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GENDER, SUSTAINABLE PEACE, AND DEVELOPMENT IN THE NIGER DELTA REGION OF NIGERIA

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ABSTRACT

The Niger Delta Region of Nigeria has recently been known for a spate of violence and unrest, which lead the Federal Government of Nigeria's decision in formulating a Regional development Master plan to stand as an antidote that is expected to bring about peace and development in the region. It has also been noticed that few of the reactions have been solely conducted by women. Thus, the paper identifies, through current literatures and the recent Niger Delta Regional Development Master plan, the consequences of the impact of oil exploration and exploitation on the women and the entire people of the Niger Delta Region of Nigeria and also proffers ways of bringing sustainable peace and development to the area.

BACKGROUND

The Federal Government of Nigeria defined the Niger Delta Region to comprise Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo, and Rivers States. The States are in the Southern part of the country boarded to the south by the Atlantic Ocean and to the east by Cameroon, having about 112,100 square kilometers, making up 12% of the total surface area of the nation, with 40 ethnic groups speaking over 250 dialects. The region, by 2006, has a population estimate of over 28 million inhabitants and expected to have over 45 million people in the year 2020.

Nigeria is the eighth largest producer of crude oil in the world, which has its source from the Niger Delta Region. Thus, the states in the Niger Delta Region are referred to as the oil producing states because of the presence of crude oil and gas in the region (both on shore and off shore). The petroleum industry is the "backbone of Nigerian economy, which accounts for over 90% of Nigeria's foreign exchange revenue and over 80% of total government revenue" (NDRDMP, 2006).

The resultant effect of the oil exploration and exploitation is the environmental degradation which invariably leads to socio-economic impact on the entire region. The region is widely known for its sporadic civil unrest which continually leads to insecurity of lives and properties in the region.

Therefore, the paper focuses on the baseline study from relevant literatures, which include the Niger Delta Regional development Master plan to reveal the baseline facts of the impact of oil and gas exploitation and exploration on the people of Niger Delta, taking cognizance of the women and to furtherance the engendering of the peace process and the total environmental sustainability of the region.

Niger Delta Region Women and Civil Unrest

Men and women are most likely to have different roles in the family, community, and work force and also likely to have different personal interaction with the environment. They are often differently affected by environmental degradation (UNDP, 2002). The history and waves of women's resistance and revolts towards injustice in the Niger delta dated back to the 1980s when we had two uprisings of women; firstly, in 1984 by Ogharefe women of Ethiope local government, and again in 1986 by Ekpan women in the Okpe council area against a U.S. oil corporation. Also, there was women's invasion of Chevron/Texaco Escravous (Ugborodo) tank farm in July 2002. Thus, these events in the Niger Delta

Region show the needs of a gender perception of the environmental impacts and consequences in the region.

Gender and the Home in the Niger Delta Region

Women are engaged in the household subsistence activities and highly depend on the environment for their tasks. Omorodion (2004), in a research conducted on the Niger Delta, women said "they are expected to cater for the welfare of their children in polygamous marriages. Polygamous pervades the communities, compelling men to distribute their income between the female-headed units within the polygamous unions, concubines and other extended family members like aged parents, brothers and sisters in school or pursuing training". Ononge (2002) argues "that the traditional division of labour gives the rural women responsibility for providing and managing natural energy sources required for the maintenance of the family household; environmental pollution places a special extra burden on her. Pollution increases the women hours she will devote to fetching clean drinkable water, gathering forest and water products, which are crucial for food supplement, and firewood for domestic use. Overall, because the rural woman is also the last to be hired by the oil companies, she suffers a discrepant impoverishment, thereby, especially deflating her gender status vis-à-vis men.

Gender and Ecology of Niger Delta Region

The Niger Delta Region is the Africa's largest delta, with one third of the area made up of wetlands containing the largest mangrove forest in the world. It also contains distinct ecological zones, such as coaster ridges, barriers, fresh water swamp forests, and low rainforests, derived of the Savannah and Montaine region (NDRDMP, 2006). These distinct ecological zones gave the region the great potentials for agriculture, forestry development, fisheries, inland water ways development, and eco-tourisms. The ecology of a region is always a determinant of the traditional work and economic activities of men and women occupants of the region. Women in the Mangrove Forest of the Niger Delta Region are engaged in mainly fishing, gathering of sea foods and subsistence farming, which depends on availability of land; while those in the freshwater swamp forest are also involved in fishing, gathering of sea foods, fuel woods, gin distillation from raffia palm trees, collection of Africa mango seeds, Ogbono (Irvingia gabonesis), snails, weaving of mats and other objects from screw pine, etc (Gabriel, 2004). The tropical rainforest is known for the plantation farming, especially oil palm, rubber, and Cocoa, apart from root crops, like Cassava and yams (NDRDMP, 2006). Nyananyo (1994) said, "a lot of activities going on in

the Niger Delta have introduced considerable changes in urban growth, agriculture (including fishing), and industrial development of natural resources".

