

**THE IMPACT OF OIL AND GAS DISCOVERY AND EXPLORATION  
ON COMMUNITIES WITH EMPHASIS ON WOMEN**

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## Introduction

It is undeniable that oil, christened “black gold”, fuels the global economy. Oil converted into petrol and diesel fuels our various modes of transportation that allows for the movement of goods and people around the globe. Due to the enormous financial resources that can accrue from this industry, the discovery of oil in any location, particularly developing countries, is greeted with great optimism. Such was the case in the golden jubilee year of Ghana’s independence when oil was discovered in commercial quantities in the Western Region of Ghana, the same region noted historically for rubber, forestry and minerals of various kinds. In the golden jubilee fields alone, it is estimated that by 2011, oil production per day would hit 120,000 barrels and the revenue from the oil and gas exploration is estimated to hit an accumulated value of US\$20 billion between 2012 and 2030 (Gary 2009). Ghana’s president at the time, J. A. Kufuor noted with great optimism: ‘oil is money and we need money to do the schools, the roads, the hospitals...Even without oil we are doing so well already. Now, with oil as a shot in the arm, we’re going to fly’ (Gary 2009:5). The international community also shares in the optimism generated by the discovery and exploration of oil in developing nations. A World Development Report of the United Nations Conference on Trade and Development (UNCTAD) (2007:95) for example states that:

Extractive activities [including oil exploration] can also have profound social and political impacts. They can have a positive effect on development by creating jobs, encouraging business and providing vital infrastructure for remote communities such as roads, electricity, education and health.

However, the presence of substantial amounts of oil and gas reserves has been identified by many authors as a potentially mixed blessing for oil producing countries (World Bank 2006). Although the discovery of oil creates a sense of hope and expectation that the revenue would lead to the development of local communities and countries as a whole, in most cases, this dream has remained illusory as the exploration of the oil resources has led to the destruction of local communities and anarchy in oil-producing developing countries. Evidence around the world suggests that whether or not a community/country benefits from its discovery of oil and gas is a function of the global position of the oil-producing country in question (Bloomfield 2008; Hartzok 2004; National Academy of Sciences 2003; UNCTAD 2007). In most instances, local communities and oil producing nations in the global West seem to derive more blessings from the oil discovery and exploration in comparison to those in the global South. A good case in point is Norway which was the poorest country in Scandinavia at the end of the 1960s but had by the end of the 1990s become the wealthiest thanks to the discovery of oil in 1969. Larsen (2006) attributes this success to Norway’s ability to prevent rent-seeking and corruption which have been identified as core elements of the resource curse (Stevens 2003). Key elements to Norway’s success include the existence of policymakers and politicians who refrain from dipping their hands into the government kitty, a highly efficient judicial system that prosecutes the few recalcitrant rent-seekers in an expeditious manner, a transparent reporting system that provides information to every Norwegian citizen about exactly how much revenue has been generated from the oil industry via both newspapers and the internet as well as a strong media that serves as a watchdog. In addition, Norway’s public sector employs the majority of the citizenry with no discrimination towards women in this respect. By so doing, the government is thus able to channel some of the oil wealth into salaries that go directly into the pockets of citizens. In appreciation of the fact that oil is not a renewable resource, the Norwegian government has also spent a lot of time and effort building a manufacturing base, enhancing the human resource potential of its

citizens – 20% of its citizens having earned a university degree, five percentage points higher than the Organisation for Economic Co-operation and Development (OECD) mean - and creating a petroleum fund where revenue is kept for future citizens of Norway (Larsen 2006).

One key exception to the assertion that only developed countries with natural resources do well is the case of Botswana. For almost twenty years, specifically between 1966 and 1989, Botswana was the world's fastest growing economy (Sarraff and Jiwanji 2001: 9) and is currently considered an upper-middle income economy. Its success is due to the discovery of diamonds a year after it gained independence from Britain and the state's ability to implement policies that ensured the judicious use of the revenue. The emphasis on a fund similar to the Norwegian Future Generations Fund is evident in the words of Hon. Sir Masire, the President who presided over much of Botswana's economic growth who noted:

...We intend to conserve our resources wisely and not destroy them. Those of us who happen to live in Botswana in the 20<sup>th</sup> century are no more important than our descendants in centuries to come.

