion investments from both domestic and international public and private sources. USD 6.3 billion domestically (28.3% of total investment) will be mobilized nationally whereas the USD 16 billion will come from international support. Out of the USD 22.6 billion investment, USD 9.81 billion (representing 45 % of the total investment) is needed for mitigation whereas the remaining USD 12.79 billion8 will be required for adaptation.

As a follow-up to the National Climate Change Policy (NCCP) of Ghana, government has developed a Climate Change Master Plan for the period 2015-2020. The Plan includes outputs, objectively verifiable indicators, sources of verification and assumptions & risks to track expected outcomes which is very laudable. However, the NCCP did not identify measures that would ensure the delivery of climate change finance happens in an open and transparent manner. A key recommendation therefore is to make it a component of the national climate change funding strategy. Another major concern raised is about the coordination of the many national efforts underway to address climate change. With the dormancy of the National Climate Change Committee there is a pressing need for a national forum that would promote the interchange of information across line ministries so as to minimize the danger of duplication of effort and wasted resources. Additional oversight of national actions could come about with the establishment of a parliamentary select committee on climate change. Such a committee would need to draw on expertise from beyond the natural resources sectors to ensure that climate change was framed in the first instance as an economic development issue that threatens the growth of the whole economy.[22]

This means a lot more structural adjustments and efficient mechanisms must be put in place prior to receiving additional funding to **avoid duplication and wastage of resources**. Eventhough, an estimated amount of $1,057,000,000 is required to implement the Master Plan, there is no information on the financial mechanism for this plan. Already, 2 years has almost elapsed with no update or information on the implementation status of the planned interventions.

[22] Asante, A. F. et al. (2015). *Climate Change Finance in Ghana*. Overseas Development Institute (ODI), London and the Institute of Statistical, Social and Economic Research (ISSER), University of Ghana

While it will be prudent to track and assess how well Ghana has spent financial inflows for climate intervention, such exercise will be in futility. Reason being that government has conceded that **institutional challenges relating to tracking climate finance, duplication of activities and funding, lack of transparency on climate finance that have multiple use, insufficient transparency on non-financial support for training and technical assistance & inadequate financial allocation in national budget as the Financial constraints and gaps**[23] bedeviling it. Unfortunately, no clearly defined and pragmatic measures have been provided to dealing with these problems. This arguably can only lead to perpetuating the act of 'business as usual'.

Paragraph 5 of this Article states that developed country Parties shall biennially communicate indicative quantitative and qualitative information… including, as available, projected levels of ***public financial resources*** to be provided to developing country Parties. Other Parties providing resources are encouraged to communicate biennially such information on a ***voluntary basis***. How can transparency and consistency be monitored and ensured as enshrined in **Paragraph 7 of this Article** if required information is to be provided on voluntary basis by Other Parties? This is a recipe for conflict among stakeholders in the pursuance of transparency and accountability of climate financing with public resources especially where "other parties" have not been operationally defined.

Development partners and/or donors such as the Global Environment Facility (GEF) and the World Bank Institute have not been able to demonstrate clear accountability for grants and/or loans advanced to the Ghana government in pursuant of national environmental interventions.

A classical case involving GEF is shared below:

Both developed and developing countries are donors to the GEF Trust Fund. Since its inception the GEF has received contributions from 39 donor countries. At the last replenishment 30 countries pledged a record US$4.43 billion for the GEF-6 period that runs from 2014 to 2018.

During the **GEF-5 replenishment period** (July 2010 – June 2014) for example, Ghana received an indicative allocation to formulate and execute projects for US$2,620,000 in biodiversity, US$2,450,000 in climate change, and US$3,780,000 in land degradation.

In 2011, GEF developed a ***Public Involvement Policy*** which among other things, requires that grants are to ensure ***active public involvement or consultations in the planning and implementation of all GEF funded projects***. For this reason, a request was made to GEF to demonstrate practically how it is ensuring the implementation of its own policy. Questions submitted to GEF were as follows:

- How is GEF accounting to its stakeholders or supporters for the financial resources it has provided to Ghana?
- How is GEF ensuring that individuals or citizens as a whole are adequately consulted in the planning and implementation of each project in Ghana?
- What mechanisms does GEF have in place for monitoring and evaluation of funded projects in Ghana? And what actions have been taken where the nation has been cited for poor performance?
- Is there any policy or system in place to hold GEF responsible regarding how funds are disbursed and accounted for?
- In a situation where GEF is found to be failing in playing its oversight responsibility, what are the available guidelines or steps set in place to holding GEF accountable?

