

## Baseline Survey on the Level of Awareness of Ogoni Women on Implementation of the Eight Emergency Measures and Community Issues emerging from the Clean-up Process in Ogoniland, Rivers State, Nigeria

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### Abstract

### Original Research Article

After decades of protests and agitations against environmental degradation and human rights abuses perpetrated by Multi-national oil companies and the Nigerian government in Ogoniland, on invitation of the Federal Government, the United Nations Environmental Programme (UNEP) considered to conduct an Environmental Assessment of the Area. UNEP agreed to conduct the study to provide government and Ogoni people the foundation upon which action can be undertaken to remedy the situation. The report which was published in 2011 brought to the public domain the deplorable extent of environmental degradation that has happened to Ogoniland and the corresponding implications for affected populations over many years of oil industry operations. The report identifies eight emergency measures which from a duty of care point of view, warrant immediate action. Against the backdrop of the role of women in the rural economy and the fact that the clean-up exercise had started in earnest, the study seeks to assess the level of awareness and participation of this special category of Ogoni population in the clean-up process. Facts at the disposal of the study indicate that level of awareness is low while their involvement level in the clean-up process is abysmal. Yet, women are the engine of the rural economy.

**Keywords:** Environmental Degradation, Emergency Measures, Hydrocarbon Pollution Restoration Project (HYPREP), United Nations Environmental Programme (UNEP), Women's Rights.

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### INTRODUCTION

The oil and gas industry is the most important sector in the Nigeria because of their contributions to the economy. Oil is the basis of the Country's wealth, and the export upon which it depends on for economic survival. In fact, oil exports make up over ninety percent of Nigeria's export income and do not appear that it will soon cease to be the primary source of the prime wealth for Nigeria as a whole and the Federation rests. In fact, by 2008, Nigeria was the sixth largest exporter of crude in the world and the largest producer Oil in Africa, with a daily production of over 2 million barrels per day (bpd) and reserves of over 30 billion barrels. However, during the same period the Department of Petroleum Resources (DPR) statistical and geological findings estimated that the proven reserves in the country stood at some 27 billion barrels and would only last until 2035 [1]. Nigeria continued to grow her reserves mainly from the deep offshore field as a result of new production from the deep offshore (namely *Bonga, Erha and Aboh*). Seven floating, Production, Storage and Offloading Vessels were commissioned in Nigerian waters between 2005 and

2010. Prior to the rise of militant attacks on oil and gas infrastructure in 2009, the three fields' namely Bonga, Erha and Aboh average production capacity was 420,000 barrels per day. It was expected that more than more than 1 million barrels per day of production capacity will be added by the time more ongoing development projects targeted at recent discoveries in the deep offshore come on stream by 2012.

Oil and gas resources should present an opportunity for the oil bearing states and communities to improve the welfare of their citizens through improved governance. However, evidence abound to the opposite as many oil bearing communities in the Niger Delta have not fared better due to a combination of factors such as poor governance of oil revenues, misappropriation of funds, oil politics, and others. The obvious cost of oil exploitation pressure on the environmental systems are three folds: direct pollution such as offshore and on-shore spillage, gas flaring and abandoned installations, alteration of the by activities such as the construction of access slots, pipelines, flow lines, roads, drilling sites and wellheads, pollution and

alteration of the environment by other primary and secondary and tertiary industries encouraged by the oil industry [2].

It was a widely held belief by “outsiders” that the environmental problems attributed to the oil industry operating in the Niger Delta are exaggerated by community representatives. However, the experience of people of Ogoniland presents a good example of how huge “investments” in oil and gas exploitation by oil multinationals especially Shell Petroleum Development Company (SPDC) has failed to translate into development [3]. The point of fact is that as the Country continues to reap the benefits of oil in terms oil derived revenue, oil pollution caused by oil spills and gas flaring by the industry has devastated the Niger Delta for more than five decades. The pollution kills fish, their food sources and fish larvae, and even damaged the ability of fish to reproduce, resulting in immediate damage and long-term harm to fish stocks. Oil pollution also damage fishing gears and pollutes drinking water in wells. Oil spills and waste dumping have also degraded agricultural land of which its long-term effects include damage to soil fertility and agricultural productivity which in some cases, can last for decades [4].

The Ogoni people’s struggle for ethnic autonomy within a just federation and a habitable environment free from the degrading activities of oil exploration apart from being a metaphor for the larger national question in Nigeria, also serves as the paragon of the struggle of all Nigeria’s minority nationalities. Watts [5] captures the Ogoni situation in the midst of plenty when he contended that if Ogoni failed to see the material benefits from oil, what it did experience was an ecological disaster – or what the European Parliament called “an environmental nightmare”. It will be recalled that Shell Petroleum Development Company (SPDC), the multi-national oil exploring and exploitation in Ogoniland, was compelled to stop all its activities in the area in 1993 at the peak of the Ogoni people’s struggle. The Ogonis had demanded royalties for the three decades of exploration in their land, and the restoration of the degraded environment before allowing further oil production activities. But events proved that things were bound not to go this way [6].

Oil spills, waste dumping, and gas flaring are notorious and endemic. In most cases, oil spills result from corrosion of oil pipes, poor maintenance of infrastructure, leaks, human errors as well as vandalism or sabotage and oil theft. Worse still, the scale of pollution and environmental damage has never been properly assessed, while the regulatory systems and institutions operating in the Niger Delta are deeply flawed because laws and regulations that require companies to comply with internationally acceptable standards of “good oil field practice” designed to protect the environment, are poorly if at all, enforced. In

fact, the general trend is that government agencies responsible for enforcement are either ineffective or not willing to hold companies accountable for breach of environmental protection regulations. Put simply, the ecological harms which stem from oil spills (either from pipelines which crisscross Ogoniland or from blowouts at the well-heads) and gas flares; transformed Ogoniland into a complex operating environment characterized by conflict. Although coursing through contemporary Ogoni environmental story is, in short, a much more complex sort of social movement that the post-development literature might admit, Ogoni struggles represented a sort of hybrid political identity which was a continuation of a colonial hybridity.

Economically, the lives and livelihoods of the inhabitants are essentially based on farming, fishing and exploitation of the rich forest resources. Little wonder that the negative impact of petroleum production on land-based livelihoods has been the major contentious issue between the local communities, oil companies and the Nigerian State. The environment is a complex weave of physical, chemical and biotic that interact with other and impact on all living things and their surroundings. This implies that the environment is the life support system for human existence and survival, providing also, the physical milieu and raw materials required for socio-economic progress. However, the quest for human survival has resulted in rapid expansion and intensification of economic activities which are largely resource intensive [7].

The human assault on the environment in the course of promoting and advancing development has resulted in environmental threats to the extent that there is a growing concern over the environmental consequences of economic development. This has become more crucial in the face of persistent and worsening poverty despite the huge revenue generated by crude oil exploration. Standing at the margin of margin, Ogoniland appears as a socio-economic paradox. Home to six oilfields, half of Nigeria’s oil refineries, Nigeria’s only fertilizer plant, a large petrochemical plant (now sold to INDORAMA), Ogoniland is wrecked by unthinkable misery and deprivation. During the first oil boom, Ogoniland’s fifty-six wells accounted for almost fifteen percent of oil production in Nigeria and by 1998 an estimated \$30 billion in petroleum revenues have flowed from local opinion called Nigeria’s Kuwait [5]. Yet few Ogoni households have access to electricity and other important social amenities; furthermore, there is one doctor per 100,000 people, child mortality rates in Ogoniland are in the last two decades highest in the country, unemployment in the area is 85%, 80% of the population is illiterate and close to half of Ogoni youths have left their communities in search of work. Life expectancy is barely 50 years, substantially below the national average. Compensation by the major oil company operating in the area for land appropriation

and for spillage have been minimal hence, were constant sources of tension between company and community.

In 2011, United Nations Environmental Programme (UNEP) published their assessment of oil pollution in Ogoniland following over fifty years of petroleum operations in the area. This report showed that the impact of wide spread pollution of land areas and wetlands by Transnational and state owned oil companies, exposed community members, in some cases, to benzene – a known carcinogen, at levels over 900 times above the World Health Organisation (WHO) recommended safety level. Farmlands and sources of drinking water were contaminated by hydrocarbons, in some cases, 1000 times higher than the drinking water standard of 3 ig/l. Mangroves which provides the breeding ground for fish and other biodiversity have also been destroyed over the years.

The need for assessment of the level of awareness of women on the extent of implementation of the Eight Emergency measures recommended by the Report of Environmental Assessment of Ogoniland by United Nations Environmental Programme (UNEP) is essential at least, to establish its policy efficacy. The fanfare that greeted the establishment of the Hydrocarbon Pollution Restoration Project (HYPREP) in 2012 after many months of delay and the level of execution of its mandate, as well as the role of women in the clean-up process have been taken so lightly, so simple and uncritically that a serious appraisal of the level of awareness of women in the implementation in historical contextual perspective becomes urgent. By September 2014 the Agency, as noted by Fyneface and Akhigbe [7], had not done any “reasonable” work.

It is pertinent at this occasion to pose the question of why the focus on women in the environmental and development question of Ogoniland? The answers to this are not farfetched. Ogoni women who witnessed the turbulent years of Ogoni crisis possessed rich traditions as leaders and participants in women’s movement along with men in the struggle for environmental security and political autonomy. These moves brought women a feminist base from which to speak and make contributions to the development of their communities and demand for environmental justice. The effects of women in the overall Ogoni development project continue to this day. These efforts have been far from wholesale. However, women have moved into professional associations and positions in appreciable percentages, as students, teachers, and scholars. These developments have created awareness that may help explain the wide popular of this study because it suggests that women’s ways of being and knowing what is happening around them may be part of a fundamental template for producing a just society for their husbands and children.