(Sarraff and Jiwanji 2001: 1)

To make it possible for future generations of Botswana to derive benefits from the diamonds discovered on their land, the state accumulated international reserves and ran budget surpluses in anticipation of leaner seasons ahead. Unexpected increases in revenue were not spent, but rather saved. New development projects were only undertaken if the resources were available to cover the long term recurrent costs associated with such a project. In addition, like the Norwegians although less successfully than the Norwegians, the state sought to diversify the manufacturing, services and agricultural sectors of the economy so that revenue was generated from sources other than minerals. Finally, great pains have also been taken to ensure that mining operations are environmentally sound so that communities that live in close proximity to the mines do not suffer unduly from the mining of the natural resources (Sarraff and Jiwanji 2001).

The successes of Norway and Botswana seem to lie in a nutshell in their governance structures. Resources, it seems, are only a curse if governance structures are weak. Effective institutional mechanisms need to be in place to ensure that a model closely resembling the Norwegian or Botswana structure exists before the oil revenues come into a developing country if the country is to avoid the resource curse. As Pegg (2009) demonstrates in explaining the failure of the Chad-Cameroon pipeline, the largest single private sector investment project in Africa, both timing and consistency are key here. Although the revenues from the Chad-Cameroon pipeline begun to accrue to the Chadian government in 2003, some of the measures to ensure its proper dispersal were not in place at that point. In addition, key components of the institutional measures which were written into law while the oil wells were being developed such as the need for a Future Generations Fund similar to the Norwegian Petroleum Fund were scrapped once oil revenues begun.

It is imperative that Ghana learns from both the successes of countries such as Norway, Canada and Botswana as well as the mistakes of Angola, Nigeria, Equatorial Guinea and others for countries in the global south which are rich in natural resources seem to suffer from what Auty (1993) has famously identified as the resource curse thesis. Using GDP growth, Auty and Mikesell (1998: 87) have demonstrated that ore-exporting, resource rich economies recorded a lower average GDP growth per annum, infact a 0.2% decline, than small resource-poor countries between 1970 and 1993. Collier and Hoeffler (2000) have extended the resource-curse thesis by arguing that natural resources do not only pose challenges to the

economy of a state, but also have a tendency to generate civil conflict. In their analysis of 73 civil conflicts that occurred between 1965 and 1999, they argued that the most powerful explanatory factor for these conflicts was the fact that they occurred in states that derived a significant amount of its GDP from the export of primary commodities. Collier (2007) has gone on to argue that having abundant natural resources is therefore one of four traps that a poor country might find itself in. All in all then, the mere discovery of oil and gas should not be cause for celebration. As an extractive item, it poses great challenges to the states in which it is located, particularly if these states as the case is with Ghana are developing states. It is in light of this reality that Ghana's Network for Women's Rights (NETRIGHT) has commissioned three reports on the oil and gas discovery/exploration in the Western Region of Ghana. These include a study of the impact of the oil and gas discovery on communities in the Western Region of Ghana, an analysis of the oil and gas policies of Ghana from a gender perspective, and finally an assessment of the existing literature on the impact of the discovery and exploration of oil on local communities in the developing world and particularly women in these communities. Information for this review came from a number of internet based search engines such as JSTOR, Proquest, Ebscohost, LexisNexus and googlescholar. The emphasis in this literature is on oil as a natural resource. However, in recognition of the fact that oil shares many characteristics with other extractive resources, in a few cases, the emphasis is on extractive minerals in general. As detailed in the following sections, the extraction of oil poses numerous challenges to states, local communities and the women who live there.

### **Oil and its links to conflict**

The evidence to date particularly in developing countries shows that the discovery and exploration of high valued natural resources including oil have plunged oil-producing countries into anarchy and conflict. The data from Collier and Hoeffler (2000) which served as an extension of the resource-curse thesis is further buttressed with a report conducted by the United Nations Environmental Programme (2009). This report indicates that from 1990 to date, not less than 18 violent conflicts have been sparked by the exploration of natural resources including oil in regions such as Angola, Cambodia, the Democratic Republic of Congo, Darfur in the Sudan and the Middle East. These intra-state armed conflicts can be national or confined to a specific territory of the country. In some cases, these intra-state armed conflicts are influenced by inequalities in the allocation of oil revenues especially when the local communities near the oil reserves are disadvantaged as is the case in the Niger Delta of Nigeria. According to Boonstra et al (2008), insurgency is on the increase in Nigeria and this is coupled with frequent attacks on oil installations and increases in the kidnapping of western workers (over 100 between 2006 and 2007). Bloomfield (2006) also indicates that the Niger Delta has become a chaotic haven for armed gangs, with increasing instances of kidnappings and daily violence. Le Billon (2001) also provides a good account of the extent to which the war in Angola was fuelled by proceeds from the sale of oil.

