



CLIMATE CHANGE, CORRUPTION AND INSTITUTIONAL FAILURE

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Abstract

This study examined the linkage between corruption, institutional failure and the Nigerian State poor response to climate change. The study adopted Structural-Functionalism as its theoretical framework while the methodology involved the Time-Series research design. Data was gathered basically from secondary sources. The study focused on the Niger Delta due to its peculiar characteristics and susceptibility to the impacts of climate. The study found out that corruption has led to the failure of institutions responsible for managing the impacts of climate change in the region, and subsequently recommended that there should be strict supervision of funds meant for climate change, while those involved in corrupt practices should be punished to serve as a deterrent to others.

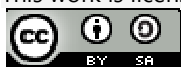
Keywords: Corruption, Institutional Failure, Climate Change, Environment, Degradation

Introduction

It is a factual truism that the environment sustains human existence on planet earth. This is one of the reasons why the state of the environment is of paramount concern to humanity, if life is to be guaranteed here on earth. (Adewusi 2011; Ambasht and Ambasht, 2005). The health of the environment is tantamount to the health of humanity; therefore a pollution free environment is sine qua non to a healthy living that underpins sustainable development.

However the strange paradox of human existential struggle for development couched on industrialization and enhanced economic activism has led to the phenomenon of climate change on one hand and the need to preserve the environment for continuous existence of the human race on the other (Angalapu and Bila, 2018). There is no doubt that, man is the greatest and chief pollutant of the environment as his struggle to better his economic condition causes a great harm to the normal flora and fauna of the planet (Adjugo, 2010). Man's efforts to improve upon his material condition are inextricably tied to the environment (Ambasht and Ambasht, 2005; Tyokumbur, 2010). Nevertheless, there is an increasing recognition all over the world the health of the environment is positively associated with health of man. In the context of the above, a study of the environment and its sustainability becomes catalytically instructive and germane in Nigeria's quest for sustainable development.

It is trite to note that, concerns over the environment have been in focus the world over since the sixties (Adewusi, 2011). However, this was brought to the front burner of international discourse and indeed given impetus in 1972 when the world community resolved at United Nations Conference on the Human Environment held in July 1972 at Stockholm to protect the





environment and mitigate the impact of climate change (Elliot, 2007; Nwosu, 2006; Etekpe, 2014). After this conference, there has been a flurry of regional and international conferences on the protection of the environment leading to the concept of sustainable development. Climate change is a subject of global concern. Accordingly, in many quarters today, even places where a policy does not exist, there is a tacit agreement with science that our climate is at risk (Allen, 2014). The goal of policy, therefore, is to ensure that greenhouse gases in the atmosphere are reduced to a safe level. However, global policies on climate change have rarely affected global emissions reduction level (Allen, 2014). Meanwhile, three related policy actions are required to tackle climate change, namely: stabilization, adaption, and mitigation. All three actions and their various options are expensive to undertake, including mitigation strategies of fossil fuel shift towards alternative renewable energy (Kumar, 2009). The major problem of global policy on climate change has been the fact that developed capitalist nations have been unable to reach a binding agreement on the substantial emissions reductions (Angalapu, 2018).

Developing countries increasingly becoming frustrated with the big polluting countries' unwillingness to tackle the problem have also developed local strategies to deal with the effects of climate change (Angalapu and Bila, 2018). Scholars have also suggested the integration of climate change science into formal and non formal education (Amatari, 2015) In accordance, Nigeria has developed The National Adaptation Strategy and Plan of Action on Climate Change (NASPA-CCN) and the National Mitigation Action (NAMA). The goal NASPA-CCN is to take action to adapt to climate change by reducing vulnerability to climate change impacts and increasing the resilience and sustainable well being of all Nigerians. NASPA-CCN is an elaborate policy framework with full sets policy programmes and strategies for agriculture (crops and livestock), fresh water resources, coastal water resources and fisheries, forest and biodiversity (BNRCC, 2011).

It is however sad that despite several local policies and agencies established to curb the devastating impact of climate change, very little has been achieved (Nwosu, 2006; Amobi and Onyishi, 2015). Thus, this work seeks to locate the failure of climate change policies and institutions in the Niger Delta on the pervasive nature of corruption that has pervaded the Nigerian polity. Consequently, this study seeks to tackle the question: Has corruption contributed to the poor performance of institutions responsible for managing climate change in the Niger Delta?