[23] Ghana's 3rd Communication Report

The result from the dialogue with GEF shows that it has no proof! GEF opines that Ghana government should rather provide details of programmes or projects supported. GEF's own guidelines states that *"The GEF's Operational Focal Point (OFP), in coordination with the GEF Agencies and the GEF Secretariat, should keep and regularly update a list of CSOs and other organizations in the country, and share necessary information and consult with them, including those who may not be able to attend meetings. In addition to the stakeholder engagement plan, all GEF-financed projects and programs should have full documentation of public involvement. Public involvement activities will be conducted in a transparent and open manner. All GEF-financed projects should have full documentation of public involvement activities. Full documentation includes the following: a) Summary reports of stakeholder consultations; b) Environmental and social screening report; c) Draft Environmental and Social risk/impact assessment and draft mitigation/management plans (prior to appraisal); d) Final Environmental and Social risk/impact assessment and final mitigation/management plans (upon completion); e) Monitoring reports (Mid-Term Evaluations and Terminal Evaluations)."*
Ghana's OFP has failed to provide such information when a request was made. What then is the relevance of GEF's Public Involvement Policy? Also, what is the operational definition for the so-called *information sharing* that is always postulated? Ghana's Country-At-A-Glance data shows 76 projects, $449.1million Grant Funding, $2.60billion Additional Co-financing[24]. Reports cited from GEF's Evaluation Office unfortunately fails to give detailed information on these funded projects.

How does GEF expect the poor and vulnerable (supposedly the targeted beneficiaries) for loans and/or grants given to even know they ought to be engaged on GEF funded projects per its own policy? Such practices debatably will lead to perpetuating and deepening inequalities when systems and structures in place disregard or ostracize the poor and vulnerable in the decision making processes. Infact, the global agenda of **"Leave No One Behind"** on the contrary will result in leaving much more people behind especially the poor and vulnerable!

Similarly, the operations of the Ghana Country office of the World Bank Institute gives very little room to pursue vigorous monitoring and evaluation of support given to the government of Ghana. Agreeably, its Social Accountability concept is commendable despite the fact that its coverage is extremely limited. The World Bank needs to intensify this exercise and ensure that the outcomes or results of such intervention are widely shared and readily accessible to citizens.
A 2016 report entitled ***the fall and rise of Ghana's debt: How a new debt trap has been set*** has challenged the Bank's conduct. It states that *"The World Bank broke its own rules by lending more to Ghana than it should have done based on its own risk rating. The World Bank says that "Recipients [of funding from IDA] with a high risk of debt distress receive 100 percent of their financial assistance in the form of grants and those with a medium [moderate] risk of debt distress receive 50 percent in the form of grants."[25] Ghana has continued to be a full recipient of finance from IDA rather than the higher interest IBRD part of the World Bank.66 Between May 2007 and February 2015 it was assessed as being at moderate risk of debt distress. Since March 2015 it has been at high risk of debt distress. However, on projects agreed by the World Bank Board between May 2007 and February 2015, $2.267 billion has been disbursed as loans, whilst only $160 million as grants.[26] This means 93% of IDA funding to Ghana has been in the form of loans, during a period when only 50% was meant to be. The four grants which were given in this time all date from between January 2012 and June 2013. IDA has agreed five projects with Ghana since it became at high risk of debt distress. Two of these are guarantees – the $400 million for the bond guarantee and $500 million for the Sankofa Gas Project. In addition, there have been three loans directly to the government of $150 million, $60 million and $45 million. In total that is $1,155 million*

[24] https://www.thegef.org/country/ghana
[25] http://ida.worldbank.org/financing/ida-financing
[26] Calculated from IDA statement of credits and grants

of loans or loan guarantees, and no grants, since IDA was meant under its own rules to only give grants to Ghana."

Interestingly, the GEF and the World Bank Institute have provisions for legal redress if any party feels affected or have concerns about their respective ways of work. While such provisions are ideal, ethics and morality embodied in the principle of Natural Justice is supreme. Climate change has already devastated and destroyed lives and properties of the majority poor people across the world. They still continue to suffer the harsh impact of climate change since it's no respecter of persons. Inspite of all these adverse conditions, states continue to drain resources from the poor through taxes. Don't the poor and vulnerable have EVERY RIGHT to know the benefit of their taxes that are used to finance the high-leveled meetings or consultations at the national and international levels including UNFCCC sessions? The issues of Tax Justice perhaps have been underestimated.