While the formation of the Organisation of Petroleum Exporting Countries (OPEC) to ensure solidarity in the determination of both the volume and price of crude oil has worked largely to curtail inter-state conflicts over oil, inter-state conflicts and tensions do occur sometimes with the discovery and exploration of oil especially when the discovered oil reserve is on a shared border. When news of the availability of oil reserves on borders of nations breaks out, expectations that the oil revenue could ameliorate the penury of developing countries make such borders contestable. Yav (2007) states that there has been tension, sometimes reaching critical and conflict dimensions, between Uganda and Congo DR on their shared border along Lake Albert since oil was discovered. Also, the tension between Nigeria and Cameroon as a

result of the dispute over the oil-rich Bakasi Peninsular required international arbitration. Hence oil discovery especially along borders has the potential of engendering hostilities among neighbouring nations.

The involvement of Transnational Corporations (TNCs) in conflicts in high valued resource-rich developing nations cannot be downplayed. Usually, these corporations engage in divide and rule tactics where they support some passive rulers or communities against the more radical ones calling for reform. According to Patey (2007), TNCs exploiting the resources of the developing world have in some cases played significant roles in a number of the most destructive civil wars in the developing world: Colombia, Sierra Leone, Angola, the Democratic Republic of Congo, Azerbaijan and Myanmar.

Conflict whether of an intra-state or inter-state nature has serious implications for the individuals caught up in the conflict, particularly women. During periods of conflict, the moral fibre of a society degenerates and women become the targets of the pent-up frustrations of men in their communities. Thus in places such as the Democratic Republic of Congo (DRC), where conflict rages over the numerous mineral resources located in that land, incidences of rape and sexual violence have reached epidemic proportions. In the South Kivu province of the DRC which borders Rwanda and Burundi and serves as the entry point for armed foreign groups, it is estimated that there is an average of 40 rapes a day totalling 14, 600 a year; 13% of the survivors are under the age of 14, 3% die and 10-12% contract HIV (Rodriguez 2007:45). More recent estimates are much higher suggesting that the number of sexual assaults average 27, 000 a year (Wakabi 2008:15). The brutal nature of sexual violations in conflict zones – including women being gang-raped in front of their partners -led to the United Nations Security Council adopting Resolution 1820, a resolution which calls for the classification of rape as a weapon of war, in June 2008.

### **Oil and its links to human rights abuses**

The extractive industry, particularly oil exploration, also has serious human rights implications for developing countries. The quest for the much needed foreign exchange from the extractive industries has in most cases resulted in high government tolerance of firms in these industries regardless of their human rights record. In their bid to protect their investments and secure foreign revenues, TNCs and governments respectively, have in some cases formed alliances of convenience that expose the population to human rights abuses. In some cases, the national security agenda are determined by the security concerns of TNCs. Thus the need to provide security for the continued exploration of oil overrides national security. According to an UNCTAD (2007) report, the participation of transnational corporations in the extractive industries can result in human rights abuses such as the disappearance of people, arbitrary detention and torture and loss of land and livelihoods without negotiation and without compensation. The famed case of Ken Saro Wiwa, leader of the Movement for the Survival of the Ogoni People, and eight other Ogoni minority rights activists in November 1995 who protested the poor quality of life of the Ogoni inspite of the oil exploration activities of Shell in their community, are a good example of such cases of atrocious human rights abuses (Obi 2001). Nigerian women, as victims of harassment and repression at the hands of the state and multinational oil companies, have been stripped, beaten, maimed, raped and killed. Instances of such cases abound in Nigerian media. For example, Onwuemeodo of the Vanguard newspaper noted in 1999 how 238 Ijaw women had been raped in 4 major military crackdowns on Ijaw resistance (cited in Ikelegbe 2005:255). While women may not always be the direct targets of human rights abuses, they suffer the consequences of human rights abuses just as much as the victims do. When

husbands/partners, fathers, brothers and sons are subjected to human rights abuses, women are left with the responsibility of picking up the pieces and trying to keep families together as best as they can. Especially in the cases where husbands, who are also breadwinners, are the victims of human rights abuses, women as wives and mothers have to double their efforts to fend for their families, the stress and strain of which can have disastrous impacts on their health.