Ogoni women also have tangible records of economic activities that are land-based which have been adversely by oil prospecting activities. Nonetheless, introduction of technologies in farming, education and wage employment opportunities, had usually bypassed them. Worse still, environmental degradation associated with oil prospecting activities accentuated their helplessness. As men had been drawn into the modern sectors, women’s productivity is consistently eroded because of subsisting perception of as home-makers eclipsing women’s substantial political and economic activities. This patriarchal view persists and sometimes justified by references to “elements in traditional culture that gave men preferential access to resources. This study found such a view misleading.

Historical evidence indicates that Ogoni women participation in political and economic life was deeply rooted in all facets of Ogoniland. The gender division of labour allocated responsibility for cultivation to women, who could either barter or sell their excess produces, men only engaged in hunting. In some communities, women and men farmed side by side. However, the burden of food production generally fell on women. Consequently, in most communities, women are the backbone of rural farming. They usually cultivated community owned allocated to them male lineage heads, to whom they in turn paid with some of their produce. Besides agriculture, women engaged in commercial activity locally. In almost all the entire Local communities, they are engaged in some kind of trade. In other words, for majority of the women folk, agriculture or petty trade was the source of livelihood. The study revealed that engines of the rural economy, they are the most affected by the long-years of pollution of their environment. Clearly, in Ogoni communities, whilst it cannot be said that all women had equality with men, despite class differences, a balance of economic responsibility did prevail between women and men, and the work of both was valued in largely non-competitive division of labour. Parallel gender-based institutions are common in this environment, and men’s and women’s groups each managed their own affairs.

As the Ogoni crisis heightened with the establishment of the Rivers State Internal Security Task Force under the headship of then Major Paul Okuntimo, the men deserted the communities due to military onslaught, their migration to the cities left women on the farm doing both men’s and women’s work. The Internal Security Task Force is effectively an army of occupation let loose on Ogoniland to “pacify” it for the business of oil production [6]. These Ogoni women often had many dependants-children, elders and the ill to care for-without enough adult workers. The involvement of women in historic protests against military occupation of Ogoniland laid the foundation for them to join with the men in the struggle against environmental degradation associated with oil

exploration activities and political autonomy. After the experience of struggle, women are more determined to be fully participating citizens of "Ogoni Nation". Although this wish is not yet fully realized, the solidarity groups and organizations they evolved from their work still rank among the most important components of the Ogoni civil society.

### Background information on Project Area

The Ogonis have been known to live in their present location for over five hundred years and occupy an area of approximately 700 square kilometres (604 acres) lying at the easternmost extension of the mainland fringe bordering the eastern Delta of the River Niger [8] making the area one of the most densely populated in Africa [1]. Ogoniland is divided into four Local Government Areas in Rivers State namely, Eleme, Gokana, Khana and Tai. Although the Ogoni ethnic nationality is a distinct group in the Southern Part of the Niger Delta, their villages have over the years expanded to form towns with huge populations. Eleme, Tai, Gokana, Babbe, Ken-Khana and Nyo-Khana are the six existing kingdoms constituting the Ogoni nation. They speak four related but mutually unintelligible languages with Kahan and Gokana serving as the two major ones. There are also dialects peculiar to each major tongue. Interestingly, irrespective of these differences, the people are united in their environmental peculiarity. For example, their land, rivers, water-ways, culture and occupation unite them so much so that any overt interference in the natural state of things necessary manifest on the people. At the head of each of Kingdom is the traditional Head called *Gbenemene* who presides over all cultural and traditional rites and is equally seen as the de facto head of several community leaders in his domain [9].

Most of the communities in Ogoniland had access to the sea for fishing and enough fertile coastal land for farming. In fact, natural springs and streams are common feature of the area providing portable water for all year round. The area is also a richly endowed environment with wild life and fruits all of which resulted in self-sufficiency thus limited the interaction of Ogoni people with outsiders. The Ogonis respect their land, for majority of the people, land is perceived as the abode of the gods, and it carries traditional respect. It is a widely held belief that the lives of the people are controlled from land. This is not a surprise for most of the people are farmers and fishermen; hence land must be seen as an integral aspect of life. The agricultural practices of the people can be grouped into three categories: arable, compound, and plantation farming. Arable farming is dominated by planting of root crops such as yam and cassava used for the production of *garri* (the staple food) or buried under water and pounded after three days to produce *Gbebaa* (or *fufu*). Compound farming is characterized by the cultivation of two or more crops on the same parcel of land however, with varying harvest seasons. The crops

grown here may include yam, cassava, maize, mango, fluted pumpkins, pepper, melon, maize, mango, and fluted pumpkins. No fertilizer is used. Plantation agriculture on the other hand, includes oil palm, rubber trees, and sometimes pineapples. Goats, sheep, dog, cats, chickens and ducks are kept as family livestock [9].

Hunting and fishing were the major source of protein. Hunting expeditions are sometimes organized in groups with locally-trained dogs and single-barrel guns which were locally assembled. The products of the hunting expeditions are animals like monkeys, antelopes, grass cutters, squirrels, crocodiles, tortoises and porcupines. Division of labour were sometimes on the basis of gender. While hunting was a specialized trade for men, in most communities fishing and farming were necessary for both males and females. However, women predominantly in engage in searching for and picking the slow-moving periwinkles, oysters, and, crabs and shellfish that crowd the vast mangrove wetlands. Against this backdrop, desecration or seizure of any Ogoniland would be viewed as a desecration of the lives of the people. Within this context, such desecrations affect not only the living, but also the dead, and children yet unborn. Some communal land and creeks were reserved for the invalid and destitute, hence sacred grounds were avoided while evil forests were left unexplored until sacrifices were made to the gods.

As agriculturalists, bumper harvests were recorded at the end of each farming season. Consequently, poverty or a poor harvest connotes a bad omen, traceable to disrespect for the tradition. To change the situation, the ancestors must therefore be routinely consulted through the appropriate medium and appealed to prevent poverty and guarantee prosperity and a bountiful harvest. Fishermen also consult the mermaid referred to locally as "mammy-water" to prevent sea mishaps and for enhanced catches of fish as the locals believed she controls all aquatic life. In fact, time there was, when the fishermen need not foray into deep seas, as the banks were rich enough with fishes for subsistence and exchange. The soil was rich and loamy and its natural position on the coastal plains, nourished by creeks, and rivers running in to the Atlantic coast guaranteed successful farming [10, 9]. The Non-agricultural secondary industry is limited and dependent partly or wholly on imports: tailoring; cabinet making (with materials such as timber now coming from Cross River State); canoe building (which is also declining because there are few suitable trees left); baking (industrial and domestic); brick-making; building and carpentry. Service industry includes: local government, traditional herbalists and midwives; bicycle repairs; sewing; watch repairs and a restaurant and bars. Generally, the economic activities of Ogonis are dependent on declining agricultural yields. Incomes are low and it appears that much money in the communities

comes from people who work in Port Harcourt and elsewhere [2].

The point being made is that the flourishing economic activities changed with the discovery of oil at Bomu (Dere) in 1958 as the intensive exploitation of the area's rich oil resources, brought with it severe environmental degradation and pollution. Ogoni has suffered and continues to suffer the degrading effects of oil exploration and exploitation. Lands, streams and creeks are totally and continually polluted; the atmosphere is continually charged with hydrocarbons, carbon monoxide and carbon dioxide; and many villages experienced the internal quacking of the wrath of gas flares which burnt 24 hours a day for over four decades. Acidic rain, oil spillages and blows-out were common. The results of such unchecked environmental pollution and degradation according to Leton [11] are:

- The Ogoni people can no longer farm successfully. Once the food basket of the Eastern Niger Delta, the Ogoni now buy food owing to the oil exploration induced destruction of arable lands and farm products;
- Fish, once a common source of protein in the area, is now rare. Owing to the constant and continual pollution of our streams and creeks, fish can only be caught in deeper and offshore waters for which the Ogoni are not equipped;
- All wild life is dead;
- The ecology is changing fast. The mangrove tree, the aerial roots of which normally provide a natural and welcome habitat for many a sea-food-crabs, periwinkles, mudskippers, cockles, mussels, shrimps and all- is now being gradually replaced by unknown and otherwise useless palms;
- The health hazards generated by an atmosphere charged with hydrocarbon vapor, carbon monoxide and carbon dioxide are innumerable.
- The once beautiful Ogoni countryside is no more a source of fresh air and green vegetation. All one sees and feel around is death. Death is everywhere in Ogoniland – Ogoni people, Ogoni animals, Ogoni fishes are dying because of 33 years of hazardous environmental pollution and resulting food scarcity.

The Nigerian civil war hardened the sense of dominance among Ogonis. Consequently, a “supreme cultural organization” called KAGOTE, which consisted largely of traditional rulers and high ranking functionaries, was established at the war's end and in turn gave birth, in 1990, to the Movement for the Survival of Ogoni People (MOSOP). A watershed moment in MOSOP's history was in the drafting in 1990 and Ogoni Bill of Rights [8, 5]. The Bill of Rights which documented a history of neglect and local misery took head on the question of Nigerian federalism and minority rights. The Ogoni Bill outlined a plan for autonomy and self-determination in which there would be guaranteed “*political control of Ogoni affairs by*

*Ogoni people... the right to control and use a fair share of Ogoni resources* of Rights presented to the military government and people of Nigeria sought political control of Ogoni Affairs by Ogoni people, control and use of Ogoni economic resources for Ogoni development and direct representation of right for Ogoni people in all Nigerian national institutions and the right to protect Ogoni environment and ecology from further degradation [8].