Gender and Food Sustainability in the Region

Apart from other gender-specific tasks performed by women, they have a primary responsibility of food production, spending over 70% of their time on this activity alone (UN-ECA, 2001). Women are involved in agricultural production and post-harvest activities.

Systems of farming in the Niger Delta Region are traditional subsistence crop farming, characterized by small sized farms less than one hectare per households (NDRDMP, 2006). Different processes involved in oil and gas exploration has hindered the food sustainability in a diverse way in some of the Niger Delta communities where Petroleum industries are being situated, thereby invariably affecting food pricing and availability in the Niger Delta Region.

The largest grown crop in the region, which is Cassava used in the production of staple foods like Garri, has been found through research to have its own toll of impact from petroleum industries. Gas flaring, which is a continuous exercise in the Niger Delta communities, has been implicated in suppression of plant growth near the flaring points. Imevbore and Adeyemi (1981) said there is a decrease in length, weight, starch, protein and ascorbic acid (Vitamin C) content of cassava around the flaring points. Also, acid rain in the region, which could be partly attributed to gas flaring, leads to acidity of the soil (loss of soil fertility) and damaged crops (Gabriel, 2004).

We can not rule out the spillage of oil on land and water, which is a common occurrence in Niger Delta oil drilling areas. The effect of oil spills on land and water are disastrous. "Some water soluble fractions, particularly the aromatic compounds are toxic to aquatic animals and plants. They are actually leather in concentrations of few ppm (parts per million) and chronically leather at sub leather concentrations of few ppm (parts per million), though plants and animals vary widely in tolerance. Oil spill in water completely kill shell fish, fish, worms shrimps and plants. In farmlands, the soil is often oil logged and all economic crops and trees die. Contaminations may persist for years" (Clark, 1982; Odiete, 1999). Gabriel (2004) also said oil spillage resulting in land degradation and soil fertility loss, compounds women's limited access to land for agriculture in the Niger Delta. Women neither own land nor inherit

any in the Niger Delta. This traditional practice which alienates women from owning economic resource base only allows them access to land through their spouses, sons, brothers and/or male relations. In the Niger Delta, women and children harvest snails and seafood on mangroves and fresh water swamps. Women fish in creeks and mainly ebb tide. Fish, seafood - periwinkles, oysters, water snails, shrimps, and crayfish are transported to urban areas for sale. Women depend on these sources for their livelihood and other responsibilities. Thus, damage on marine life will impact negatively on women family lives, their economic base, and livelihoods.

Oil exploration brings about increase in the noise level of the affected communities due to road construction to the site, mobilization and deployment of skilled and unskilled personnel to the communities, and the use of sophisticated equipment. Also, seismic acquisition whose activities involve the use of acoustic energy sources, such as explosives, water gun, etc. to generate seismic waves (which are either reflected or refracted back to the surface by sub surface rock layers which will be recorded by the Seismic machinery). All of these factors increase the noise level of the community involved above the recommended level. The effect of noise pollution is driving away wildlife which is a good source of livelihood and protein for residents of developmental project sites and cannot be over emphasised. Thus, the Niger Delta women will have to cope with the sourcing and high cost of protein for their families.

Health Conditions and Oil Exploitation/Exploration in the Region

The health conditions of the people in the region has its own feel of impact from the petroleum industries, even with the non-availability of an adequate health care system in most of the communities and non-easy accessibility to urban centers where adequate health facilities can be sought by the residents of these communities because of no access or link bridges from the rural settings. Air pollution is a common occurrence in this region which arises from oil exploration and gas flaring. It is widely reported that Nigeria's flares are the world largest until recently all the associated gas from Nigeria oil field were flared (Adegoke and Ojeshina, 1999). The air is polluted through gas flaring sending into the atmosphere obnoxious gases to the detriment of the people in the area. Such gases include oxides of sulfur, nitrogen, carbon, particulate matter, hydrocarbon, petrochemical oxides, ash, and hydrogen sulphide. These pollutants have adverse effects on human health, especially the respiratory systems, of people in adjoined communities. Major pollutants from exploration of oil include hydrocarbon, polyaromatics, chromium, lead, and cadmium, mercury, benzene, etc. Injection of the heavy metals

could lead to kidney diseases, stroke, hearth diseases, anaemia, and skin cancer. Also noise pollution, which is an effect of oil and gas industries, has physiological effects that can affect the hearing of humans living in the communities. It could contribute to heart and circulatory diseases and can also interfere with sleep.

Also, the scourge of HIV/AIDS is on the increase in the Niger Delta Region with the incidence in three of the Niger Delta Region states (Cross River, Akwa-Ibom, and Rivers) exceeding the national average of 5.4%. The Cross River State is having the highest rate of 12% in the country (NACA, 2004).