### **Oil and its links to politics**

Black gold is also noted for its ability to impact negatively on the ways in which politics plays out in these communities. The discovery and exploration of oil has the potential to and in most cases have negatively affected the political system of developing nations. Western political censorship of governments is sometimes uncritical of badly governed but oil-rich developing nations. Gumede (2008) argues that the West is selective in their pressure for African countries to democratise by ignoring countries that are rich in oil such as Chad and Equatorial Guinea. Indeed, Ross (2001a) has argued that oil and mineral production is linked to authoritarian rule. Likewise, Boonstra et al (2008), note that there is an intricate relationship between energy production and democracy such that international pressure for bad regimes in oil-rich nations to reform is increasingly weakened as Western countries seek to access the scarce resources in more competitive global markets. In Nigeria, Bloomfield (2008) opines that just as oil has polluted the environment of the Niger Delta, so has it polluted the politics of Nigeria. Likewise, Boonstra et al (2008) argue that the rise of oil revenues in Azerbaijan is associated with the decline in democratic gains. The famed American feminist Catherine MacKinnon has argued that states are socially and politically male and thus work to ensure the rights and survival of the male citizens of any country. Undemocratic states are especially so because they provide little space for alternative voices, let alone women's voices, to be heard in the public space. Such states have little respect for the rights of its citizens let alone the rights of its female citizens. As a result, patriarchal relations between men and women are implicitly condoned by the state and little is done by way of the state to ensure gender justice.

The news of oil discovery has also threatened the stability of some governments in the developing world. For instance in Equatorial Guinea, the news of the discovery of oil in commercial quantities resulted in an attempted coup d'état. Gary (2009) also argues that oil revenue tends to negatively affect democratic gains and further advised that for Ghana to avoid this, the right institutions and transparent policies ought to be in place before commercial production begins.

### **Oil and its links to corruption**

Associated with the negative impact of oil exploration on local politics is the problem of corruption. Petro-states are viewed as especially corrupt. According to a World Bank (2006) document, huge spending and contract allocation associated with the oil business can engender corruption in countries. For Palley (2006), in addition to scoring low on the Human Development Index, countries which depend on oil revenues exhibit higher levels of corruption as the resources are often misappropriated by corrupt leaders and officials. In Nigeria for example, the oil business offered the opportunity for corrupt politicians to enrich themselves at the expense of the people (Bloomfield 2006). Supporting Bloomfield (2006), Boonstra et al (2008) also stated that corruption in Azerbaijan has increased as oil revenue has increased.

Equatorial Guinea stands as a good example of the ways in which corruption can negate the potential benefits of oil wealth. Between 1997 and 2001, the GDP of Equatorial Guinea grew at a faster rate than any other country in the world (Frynas 2004: 527) and by 2003, its GDP per capita was estimated at \$5,310, one of the highest in Africa (Frynas 2004: 540). However, Equatorial Guineans do not feel the impact of this wealth; the government spends much less on health and education than many other African states, including petro-states. In the period when its GDP grew at a faster rate than any other country in the world, the government of Equatorial Guinea spent only 1.23 percent of its expenditure on health compared to 3.4 percent by the Cameroonian state, 5.95 percent by the Nigerian state, 10.6 percent by the Mozambican state and 12.1 percent by the South African state (Frynas 2004: 543). A similar story can be told in the education sector. Indeed, Frynas (2004: 543) notes, "Living standards for the majority [of Equatorial Guineans] have ... fallen despite a huge rise in GDP per capita." The real beneficiaries of the oil wealth in Equatorial Guinea seems to be the President and his close family members; his eldest son is the Minister of Infrastructure, his second son is the deputy oil minister while other family members and close associates run employment agencies that demand party membership before jobs in the oil sector are provided to citizens (Frynas 2004).

Similarly Frynas et al (2003:68) argue that the key beneficiaries of the oil exploration efforts in Sao Tome/Principe (STP) happen to be the owners of ERHC /Chrome, including Emeka Offor, the owner of the latter company who was one of the biggest financial backers of the PDP, government in power in Nigeria at the time. The deal between this consortium and the STP state, the authors argue, has no precedent in the history of the African oil industry since the end of colonialism. In this deal, which the consortium in question won without competitive bidding, a consortium with only \$1.5 million in cash and \$30 million in market capitalization could find a partner with \$50 million to buy an oil concession for which they did not have to pay a signature bonus. In addition, they had future rights to benefits that otherwise should accrue to petro-states such as future petroleum taxation.

