

The Political Economy of Climate Change in Nigeria's South-South Zone¹

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Abstract

If there is any part of Nigeria that needs special attention and consideration with respect to the on going discourse on global climate change and its far reaching implications for life on planet Earth, that region is Nigeria's South-South, where the convergence of three major processes associated with climate change seem to concentrate and reinforce one another; namely: exposure to ocean and tidal waves, coastal erosion and intensive and heavy rainfall on one hand, and traditional agricultural practices that accentuate the natural forces referred to earlier and more than five decades of oil and gas exploration and exploitation, accompanied by regular gas flaring; with little attention to the adverse effects that these have on the environment and consequently on change, thereby producing one of the most devastating outcomes for the inhabitants of the region on one hand and dire need to mitigate, manage and reverse these trends. The questions that this paper seeks to answer are these: what is the peculiar political economy of the South-South zone that has made climate change and its proper management an imperative necessity for the people, communities, and governments of this zone? How can this potential catastrophe be transformed into a win-win situation for the people of the region and Nigeria as a whole? The paper avers that effective management of climate change is not only a sine-qua-non for the survival of the South-South zone and continued prosperity of Nigeria, but requires a whole novel political economy and policies that will transform the region into a new climate friendly zone in the country. To this end, the paper recommends the creation of a new series of democratic institutions beginning with the rejuvenation of the now comatose geopolitical zonal structure of the country.

Key words: Climate change, South-South Zone, Niger Delta, Political Economy

1. Introduction

Today, millions of people are already suffering because of climate change. The deathly silence of this crisis is a major impediment for international action to end it...Science is only beginning to address the human impact of climate change...Without describing the full picture of the challenge, we cannot expect our response to match its scale. And we can no longer hold back from speaking out on the silent suffering of millions worldwide...The effects of pollution driven by economic growth in some parts of the world are now driving millions of people into poverty elsewhere...(Annan, in GHF, 2009).

Climate change conceived as a direct consequence of global warming, is now of critical importance among global concerns and pre-occupations accompanied by dire predictions of the disastrous fall-outs for humanity (Broecker, 1975; Bryan, 1986/87; NAS, 2008; Oxfam, 2009). Climate change, is therefore, tagged a "wicked problem"² (Batie, 2008), a "study in injustice" (CARE Int'l, 2011:4), a threat multiplier to health, (IPCC, 1995; Epstein, 2002; Colwell and Patz, 2005; Augusto, et al, 2009), etc.

In an attempt to check the dire effects resulting from climate change, from the first week of December 2009, the leaders of the world gathered in Copenhagen, Denmark to review the progress so far made in attaining the objectives agreed upon in the Kyoto Accord of 1997, and to chart a new agenda for dealing with the global challenges posed by climate change.

While, the underdeveloped countries of the world in general have been penciled down as those countries that are most negatively impacted by global climate change, sub-Saharan Africa has been singled out as the region that is likely to be worst hit by the negative consequences of the global scourge of climate change resulting from global warming, irregular rainfall, increased heat and natural disasters (IPCC, 1995; Boko, et al, 2007; E.U Insight, 2009). However, the expectations of many, including Sub-Saharan was set aback by the failure of the December 2009 Global Conference on Climate Change in Copenhagen, Denmark, to raise their expectations for a healthy climate (Muller, 2010).

The purpose of this paper is to highlight the unique predicament of the South-South zone of Nigeria as one region of Sub-Saharan Africa that is the most exposed to the ravages of climate change arising from the special location of the region, its political economy characterised by peasant agriculture disrupted by the operations of international oil and gas corporations exploiting the enormous wealth of the area; accompanied by the regular flaring of associated gas from oil wells, and especially, the three sided competition amongst the three tiers of government on one hand, transnational oil corporations and the indigenous communities and their intense competition to control the oil wealth of the area leaving the zone most exposed to the impact of climate change (Azaiki, 2009; Efe, 2010; Ibaba, 2012)

The paper affirms that effective management of climate change not only in the South-South zone but Nigeria at large requires a novel political economy that will transform the region into a new climate friendly zone in the country. In the wordings of Climate Science Watch (see in NCCPI, 2008:1) report, the challenge of dealing with climate change requires, “new institutions, new approaches, new resources, even new ways of thinking and behaving”. Some of the expected outcomes of such new institutions, resources and thinking, should include adjusting Transnational Corporations (TNCs) operating strategies to reduce environmental pollution and gas flaring, and water pollution (Quist-Arcton, 2007; Bassey, 2008; Ukala, 2011) while local communities minimise deforestation through improved earnings, control erosion and conserve water.