Development partners/donor institutions such as the World Bank Institute and GEF must take a second look on how they pursue their accountability mechanisms! The World Bank in particular has announced support in the areas of **Gender and Climate Change** in the next phase of the Country Partnership Strategy with the government of Ghana.

Government claims that it is well placed to make good use of climate finance, given its credible Public Financial Management system and its experience on how best to blend support from donors with national resources to address national priorities[27]. This position is highly contestable because it is currently unknown if government has truly undertaken the **Climate Public Expenditure and Institutional Review (CPEIR)** leading to climate sensitive budgeting in the medium term[28] it indicated.

Ghana is hoping to obtain USD$ 5billion from the Green Climate Fund (GCF) to support its iNDC. It can only be expected that the Board of GCF shall ensure that funds disbursed are efficiently and effectively accounted for in the spirit of good governance, transparency and accountability.

VII. TECHNOLOGY: ARTICLE 10

Paragraph 2 of this Article affirms country parties' position that the importance of technology for the implementation of mitigation and adaptation actions under this Agreement and recognizing existing technology deployment and dissemination efforts shall strengthen cooperative action on technology development and transfer. As noted in **Paragraph 6 of this Article**, support, including financial support, shall be provided to developing country Parties for the implementation of this Article, including for strengthening cooperative action on technology development and transfer at different stages of the technology cycle, with a view to achieving a balance between support for mitigation and adaptation.

According to Ghana government, without the requisite technology, the technical capacity and favorable conditions that stimulate innovation, Ghana will not have the capability to fully implement its iNDC. In this regard, Ghana will be looking for international partnerships to take advantage of the opportunities for technology development and transfer and continuous up-skilling especially in the priority iNDC sectors.
While this submission is understandable, government has woefully failed to demonstrate competence in basic technology inspite of donor support over the years

The Ministry of Environment, Science, Technology and Innovation (MESTI) hitherto known as the Ministry of Environment, Science & Technology (MEST) has little to showcase (if any) about how ***innovative*** it

[27] National Climate Change (NCCP) of Ghana
[28] 2015 National Budget Statement, Ghana

has become in the discharge of its roles and responsibilities. The ministry's website is not user friendly and does not provide links or access to relevant reports and/or documentations on all climate related projects that can be assessed by any interested party. Moreso, MESTI is virtually absent on social media; a readily available platform to providing education and creating awareness to a wide audience as required by **Article 12 of the Paris Climate Agreement**. If President John Mahama of Ghana is delighted to hit 1 million followers on Facebook who get to receive his messages and possibly have opportunity to share their concerns or issues with him. Indeed donor agencies and development partners are strongly present on social media so what is preventing MESTI in taking advantage of such readily available platforms in addition to the traditional media? It will make better understanding if simple technology platforms are maximized prior to targeting the advance and sophisticated technologies.

VIII. CAPACITY BUILDING: ARTICLE 11

Paragraph 2 of this Article states that, "Capacity-building should be **country-driven, based on and responsive to national needs, and foster country ownership** of Parties, in particular, for developing country Parties, including at the national, subnational and local levels. Capacity-building should be guided by lessons learned, including those from capacity-building activities under the Convention, and should be an effective, iterative process that is **participatory, cross-cutting and gender-responsive**". This is an idle expectation nonetheless the subject of 'capacity-building' is arguably vague. It must be operationally defined and contextualized as country parties have different levels of knowledge and expertise in discharging climate-related interventions. Government of Ghana has organized several capacity building sessions and yet the impact or outcome of these trainings cannot be measured. For example, as part of efforts to mitigate the impact of climate change, a draft National Policy and Nationally Appropriate Mitigation Action (NAMA) has been prepared for consideration and adoption. Three consultative fora were organized for key stakeholders to enhance their capacity to reduce the impact of climate change[29]. It is unknown how such capacity building has translated into verifiable impacts or change. Reasons are that there is **fragmentation and duplication of interventions; non-coordination among government sectors and agencies** and more seriously is the fact **key policy makers are not knowledgeable on climate change**[30].

In 2000, Government of Ghana indicated that specific projects in climate change will be developed and implemented in the districts. Moreso, District Assemblies will be assisted to enact by-laws related to climate-change[31]. A youth-led climate change adaptation project conducted in Coastal, , Rain forest, High Temperature areas by the **Strategic Youth Network for Development (SYND)** in 2016 showed that local state actors lack the necessary knowledge to prosecute climate change in their respective jurisdictions.