### Objectives of the Study

That women constitute an important resource in the agricultural production process in Ogoniland is not in doubt. Women make up such a large proportion of the farming population in Ogoni that their contribution cannot be ignored. Since they depend on land for livelihood, they are easily affected by environmental degradation associated with oil exploration and exploitation. Ogoni women contribute to family income; hence they are recognized as producers of goods rather than just consumers of goods and services. It is thus, reasonable to expect a high level of awareness of women on the extent of implementation of the emergency measures. Consequently, the study seeks to:

- Assess the level of awareness of women on implementation of the Clean-up process in Ogoniland.
- Examine the level of awareness of women on the extent of implementation of the Eight (8) Emergency Measures by the project implementation agencies (especially, the Hydrocarbon Pollution and Restoration Project(HYPREP)
- Examine the level of gender responsiveness of the overall cleanup process.
- Examine the level of community engagement by the Hydrocarbon Pollution Restoration Project (HYPREP).

### Explanatory Framework

Political ecology analytical framework best suits our purpose because it embraces a range of definitions. A review of the term from its early use to its most recent manifestations shows important differences in emphasis. Some definitions stress political economy while others point to more formal political institutions; some identify environmental change as most important, while others emphasize narratives or stories about change. These differences notwithstanding, there seems to be a set of common elements. A cursory look at the plethora of definitions underscores the fact political ecology represents an explicit alternative to “apolitical”, because it works from a common set of assumptions, and that it employs a reasonably consistent mode of explanation [12].

Political ecology accounts and research efforts also share a common premise, that environmental change and ecological conditions are the product of

political process. Three basic assumptions drive this framework namely, political ecologist accepts the idea that costs and benefits associated with environmental change (which inevitably reinforces or reduces existing social and economic inequalities (which holds) political implications in terms of the altered power of actors in relation to other actors [13]. Against this backdrop, research tends to reveal winners and losers, hidden costs, and the differential power that produces social and environmental outcomes. Consequently, the four theses of political ecology are Degradation and marginalization; Environmental conflict; Conservation and control; and environmental identity and social movement [12].

For our purpose, we argue that changes in environmental management regimes and environmental conditions have created opportunities or imperatives for local groups to secure and represent themselves politically. Such movements often represent a new form of political action, since their ecological strands connect disparate groups, across class, ethnicity and gender. In this way, local social/environmental conditions and interaction have delimited, modified, and blunted otherwise apparently powerful global political and economic forces. In other words, political ecology seeks not simply to retrospective or reactive, but to be progressive [5].

### **Women's Right and Gender Equality in Ogoniland**

The gender question in Ogoniland like in most Nigerian communities is historically, a socio-cultural phenomenon which denigrates the female person whether as a girl child, or the adult woman, as an inferior and weak human-being that is incapable of participating in leadership, while her male counterpart is celebrated as the superior person, imbued with all the potentials for leadership. This denigrating concept of the woman was not only prevalent in pre-colonial Nigeria but is also popular in contemporary time. The Ogoni woman is thus utterly subjugated to the male authority of her father, her brother, and her husband and who, severely dominated her with paternal power. She was so virtually depersonalized that she was categorized into the same disempowered group with children. Male chauvinism thus denied the female child, the right to education; the right to dignity of person, and the right to a meaningful career.

International concern for the plight of women with respect to their socio-economic, and political rights effectively began in 1945, with the establishment of the United Nations which through its Charter, affirmed faith in fundamental rights, in the dignity of the human person, and in the equal rights of men and women, as well as promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to sex. In furtherance of the afore-stated principles the UN established the Commission on the Status of Women in 1947; the UN International

Research and Training Institute for the Advancement of women, in 1975, and the UN Fund for Women, in 1976. The UN in 1979 adopted the convention on the Elimination of All Forms of Discrimination against Women – undoubtedly, the most far-reaching International framework for the rights of Women. In compliance with the above policy obligation, the Assembly of heads of States and Governments, under the aegis of the then Organization of African Unity (OAU) at Nairobi, Kenya adopted the African Charter on Human and Peoples' Rights. The Charter contains broad principles, which under Article 2, affirm the right of every individual to enjoyment of the rights and freedoms recognized and guaranteed in the Charter without distinction of any kind. By these principles, all peoples shall have the right to their economic, social and cultural development with due regard to their freedom and identity, and in equal enjoyment of their common heritage of mankind: Article 22.

Nigeria has not only embodied the provisions of the convention, and the Charter, in her municipal laws, but has also established appropriate frameworks for the enforcement of their provisions. Thus the provisions of the United Nations Convention, and the African Charter, are now fully part of Nigerian domestic laws. See for example, the African Charter on Human and Peoples' Rights. i (ratification and Enforcement) Act (Cap. 10, Law of the Federation of Nigeria, 1990) and Nigeria's Treaties in Force (1970-1990), volume 2 (pages 313-329). There can be no doubt that by the statutes highlighted above, Nigeria has, by affirmative legislative action, committed herself to the cause of women empowerment, through a policy of gender integration in her national development. Regrettably, in spite of the available legislative and administrative frameworks, for fostering gender equality in Nigeria, discrimination against women subsists. Although some progress has been made in the last decade, the obstacles, barriers and bias that hinder women's advancement are numerous, tough, deeply rooted in culture, long standing and monumental but not insurmountable. The implementation of the UNEP report in Ogoni brings to the fore complaints of inadequate and lack of quality representation and inclusion of women in the clean-up processes.

### **Highlights of the Report of United Nations Environmental Programme (UNEP) Environmental Assessment of Ogoniland**

When business is bad, as the Chinese proverb goes, paint the store. The Nigerian State's attempt at addressing the environmental degradation in the Niger Delta which the implementation of Environmental Assessment of Ogoniland by United Nations Environmental Programme is a microcosm unendingly seem to be repainting the store with new fads, yet business remains bad. Some would argue that it is time to tear down the store. As each new approach to change the narrative of Niger Delta development problematic,

goes after its precursors with axe to their knees, instead of standing on the shoulders of our predecessors, we need to adopt new approach to the narrative of what has been termed the Niger Delta development problematic which environmental challenges have come to has come to resemble “a project in intellectual deforestation. The problem, it appears, is that while knowledge is socially produced to solve social problems, it must be individually appropriated. This results in the constant demand for new and improved products which the UNEP Report represents been the site of oil industry since 1950s consequently, the area has had a tragic-history of pollution from oil spills and well fires, although no systematic scientific information has been available about the ensuing contamination until publication of the UNEP Report.

The environmental Assessment of the area covers contaminated land, groundwater, surface water, sediment, vegetation, air pollution, public health, industry practices and institutional issues. The report presents the best understanding of what has happened to the environment of Ogoni-land-and the corresponding implications for the affected population underscoring the persistent demand for environmental security. The report provides a clear operational guidance as to how the legacy of environmental spoliation can be holistically addressed.

The Report confirms that oil contamination in Ogoniland is widespread and severely impacting many components of the environment. Although the oil industry is no longer active in the area, oil spills continue to occur with alarming regularity. In fact, Ogoni people live with this pollution every day. As a result of high rate of rainfall, any delay in cleaning up oil spills leads to oil being washed away with implications for farmland and almost always ending in the creeks. At one site, Ejama-Ebubu in Eleme LGA, the study found heavy contamination present 40 years after an oil spill occurred, despite repeated clean-up attempts.

Pollution of soil by petroleum hydrocarbons in Ogoniland is extensive in land areas, sediments and swamplands. Most of the contamination is from crude oil although contamination by refined product was found at locations. The absence of continuous clay layer across Ogoniland exposed the groundwater in Ogoniland (and beyond) to hydrocarbon spilled on the surface. Oil pollution in many intertidal creeks has left mangrove denuded of leaves and stems, leaving root coated in a bitumen-like substance sometimes 1 cm or more thick. Mangroves are spawning areas for fish and nurseries for juvenile fish and the extensive pollution of these areas is impacting the fish life –cycle. Any crops in areas directly impacted by oil spills will be damaged, and root crops, such as cassava, will become unusable. When farming recommences, plants generally show

signs of stress and yields are reportedly lower than in non-impacted areas.

Surface water throughout the creeks contains hydrocarbons. Floating layers of oil vary from the thick black oil to thin sheets. The highest reading of dissolved hydrocarbon in the water was detected at Ataba-Otokroma, bordering the Gokana and Andoni LGAs. Fish tend to leave the polluted areas in search of cleaner water, and fishermen must therefore also move to less contaminated areas in search of fish. When encountered in known polluted areas, fishermen reported that they were going to fishing grounds further upstream or downstream. Despite community concerns about the quality of fish, results show that the accumulation of hydrocarbons in fish is not a serious health issue in Ogoniland but that the fisheries sector is suffering due to the destruction of fish habitat in the mangroves and highly persistent contamination of many of the creeks, making them unsuitable for fishing. Where a number of entrepreneurs have set up fish farm close to the creeks, their business has been ruined by ever-present layer of floating oil. The wetlands around Ogoniland are highly degraded and facing disintegration [14].

The wetlands around Ogoniland are highly degraded and facing disintegration. While it is technically feasible to restore effective ecosystem functioning of the wetlands, this will only be possible if technical and political initiatives are undertaken. The Ogoni community is exposed to petroleum hydrocarbons in outdoor air and drinking water, sometimes at elevated concentrations. They are also exposed through dermal contacts from contaminated soil, sediments and surface water. Since life expectancy in Nigeria is less than 50 years, it is a fair assumption that most members of the current Ogoniland community have lived with chronic oil pollution throughout their lives [14].