For Nigeria as a country, her Atlantic Coast and the Sahalien region have been identified by experts as the priority areas to watch in the unfolding drama of climate change, hence the focus of this paper on the South-South zone, which covers Nigeria’s six most south-ward and coastal states. This paper, thus, seek to find answers to the question: what is unique to the zone that makes it most vulnerable to the ravages of climate change? Having identified the vulnerabilities, the paper examine the elements of the political economy of the region that need to be transformed in order to make the region develop the new institutions, resources, ideas, thinking and behaviour that are needed to attain the desired result.

Of course, the title of the paper itself raises some questions:

- i. What is climate change?
- ii. How does it manifest itself in our area of study?
- iii. Why adopt the concept the concept of South-South zone instead of the geographical concept of the Niger Delta?
- iv. Why approach the study of climate change in the South-South zone from the perspective of political economy rather than from any other framework of analysis?
- v. How can the identified challenge to the management of climate change arising from the region’s political economy be overcome and transformed?
- vi. What recommendations and conclusions do we draw from our analysis?

2. Why the Political Economy Perspective?

We are familiar with the fact that climate change is a multifaceted global problem having many dimensions. While the critical element involved in the actual process of global warming and climate change are scientific in nature and ought properly to be tackled by scientists and technologists, global climate change produces major economic challenges that impact directly on the welfare of individuals, groups and nations. Consequently, climate change also has deep political implications for all concerned (Kirby, 2008; World Bank, 2010). So approaching the problem from a purely scientific, technological, geographical, economic or political perspective will not be able to capture the rich complexity of the subject (Hulme, 2009).

It is in order to capture the multidimensional character of climate change both globally and within nations that this paper adopts the political economy approach; which emphasises the fact that climate change like all social processes allocates benefits and burdens, empowers some groups and dis-empowers others (O'Brien and Leichenko, 2003). Consequently, managing climate change will ultimately result in redistributing costs, benefits, privileges and power both internationally and within countries. Thus, one of the central questions that the costs of reversing climate change is; should the major industrialised countries who are the chief contributors to global warming be made to bear a proportionate burden in mitigating, adapting or reversing global climate change or will they shift the burden to underdeveloped countries who are already the major victims of climate change to bear the brunt (Parikh, 1994; Gupta, 1999). Within nations such as Nigeria, how will the burden of climate change be effectively managed? Will there be a need to reordering of priorities within and between the various tiers of government and groups? Obviously, these are all questions that cannot be answered from a purely economic or political perspective of the current approaches to political economy listed by Wikipedia (2009:2); the one that closely approximates the usage intended in this paper is the one which states that *“political economy most commonly refers to interdisciplinary studies drawing upon economics, law, and political science in explaining how political institutions, the political environment and economic system...influence each other”*.

It is clear from this presentation that the concept of political economy is different in the sense in which Marx's classical formation was originally formulated. For in this passage influence replaces Marx's conception of causation, which has been the source of interminable debate in political economy. We do not need any serious demonstration of the fact that in Nigeria's South-South region, the interplay between economic interests, political power and legal regimes has been an ongoing process. Thus, for example, Ebeku (2004) employed the legal analysis of the provisions of Niger Delta Development Commission Act (2000) to assess the adequacy of the Federal Government of Nigeria's response to the economic and political pressures arising from the conflicting interests of National Government, foreign transnational oil corporations and the indigenous communities and their restive youths.

Similarly, Ikpatt and Scott (2001) had to propose “the equitable resource control...model” as an alternative dispute resolution concept as a way of resolving the controversy over resource control in the South-South zone. This is in order because, as experience has shown, most economic problems have a political implication and most legal regimes embody a given distribution of resources and power, whose change may affect individuals and groups one way or the other. This is more so for the affairs of a zone that is responsible for 95% of Nigeria's export earnings (Khan, 1994; Ojameruaye, 2006; Ariweriokuma, 2008).

3. What is Climate Change and How Is It Manifested Concretely

A fundamental starting point of any discussion on climate change is the fact that this is presently the most widely discussed subject. The internet giant Google has listed about 50,000 entries on the subject ‘Climate Change’ in its website (Google, 2009), thereby alerting us that there is no dearth of information on the subject. However, this abundance of information necessarily imposes a responsibility of careful selection by any researcher; to ensure that only the most useful items are brought forth, since excess of information as in other areas could be counterproductive. According to the International Panel on Climate Change (hereafter IPCC) climate change refers to a *“change in the state of the climate that can be identified (e.g. using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer. It refers to any change in climate over time, whether due to natural variability or as a result of human activity”* (IPCC, 2007). This usage differs from that in the United Nations Framework Convention on Climate Change (UNFCCC, in IPCC, 2007), where climate change refers to *“a change of climate that is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and that is in addition to natural climate variability observed over comparable time periods”*.