Accessing Portable Water in the Niger Delta Region

The Niger Delta communities depend on well and spring water for their water supply and some rural settlements, particularly the larger ones depend on water from borehole. Water-related diseases represent at least 80% of all reported illness in the Niger Delta Region even though, with availability of few water-quality studies, the data available for water supply and waste management practices illustrate that water contamination and associated diseases are a problem throughout the Niger Delta Region. Water-related diseases are also linked with environmental degradation (NDRDMP, 2006).

There is difficulty in accessing portable water in the oil exploration and exploitation zone of the Niger Delta Region. Oil spills pollute ground water with its toxic materials which supposedly is the source of their drinking water. The GOK (1988) said "in sub-Saharan Africa women are responsible for fetching water for the use of the household". This is in line with the practice in the Niger Delta Region, where traditionally women bear the burden of providing water for the household, thereby spends more productive time to search for portable water. In 1989, the inhabitants of Obio/Akpor and Bonny Local Government areas of Rivers State had traumatic experiences when their rivers, wells, springs, and other drinking water were polluted by oil spills and oil leakage from a 28 year old trunk pipeline linking Jones Creek oil field, which occurred on Thursday, March 26, 1998 when 20,000 barrels of crude oil spilled into the creeks and mangrove swamps. Ofiebor (1998) reported that thirty-four communities, which source drinking water from creeks, were adversely impacted, e.g. Kokodia, Opurosa, Korote, Epemu, Obafa, Asama, etc (Gabriel, 2004). Consumption of unwholesome water may lead to water-related diseases which are one of the most critical health problems in the Niger Delta (NDRDMP, 2006). The

burdensome effects on the family will be carried by the women whose traditional role is to care for the family.

Socio-Political System in the Region

In the Niger Delta communities, women are not expected to be part of the decision making group in their community since they are not members of the council of Chiefs. Thus, incase of oil spillage compensations are not paid to the women but to the land owners, thus, having negative consequences on their economic base. Omoridion (2004) said "oil companies provide the male population with alternative employment in the oil industries, and/or pay the men 'standby' referring to payment of stipend for no job done." He also said the depletion of economic livelihood in the Niger Delta Region, due to the consequences of Petroleum explorations and refinery, results in high school dropout among teenage children, especially early child marriages and trafficking girls in terms of prostitution and as domestics to other urban cities. This long term implication continues to lower the female status and economic autonomy and makes females highly vulnerable to STD and HIV/AIDS.

PRINCIPLE OF SUSTAINABLE DEVELOPMENT

Sustainable Development can only be achieved in an atmosphere of peace. Thus, it is widely believed that every human activity manipulating the environment for gain always imposes burden on the manenvironmental relationship. This was one of the reasons for the promulgation of the principle of "Sustainable development" which came as an off shoot of the Brundtland Commission, formerly the World Commission on Environment and Development (WCED), which was conveyed by United Nations in 1983 and to examine the strategies which mankind could establish to avoid destroying "ourselves" in the process of development and was acceptable to the participating nations at the United Nations Conference on Environment and Development (UNCED) held in 1972 and also in 1992. Thus, "Sustainable Development seeks to meet the needs and the aspirations of the present without compromising the needs of the future. It is the process in which the exploitation of resources, the direction of investments, the orientation of technological developments and institutional changes are all in harmony and enhance both current and future potentials to meet human needs and aspiration" (WCED, 1987). Sustainable development entails the harmonization of population growth with the utilization and exploitation of natural resources through redirection and reorientation of research and development, as well as institutional changes (UN-ECA 2001). This brings about the endorsement of

Agenda 21, which encourages bussinesses and industries to communicate their environmental performance. The question is whether the exploration and exploitation companies in the Niger Delta Region are working in cognisance of Agenda 21.

Nigeria is committed to the Principle of Sustainable Development, having a National policy as enunciated in the National Policy on the Environment (1989) that ensures Sustainable Development based on proper management of the environment in order to meet the needs of the present and future generations. Environmental matters were incorporated into National Rolling Plan 1992 – 1994. Environmental Impact Assessment (EIA), which is an acceptable unique Environmental Management technique (part of "Agenda 21"), became an Environmental policy instrument in Nigeria with the enactment of Decree No. 86 (1992), called the Environmental Impact Assessment (EIA) Decree. EIA is a formal study process used to predict the environmental consequences of a proposed major development project. The primary purpose of an EIA is to ensure the potential problems are foreseen and addressed in project design (Imevbore and Adegoke, 1990). The object of an EIA is to predict the possible changes on a broad ecosystem (Alo, 1999). It is to concentrate on the problems, conflicts, or natural resource constrains that could affect the viability of the projects. It also examines how the project might cause harm to people, their homelands or their livelihoods or to other nearby developments. Alo also said EIA documents, therefore, defines and evaluates the effects of all project options and attempts to determine the possibility of ameliorating negative impacts by creating "trade off" or alternatives that may include "no project option". It is a process of galvanizing environmental considerations into developmental planning and decision processes (Aina, 1994). The EIA is a viable tool in achieving sustainable development. While the Environmental Audit, which is a methodological examination of the environmental information about an organization, a facility, a site, or any human activity, is to verify whether such an organization, facility, site, or activity conforms to specified audit criteria and to what extent (World Bank, 1995).