The methodology adopted for this the study involved the Time-Series as research design. Data was gathered basically from secondary sources. The study focused on the Niger Delta due to the its peculiar characteristics and susceptibility to the impacts of climate.

Theoretical Framework

The analysis of this paper is located in the context of the Structural-Functional theoretical framework. This theory holds that every political system is made up of political structures and different political structures perform different political functions in the society (Gauga, 2003). The resultant effects of the performance of the different functions by the different structures determine the behaviour of the political system.





The logic is that, if a particular function is not performed effectively, the structure responsible for the performance of such function is dysfunctional. Hence, one can trace the ills of society to the inefficient and ineffective structures in the society which have led to a poor performance of their functions in the political system. Following from this, it can be explained that the widespread corruption in Nigeria is traceable to the lack of capacity of the structures (all state institutions and anti graft agencies) responsible for making and enforcing laws on corrupt practices. Similarly, the inability to deal with the impacts of climate change is traceable to the structures (the ministry of environment and all its sub-units and institutional frameworks) set to protect the environment.

The Impact of Climate Change in the Niger Delta

The Niger Delta is vulnerable to environmental degradation (Etekpe, 2009). As such, the changes in the earth's climate have had and are still having very devastating effects on the natural flora and fauna of the Niger Delta. Over the past 102 years, the Niger Delta has experienced a temperature rise of 3⁰C (Efe, 2010). This indicates that the Niger Delta is now 3⁰C warmer than the last one hundred and two years. The impact of climate change in the Niger Delta is multi-dimensional (Ibaba, 2012 and 2014). As such, the devastative impact of climate change has gone beyond changes often observed on the land, water bodies and the atmosphere of the Niger Delta. It has also led to infrastructural decay (Arugu, 2015). Worse still, climate change has now manifested itself and contributed remarkably in the transformation of the economy and culture of the Niger Delta (Zibima, 2014; Etekpe, 2014; Ibaba, 2015; Okoye, 2015; Sibiri, 2015, Akigbe and Ikporukpo, 2015).

The Niger Delta has been quite vulnerable to the impact of climate change. This is as Climate change has serious negative impacts on earth's coastal system. The Niger Delta makes up a considerable proportion of the Nigerian coastal system. Consequently, the Niger Delta have been susceptible to increased coastal erosion, higher storm surge, flooding, more extensive coastal inundation, changes in the surface water quality and ground water characteristics (Efe, 2010). The foregoing has led to several devastating impacts. However, what has dominated the literature has been the impact of climate change as inhibitions to primary production processes in the region . No doubt, climate change has had a remarkable on agriculture and aquaculture through the decline in soil and water quality. Table 1 gives credence to this:

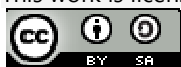




Table 1: Damage to Agricultural Crops in Niger Delta (Orashi Province) Linked to Climate change Effects

<u>Agro Crops</u>	<u>Area Damaged (000ha)</u>	<u>Yield Loss (tons/ha)</u>	<u>Projected Production Loss (hundred tons)</u>	<u>Projected Loss in Monetary Terms (USD)</u>
<u>Cassava</u>	<u>3.7</u>	<u>25.1</u>	<u>4.1</u>	<u>105,000.00</u>
<u>Yam</u>	<u>2.0</u>	<u>12.4</u>	<u>2.5</u>	<u>74,217.00</u>
<u>Plantain</u>	<u>1.5</u>	<u>19.1</u>	<u>3.7</u>	<u>102,000.00</u>
<u>Banana</u>	<u>1.1</u>	<u>14.9</u>	<u>1.4</u>	<u>53,000.00</u>
<u>Cocoyam</u>	<u>0.5</u>	<u>X</u>	<u>0.7</u>	<u>5,000.00</u>
<u>Potatoes</u>	<u>1.5</u>	<u>5.7</u>	<u>0.9</u>	<u>7,000.00</u>

Source: Adapted from Mmom & Aifesehi, 2013:223 cited in Ibaba (2012)

However, the impact of climate change in the region goes beyond agriculture and aquaculture. Climate change has further resulted to an increased loss of properties and coastal habitats, loss of lives, loss of tourism and recreation and transportation functions. Table 1 below shows the multi-faceted effects of climate change in the Niger Delta.