Again, government indicated that the existing environment and climate change unit and regional environment desks will be strengthened to coordinate climate change adaptation. In this regard 80 districts are to be targeted and a grants scheme established for sustainable land and environment management to benefit 800 service providers and adopters[32]. It will be useful to know how these capacities developed are been harnessed and maximized.

Ghana signed onto the UNFCCC on 12th June, 1992 and ratified the convention on 6th September, 1995. For over 20years, it is expected that enough significant capacity should have been built by now to deliver results. Thus conducting a capacity audit will be a useful exercise to identify not only gaps but how well

[29] 2012 National Budget Statement, Ghana
[30] Ghana's 2nd Communication Report
[31] Ghana 1st Communication Report
[32] 2014 National Budget Statement, Ghana

capacities built over the period have been utilized or maximized. Ghana conceding that key policy makers are not knowledgeable on climate change is very unfortunate.

IX. EDUCATION AND AWARNESS CREATION: ARTICLE 12

Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information, recognizing the importance of these steps with respect to enhancing actions under this Agreement.

This has not been efficient and effective due to fragmentation of climate-related interventions in Ghana. Different sectors and agencies run parallel climate programs and activities.
As part of its work on education and creating awareness, Government claims to have created electronic data sharing platforms such as:

- Online climate change data hub – Environmental Protection Agency (**http://197.253.69.38/)**.
- **National Energy data processing and information centre – Energy commission (http://energycom.gov.gh/GhAdatabase/dataset/)**
- **National Forestry Inventory WebGIS Portal – Forestry Commission (http://www.fcforestinfo.gov.gh/)**
- **Access to biomass map online – Nature Conservation Research Centre (NCRC) and Forest Trends (http://www.forest-trends.org/publication_details.php?publicationID=2837).**

Sadly, these online portals are dysfunctional except for the biomass map[33]

In 2010, the Environmental Protection Agency (EPA) of Ghana indicated that it is facilitating, among others, the following[34]:

- Train and equip sectoral agencies in environmental education skills and other facilities.
- Ensure mass participation in environmental decision making and management
- Improve access to and provide information on environmental issues
- Promote the development of training materials
- Promote continuous education to ensure the development of a cadre of environmental professionals
- Develop school/community participation through the institution of awards and competitions for environmental efforts
- Integrate environmental ethics throughout Ghanaian culture

Undoubtedly, these are laudable efforts but their current statuses (whether they failed or were successful) are unknown.

X. TRANSPARENCY FRAMEWORK: ARTICLE 13

As part of the framework for transparency of action, **Paragraph 7 of this Article** requires each party to regularly provide information on national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases as well as information necessary to track progress made in implementing and achieving its nationally determined contribution.
Again, **Paragraph 8 of this Article** notes that each Party should also provide information related to climate change impacts and adaptation under Article 7, as appropriate while paragraph 10 tasks

[33] Last viewed date was 11th October, 2016
[34] Ghana's 1st Communication Report

developing country parties to provide information on financial, technology transfer and capacity-building support needed and received.

Over the period, the practice has largely been CSOs demanding transparency and accountability from government. Indeed, development and/or donor partners (developed parties) continue to encourage CSOs to be active in their roles and responsibilities in the social development spectrum towards ensuring that interventions supported are meeting the required or expected goals. Unfortunately, developed parties have not demonstrated the very commitment they propagate as seen in Article 9 above.

Ghana government is of the view that a Monitoring Report and Verification (MRV) system is the cornerstone to ensure the successful implementation of its iNDC mitigation and adaptation actions. It states that the iNDC will be an integral part of the existing national development monitoring and evaluation structures which incorporates sector-based periodic information review through Annual Progress Report (APR) system. The MRV for the INDC will build on the existing APR system by enhancing the technical functionalities and with proper institutional coordination. This according to government will bring about transparency and accountability in the implementation of Ghana's INDC actions. The MRV system will be deployed to track progress towards achieving INDC goals as well as any modifications in the priority policy actions that will be implemented to attain the INDC goals that have been put forward.

This position by government is contestable as such MRV system is not publicly available to facilitate or elicit independent analysis or evaluation. In anycase, the technical functionalities and proper institutional coordination do not exist, so on what basis can transparency and accountability in the implementation of INDCs come about? Until clear systems are provided for public scrutiny and involvement, this will only amount to business as usual because government cannot monitor itself!

Problems, constraints, or challenges expressed worlby government over the years such as **poor coordination among sectors or agencies, inadequate capacity building, funding, and lack of political will** seem to be a repetitive phenomenon. If that be the case, it will be important to explore why donors keep putting money into a system where the recipient is not showing any significant or radical steps in dealing with such over pampered problems?