For Wikipedia (2009:1) “Climate change is a change in the statistical distribution of weather over periods of time that change from decades to millions of years”. Perhaps, out of a consciousness that this technical definition of climate change might not go down well with some readers, the same writer gives us another usage of the concept climate change in this more accessible terms; “Climate change usually refers to change in modern climate”.

The simplicity which this second conception of climate change sought to gain is obviously lost in the tautological use of changes in climate to explain climate change.

From the entry on ‘global warming’ however, it is clear that what is designated as climate change is actually the outcome of global warming which Wikipedia (2009) defines as “the increase in the average temperature of the Earth’s surface air and oceans since the mid 20th century and its projected continuation...”

Thus, we can infer that climate change is a direct result of global warming since the middle of the 20th century. The sources quoted above attribute climate change in general and its immediate causative factor, global warming, to a large number of causes; among them include plate tectonics, solar output, orbital variations, ocean variability and human influences.

However, because the natural causes of global warming and climate change take place very slowly and over every extended and extremely long periods of time, human influences have to be accorded priority in accounting for global warming. Wikipedia (2009) further stated that “presently the scientific consensus on climate change is that human activity is very likely the cause for the rapid increase in global average temperature, over the past several decades...”

Of most concern in these factors is the increase in CO₂ levels due to emissions from solar fossil fuel contribution followed by aerosols (particulate matter in the temperature) and cement manufacture. Other primary contributors to global warming include: land use, ozone depletion, animal agriculture and deforestation (Wikipedia, 2009:4). This conception of global climate change is not different from the position of Page (2006), who conceives of global change in terms of global warming. In other words, although climate change involves many related processes, what makes climate change a pressing subject of national and international concern is the phenomenon of global warming which produces the consequences that individuals, groups, governments and international organizations have to deal with. Aside from the far effects of climate change that can be seen in change in the nature of glaciers, vegetation, the core and other exotic indicators, sea level changes are of particular importance to our analyses of the political economy of climate change in Nigeria’s South-South zone. As indicated in an entry on global warming,

An increase in global temperature will cause sea level to rise and will change the amount and pattern of expansion of precipitation of such tropical deserts...It is with some justification that some Nigerian observers have called attention to the fact that Nigeria is doubly at risk from climate change: heavy rainfall, flooding, soil erosion, and submergence of the land in coastal areas, and loss of precipitation and increased desertification in the North (Ekott, 2009).

For the purpose of emphasis and from the perspective of the South-South zone, it important to emphasise that the challenges of climate change manifest themselves mainly in terms of:

- i. Increased rainfall,
- ii. The risk of large scale flooding,
- iii. Ocean encroachment,
- iv. Increased deforestation,
- v. Psychosomatic diseases provoked by intensive heat caused by gas flaring.

It is one of the ironies of life that while the underdeveloped countries are worried about the ravages climate change will wreak on their populations, the advanced countries are concerned that climate change will curtail their exotic habit and life style. Thus, the President of the World Tourism Organisation complained that climate change might prevent tourists from visiting some tropical islands. Also, the chairman of the World Travel and Tourism Council (WTTC), Fiona Jeffrey highlighted the negative effects which climate change will have on the Tourism Industry and people’s quality of life. Just imagine Switzerland or Colorado without water sports or the traditional sunny hot spots becoming like a total desert. These pronouncements obviously portray a different if not misplaced perspective to the problem of climate change (Okungbowa, 2009).

It doesn’t bear thinking about, but without sounding alarmist, the world scientists are in agreement that this could happen unless action is taken (Okungbowa, 2009:88). The next title explores the reasons from this peculiar combination of factors that make the South-South zone of Nigeria the most susceptible to the effects of climate change listed above.

4. The South-South Zone: Between Geography and Political Economy

What does it matter whether we discourse climate change in the Niger Delta region or in the South-South zone? We argue that it makes a world of difference. While the concept of Niger Delta, even if its exact empirical referents have tended to be subject to contestation according to different writers (see Ubhenin, 2006), is more or less geographic and economic in nature only dealing partially with the rich politics of the area.

The concept of the South-South zone on the other hand is pointedly political and economic in nature, emphasising the historical evolution of the zone from the mainstream of Nigeria's political dynamics in which the minorities of the defunct regions of the south, the Western and Eastern regions, actively canvassed the creation of additional states in order to enlarge their own political space in relation to the majority groups in the two regions. It is therefore, a matter of historical significance that the Abacha administration, in its quest to build even a modicum of legitimacy for itself decided to cash in on the then attractive expediency of restructuring the country into six geopolitical zones; with all the six Southern micro minority states being grouped together as the South-South zone.