### **Recommended Emergency Measures**

As a prelude to the clean-up process the report recommended eight emergency measures which needed to be addressed without delay. Most worrisome, is the seeming inability of government to implement the eight emergency measures which from a duty of care point of view, warrant immediate action. These emergency measures are:

- Ensure that all drinking water wells where hydrocarbons were detected are marked and that people are informed of the danger.
- Provide adequate sources of drinking water to those households whose drinking water supply is impacted.
- People in Nsisikoken-Ogale who have been consuming water with benzene over 900 times the WHO guideline are recorded on medical registry and their health status assessed and followed up.
- Initiate a survey of all drinking water wells around those wells where hydrocarbons were observed

and arrange measures (1-3) as appropriate based on the results.

- Post signs around all sites identified as having contamination exceeding intervention values warning the community to walk through or engage in any other activities at these sites.
- Post signs in areas where hydrocarbons were observed on surface water warning people not to fish, swim or bathe in these areas.
- Inform all families whose rainwater samples tested positive for hydrocarbons and advise them not to consume the water, and
- Mount a public awareness campaign to warn individuals who are undertaking artisanal refining that such activity are damaging their health [14].

In some communities where rivers and tributaries [1] were polluted, there were no signpost warning locals against the use of the water. In Gokana Local Government Area, communities like Bodo city, Goi, B-Dere, K-Dere, Deken and Lewe, there are signposts around impacted sites and polluted water resources. However, some locals, including children often times bathe in the polluted water despite the existence of warning signs for lack of alternatives [7].

### Sample Size Determination

Decision about the size of the sample requires a provisional estimate of the cost of the size to ensure that the sample will fall within the allowable budget. Whether a researcher aims at complete coverage or not in a research is to a larger extent determined by the amount at his/her disposal. In practice, in fact, the researcher very often has no choice in the matter-the population for study is almost always so large and dispersed that complete coverage is often ruled out by shortage of fund, time and trained manpower. Principal advantages of sampling include reduced cost, greater speed, greater scope, reduced labour, and greater accuracy. It is against this background that respondents for the survey were selected.

**Table-7.1: 2016 Projected Populations for Selected Local Government Areas (LGAs)**

S/N	Local Government Areas	Population
1	Eleme	267,200
2	Gokana	328,500
3	Khana	411,500
4	Tai	169,000
	<b>Total</b>	<b>1, 175, 500</b>

Source: City Population  
(<https://www.citypopulation.de>)

From the table above, the total population for this study is One Million, One Hundred and Seventy-Five Thousand Five Hundred (1, 175,500). A scientific method will be used to determine the sample size for this study. The scientific method proposed by Taro

Yamen will be adopted in the determination of the sample size for this survey. The Simplified Formula for Proportions by Yamane (1973) provides a simplified formula to calculate sample sizes. A 95% confidence level and  $p = 0.5$  or error margin of 0.05 was also recommended.

### This formula is stated below thus

$$n = \frac{N}{1 + Ne^2} \quad \text{Where } n = \text{sample size, } N = \text{population size and } e = \text{margin of error}$$

Since the population for the study is 1, 175, 500, the sample size is derived as follow:

$$n = \frac{1,175,500}{1 + 1,175,500[(0.05)^2]}$$

$$n = \frac{1,175,500}{1 + 1,175,500(0.0025)}$$

$$n = \frac{1,175,500}{1 + 2,938.75}$$

$$n = \frac{1,175,500}{2,939.75}$$

$$\therefore n = 399.86$$

The derived sample size is approximately 400; therefore, the sample size for this study was four hundred (400) respondents. Four Local Government Councils and eight communities in Ogoniland were covered as follows Eleme (Alode and Nsisoke), Gokana (B-Dere and Mogho), Khana (Kwawa and Buan) and Tai (Krokro and Ueken).

One hundred (100) respondents were sampled from each of the four Local Government Areas, implying that Four hundred respondents were surveyed. All the respondents are females. However, only 365 questionnaires were properly filled, hence used for the analysis.

### Sampling Method

The sampling technique was random apart from the purposive gender based sampling. Using the clocking technique, research assistants randomly choose a particular street or neighbourhood. Every third (or second) house on the right or left side of the street or neighbourhood was selected.

In each household selected for study, the research assistants randomly selected a respondent that fits the empirical universe. This was done by asking the contact to list names of all residents, 18 years and above, in the house that fit the gender quota and asks the contact to pick from a set of pre-numbered cards. The person whose serial number corresponded with the number on the card picked was selected for interview. Thus, if Mrs. A is number 5 on the list and the contact

<sup>1</sup>Bane and Ewee communities



picked No 5, Mrs. A was automatically chosen for the survey. Where the person selected for interview was not at home, the research assistants arranged to return. Substitution was only allowed after a second trial. The substitute came from a different household, applying the same sampling method.

### Methods of Data Collection

The study relied on two main sources of data—primary and secondary and both yielded quantitative and qualitative information. The primary data was generated through Questionnaire and Focus Group Discussions (FGDs). Each questionnaire consisted of closed-ended questions (structured), which permitted respondents to tick from a list of suggested answers. The opened questions (unstructured) provided respondents freedom to answer in their own words and to express any idea(s) they considered pertinent. Participants in the Focus Group Discussions (FGDs) were representative of different components of the population and interests, including age. There were four (4) FGDs in the study area, one (1) in each Local Government Area. Fifteen (15) persons were invited for each Local Government Area FGD. There was one FGD in Ebubu, one at Kpor, one at Tabaa and another at Norwa. Questions focused on establishing the socio-economic consequences of the Land Use Act, the impact of oil exploration activities and delay in implementation of the emergency measures. For effectiveness, questions were translated in local

languages. The secondary data were derived from the UNEP report on Ogoniland, journals, books, news bulletin, government and media publications.

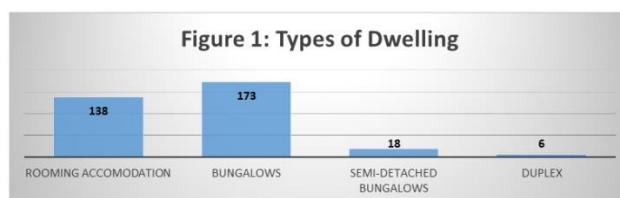
### Data Presentation and Analysis

#### Socio-Economic Characteristics of Respondents

##### (i). Type of Dwelling Units

The study found that the major types of dwelling units in the study area are “rooming accommodation” otherwise known as traditional rooming because they are either rooms attached to family or compound homes and assigned to individuals who are family members. 138 or 37.8% of the respondents indicated they live in rooming accommodation. Some occupants of these traditional rooming accommodations are tenants most of whom are non-indigenes.

This is mostly the case in Bori (head quarter of Khana Local Government Area), and Eleme (head quarter of Eleme Local Government Area), another 173 or 47.4% of respondents live in Bungalows, 18 or 4.9% other respondents live in semi-detached bungalow, while as low as 6 or 1.6% of the respondents live in duplex usually owned by the elite. Most occupants of the duplexes are tenants. This is the case in Bori (the traditional capital of Ogoni ethnic nationality) and Eleme towns that are increasingly urbanizing.



Source: Fieldwork, April 2019

For majority of the respondents, the study area is their ancestral home, it is therefore not a surprise that some of the respondents have lived there for over forty years. 68 or 18.6% of respondents have lived in their present place of abode for 20 years, 142 or 38% other respondents have stayed in their present dwelling unit for twenty-one to forty years just, as 128 or 35.1% of

respondents indicated that they have lived in their present accommodation for over forty years.

##### Public Water Supply

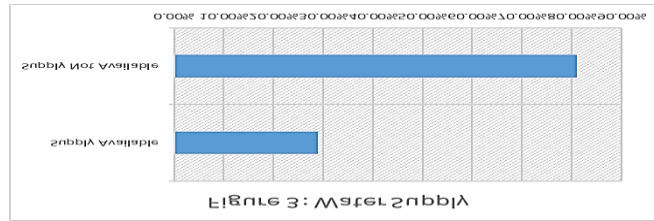
An overwhelming majority of the respondents (81.1%) stated that public water supply is not available in their neighbourhood while 28% other respondents stated that water is available in their neighbourhood.



Source: Fieldwork, April 2019

Those respondents who indicated that public water supply is available further stated that the supply

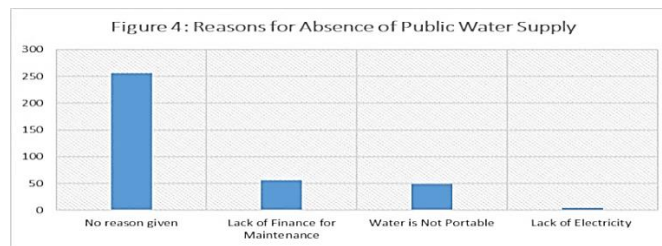
of available water is somewhat irregular. Figure 3 underscores this fact.



Source: Fieldwork, 2019

Figure 4 below shows that while 256 or 71.1% of the respondents gave no reason to explain the absence of public water supply in their neighbourhood, 56 or 15.3% other respondents claimed that lack of finance for maintenance is responsible for the sorry-

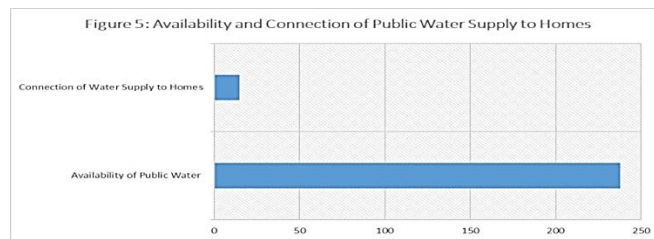
state of water supply, 49 or 13.4% of other respondents stated that the water is not portable; just as 4 or 1.1% of the respondents stated that lack of electricity is the problem of public water supply in Ogoniland.