INFERENCE AND CONCLUSION

Developmental Tools

All of the tools expected to be used to actualize sustainable development should be followed in the developmental processes of the Niger Delta Region in an effort to achieve sustainable peace and development which has been tampered with for sometime now.

The concept of Environmental Impact Assessment should be adhered to before oil exploration and exploitation in the region. Also, scattered round the regions "on shore and off shore" are hundreds of oil drilling sites at different locations, sincere environmental assessment of such sites should be done to assess the effects of the developmental projects on the communities (i.e. Environmental Audit).

"Women have vital role in environmental management and development. Agenda 21 (United Nations 1992a, Chapter 24) focuses on the impact of environmental degradation on women and encourages empowerment of women as environmental managers. Their full participation is essential to achieve sustainable development (Anikpo, 1995).

Improving Human Capital

Agenda 21 also emphasised promoting the education of girls as a requirement to reduce the current unbalanced situation between boys and girls. Agenda 21 believed that Environmental Sustainability in Africa will depend ultimately on the efforts made to improve human capital and its effect on environmental management (UNCED, 1992 *Agenda 21 Chapter 36*). The current education condition in Niger Delta Region is shown in the table below.

Table 1: Education-Current Conditions in the Niger Delta States

STATE	Adult literacy	Attainment of	Attainment of	Attainment of	No. of Jobs in
	(%)	Primary	Secondary	Post	Sector 2000
		School (%)	school (%)	secondary	(Teachers)
				education (%)	
Abia	84.1	39.6	43.6	16.8	9,276
Akwa-Ibom	76.3	54.4	44.4	8.3	13,683
Bayelsa	78.7	38.8	49.3	11.9	3,515
Cross River	82.2	44.6	42.8	12.6	11,425
Delta	77.4	37.9	43.6	18.5	15,720
Edo	69.7	49.3	38.8	11.9	10,959
Imo	79.3	46.1	42.7	11.2	14,145
Ondo	78.8	45.0	44.2	10.8	12,342
Rivers	79.9	33.4	49.5	17.1	4,011
The Region	78.7	43.3	43.2	13.5	95, 076

Source: NDRDMP, 2006

Poverty Assessment

Poverty assessment of the Niger Delta Region is essential in an effort to achieve sustainable peace and development in the area. The assessment should also not be too straight jacketed but should include gender analysis. "The poverty assessment is potentially an important vehicle for addressing both how poverty alleviation affects the environment and how environmental improvement can contribute to poverty alleviation. More needs to be given to how the poor use natural resources, how they are affected by continuous environmental degradation and what opportunity exist to intervene in both ways that can both alleviate poverty and enhance the quality of the environment" (The World Bank, 1996). A recent analysis of the poverty line of the region is shown below.

Table 2: Percentages of unemployment in Niger Delta Region.

STATE	Composite unemployment levels, 2000 (%)	Urban unemployment 2000(%)	Rural unemployment levels, 2000 (%)	'Core Poor, 1996
Abia	2.9	8.7	2.4	24.3
Akwa-Ibom	18.2	12.6	18.3	33.4
Bayelsa	6.5	13.0	5.5	No data
Cross River	16.6	7.3	18.3	25.2
Delta	10.3	16.2	8.8	26.3
Edo	1.5	7.3	N.A	15.7
Imo	6.8	2.7	7.2	20.6
Ondo	4.1	4.7	3.6	34.1 (Inclusive of Ekiti State)
Rivers	19.1	18.2	19.3	19.1
National Average	4.7	7.2	3.7	34.4

Source Social Welfare SC Report C: 2 (NDDRP, 2006)

Sustainable Community

A sustainable community minimizes waste, prevents pollution, promotes efficiency, and develops local economies (Minnesota Office of Environmental Sanitation, 2004). Thus, there is need for the transformation of the Niger Delta communities to sustainable communities. It is pertinent to know that a sustainable community will also allow for gender equality in the field of environment, where there shall be equal participation in decision-making, gender mainstreaming in environmental policies and assessment of effects on women in environmental policies. Thus, with the baseline facts generated, it is necessary to engender the Niger Delta Regional development master plan as one of the great methods of achieving the peace required for sustainable development in the Niger Delta Region of Nigeria which has eluded the blessed region for sometime now.

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