The significance of the political restructuring exercise was its conscious attempt to redress the sense of political marginalisation which the various minority groups in the country felt in Nigeria's political process, if the project was carried through. Of course, the South-South zone cannot be totally separated from the Niger Delta region, for it is the geographic properties of the Niger Delta that gave the zone its unique political dynamics. If we are permitted to put the relationship between the two in quasi-mathematical terms, we would simply say that the South-South zone is equal to the Niger Delta minus three; where the Niger Delta comprises nine states, i.e. Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo, and Rivers. If we subtract Abia, Imo and Ondo states, which belong to the South-East and South-West geopolitical zones respectively, we are left with six states that compose the South-South zone. However, what the original objectives of the geopolitical zones was designed to accomplish have remained unachieved because the whole project became subordinated to the personal succession ambition of its chief proponent and was reduced to only a caricature of usage in sharing political offices (Obiyan, 2005). The incomplete realisation of the political restructuring project has, therefore, left a vacuum in the country's democratisation process and made it difficult to render needed services to the citizens. One may rightly raise the question why the geopolitical zones cannot be refurbished and given a more robust role in the delivery of some services that are being currently provided inefficiently by some MDAS?

It is considered a view of this paper that the geopolitical zones if given some dynamism by having elected coordinating councils rather than the current situation where state commissioners, party chairmen and others are selected into agencies where they constitute part of the NET that prevents resources from getting to their destination, especially the ordinary people. Such elected councils as Obiyan (2005) has argued, the ambition of the initiator of the political restructuring agenda to succeed himself at all costs led to the failure of his complex political innovations. However, the six political zones eventually survived the initiator of the reforms.

Perhaps, the utility of the concept of geo-political zones has not been fully exploited as a strategy for dealing with Nigeria's numerous problems of federalism and intergovernmental relations-with many observers arguing that Nigeria is operating a unitary system of governance in the guise of federalism, and others arguing that many federally administered programmes such as road construction, environmental control, etc, are not rendering the needed services because of the over concentration of power at the centre (Akinsaya, 1999).

It is, thus, on this territory of South-South that is home to about 22 million people in the six South-South states out of the 31 million people for the Niger Delta, and which has served as the dominant location of crude oil and gas production in Nigeria since the 1950s that this paper focuses. It is already an established historical fact that the area under consideration is the most Southerly part of Nigeria receiving the highest amount of precipitation per year, giving rise to three basic climatic and vegetation belts: the humid oceanic zone of salt and fresh water swamps, the mangrove forests and the rain forest of the hinterland (Oyegun, 1999; Azaiki, 2009).

Before the advent of the transnational oil corporations and their exploration and exploitation of crude oil and gas, the inhabitants of the South-South zone were mainly farmers and fishermen, growing assorted food crops such as plantains, yams, cocoyam, vegetables, etc.

A point that needs to be noted is that although the traditional agricultural practices of the people were to some degree injurious to the environment and contributed in a small measure to climate change, the generally small scale of traditional agricultural practice did not cause much harm to the environment in the final analysis.

However, the advent of oil Transnational Corporations with systematic forays and random drilling for oil in the forests of the region as well as the wide spread clearing of the forests to be able drill tested wells, the laying of pipelines, and especially the flaring of associated gas from oil wells, etc, increased significantly the process of global warming in the oil producing areas of the South-South and thereby introduced the phenomenon of “permanent days and no nights” in some parts of the zone (Frynas, 2000). Thus, commenting on the problem of gas flaring in the South-South zone, Sharife (2009:19) noted that,

The oil rich region...possesses over 100 vertical and horizontal flares emitting over 45 billion kilowatts of heat. Many of these flares based at ground level are located close to the communities...the ecological impacts of the oil industry, including flaring, oil spills waste are largely externalised...a conservative estimate of eco-system degradation caused by pollution in Nigeria was placed at \$5 billion per annum, excluding the economic costs of fisheries, agriculture, clean surface water on which...population directly depends. Deforestation and acidification were also ignored.

Obviously, what emerges from this picture is that South-South zone, home to the country’s economic treasure house pays an unusual price for her economic role as principal source of revenue for the country. Sharife (2009) further stated that over \$400 billion has been siphoned away from the zone’s oil resources. At the same time, the local population and the host communities are often described in terms of abject poverty. In this regard, it will be very interesting to compare the statistics provided by Ubhenin (2006:73) with more recent data on this subject. A question that naturally comes to mind is how this volume of wealth creation and extraction could have gone hand in hand with the degree of pauperization that has become emblematic of the South-South zone? The answer lies in what could be described as the triple alliance between foreign capital, state capital and indigenous private capital initiated since 1972, but with various mutations ever since (Evans, 1979). This alliance makes it very difficult to enforce regulatory standards as the frequent changes in effective deadlines for the ending of gas flaring in the zone since 1984 has shown. Thus, the cost to oil multinationals corporations engaged in gas flaring was fixed so low that many of the oil multinationals corporations find it cheaper to flare and pay the price rather than not flare. Available data for 2004 showed that the fine paid by transnational corporations for gas flaring totaled \$150,000-\$370,000 a fairly meagre sum (Sharife, 2009:19).