Source: Fieldwork, April 2019

Figure 5 below shows that, although 238 or 65.2% of respondents indicated that public water supply is available within their neighbourhood, a negligible

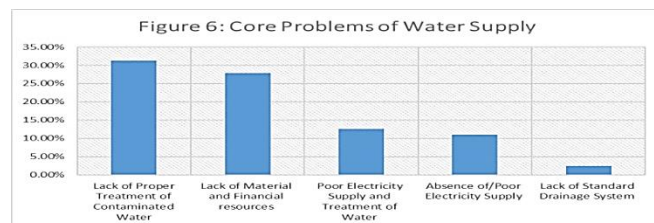
number of respondents (15 or 2.1%) stated that the water is connected directly to their houses.



Source: Fieldwork, April 2019

It came out strongly that the core problems of water supply, as shown in Figure 6, are lack of proper treatment of contaminated traditional sources of water supply (114 or 31.2%), lack of material and financial resources to provide affordable water (27.9%); poor

electricity supply and treatment of water (especially, boreholes) (46 or 12.6%); absence of/poor electricity supply (40 or 11.0%) and lack of standard drainage system (9 or 2.5%).

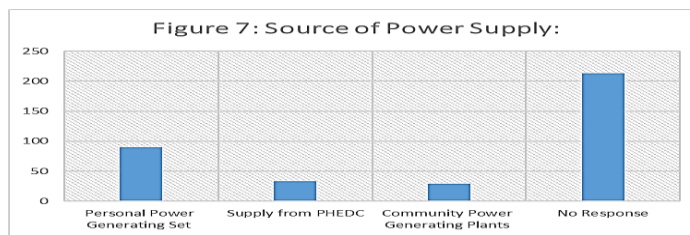


Source: Fieldwork, April 2019

**Source of Power Supply**

Figure 7 shows that 90 or 24.7% of respondents stated that personal power generating set is the major source of power supply; 33 or 9.0% other respondents indicated that they derived power supply from Electricity Distribution Company (EDC); other 29 or

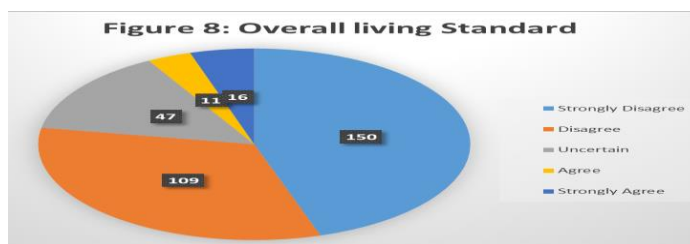
7.9% of respondents claimed they derived electricity from community power generating plants, while as high as 213 or 58.4% of the respondents declined to respond to this question.



Source: Fieldwork, April 2019

### Overall living Standard

Figure 8 below presents the responses provided by the respondents on the overall standard of living in Ogoniland. Majority of the respondents (150 or 41.1%) strongly disagreed with the prevailing poor standard of living in the study area; 109 or 29.9% other



Source: Fieldwork, April 2019

While 256 or 71.1% of the respondents gave no reason to explain the absence of public water supply in their neighbourhood, 56 or 15.3% other respondents claimed that lack of finance for maintenance is responsible for the sorry-state of water supply, 49 or 13.4% of the respondents stated that the water is not portable; just as 4 or 1.1% of respondents stated that lack of electricity is the problem of public water supply in Ogoniland. Although 238 or 65.2% of respondents indicated that public water supply is available, within their neighbourhood, a negligible number of respondents (15 or 2.1%) stated that the water is connected directly to their houses. It came out strongly that the core problems of water supply are lack of proper treatment of contaminated tradition sources of water supply (114 or 31.2%), lack of material and financial resources to provide affordable water (27.9%); poor electricity supply and treatment of water (especially, boreholes) (46 or 12.6%); absence of/poor electricity supply (40 or 11.0%) and lack of standard drainage system (9 or 2.5%).

### Social Services

(a). **Health Delivery:** 163 or 44.7% of respondents strongly disagree with the quality of health delivery; 105 or 28.8% other respondents disagreed with the current state of health services in the area of study, while another 12 or 3.3% of respondents agree with the quality of health delivery. Associated with the issue of the environment is the lingering health crisis in Ogoni which in the main derived from the environmental problems. The study team observed that the biggest social event while the study was ongoing is burial programmes; in the words of one of the

respondents disagreed with the standard of living; 47 or 12.9% of respondents were uncertain of the living standard, while 11 or 3.0% and 16 or 4.4% of the respondents agree and strongly agree with the prevailing standard of living respectively.

participants in the GFDs “Ogoni people are dying on daily basis”. This is a cause for concern. The residents appreciate the efforts of the Rivers State Government in providing health care services; they are worried at the deteriorating situation of secondary health services provision. They are concerned that despite advances in health care in other parts of the country, there not a single specialist or tertiary health facility in Ogoni established by Federal Government.

(b). **Housing:** we have shown somewhere (Figure 1) earlier in this report that the types dwelling in the study area are rooming, bungalow, semidetached room, and duplex. It is therefore not a surprise that 147 or 40.3% of respondents strongly disagree with the quality of housing; 97 or 26.6% of the respondents disagree; 55 or 15% are Uncertain; 27 or 7.4% other respondents agree, while another 13 or 3.6% of respondents stated they strongly agree with the prevailing housing types.

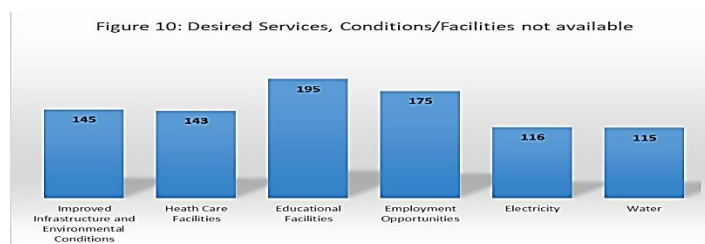
(c). **Employment opportunities:** 207 or 56% of respondents strongly disagree with the unemployment situation; 93 or 25.5% other respondents stated they disagree; while 3 or 8% of the respondents agree.

(d). **Income Position:** 157 or 43.0% of the respondents strongly disagree with the income position; 77 or 21.1% of respondents stated they disagree; 85 or 23.3% other respondents stated they are uncertain; while 6 or 1.6% of the respondents said they agree.

(e). **Electricity Provisioning:** As high as 178 or 54.8% of respondents stated they strongly disagree; 94 or 25.8% of the respondents disagree; 41 or 11.2% of respondents were uncertain; 14 or 3.8% of the respondents agree with the level of prevailing supply; 10 or 2.7% other respondents indicated they strongly agree; while another 28 or 7.2% other respondents did not respond to this question.

(f). **Public Transport:** 173 or 47.4% of respondents strongly disagree with the quality of transport delivery; 99 or 27.1% of the respondents stated they disagree; as low as 7 or 1.9% of the respondents agree; while another 46 or 12.6% of respondents indicated uncertain as their response. To an un-careful observer; it would appear that the state and Local Government Councils are active in this sector as there are a lot of public transportation vehicles bearing their trade mark plying the routes. Discussions at FGDs did not corroborate this fact. Although most public transportation vehicles (buses and cars) bear the inscriptions of either the State or Local Government Councils, these marks are patents because the true owners are private individuals and organizations.

(g). **Educational Facilities:** There are primary and secondary schools in all the Local Government Areas. In fact, Khana hosts a Poly-technique yet, 126 or 34.5% of the respondents strongly disagree with the state of facilities in the public schools; 102 or 27.9% of respondents disagree; 10 or 2.7 other respondents strongly agree; 33 or 9.0% of respondents agree; while as high as 66 or 18.1% of respondents stated uncertain as their response. The primary goal of education is to equip people with knowledge and confidence to make a difference in the transformation of society. In addition of providing people with knowledge, education helps instil values, attitudes and behaviour that are align with those expected in a society. The respondents felt that this is the reason the forebears of the Ogoni struggle for socio-economic justice enshrined in the second stanza of the Ogoni Anthem, the need for every Ogoni person to acquire education. They stated that educational development in contemporary Ogoni is witnessing a dangerous trend. They contend that the importance attached to education is declining and that this is reflected in the growing decline in school enrolments and that in most schools, the number of teachers is abysmal.



Source: Fieldwork, April 2019

(a). **Desired Services, Conditions/Facilities but not available:** The study brought to the fore, in order of importance the following desired social services, conditions and facilities. 145 or 39.7% of the respondents opted for improved infrastructure and environmental conditions. This should not be a surprise because discovery of oil in commercial quantities in Ogoniland set the stage for the desecration of Ogoni socio-cultural heritage. Large parcels of cultivated, cultivable land forests reserves were compulsorily acquired through a regime of obnoxious laws for oil production activities. These laws deprived the indigenous people ownership, control and the use of associated benefits. Long stretches of valuable land not used for direct drilling activities were appropriated for pipelines with attendant rights of way. The more oil deposits were discovered, the more land was required and acquired by the Nigerian State without regard for cultural values. Associated with oil exploration activities is the flare of gas which resulted in disappearance of animals that had to migrate to human settlement under the cover of darkness in search of food and were caught by hunters or traps.