Corrupt practices on the part of the state means that oil revenue is not likely to trickle down to local communities, let alone the women in these communities for whom access to social amenities such as pipe borne water would mean less distances travelled in search of water or a good transport system would mean less likelihood of dying from childbirth because of an inability to reach a medical facility.

### **Oil and its links to forced resettlements**

Forced resettlements were also identified as associated with the development of extractive industries. The April 3, 2009 edition of the Sudan Tribune reported for example that in Sudan, thousands were forcefully evicted to make way for a low-sulphur crude oil venture in south-central Sudan. Through this forced eviction, the people of this community lost venerated ancestral homes, died from contamination and saw livelihoods jeopardised. Agriculture is the mainstay of a substantial number of African families and as has been documented in the works of authors such as Baanante et al (1999) and Whitehead (1999), the agricultural systems in Africa depend as much on the efforts of women as they do on the efforts of men. However, men are more likely to be cash crop farmers and food crop farmers are usually the poorest in our societies (Darkwah 2005). Forced resettlements which jeopardise the livelihoods of women food crop farmers put undue strain on them and their families as they struggle to develop alternative livelihood practices to fend for their already cash-strapped families.

## **The impacts of oil exploration on the health of citizens**

Another problem common in sites near oil reserves is the relatively poorer health of community members. The bulk of the literature on the impact of oil discovery and exploration in developing countries indicates the dwindling health status of the people in communities near oil reserves (Bloomfield 2008; Bisina 2004 and US Non-Governmental Report 1999). A UNEP (2009) report indicates for example that the exploration of natural resources has the tendency to engender health risks and that this health risk is more acute in developing countries. For example, a report by a US Non-Governmental Delegation (1999) that visited the Niger Delta indicated that in the local communities there, diseases such as respiratory diseases, skin rashes, coughing up blood, tumours, gastrointestinal problems, different kinds of cancers and malnourishment were not uncommon. Hurtig and Sebastián (2005) also state that the incidence of haematopoietic diseases tends to increase the closer one resides to oil fields and the overall incidence of cancer is significantly higher in both men and women in the countries where oil exploitation had been going on for over 20 years. In Ecuador, for example, they note that cancer was also observed in the population under 10 years in both males and females exposed to oil exploration. Since it is well known that women bear the brunt of the responsibility of providing care to sick loved ones, an increase in the ill-health of citizens in an oil-producing community simply increases the work burdens of already heavily-burdened women. The health risk in oil producing communities can be fatal. In Sudan, according to the April 3, 2009 report of the Sudan Tribune, 27 adults and three children have died since 2006 because of their consumption of contaminated water from the oil fields.

Explosions from pipelines have also resulted in injuries and in some cases deaths of people in the local communities. According to a UNCTAD (2007) report, because the products of the oil industry are mostly combustibles and explosives, accidents such as fires and explosion can have serious effects. In October 1998, for example, a pipeline leak led to an oil flood near the village of Jesse in the Niger Delta and ultimately resulted in an explosion in which over 700 people, mostly women and children, were reported to have died (US Non-Governmental Delegation to the Niger Delta 1999 report). Although in some instances explosions resulting in injuries and fatalities have been caused by defective pipelines, in other instances, they have been caused by attempts by the local people to siphon some oil. Attempts to siphon oil from pipelines, criminal as they may be, are what Marxist criminologists such as Quinney (1974) define as crimes of accommodation as the poor people of the local communities in response to the destruction of their livelihood attempt to siphon oil to sell in order to eke out a living.

In addition to the health risk for the local communities from environmental pollution and accidents as a result of oil explorations, the influx of migrant populations also brings health problems to the local population through the introduction of new diseases. New settlers and migrant workers in some instances become vectors through which new diseases hitherto absent, are introduced into the local communities. The UNCTAD (2007) report cites the case of the Ecuadorian Amazon where the new settlers and migrant workers of ChevronTexaco introduced various diseases to the local population.

In addition to exposing local communities to health risks, oil exploration also has the potential of destroying the health seeking behaviour of local communities. The negative environmental impacts of oil exploration affect plants some of which are used by the local communities near the oil reserves in their health-seeking behaviour. According to the UNCTAD (2007) report, the construction of pipelines leads to the destruction of medicinal plants used by the local populations. Dadiowei (2003) also corroborates this by stating that environmental destruction through oil exploration led to the scarcity of medicinal plants used



by traditional birth attendants (TBAs) in Nigeria. This problem is compounded by the lack of adequate and fully qualified medical personnel in these communities.