It is therefore not surprising that the report of the Special Security Committee on Oil Producing Areas, that is, the South-South zone, submitted in 2002, identified in addition to the eight root causes of community agitations in the area ranging from massive unemployment, abject poverty in the area, dislocation of traditional economic activities, the collapse of traditional authority structure and neglect by government among others, went ahead to list some important environmental challenges resulting from oil exploration and exploitation activities that had become part of the basis of agitations in the zone namely pollution, effluent discharge, erosion, coastal submerging and flooding (The Ogomudia Report, 2002:143-4).

Lest we assume these problems are occurrences of the past, this title in the Sunday Guardian of November 22, 2009, can remind us of the ongoing nature of the challenges of the environment and climate change in the South-South zone: “Port-Harcourt, Floods sacks community as oil spills worsens”. In this report, we read that a community with more than 200 houses and thousands of residents has been submerged by flood making thousands of resident’s refugees in other communities. Similar stories are common in Cross River, Akwa Ibom and Bayelsa States. The question that readily comes to mind in this respect is this: given the reality that all these problems have been identified in many previous reports, could nothing had been done to prevent them? It was in reaction to these challenges and feeling of past neglect that the various struggles for equity, justice and development in the zone have been waged, with each phase of the struggle becoming more militant and violent in nature; until the last phase which Africa Confidential described as “Showdown in the Delta”, whose scale of violence and destruction eventually led to the recent proclamation of amnesty for the militants by the Federal Government (Africa Confidential, 2006). This last phase of militancy like the previous ones is illustrative of how deadly and dangerous the many sided struggles between transnational corporations, the host communities, and the government at different levels, over the oil and gas wealth of he region has ever been.

On the other hand, it may be noted, it is now becoming fairly clear that the mere possession of natural resources such as minerals is itself not sufficient to bring economic prosperity and development to a community or nation, when such resources are exploited by foreign economic entities (Nwoke, 2005).

What all these conflicts, crises, and resort to violence point to is the failure of the extant political economy of the South-South zone founded as it is on over five decades of a combination of a peasant population whose dependence on the land has been rendered untenable by the activities of foreign transnational corporations operating in symbiosis with state and local capital on the one hand and a NET of various levels of public community leaders and private individuals, whose chief ambition is to achieve their own private interests rather than the common good. It is pertinent to note that the transformation of the traditional authority system often alluded to in official and unofficial reports as being responsible for the agitations, restiveness, and militancy in the zone, is due in large measure to many traditional authorities serving as part the NET in their respective localities. Given this reality of a political economy that is dysfunctional because it is founded on the pursuit of private gain without accountability, the zone really needs a new political economy founded on democracy, accountability and good governance to deal with the challenges and issues relating to climate change namely: pollution, effluent discharge, soil erosion and coastal submergence and flooding (Smith, et al, 2007; Cline, 2008; Svendsen and Kunkel, 2008; Parry, et al, 2009; Hertel, and Rosch, 2010; Acquah, 2011; Muller, et al, 2011; Thornton, et al, 2011) with severe food insecurity as shown on the table below (CARE Int'l, 2011). A brief highlight of unique challenges which these four groups of issues present to ongoing climate change effects will be useful seen from the above quoted report. Environmental pollution arising from the operations of the oil industry has had an impact on all aspects of peasant agriculture (Egbe and Paki, 2012) and aquatic life in the zone.

Climate Change Impacts and Consequences for Food Systems

Climate Change Impact	Direct Consequences for food systems
Increased frequency and severity of extreme weather events	Crop failure or reduced yields
	Loss of livestock
	Damage to fisheries and forests
	Destruction of agricultural inputs, such as seeds and tools
	Either an excess or shortage of water
	Increased land degradation desertification
	Destruction of food supply-chains
	Increased costs for marketing and distributing food
Rising temperatures	Increased evapotranspiration resulting in reduced soil moisture
	Greater destruction of crops and trees by pests
	Greater threats to human health (e.g. disease and heat stress) that reduce the productivity and availability of agricultural labour
	Greater threats to livestock health
	Reduced quantity and reliability of agricultural yields
	Greater need for cooling/refrigeration to maintain food quality and safety
	Greater threats of wildfires
Shifting agricultural seasons and erratic rainfall	Reduced quantity and quality of agricultural yields and forests products
	Either an excess or shortage of water
	Greater need for irrigation
Sea level rise	Damage to coastal fisheries
	Direct loss of cultivable land due to inundation and salinisation of soil
	Salinisation of water resources

Source: CARE Int'l (2011) Adaptation and Food Security. Climate Change Brief, April, p.2

Also, the Ogomudia Report (2002:143) noted that “in addition to the effect of oil spills on farm lands, dumping of by-products from explorations, exploitation, refining operations and over flowing of oily waste in the area have had effects on surface and background water used for drinking, fishing and other household purposes. Similarly, the flaring of gas affects plant life pollutes the air and water, land, etc”.