Table 2: Impacts of Climate Change on Selected Communities in the Niger Delta 1990-2013

Characteristics						
S/No	Community	Livelihood (Local Economy)	Health Hazard	Security	Exacerbated poverty levels	Remarks
1.	Fangbe, Yenagoa, Bayelsa State	-Entire village relocated as old village was submerged by River Nun (Oceanification) -Undue Stress on available land. -Acid rain -28,540 internally displaced persons IDPs.	-Epidemics in water borne disease-malaria, typhoid, etc. -physically challenged babies (PCB) -High death rate. -Respiratory problem	-Inter/Intra communal crises. -Increased conflicts with community leaders, MNOCs and governments.	-Destroyed farm lands and fishing activities and other local economic activities. -Increased poverty level by 45 percent	No shore protection or concrete measures by the state government in place to control erosion/ mood slide
2.	Otuokpoti; Ogbia	-Shore has been submerged by	-High incidences of	-Inter communal war	-Destruction of logging,	-shore protection by

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	Bayelsa State	River Nun (river erosion)	water borne diseases causing high death rate -outbreak of skin disease -Respiratory problem	with Agbura community over land in 1990. -Perennial conflicts with MNOCs	fishing, hunting etc. -Exacerbated poverty level by 39%	Melford Okilo government in 1982. But needs reinforcement
3.	Sagbagraia, Kolokuma/Opokuma, Bayelsa State.	-Greater part of the village relocated being submerged by River Nun (river erosion) -Undue stress on available land for farming, building and other economic uses. 8450 IDPs -Unusual heavy acid rains	-Increased death rate from acid rain water that caused cancer, skin disease, lung cancer and water borne ailments.	-Communal crises over land and fishing rites. -perennial conflicts with MNOCs.	-ditto- Exacerbated poverty level by 35%.	No shore protection or concrete measures by the state government in place to control erosion/oceanification
4.	Agbere, Sagbama, Bayelsa State.	-Greater part of the shore has been submerged due to erosion. (River Nun) -Undue stress on available land. -10,540 IDPs -Undue flooding	-ditto- 11	-ditto-	-ditto- -Exacerbated poverty level by 54%	-ditto-
5.	Patani, Pantani, Delta State.	-ditto-	-ditto- 40,410 IDPs	-ditto-	-ditto- Increased poverty level by 58%	Shore protection by OMPADE in 1995
6.	Ibeno, Ibeno, Akwa Ibom	The shore has been eroded/submerged by Atlantic	-ditto-	-ditto- -Increased		No shore protection.





		ocean (oceanification) -Undue flooding and stress on available land, fishing rites, etc. -20,160 IDPs		poverty level by 48%.		
7.	Abonnema, Akuku-Toru, Rivers State.	Greater part of the shore has been eroded, causing undue stress on available land -Occasional acid rain. -12,850 IDPs.	-High incidences of water borne diseases. -outbreak of epidemic diseases. -respiratory problem/	-dotto- -Exacerbated poverty level by 26%	Intra-Inter communal clashes over land and fishing rites. -with Degema Community. -Increased poverty level by 41%	Shore protection by OMPADEC in 2004

Source: Etekpe, 2015

Among the effects of climate change in the Niger Delta, sea level rise and change in rainfall fall pattern seems to have caused greater harm to the environment than others owing to the fact that the Niger Delta is located along the coast. It has been noted that 42.6 % of the Niger Delta is highly vulnerable to sea level rise, such areas being characterised by low slopes, low topography, high mean wave heights, and unconfined aquifers (Musa, Popescu and Mynett, 2014). Table 2 outlines the effect of sea level rise and changes rainfall pattern on the Niger Delta environment.