The sensitivity of the masses to land alienation and the determination to resist state's appropriation of

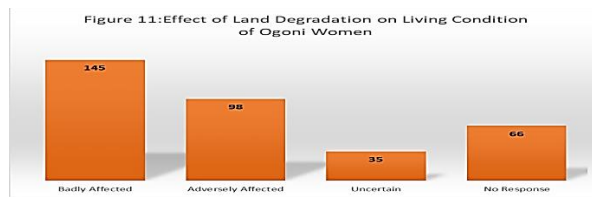
communal land lies at heart of some of the explanations for the increasing repressiveness by government. Popular awareness created by MOSOP on this topical issue gave tremendous urgency to the agitations for land restitution and revolution of expectations with disturbing consequences for political stability. As some of these expectations were not easily met, governments usually tend to repression as a short-run solution. The fact that the Ogoni people are consistent on the demand for abrogation of the primitive capitalist accumulative Land Use Act and the support of the Ogoni demand by other ethnic minorities in Nigeria increases the nervousness, and hence, the intolerance, of the Nigerian State. This repressive trend is reinforced by the tensions arising from the differences in the attitudes of leaders of the Nigerian State to the Ogoni question. Although nascent democratic regimes tend to be patient with the demand for land reform, Ogonis are sceptical if government will ever initiate and implement a comprehensive land policy.

(b). Another 143 or 39.2% of respondents stated health care facilities; 195 or 53% of respondents indicated educational facilities. Attendance from the Focus Group Discussions (FGDs) showed that although some participants had no formal education, it came out

strongly that some completed primary school; some had some form of secondary school education while majority completed secondary education. Still, others are either in tertiary institutions or are graduates. This implies a high level of literacy of inhabitants/residents of the study area. Against this backdrop, the high rate of respondents who desired educational facilities is understandable. Employment opportunities is the next on the scale of preference as 175 or 47.9% of the respondents desired employment opportunities. Facts at the disposal of the study showed that most of the respondents were self-employed, farmers, fisher women. Others are civil servants or in the employment of Community Based-Organizations. The point of fact is that those respondents who claimed they are civil servants are the employment of the Local Government Councils or political appointees. In fact, some are Vice-Chair persons of the Councils. 116 or 31.5% and 115 or 31.5% of respondents selected electricity and water respectively.

(b). Effect of Land Degradation on living condition of Ogoni Women: 145 or 39.7% of our respondents stated their living condition have badly

affected; 98 or 26.8% of respondents stated that they have been adversely affected. It is pertinent to note that the history of Ogoniland like other Niger Delta communities is dotted with an array of systems by which people gain access to and manage their natural resources. Customary tenure systems remain the predominant means through which people manage and gain access to land and other natural resources. These systems are based on the values of the local people to the extent that these values confer legitimacy on the decision making process. Customary tenure system was disrupted by colonial incursions as the colonial State forcefully appropriated hinterland trading outposts that served as routes of palm oil trade. During this period, the Niger Delta lost control over land as such land became property of the colonial State. Customary tenure systems are still more functional in communities where oil has not been discovered or oil exploitation activities essentially take place offshore. This is because of intense competition for land between the oil industry and communities since oil production started in the Delta in 1958. After decades of competition, the communities have evidently lost more land to multinational oil companies.



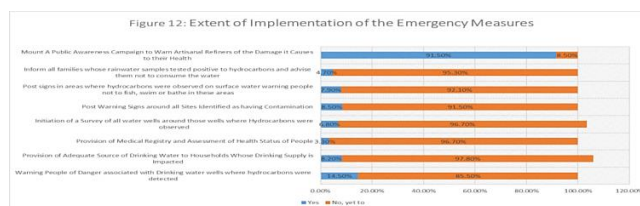
Source: Fieldwork, April 2019

Shell Petroleum Development Company (SPDC) which operated in the Ogoni axis had oil mining lease which covered 31,103 sq/kilometers, a little less than half of the 70,000 sq/kilometers of the Niger Delta. Shell Petroleum Development Company (SPDC) also has 391 producing oil wells, linked by a network of 4,786 km of field pipelines and 154 km of trunk lines to 87 flow stations all located in the Niger Delta [15]. The implication that flows from this is that more than ninety percent of SPDC's oil is pumped from on shore concessions, unlike the other oil multinationals that operate off shore or have relatively small on shore operations. It is thus evident that the oil industry's demand on land is immense and the UNEP Report had shown that its environmental consequences are enormous. For example, communities suffer loss of

economic activities emanating from pollution that affected traditional fishing and dislodgement from forests and land used for farming. Yet, these are not adequately addressed by either the compensation paid or the system of paying compensation.

Due to the prevailing widespread pollution, agricultural lands have been severely impacted resulting in a reduction in the quantity of harvest. Furthermore, because of the direct contact with plants, or indirect contact through absorption of nutrients from contaminated soils, quality of food is severely impacted. 66 or 18.1% of the respondents declined to respond to the question while 35 or 9.6% other respondents claimed Uncertain as their response.

**Extent of Implementation of the Emergency Measures**



Source: Fieldwork, April 2019

Figure 12 above shows the distribution of opinions of participants on the extent of implementation of the emergency measures. The Hydrocarbon Pollution Restoration Project (HYPREP) under the office of the Minister of Petroleum Resources was established on 24<sup>th</sup> July, 2012 and given the responsibility of achieving some of the recommendations made in UNEP report. Some of the recommended emergency measures as stipulated in the Report are:

1. **Ensure that drinking water wells where hydrocarbons were detected are marked and people informed of the danger:** A negligible number of the respondents (14.5%) indicated that this had been done while other 85.5% of respondents stated that this is yet to be done. In some communities in Khana Local Government Area there are HYPREP warning sign post but there are cases where major water source for residents though polluted, still serves the purpose of bathing and drinking. In Tai Local Government Area some of the impacted sites visited such as Korokoro there are sign post, though the community people said that was a recent development. The same is the case in Nisioiken-Ogale where most boreholes, mono-pumps, overhead tanks and well-water were marked with signposts provided by HYPREP warning residents that the water was not fit for human consumption. Similarly, at the polluted sites in Gokana Local Government Area HYPREP sign posts were observed in impacted sites and waters. However, some residents of the communities informed the study team that some people still bathe in the polluted waters for lack of alternatives.
2. **Provide adequate source of drinking water to households whose drinking supply is impacted:** 97.8% of respondents stated that this had not been done while only 8.2% other respondents indicated that adequate alternative source of drinking water to households had been provided. It came out strongly from the FGDs that HYPREP is yet to provide overhead water tanks in some of the affected communities. However, facts at the disposal of the study revealed some plastic water tanks and iron tank stands have been erected in Khana, Tai, Ogale in Eleme and Gokana. Residents reported that in instances where water was provided, it was inadequate and sporadic, forcing people to drink the contaminated water for lack of other alternatives. In some communities, the initial sporadic water supply has ceased altogether due to funding and maintenance challenges.
3. **Provision of Medical Registry and Assessment of Health Status of People of Nisioiken-Ogale who have been consuming water with Benzene over 900 times WHO guideline:** 3.3% of our respondents stated that this had been done. Another 96.7% other respondents stated that this is yet to be done. A very disturbing finding by the UNEP report is the fact that Ogoni community is unprotected against petroleum pollutants in both outdoor air and drinking water, sometimes occurring at high concentrations. According to Yakubu [16], Ogonis are also exposed through skin contact to contaminated environmental media, including soil, sediments and surface water. Nriagu [17] argues that many host communities in the Niger Delta including Ogoni, continue to suffer diverse range of illness arising from exposure to oil pollution, such as blood disorders, cancers of different organs, negative reproductive conditions, impaired disease immunity, and growth; respiratory diseases, and undesirable physiological responses. Some of the participants in the FGDs complained of deterioration of health, including bad vision, headache, nose pain and bleeding, asthma, birth defects, ulcers, skin rashes, and heart attacks. Some women also claimed they experienced miscarriages. However, a careful perusal of the UNEP report did not associate oil pollution with the later claims. Yet, the medical registry and meticulous follow-up for residents of Nisioiken-Ogale community and adequate safe drinking water are urgently desired.
4. **Initiation of a Survey of all water wells around those wells where Hydrocarbons were observed:** As high as 93.2% of the respondents stated that this had not been done, just as other 6.8% of respondents claimed that this had been done. The UNEP report prioritizes this emergency action ahead of all other remediation action, in response to the Nisioiken-Ogale dilemma.
5. **Post Warning Signs around all Sites Identified as having Contamination:** majority of the respondents (91.5%) stated that this is yet to be done, while other 8.5% of respondents indicated that HYPREP had posted warning signs around all sites identified as having contamination. Even where signs were posted, residents are dependent on very shallow wells connecting aquifers. Even where signs were seen around polluted water sources warning people to desist from using such water, people still use such water for lack of alternatives. In addition, some of the sign posts were provided by the Local Government Councils.
6. **Post signs in areas where hydrocarbons were observed on surface water warning people not to fish, swim or bathe in these areas:** 92.1% of our respondents stated that this had not been done, but 7.9% other respondents claimed it had been done. Part of the problem it appears, is lack of consistent enlightenment of residents about the signs. Fyeface and Akhigbe [7] confirmed that oil polluted communities in Gokana Local Government Area where HYPREP signposts

were seen around oil-impacted sites and polluted water sources; residents were seen bathing in the polluted water despite the existence of warning signs.