We need not elaborate on other three issues in detail here, but what is striking is that, from the content of the Ogomudia Report (2002), it is clear that the major challenges of environmental degradation and climate change in the South-South zone and how to tackle have been well known to the political leadership of the country for some time now. The surprise remains why they have not been resolved. The answer to that question lies in the centrality of oil in the economy of Nigeria whereby the bulk of the nation's revenue since 1970 has derived from rent collected from the exploitation of oil.

Given Nigeria's peculiar geopolitical structure where effective political power and authority have often been in the hands of leaders from the majority zones, the North-West and the North-East, the South-West and North-Central, it has been impossible to address squarely the consequences of the negative impact of the burden of the South-South producing for the economic wellbeing of Nigeria (Omoruyi, 2000). The walk out of South-South delegates at the 2005 Political Reform Conference over the 50% derivation principle was a clear evidence of the political economy of oil in Nigeria. Thus, the multiplication of intervention agencies by different governments seems to be a prolongation of the same dialectic, ensuring that the South-South zone does not ultimately assume effective control over oil and gas resources for the welfare of other people (Aaron and George, 2010). At another level, the many sided struggles between the oil transnational corporations, the indigenous communities of the South-South zone and state at different levels clearly belong to this logic that some have described in terms of internal colonialism (Jeyifo, 2009). As a result of the dominant role oil play in the economy of major exporting countries such as Nigeria, instability in market prices of oil as well as variations in total demand and supply often have very serious and dramatic implications domestically and externally. At the domestic level for instance, down turns in the prices and production of oil bring about loss of vital revenue by exporting countries; disruption and distortion of the economies of producing countries; loss of jobs by thousands of workers, in a sector that is capital rather than labour intensive among other effects (Hammed, 2006:143). The obvious aftermaths of such changes in the dominant sector of the economy often translate into an intensification of the inter-group and inter-class conflicts, struggles and competition for the scarce natural resources, which are often not allowed to go down to the grassroots.

This should not be a surprise as different studies have emphasised the fact that mere possession of mineral wealth might not necessarily bring prosperity to the communities, regions or nations concerned since these are often exploited for the benefit of outsiders (Nwoke, 2006). On this fact, Omoweh (2005) has undertaken a holistic and dialectical analysis of the "role of Shell Petroleum Development Company and the state in the underdevelopment of the immediate host oil producing communities in the Niger Delta of Nigeria". The study emphasises the environmental degradation occasioned by the activities of Shell and the reacting of the various communities these activities. What needs to be highlighted from this study is the fact that the demands of the Ogoni Nationality for a better deal as well as the immediate past militancy of youths in the South-South zone can all be attributed to reckless manner with which Shell and other companies in the region exploited the resources of the region.

5. Dealing with Climate Change in South-South Zone: Building New Institutions and Promoting Democracy

In order to properly address the challenged of climate change identified in the earlier parts of this paper, it is necessary to ask and answer this important question: why has the political economy of the zone to date succeed only minimally in addressing some of the environmental and developmental challenges the various policies and programmes were designed to resolve?

Part of the answer lies in the fact that many of the institutions put in place in the form of intervention agencies beginning with the Niger Delta Development Board (NDDDB) of 1962, the Oil Mineral Producing Areas Development Commission (OMPADEC), to the Niger Delta Development Commission of 2000 and the recent creation of the Ministry of the Niger Delta and the recent institutions that were more in the direction of meeting latent needs to compensate political allies, appeal to domestic and international public opinion as well as facilitate individual accumulation rather than really address the felt needs of the host communities and develop the Niger Delta which in the manifest function in this sense, the operations of these intervention agencies facilitates the operation of the NET which has obstructed the development of the South-South zone (Etekpe, 2009; Aaron and George, 2010). Thus, the progress of the South-South zone in dealing with climate change requires the breaking of the NET, building new institutions, trying new approaches, ensuring that adequate resources are available and used for what they are designed to be used for.