Oil exploration increases the risks and dangers associated with women undertaking their reproductive roles. These risks and dangers arise as a result of the predisposition to peculiar diseases in communities where oil exploration takes place. This coupled with poor antenatal care and malnutrition make the lives of pregnant women in these communities particularly precarious. Research shows that pregnant women living close to oil reserves have a higher mortality risk for both themselves and that of their unborn children. According to Hurtig and Sebastián (2005), women living in communities near oil fields are at a 2.5 higher risk of spontaneous abortion than other women. The proximity to oil reserves also predisposes pregnant women to a higher incidence of delivering children with defects. In the Ecuadorian Amazon, oil exploration by ChevronTexaco has resulted in a number of birth defects in communities close to the oil reserves (UNCTAD 2007).

In addition to problems with reproduction, the general health of women is also adversely affected by living close to oil reserves. Hurtig and Sebastián (2005) indicates that women living in communities near oil fields reported higher rates of skin mycosis, tiredness, itchy nose, sore throat, headache, red eyes, ear pain, diarrhoea, and gastritis.

### **Environmental and livelihood implications of oil exploration**

The oil industry, especially the exploration of oil, has destructive environmental impacts or what Watts (2001) refers to as engendering ecological violence. Oil extraction involves several environmental pollution processes (Sebastián et al 2001). A UNCTAD (2007) report indicates that oil and gas exploration impact on the environment in many negative ways by exposing it to oil leakages and spills, gas flaring, and deforestation as a result of the creation of access routes to new areas. Gas flaring without temperature or emissions control pollutes the air (Hurtig and Sebastián 2002) and releases unacceptably high levels of carbon dioxide into the atmosphere (US Non-Governmental Delegation to the Niger Delta 1999). In Ogoniland for example, two independent studies have revealed that total petroleum hydrocarbons in the streams located there are between 360 and 680 times the European Community permissible levels (Watts 2001: 196). Oil spillages are also quite frequent in oil fields in the global south. According to the UNCTAD (2007) report, between 2000 and 2004, there were as many as 5,400 officially recorded oil spillages in the Niger Delta alone. Further studies show that these spills are far more frequent in the global south than in the global north. Between 1982 and 1992, for example, 37% of Shell's spills worldwide occurred in the Niger Delta (Watts 2001: 196).

The environmental pollution associated with oil exploration has serious implications for the survival of species in communities near oil reserves. Oil spillage massively pollutes water bodies thereby threatening fisheries and reducing tourism, harming bird life and severely affecting ecological ocean life (UNCTAD 2007). The environmental pollution caused by oil drilling also results in a destruction of livelihoods in local communities making it difficult for the present and future generations to make a living off of their land. Farming and fishing activities, the mainstay of these economies, literally grind to a halt with the exploration of oil. A member of the Escravos Women Coalition in describing the impact of the activities of Chevron on their community notes, "Our farms are all gone, due to Chevron's pollution of our water. We used to farm cassava, okro, pepper and others. Now all the places we've farmed are sinking, we cannot farm. We cannot kill fishes and crayfish." (Turner and Brownhill 2005: 172). Likewise, according to Dadiowei (2003), the ten kilometre construction of the Gbaran Deep Oil Field led to the destruction of seasonal creeks, lakes,

swamp pools and other water bodies which hitherto had been relied on by fisherwomen from the Gbaran field communities for fish, shrimps and lobster. This dislodged the economic base of the women in the Gbaran communities in Nigeria leaving them with one less option for earning a living. Gas flaring has also made it impossible for the fisherwomen of Uzere in the Delta State of Nigeria to continue to fish (Ikelegbe 2005). Likewise, the women of Ogoniland, Nigeria who earn their living as farmers can testify to the ways in which the execution of oil projects compromises their livelihoods. In late April 1993, for example, farmlands close to the Ogoni pipeline were bulldozed with no regard for the crop growing on the land. When one woman, Karololo Kogbara, attempted to salvage what little crop was left on her farmland, Nigerian soldiers safeguarding the operations of the oil company shot her in her arm. That arm was later amputated. Sixteen years later, Karololo is one of the plaintiffs in the legal case against Shell that was heard on May 26th 2009 in a courtroom in New York. ([www.shellguilty.com](http://www.shellguilty.com) accessed May 25th 2009). The situation is no different in Cameroon where the construction of the Chad-Cameroon oil pipeline by ExxonMobil, Petronas and Chevron have had serious survival implications for the Bagyeli (UNCTAD 2007). This is because the pipeline project left a 30 meter wide gap through the forest, where the Bagyeli hunted, gathered and cultivated crops. The effect of this is the loss of land and access to resources upon which Bagyeli livelihoods have traditionally been based (Nelson 2002). In the Philippines as well, the World Rainforest Movement bulletin (2009) also reports that oil exploration is affecting the fish population as some local fishes are disappearing threatening the livelihood of over 200,000 fisherfolk.