7. **Inform all families whose rainwater samples tested positive to hydrocarbons and advise them not to consume the water:** As high as 95.3% of respondents this recommendation is yet to be implemented. Other 4.7% respondents stated that this had been done. One of the most disturbing finding by the UNEP report is that Ogoni Community is unprotected against petroleum pollutants in both outdoor air and drinking water, sometimes occurring at high concentrations. The study also reported of benzene in all air samples at levels ranging from 0.155 to 48.2ug/m<sup>3</sup>. Benzene is a “known carcinogen” based on occupational studies in adults who demonstrated increased incidence of several types of leukemia on exposure (37, 68, 69) [16]. Although some residents who spoke to the study team argue that HYPREP had informed community people not to consume rain water, to most residents, rain water remains a major source of drinking water, especially during the long raining seasons. Rain water is also preserved for consumption during the dry season for want of an alternative. This is worrisome, because benzene is one of 188 hazardous air pollutants (HAPs) listed under section 112(b) of the 1990 Clean Air Amendments and regulated from more than 170 industrial source categories [18].

8. **Mount A Public Awareness Campaign to Warn Artisanal Refiners of the Damage It Causes to their Health:** 91.5% of the respondent indicated this had been while 8.5% other respondents stated that this is to be done. The point of interest is that this is one emergency measure which the respondents stated that HYPREP had implemented successfully. Oil theft and illegal /artisanal refining of petroleum is a lucrative business in the study area. Like most oil producing communities in the Niger Delta, oil theft and artisanal refining of stolen crude are energized by unemployment and scarcity of/and unaffordability of legally refined Premium Motor Spirit(PMS), Diesel and Kerosene. Crude oil produced in Ogoniland like other communities in the Delta are stolen in several ways. First, there is the theft associated with ethnic militia forces whereby militia provide security cover for illegal oil cartels who steal large volumes of crude oil directly from pipelines. The crude is taken from well heads where the oil is diverted to a barge which

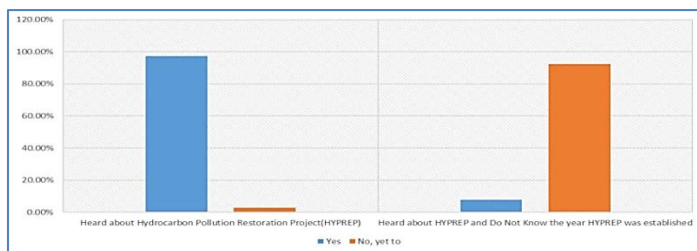
transships the oil to a tanker standing by ready to ship the crude overseas. The second method is known as “hot tapping”, where oil thieves breach a pipeline at night with the result that the oil company shuts down the flow line which allows the thieves excavate the pipeline some distance away and install a tap through which they deliver a constant supply of oil to their own facilities. The third, is a smaller scale theft where local small scale operators tap petroleum product lines and sell the product on the local market [19].

Although there is now a decline in pipeline vandalization due to military onslaught, oil theft poses serious threat to the environment. It in recognition of this threat that the UNEP report recommended that a campaign in Ogoniland to end illegal oil-related activities should be jointly conducted by government, oil companies and local authorities. This campaign should include an awareness component highlighting the disproportionate environmental footprint of artisanal refining (borne by all sections of the community) and spell out training, employment and livelihood incentives that will encourage people away from participating in this illegal activity [18].

Specialized interviews in the study area revealed that there is military clampdown on the business in the area as well as public awareness campaign on the environmental and health hazards associated with this rogue economy. Oil bunkering in Ogoni like other communities the region, is justified by perpetrators as a backdoor resource control which a few community members have had the courage to participate in. Some of the beneficiaries of illegal oil bunkering are now wealthy and enjoy popularity amongst the poor and uninformed community people, who unfortunately are a big minority in the Niger Delta. Any long time success in the fight against oil theft must be tied to community participation in the management of oil activities and the benefits therefrom.

### Other Findings

Assessment of Level of Awareness of the Existence and Core Mandate of the Hydrocarbon Pollution Restoration Project (HYPREP): The study posed the question “Have you ever heard about Hydrocarbon Pollution Restoration Project (HYPREP)? As shown in figure 13, 97.3% of the respondents claimed they have heard about the agency while 3.7% other respondents stated they have never heard about the organization. 92.3% of the respondents who claimed they have heard about HYPREP do not know the year it was established.



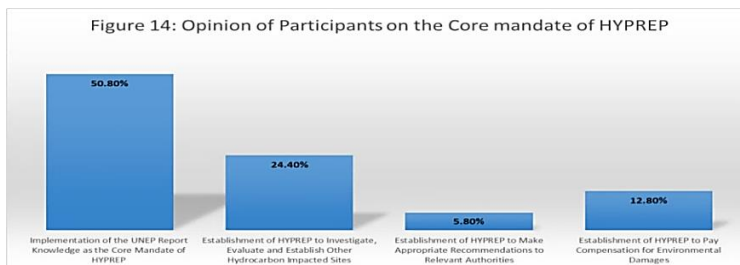
**Fig-13: Level of Awareness of the Existence of the Hydrocarbon Pollution Restoration Project (HYPREP)**  
Source: Fieldwork, April 2019

With respect to the core mandate of HYPREP, 50.8% of the respondents stated that it was established to implement the UNEP report, 24.4% of respondents said it was established to investigate, evaluate and establish other hydrocarbon impacted sites; another 5.8% of respondents stated that the organization was established to make appropriate recommendations to relevant authorities; while 12.8% of respondents stated that HYPREP was established to pay compensation for environmental damages. Hydrocarbon Pollution Restoration Project (HYPREP) was established on July 24, 2012 to clean up the Niger Delta region. The establishment of the agency was not backed by any legislation but was placed under supervision and control of the Ministry of Petroleum Resources, without clear budgetary provisions for its operations and organizational structure, it experienced teething internal conflict between the Minister and the foundation coordinator which slowed down its early work. This problem seems to have been resolved but community

people are demanding for relocation of its office from Port Harcourt to Ogoniland.

HYPREP was entrusted with responsibility of achieving some of the recommendations made in the UNEP Report. Such recommendations as stipulated in the report include:

- Ensure that all that all drinking water well where hydrocarbons were dictated are marked and people are informed of the danger (Emergency measure).
- Provide adequate sources of drinking water to those households whose drinking water is impacted (Emergency measure).
- A Centre for Excellence for Environmental Restoration should be established in Ogoniland to promote learning in other areas impacted by oil contamination in the Niger Delta (Recommendation for Government. Fyनेface and Akhigbe [7] had shown that HYPREP handmade some efforts in terms of I and 2 above, though not as envisaged by the respondents.



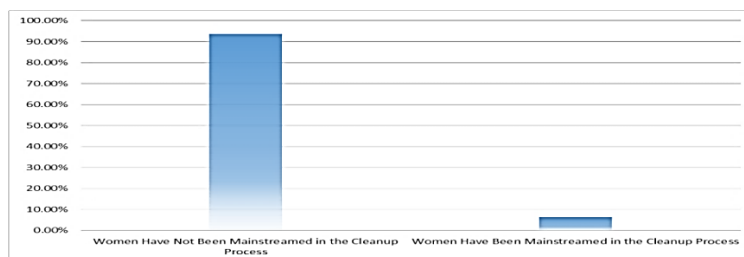
Source: Fieldwork, April 2019

**Mainstreaming of Women in the Clean Up Process in Ogoniland**

An overwhelming majority of respondents (93.7%) stated that women have not been mainstreamed in the Clean-up process, while other 23 or 6.3% stated that they are involved. 328 or 89.9% of respondents

adduced the following reasons to justify why they should be involved in the clean-up process:

- Oil spills destroyed water resources, farmlands
- They are impoverished by non-yield of their natural habitat
- They are the most affected victims of pollution because of the role they play in the rural economy.



**Fig-15: Mainstreaming of Women in the Clean-up process**  
Source: Fieldwork, April 2019



The above findings collaborate some of the declarations of Niger Delta Women on the clean-up of Ogoniland. The Women drawn from communities in Akwa Ibom, Bayelsa, Cross river, Edo and Rivers State at the auspices of Kebetkache Women Development & Resource Centre, Port Harcourt from November 22- 23, 2016 to debate and discuss the implementation of the UNEP report and the clean-up process in Ogoniland and other Niger communities and at the end of the meeting declared as follows:

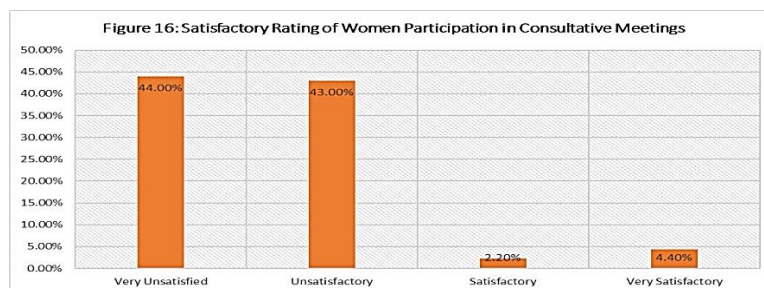
- Women bear the brunt of environmental degradation in the Niger Delta and are the first major casualty of environmental pollution.
- Oil activities have destroyed farmland, polluted rivers, streams, creeks, water ways, and livelihoods.
- The rich mangrove stretches in the Niger Delta have been destroyed with the aquatic richness; prawns, periwinkles, oysters, fishes, crabs, cassava, yam, cocoyam are no longer because of oil spills.
- Rainwater in the region contains hydrocarbon and is no longer safe for drinking.
- Loss of livelihood means poverty among women, loss of control over children and advent of vices that have taken over the Niger Delta; loss of respect for family values-promoting violence, kidnapping and other vices, loss of confidence in government; lack of access to healthcare services, increased burden of women unpaid work, increased rate of school drop-outs & teenage pregnancies, food insecurity, loss of variety of fish, loss of vegetable

species; violence and conflict have left women widowed (<http://www.homef.org/article/niger-delta-women-declaration-clean>, 2017).