This also requires that whatever new institutions are put in place to manage and respond to climate change must be democratic institutions, that follow the rules and procedures of good governance, and that enhance accountability, transparency and community participation. Such a path way is dictated by our fundamental assumption that dealing with climate change whether in terms of mitigation, adaptation or management, can only be based the creation of new institutions, the adoption of new and fresh approaches and development of new resources, new ideas and fresh ways of thinking and behaving,. Consequently, blue print for a new political economy will give priority to the political institutions needed to manage climate change; thereafter other agencies and actors of adaptation will receive their due attention.

Breaking the NET

We have made allusion to the concept of a NET in the South-South zone severally in the preliminary sections of this paper. It is necessary to explicate this concept. A net in popular is used to describe a woven instrument made of cotton used for trapping insects or fishes. In the context of worldwide fight against malaria, we are all exhorted by the National Action Committee against Malaria to use insecticide treated bed nets. In the context of this paper, however, the NET, as developed BRAC in Bangladesh (1983) is used to describe a social network of privileged individual groups and community leaders who collectively use their formal and informal relationships to serve as a net that prevents the public and foreign resources destined to the masses of the people in the villages and in the communities from actually getting to the final beneficiaries.

Though this study was conducted in the context of rural Bangladesh and had to do with the operation of the NET in relation to the distribution of relief materials during one of Bangladesh's frequent floods, we believe that, it can *mutatis mutandis*, be applied with beneficial results in the Nigeria's South-South zone for the following reasons:

- ✓ The rural areas of the South-South are in many respects similar to rural conditions in rural Bangladesh
- ✓ The Net operates as an intermediary between the rural poor and the resources meant for them, either as relief or compensation for environmental degradation, or simply in the form of royalty for resources extracted,
- ✓ While in the case of Bangladesh the resources came either from the central government or foreign humanitarian agencies, in the case of the South-South zone, the resources come from Federal Government Intervention Agencies, and the Transnational Oil Corporations
- ✓ In the South-South zone as in rural Bangladesh, the operations of the NET contribute largely to the perpetuation of rural poverty in spite of well meaning efforts to combat it,
- ✓ It is interesting to note that the initial phases of youth restiveness and militancy in the South-South zone were direct reactions to the assumed greed and selfness of members of the NET.

The activities of the NET in the South-South zone composed of low and middle personnel of the three tiers of government, the transitional rulers of the zone and various shades and types of youth leaders, militants, etc, appears to be a major factor in the inability of various intervention projects of the various tiers of government having their desired life and environment transforming effects in their areas of application. Thus, for climate change in the South-South zone to be properly managed, the NET has to be neutralised or by-passed. Then the question of becomes how to accomplish this task.

6. Return to the Concept of Geo-Political Zone

The concept of Geopolitical zones as presently deployed in Nigeria is both underdeveloped and underutilised and therefore cannot perform the positive role that it was designed to achieve. It is obvious that having been designed to cater for elite political ambitions and their quest to rotate and share key political offices among themselves, many of these leaders have been unable to see through the positive effects which the concept of geopolitical zones could have in making our federal system more efficient, functional and less prone to current abuses. A first step in making the current moribund geopolitical zones in the country viable instruments of governance and addressing common challenges confronting different geopolitical zones of the country, is that these zones need to be vested with legislative and executive authority over a specified number of legislative subjects that will be downloaded from the current bulging list of exclusive and concurrent matters in the constitution of the Federal Republic of Nigeria. three or four topics that could be given experimental trial include regional power generation and distribution, maintenance of federal highways in each zone, and agricultural production and food security. This list of subjects could be expanded or contracted on the basis of experience and feedback from practice.

Of course, will this not tantamount to one more layer to the national bureaucracy which has been widely censured recently as being largely responsible for the current maladies of the national political economy? The answer is yes and no. Yes a geopolitical level administration will add to the current bureaucratic go slow if it is left to function according to its own red tape. A sure way to obviate this eventually is to build the following safety nets into the proposed new level of governance. Since our working assumption is that climate change and its challenges compel the willingness to try new ideas and new thinking, we propose that the geopolitical level of authority be established not on the model of the current presidential mode of government, but on the basis of the parliamentary or cabinet system, in which the executive arm would be elected from and totally responsible to the legislature. Since we are working on the basis of new ideas and ways of thinking, candidates to the geopolitical zonal legislatures and executive bodies could contest on the basis of independent candidature, and on no account should any registered party try to impose any candidates for this election. Instead, all should go through open primaries. Given the political manipulations that attended the creation of local governments in the country, the three senatorial districts of each state could serve as the constituencies for the Zonal Assembly to be composed of one elected representative from each of these districts. Thus, a zone that has six states will have a zonal assembly of 18. Those zones with five states will have a zonal assembly of 15.