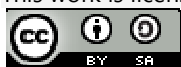




Table 3: Environmental Problems linked to Climate Change in the Niger Delta

Climate Change Effect	Type of Environmental Problem	Impact on Environment
Sea Level Rise	(a) Coastal/river bank erosion	(i) Loss of coastal vegetation (ii) Destruction of settlements and economic infrastructure such as oil pipelines. (iii) Destroys farmlands, crops, and economic trees. (iv) removes top soil
	(b) Coastal Flooding	(a) enhances the intrusion into sea water into fresh water sources. (b) increases the salinity of surface and underground water. (c) worsens erosion. (d) removes top soil. (e) destroys settlements and infrastructure such as roads. (f) destroys farmlands and crops
Change in Rainfall Pattern	Makes the dry and rainy season unpredictable.	Disrupts agricultural activities and reduces crop yield

Source: Adapted from Uyigue & Agoh, 2007:8-12; Efe, 2010:2-3; Onuoha & Gerald, 2010:11-19 cited in Ibaba, 2012

From the table above, it could be seen that sea level rise and changes in the pattern of rainfall have had serious implications on the socio-cultural, economy and demography of the Niger Delta. Table 2 is even more incisive as it reveals the impact of the changes in the pattern of rainfall on selected communities in the Niger Delta.

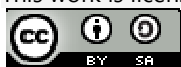
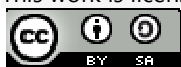




Table 4: Effects of Rainfall on Inhabitants of the Niger Delta

Affected Towns	Properties Affected	Estimated Cost (NGN)
Warri	Over 197 houses, 28 commercial shops, 67 workshops, 5 schools and several farmlands/fish ponds.	1,825,962
Forcados	Several houses and commercial shops, workshops and several farmlands/fish ponds.	1,679,234
Benin City	Over 192 houses, 118 commercial shops, 124 workshops, 11 schools and farm lands.	2,002,376
Yenagoa	186 houses, 27 stores, 34 workshops, 12 schools and several fish ponds.	2,015,309
Port Harcourt	Over 201 houses, 16 commercial shops, 89 workshops, 12 schools and several farm lands/fish ponds	2,023,543
Uyo	Over 93 houses, 18 commercial shops, 7 workshops, 3 schools and several farm lands.	1,345,789
Ikot Ekpene	Over 76 houses, 26 commercial shops, 10 workshops, 2 schools and several farm lands.	1,674,980
Calabar	Over 14 houses, 8 commercial shops, 5 workshops and several farm lands.	1,000,123
Ondo	Over 56 houses, 14 commercial shops, 8 workshops, 2 schools and farmlands.	1,543,863
Total		15,110,179

Source: Adapted from Efe, 2010:56





More so, it has also been established in the literature that climate change has serious implications for poverty. Climate change makes it difficult for an individual to produce and reproduce his means of subsistence. This is as climate change results in scarcity, limited availability or restricted access to natural resources which is a threat to the survival of man (Adeoye, 2017; Marietu and Olarewaju, 2009; Odoh and Chilaka, 2012; Olaniyi, Ojunkunle and Amujo, 2013). Table below captures the climate change-poverty nexus.

Table 5: The Impacts of Climate Change and Implications for Poverty

Effect of Climate Change	Environmental, Economic and Socio-Health Implications	Impact on Poverty
Increased temperature and changes in precipitation	Reduced agricultural and natural resources	(i) Lowered industrial output and labour productivity, high inequality, impacts on trade, and fiscal and macro-economic burdens lead to reduced economic growth , and poverty reducing effects. (ii) reduced productivity and security of poor people's livelihood assets , and reduced access for the poor to their livelihood assets. (iii) Less effective coping strategies among the poor, and increased vulnerability of poor
Change in precipitation, runoff and variability.	Greater water stress	
Increased incidence or intensity of climate related disasters.	Damage to assets and infrastructure.	
Temperature, water and vegetation changes	Increased prevalence of diseases	

Source: Adapted from Mitchell & Tanner, 2006:8 in Ibaba, (2012)

Corruption and Institutional Failure as an Albatross to Climate Governance in the Niger Delta

Corruption in Nigeria appears to be ubiquitous and takes many forms: from massive contract fraud to petty bribery; from straight-up embezzlement to complicated money laundering schemes (Amudsen, 1999). There is a “general conclusion that everyone in Nigeria is corrupt in varying degrees and that corruption in Nigeria has become a way of life” (Iheanacho, 2104). It is





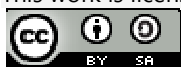
even more worrisome that even the institutions and state actors, who are supposed to make and enforce the laws against corrupt practices are themselves corrupt (Ikporukpo 2016; Iheanacho 2014). It was thought that the corrupt nature of the Nigerian state was rooted in the authoritarian rule of the military (Iyaniwura, 2014; Majid and McDonald, 2007). However, the return to democracy and the birth of the Nigerian fourth republic has not only ridiculed Nigeria as a country with poor development but also presented the country as a classic case of celebrated leadership unaccountability and widespread corruption (Egharevba and Chiazor, 2012). Consequently, all administrations in Nigeria's fourth republic have been entangled in one case of corruption or the other (Mohammed, 2013). The evidence of the pervasive nature of corruption in Nigeria have made the promise of fighting corruption a fundamental component embedded within party manifestoes of all political parties which have had a hold on political power in the country.