Although the local traditional occupations are no longer sustainable due to the destruction of the environment through oil explorations, the vulnerability and powerlessness of the local people, particularly women, further disadvantage them on two counts. First, whatever pittances are paid as compensation claims are usually paid to the mostly male traditional rulers and local elites who are seen as the owners of the land and water resources (Ikelegbe 2005). Second, no significant efforts are made to develop alternative means of livelihood for them. The young men and women of communities near oil reserves therefore remain unemployed. According to Bloomfield (2008), jobs in the oil industry mostly go to well-paid expatriates and Nigerians from less marginalized parts of the country while the most that residents closest to the oil fields get are casual jobs which come when there is the need to clean oil spills or pipeline bursts. Women, as Ikelegbe (2005: 2004) notes, are the least likely to gain employment in these oil companies even on these occasions. The case of the Bagyeli of Cameroon is similar. Although the Bagyeli lost their traditional livelihood as a result of the pipeline project, only 5% of them were employed by the project (UNCTAD 2007). Although the UNCTAD (2007) report does not give us any sense of how many men/women constituted the 5% of the Bagyeli who got jobs from the oil project, Dadiowei (2003) makes it clear to us that women were the last to benefit from any 'left over' trickling down effect of oil exploration in the Gbaran community. Ross (2008) has argued that oil producing economies in general have a poor record of incorporating women into the formal labour force.

Besides the fact that women can lose livelihoods as a result of the execution of oil projects without necessarily being integrated into the formal sector, the environmental degradation, particularly the destruction of forest cover that often accompanies oil projects has serious implications for the availability of energy sources with which food can be cooked and lighting sources provided. In many African communities such as the Gbaran in Nigeria, Dadiowei (2003) indicates that the traditional division of labour places on rural women, the responsibility for providing and managing natural energy sources required for the sustenance of the household. Bina Agarwal (1989) has long noted how village commons and forests in

rural communities house a variety of resources that are crucial to the survival of rural households, particularly poor households. These include food, medicinal herbs, fodder, fibre and fuelwood. Therefore, environmental degradation in an effort to mine oil places an extra burden on women, who have to continue to provide these energy sources in spite of the loss or the scarcity of these energy resources.

Perhaps because women bear the brunt of the negative impact of oil discoveries and explorations, they are at the forefront of the efforts to change the ways oil companies operate in these communities. As Ikelegbe (2005: 242) puts it, the marginality that women in oil producing communities face serves as a basis for gendered movements. In the Niger Delta for example, between July 2002 and February 2003, a few thousand women resorted to stripping in front of oil company male leaders, the most extreme traditional form of social protest which gained international recognition and led to its adoption across the world to protest not only oil activities but also the War on Iraq. A major complaint of these women was the loss of livelihoods that their children suffered and its concomitant effect on them. As Queen Uwara, the deputy chairperson of the Escravos Women Coalition put it,

A mother gets old someday, she becomes weak; the same with the father. It is your son and daughter who will be feeding you. If our children are not given work then the mothers cannot survive. They employ other tribes to work here, this time we cannot allow this kind of situation...If Chevron wants to kill us, we are no longer afraid. We women have taken over the yard. But we are not afraid because Chevron is on our land. All we want is for Chevron to leave our land.

(Turner and Brownhill 2005:173)

Civil society efforts to make oil companies and petro-states more responsive to community and gender justice do not have to be the prerogative of women only. Diane Elson (2003), the famed feminist economist and staunch critic of the neo-liberal economic framework, has noted the importance of the need to push globally for universal state entitlements to key services such as health and education. To live in such a world requires the concerted efforts of citizens around the world. Local civil society efforts to call large scale extractive companies to order are crucial to this effort.