With respect to the zonal executive committee, this should consist of a minimum of five and not more than seven coordinators or whatever other designation with one elected by the legislature to serve as chair for a maximum period of three years. The four other coordinators will take responsibility for each of the four subjects of interest: power generation and distribution, maintenance of zonal roads, agricultural development and battling with the challenges of climate change.

In order to avoid the pitfalls of the bureaucracy, the zonal tier of governance should operate strictly outside the civil service structure with their staff employed, retained and allowed to go on the basis of well defined performance criteria. Given the specific areas of competence of the zonal governance, they need not follow civil service structure all the way through.

Once the zone structure is in place, each state local government and ward would be encouraged to elect by popular ballot a liaison committee that will work with the zonal level authority to handle the specified subjects already listed. The most important objective of this proposal is to make all those vested with responsibility under this arrangement democratically elected, accountable to the electorate and answerable to their electors.

What about finances? At present, there are too many intervention agencies in the country often leading to duplication, competition and waste of resources among them. A rationalisation of functions along the lines suggested should free some funds from existing inefficient and wasteful Ministries, Departments and Agencies at National and State levels to put this experiment in place. What if we start with the N800 billion of unspent budgeted funds that the House of Representatives found during its routine check on government finances (The Guardian, 2009:9) or with the funds recovered from the recent petroleum subsidy removal efforts of the Federal Government of Nigeria.

7. Mitigation, Adaptation and all that

Ekott (2009) has reported how the Nigerian Ministry of Environment and Building Nigeria's Response to Climate Change (BNRCC) to promote adaptation awareness in the country by awarding contracts to scientists and other experts to conduct pilot research studies throughout the country. The major types of adaptation that the research will help to test and measure include: (a) finding alternatives to deforestation, (b) controlling erosion, (c) conserving water, (d) developing long term community adaptation plans, etc.

Laudable as this initiative of the Ministry of Environment may be, in view of the threats posed by climate change, some respondents who reacted to the news of the launch of the pilot study were very critical based on past experience. One of them declared, "I do hope this time the Nigerian Government will honestly carry through the Project and come up with action". Another wrote, "The Nigerian Government has over the years come up with projects that either are never started or never finished" (Ekott, 2009).

It is for the purpose of such cynicism and skepticism about the government and its activities that the democratisation proposed in this is meant to deal with. For as a result of the country's recent history there has developed strong and widespread districts of government and its policies.

Extending democratisation especially in matters of dealing with climate change will definitely go a long way in enlisting the support of the people to do what needs to be done to combat climate change and its deleterious consequences, in the South-South zone and in Nigeria at large.

8. Conclusion

The South-South zone of Nigeria play host to the huge Nigerian oil industry. This role is not without excruciating challenges and pains in gas flares, deforestation, environmental degradation resulting from oil spillages, etc. The totality of these, especially, gas flares are known causal elements of climate change (Jaeger, et al, 1993). The region today risks statelessness (see Park, 2011) going by the present form and shape of oil exploration and exploitation activities undertaken by oil Transnational Corporations (TNCs). For example, it is commonplace to witness communities with threatening erosion, flooding, acid rains, etc. To make matters worse, the communities are helpless as the various players in the oil industry (i.e. oil TNCs and the Nigerian state) are both either profit or rent seekers that never had a reason to contemplate the plight of the communities from where oil is extracted.

Oil extraction presents a new set of environmental concerns as indicated above. These are the climate change related pains presently borne by the South-South zone. The Nigerian state must look beyond oil rent and begin to initiate climate change adaptation strategies in the region (Hinchliffe, 1996). To do this requires a whole novel political economy and policies that will transform the region into a new climate friendly zone in the country. The creation of a new series of democratic institutions beginning with the rejuvenation of the now comatose geopolitical zonal structure of the country is needed. These new institutions will then ensure that urgent measures are taken to develop environmental friendly agricultural practices, reduce the exposure of coastal lands to ocean waves and erosion, adjust the operational strategies of foreign transnational oil corporations to reduce deforestation, oil and gas pollution, especially gas flaring. Individuals, groups and communities on one hand, local governments, state governments in the region and even at national level need to bring climate change and its effects into the mainstream of their planning, budgeting and policy implementation and evaluation processes as part of the new political economy.

Notes

1. Previous version of this paper was presented at the conference on Climate Change and Human Security in Nigeria: Challenges and Prospects organised by the Nigerian Institute of International Affairs, Victoria Island, Lagos, 24th and 25th November, 2009.
2. Batie (2008) contrasted “wicked” problems with “tame” ones. Tame problems may be readily identified as either solved or not solved. However, in the case of climate change, there is little agreement on an appropriate definition of the problem, let alone the appropriate solution.

9. References

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