Moreover, Ghana government has [still] not passed the **Right to Information Bill** into Law eventhough it has ratified the Paris Climate Agreement. Should government refuse to submit or present information when demanded, what will be the relevance of the Paris Agreement's Transparency Framework?

XI. CONCLUSION

From hindsight, country parties' commitment to the Paris Climate Agreement appears to be a key hope to meeting the 2 degrees temperature goal. But this may actually not be the case; at least history shows that the goal set around the Kyoto Protocol has not been successful.

This paper shows that Ghana's intentions and conduct are in serious doubt. Similarly, the conduct of development partners and/or donor agencies gives credence to the fact that they have not been able to **publicly demonstrate probity, transparency and accountability**. Until this is expeditiously remedied, **Articles 6 and 13 of the Paris Agreement** shall become mere rhetoric and thus rendered impotent. For instance, access to relevant information is virtually impossible momentarily in Ghana.

The UNFCCC is expected to be receiving periodic reports from country parties. Correspondence with the secretariat shows that there is limited human capacity to review all documents submitted per country party to check for consistency and accuracy. However, the essence should not just bother on submitting

reports which possibly may not be verified by the secretariat. If care is not taken, country parties will only be submitting reports to the UNFCCC as required making the registry merely a "dumping site". Checks with the Secretariat shows that there is no personnel that reviews reports submitted by Ghana – which possibly explains why Ghana's emission baseline discrepancy as produced under ***Mitigation*** has gone unnoticed. This obviously has implications.

The systems and structures of development partners and/or agencies such as GEF and the World Bank Institute gives no room for the poor and vulnerable to fully engaged in the decision making processes. These bodies have provisions for legal redress if any party has concerns about the conduct. While such provisions are ideal, ethics and morality embodied in the principle of Natural Justice is supreme. Climate change has already devastated and destroyed lives and properties of the majority of poor people across the world. They still continue to suffer the harsh impact of climate change. Inspite of all these adverse conditions, states continue to drain resources from the poor through taxes. Consequently, what will be more noble that making information readily available to them? Don't the poor and vulnerable have EVERY RIGHT to know the benefit of their taxes that are used to finance the so-called high-level meetings or consultations?
Until such practices are critically reviewed, the poor and vulnerable will continue to be ostracized thus perpetuating inequalities and end up leaving more people behind contrary to the **"Leave No One Behind"** mantra of the Sustainable Development Goals (SDGs).

Again, problems, constraints, or challenges expressed by government in various reports notably poor coordination among sectors or agencies, inadequate capacity building, funding, and lack of political will etc. have become a recycled phenomenon and over-pampered. If development partners [still] continue to give public resources inspite of this situation, then logically speaking these partners have supported (and still supporting) government's inefficiencies and ineffectiveness. This will serve as a litmus test for the operators of the GCF.

Interestingly, the Paris Climate Agreement is silent on penalties or punitive measures against parties whose conducts are inconsistent with the agreement. **Article 15** makes provision for the formation of a committee that shall be expert-based and facilitative in nature and function in a manner that is transparent, non-adversarial and non-punitive. As if that is not enough, **Article 28** provides a "window of escape" for any party that wishes to withdraw from the agreement after three years of coming into force. This basically means that parties are permitted to romanticize with the Agreement and seek divorce after 3 years. How does this provision show that country parties are really committed to their own obligations?

There are individuals and organized bodies who are very skeptical about this whole climate change agenda such as Donald Trump who reports say doesn't accept the scientific evidence that climate change is real and even wants to dismantle the Paris Agreement. He is quoted to have said on December 30, 2015 at a campaign rally in Hilton Head, South Carolina that ***"So Obama is talking about all of this with the global warming and … a lot of it is a hoax. It's a hoax. I mean, it's a money making industry, okay? It's a hoax."*** Thus those who claim it is a real phenomenon bedeviling humanity and must be tamed should be seen doing so not just by word of mouth or declaration but by verifiable and replicable actions.

In December 2013, immediate past president of Ghana Ex-President John Agyekum Kuffour was appointed as U.N. Special Envoy for Climate Change. In January, 2016 current president of Ghana, President John Dramani Mahama was also appointed as Co-Chair of Eminent Persons to the SDGs. This demonstrates that Ghana [the leadership] is highly respected and recognized in the global development agenda. Nonetheless, this paper firmly posits that unless a radical approach or paradigm shift occurs, the Paris Agreement [from Ghana's perspective] "shall" fail!