On how to mainstream women in the clean-up process, 320 or 37.7% of the respondents stated as follows:

- Empowerment of women through training to build capacity for the cleanup process
- Appointment of women into decision making position to ensure that their interests are protected
- Public enlightenment campaigns with focus on the dimensions of the cleanup process and implementation of the emergency measures
- Attendance of workshops/meetings aimed at sensitizing women on the implementation of the UNEP Report/Cleanup process. Some of the respondents indicated that they had attended workshops organized by the following organizations: ESHRG, MOSOP, Lokiakia and Kebethkathe Women development and Documentation Centre.

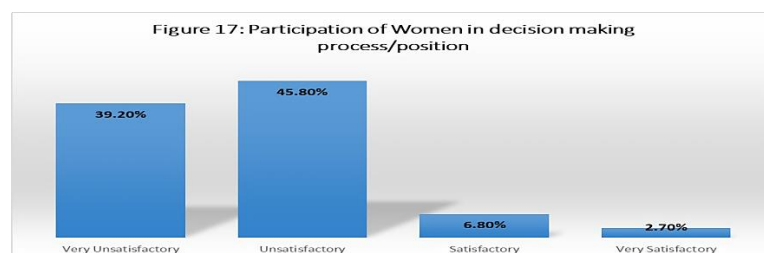
The study also sought to assess the rating of women on the overall clean-up process: Participation of women in consultative meetings: 161 or 44% of the respondents stated they are very unsatisfied; 160 or 43% of respondents indicated unsatisfactory; 8 or 2.2% other respondents stated satisfactory, just as another 16 or 4.4% of respondents stated very unsatisfactory.



Source: Fieldwork, April 2019

With respect to participation in decision making process/position: 143 or 39.2% of the respondents stated very unsatisfactory; 167 or 45.8% of

respondents stated unsatisfactory; 25 or 6.8% other respondents choose satisfactory just as other 10 or 2.7% respondents stated very satisfactory.



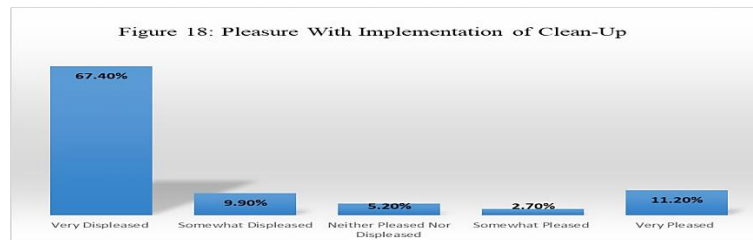
Source: Fieldwork, April 2019

On how pleased or displeased they are with the implementation of the clean-up? 246 or 67.4% of the

respondents stated they are very displeased; 36 or 9.9% of respondents stated they are somewhat; another 19 or

5.2% of respondents are neither pleased nor displeased; 10 or 2.7% of respondents stated they are somewhat

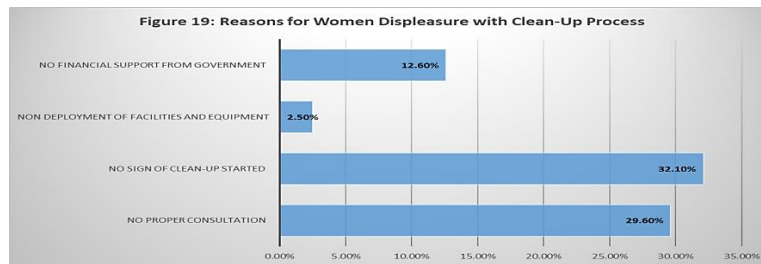
please; while 41 or 11.2% of respondents are very pleased with the level of women participation.



Source: Fieldwork, April 2019

Figure 19 adduced some reasons for their displeasure with the level of involvement of women in the clean-up process. No proper consultation (108 or 29.6%); No sign of clean-up started (117 or 32.1%); Non deployment of facilities and equipment (9 or 2.5%); No financial support from government (46 or 12.6%). It is pertinent to note that the first coordinator of HYPREP is an Ogoni woman – Joy Nunieh-Okunnu,

who was embroiled in internal conflict between her and the Ministry of Petroleum that resulted in non-payment of staff salary for over 18 months. Part of the problem derives from the fact that the organization was subsumed under the Ministry of Petroleum Resource; lack of clear funding arrangement or a clear agenda for HYPREP and absence of any law backing its creation.



Source: Fieldwork, April 2019

Those respondents who stated that they are displeased with the level of involvement of women in the clean-ups process adduced the following reasons for their response: No proper consultation (108 or 29.6%); No. sign of clean-up started (117 or 32.1%); Non deployment of facilities and equipment (9 or 2.5%); No financial support from government (46 or 12.6%).

There is an urgent need for mainstreaming women in the clean-up process as we have shown, the role of Ogoni women in development was clear long before the military induced crisis in their communities. Today, women want more in order to achieve equality with men despite the patriarchal nature of their society. To achieve this, it is absolutely necessary to have more education and this throws up the need to invest material, financial and human resources to eliminate illiteracy. This is a necessary condition for women to play their role in new information society.

### Discussion of Findings

The Ogoni environment for women today is more threatening than it has ever been since oil exploration began in commercial quantity in the area. The current gloomy situation based on combinations of civil unrest, emergence of environmental justice movements and military expeditions, all of which are

consequences of oil. Their response explains why, despite a very hostile environment and few opportunities as compared to men, Ogoni women today are on the move. The delay in implementation of the Eight Emergency Measures accentuate the environmental and health hazards due to the lacklustre performance of Government and the institutions charged with the clean-up, have devastating consequences that constitute a real threat to life, hence an urgent need to implement the emergency measures comprehensively. Women could in the interim, organize themselves in league with other critical community stakeholders to make conscious effort to disseminate information of the dangers inherent in disobeying warning signposts on contaminated sites. This will require a revisit, more vigorously, to the warnings to stay away from impacted sites. Lack of capacity has been pivotal in residents' inability to monitor read and understand warning sign posts and to monitor the clean-up. Women could organize themselves to seek ways and means of training and educating themselves to become useful citizens and more active in the quest for timely implementation of the clean-up process for the development of their communities.

There has been an avalanche of activities and new organizations at all level many of them led by

young Ogoni women. These have been enhanced by empowering factors such as the expansion of education is need to organize training programmes and strengthening of capacity for women in environmental policy analysis and management, and professionalization of the voices of non-state actors. Building capacity does not constitute an end in itself but a means for achieving overall project objective, better opportunities to be economically independent, to bring up better families and to be of purposive use to their communities and country.

## CONCLUSION AND RECOMMENDATIONS

The study revealed that for Ogoni women, transformation into active participants in the overall clean-up process transformation of Ogoni's socio-cultural and economic milieu that requires that women operate from positions of strength in both gender-specific and integrated institutions. Facts at the disposal of the study show that for Ogoni women, there is no alternative to women solidarity. The team spirit can be enhanced and the common experience can prevail over differences. Then the aspirations for active participation in the development process as equal partners, dignity and fulfilment will become realities for Ogoni ethnic nationality. Finally, women's concerns and needs on the Clean-up process of Ogoniland must be on the agenda of government and the implementing institution(s). This, the study contends is the only all-embracing framework for the clean-up of Ogoniland.

Ignoring or delay in implementing the emergency which the Report stated "warrant immediate action" has the potential to cause environmental conflict. Ignoring them does not make them vanish. So the earlier they are fundamentally and holistically addressed, the less they become enmeshed in local struggles especially, when they change the conditions in which people make a living. Women were involved in the non-violent struggle of Ogonis for environmental justice and political autonomy within the Nigerian federation. Many of the women who were leaders of the protest movement possess the capacity to mobilize all over the kingdoms for comprehensive implementation of the emergency measures for themselves, for their children, and for posterity. It is against this backdrop that we put forward the following recommendations:

1. It is clear that Ogoni faces numerous diverse and daunting environmental and development challenges. To monitor the cleanup processes, it has to tackle decisively its capacity needs. The availability and effective utilization of the requisite capacity will determine Ogoni's to meet these challenges. To play an effective role in addressing the environmental challenges, women groups and the larger civil society has to emerge as a credible and sustained voice in the implantation process. They have to play a vital role in mobilizing and articulating social demands and providing countervailing influences to ensure

accountable performance and transparency at all stages of the cleanup process.

2. The battle for monitoring of the cleanup would be won or lost in the field of capacity building of the womenfolk. Capacity building should be defined and interpreted in the context of broader goals and objectives of the cleanup. The interest in capacity building should be systematic, coordinated and sustained because capacity building is an investment with long-term gestation.
3. There is an urgent need to start creating social movements that will deepen implementation of the emergency measures through enlightenment campaigns. This can be achieved by combing strategic cultural/community information dissemination mechanisms with institutional ones. This requires that we move from elites' framework to more inclusive, participatory and populist information dissemination framework. Faith-based organizations can be a dependable alley in this regard. For example, in the early days of the Ogoni struggle the Ogoni Council of Churches was a potent instrument of mobilization. The Clergy through the pulpits mobilized Ogonis for non-violent struggles.
4. The four Ogoni Local Government Councils in Ogoniland as the tier of government nearest to the people can serve as political and social laboratories for incubating and nurturing popular participation that will ensure timely and comprehensive implementation of the eight emergency measures.
5. Government and international donor agencies should invest in strengthening women organizations in Ogoni and their networks and encourage effective interface with larger Civil Society Organizations.

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