Corruption is a clog in the wheel of progress in Nigeria. As such, corruption has affected every facet of the Nigerian society. Consequently, the environment has not also been spared from the devastating impact of corruption. The destructive impact of corruption on the environment is even more acute in the Niger Delta region. This is as; the region is quite susceptible to the impact of climate change due to its location along the coastal line. This point has been noted thus;

*As corruption spreads, foreign investment dries up or is driven away, poverty deepens, and public discontent grows. As a result, society becomes even more vulnerable to corruption, crime, bad governance, and poverty` **There is even the risk of violence and serious damage to the environment - look no further than the Niger Delta** (UN Office on Drugs and Crime, 2007)*

It is a fundamental fact that “climate change is a global phenomenon, but its effects are localized, impacting on communities without regard to who contributed to it” (Ibaba, 2012:6). The point here is that, since the effects of climate change are localized, different countries have also evolved local strategies to ameliorate and adapt to the devastating impact of climate change on the environment. However, the case of Nigeria has been worrisome as corruption has led to the failure of institutional frameworks that are responsible for responding to the challenges of climate change in the country in general and the Niger Delta in particular.

The history of corruption and how it has led to the environmental degradation in the Niger Delta is a long and sad one. However, the most glaring account of environmental degradation occasioned by corruption in the Niger Delta was the Koko waste issue. On July 24, 1987 the Niger Delta in particular and Nigerians in general woke up to the news of toxic wastes dumped in the little town of Koko in the Niger Delta region, all the way from Italy. The hazardous waste contained in 18,000 drums were filled with not only PCB, but also asbestos fiber and dioxin (Ehwarieme and Cocodia, 2010). The waste led to a massive pollution of the entire Koko Town. Investigation in the Koko toxic waste dumping issue revealed that prior to its exposure, there was a conspiracy between S.I ECMAR (Italy), its Nigerian agent (Raffaelli) and most shockingly, the Nigerian Pharmaceutical Board which issues licenses to facilitate the



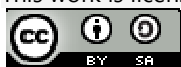


importation of the toxics into Nigeria. Inspectors at the port were also part of the conspiracy because they benefited from the syndicate (Ehwarieme and Cocodia, 2010).

However, in recent times, the new face of corruption in the region is the mismanagement and diversion of funds meant to mitigate the impact of climate change. It is quite unfortunate that in the Niger Delta, funds for climate change have long been a lucrative corruption mechanism. For instance, Ibiono Ibom Local Government Area of Akwa-Ibom is erosion prone. Its undulating landscape leaves both flanks vulnerable to corrosive gully erosion. Construction companies build erosion works into their road contract procurements but these palliatives become new triggers for worse gullies (Tell, 2016). Consequently, in 2011, the government awarded a N6.1 billion contract to United Dominion Company Limited under the supervision of the Niger Delta Development Commission, NDDC, for erosion control in the local government. The contract was to be completed in 104 weeks; that is two years (Tell, 2016). As such, the project should have been completed in 2013. However till date, nothing much has been done.

Similarly, in 2012 the then President Goodluck Jonathan announced in a nationwide broadcast that he has released the sum of 17.6 billion Naira as direct financial assistance to flood affected states and some Federal Government agencies responsible for disaster management. The President said to further intensify their intervention activities, the following agencies of the Federal Government was also allocated funds as follows: Ministry of Works, N2.6 billion; National Emergency Management Agency, NEMA, N1.1 billion; Ministry of Environment, N350 million; National Commission for Refugees, N150 million; and technical committee on flood's impact assessment, N100 million (Vanguard, 2012).

However, the fund released did not seem to have made much impact on the communities that were ravaged by the flood. This is as great number of flood affected communities have denied receiving relief materials from the government or its agencies while some have said only very little of the fund was used to give them relief materials. In Delta State for example, hundreds of hunger-torn flood victims, denied of basic relief materials resorted to eating corn seedlings, which unknown to them were already treated with pesticides (Adebayo, 2016). The foregoing led to massive food poisoning in Delta State. Consequently, women, children and the elderly were the worst hit in a mass food poisoning that was initially mistaken by local health officials for an outbreak of epidemic. Overnight, hundreds of people in communities like Ossissa, Isele-Egwu, Olor and Onu-Aboh were left looking gaunt with bloated tummies and sunken eyes, forcing families who could afford it to rush their sick members to hospitals while others resorted to prayer houses. The mass poisoning recorded in 2012 in Ndokwa-East Local Government Area of the oil-rich state exposed the underbelly of the flood disaster management and victims' rehabilitation committees set up by the State in the wake of a ravaging flood that washed away homes, farmlands, roads, bridges, markets and businesses across 22 states of the federation. The food poisoning saga became rather worrisome due the huge funds that were spent for intervention in the state.





Delta received N500 million intervention funds from the Federal Government to assist flood victims in the state. This was in addition to internal funds already set aside by the oil-rich state for the same purpose (Adebayo, 2016). In one of his numerous speeches during the crisis period, the then governor of the state, Emmanuel Uduaghan, announced the allocation of 49 trucks of food items to internally-displaced people in the state (Adebayo, 2016). However, it didn't appear that those eating pesticide-treated corn seedlings saw any of the food trucks. A cash relief of N5,000 to adults and N3,000 to youths was equally announced but the monies instead went into private pockets (Adebayo, 2016). Alexander Nwanji, a victim, stated that although he lost his farm and cassava mill, his name didn't appear on the official list of farmers to receive post disaster assistance. He also did not get the N5,000 meant for adult IDPs. He further stated that politicians and government officials populated the list with ghost beneficiaries, adding that the 11,810 IDPs at the Oleh camp alone were robbed of about N59 million. Due to the pervasiveness of corruption, people were skeptical about the usage of the funds for the benefit of the flood victims even before it was actually stolen. Dr. David Oyedepo stated thus; 'the only sector working today is politics. People see political office as chance to make money from the top to bottom, even money for the flood victims could be diverted'' (Vanguard, 2012).

Similarly, an audit of the Ecological Fund which is a voluminous federal fund for undertaking preventative and remedial environmental projects revealed how politicians, civil servants, and contractors have connived to embezzle a significant share of the ₦432 billion allocated to the fund from 2007 to 2015 (Olajide, 2016). Concerning the Ecological fund, the youth president of Anglo-Jos, Victor Gyang lamented thus;

When it rains you will pity us. We are at the mercy of the flood due to the sloping nature of this place. But that is not the thing that pains me. What pains me is the fact that government has already awarded this contract and yet more than five years that we thought that we have a solution we are still here counting losses," lamented the ecological problem troubling the area (Olajide, 2016).

More so, The Nigerian Senate revealed for 15 years, the federal and state governments have diverted about N500 billion ecological funds meant to tackle environmental problems of communities in the country. This revelation was made during a public hearing on a Bill seeking to prohibit the abuse of the Ecological Fund of the Federation organised by the Senate Joint Committee on Ecology and Environment (Leadership, 2018). From the foregoing, there is no doubt that the spate of corruption in Nigeria has serious implication for climate change governance in the Niger Delta.

Concluding Summary

This work has attempted to identify the nexus between corruption, institutional failure and the impacts of climate change in the Niger Delta. This study identified that climate change has grown to become one of the greatest threat to mankind all over the world in contemporary times. As such, different countries have evolved different local strategies to deal with the impacts





of climate change. Consequently, several institutions have been set up in Nigeria to mitigate the effect of climate change. However, this study found out that corruption has become a clog in the wheel of progress as it regards to climate change governance in the Niger Delta. This is as funds set aside to ameliorate the impact of climate change in the region is often diverted to public purse and used to pursue selfish and sectional ends.

This study recommends the improvement of the capacity of the anti-graft agencies in charge of fighting corruption in order for them to meet up with the daunting task of curbing the menace. Furthermore, there should be strict supervision of funds meant to mitigate the impact of climate change in the Niger Delta as this is a fundamental necessity in improving climate change governance in the region.

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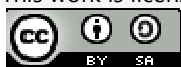


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