### **Oil and its socio-cultural impacts**

One of the important effects of oil exploration on communities near oil reserves is its impact on cultural practices, specifically the ways in which otherwise benign cultural practices might be rendered problematic in the face of changes resulting from the discovery of oil. A good case in point is the ways in which commercial sex work can increase with potentially more disastrous consequences in such communities. As noted in the previous section, oil exploration leads to a decline in farming/fishing as viable economic ventures thus increasing the propensity for women to choose commercial sex work for income generating purposes. In addition, the influx of foreign oil workers who are often paid large sums of money as expatriates makes the profession of commercial sex work potentially more lucrative in such communities. As a Nigerian female activist put it, "See, in our (Ogoni) community we have girls, small girls from Lagos, Warri, Benin City, Enugu, Imo, Osun and other parts of Nigeria here every day and night running after the white men and staff of Chevron, they are doing prostitution..." (Turner and Brownhill 2005: 174). Dadiwei (2003) has also indicated that Gbaran communities are confronted with an increase in the number of teenage mothers with fatherless babies. While the work of social historians such as Akyeampong (1997) and White

(1990) on Ghana and Kenya respectively make it quite clear that commercial sex work is not a new invention in Africa, one can safely say that the nature, extent and consequences of such practices in our current context is more worrisome. While this generation has witnessed the emergence of potentially deadly sexually transmitted infections such as HIV/AIDS, our women still have very little ability to negotiate safer sexual practices (Adomako Ampofo 2006). Be it as commercial sex workers who are more at risk for sexually transmitted infections including HIV/AIDS or teenage mothers who are left to care for children all on their own, the destruction of the structures that provide livelihoods for women in oil-producing communities puts an undue burden on women in these communities.

## **Conclusion**

Although much of this work has provided a litany of problems generated by the oil and gas industry, it is important to note that in some cases, mostly in the global West, the discovery and exploration of oil have engineered development in local communities. A report by the National Academy of Sciences (2003) indicates that in Northern Alaska, oil discovery and exploration has benefited communities in the North Slopes through the provision of jobs, schools and medical facilities. Hartzok (2004) also opined that residents of Alaska have been receiving individual dividend checks from an oil rent trust fund since 1982. In Norway as well, citizens receive substantial social services and invest oil rents in a permanent fund for the future. On the African continent, Botswana serves as a good example of the ways in which natural resources, in this case diamonds, can be used wisely to the benefit of African citizens. Key to which way the tables turn is the implementation of appropriate policies prior to the influx of the oil revenues that ensure the judicious use of the financial bonanza such as a future generations fund and substantial investments in health and education across the board. Currently the consensus is that in countries of the global south such as Nigeria where the discovery of oil has had little or no effect on the population, corruption is the culprit. In attempts to minimise corruption, the World Bank in conjunction with a number of other civil society groups have put together the Extractive Industries Transparency Initiative (EITI). This initiative supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining. If as a nation, we embrace the EITI and we look to the Norwegian model not simply for its focus on intergenerational transfers, but use that as a guide to also ensure that women and men of this generation and the next benefit from the discovery of oil and gas, then our discovery of oil in the jubilee year of our independence would be a true blessing. It is imperative that civil society groups such as NETRIGHT put in place mechanisms to ensure that they can call the Ghanaian state to order particularly when the oil revenues begin to flow so as to ensure that it is distributed in a manner that pays attention to community and gender justice. The successes of the Wassa Communities Against Mining (WACAM) in getting Newmont and other mining companies to act in ways that are fair to the Ghanaian population are testament to the fact that similar home grown efforts to monitor the oil industry will be successful.

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Offshore production of oil and gas, with installations, pipelaying, transport and processing, generates emissions to the air and discharges to water and the seabed. These emissions/discharges and the resulting pollution have consequences for the environment locally, regionally and globally. While the probability of an oil disaster on the Norwegian continental shelf (NCS) is regarded as low, the environmental impact of such an incident would be very high. A few large acute oil or chemical discharges have occurred in recent years, with the biggest in 2007. Seventh largest. Norway ranked in 2012 Recent unconventional oil and gas exploration in the United States has produced unexpected benefits in the balance of trade and global energy security. The impacts are also being felt at the community level in several parts of the U.S. One such area is the Eagle Ford Shale in South Texas, which has historically been among the poorest areas in the state. The Eagle Ford is a unique formation; whereas most shale oil and gas fields are predominantly either oil or gas, Eagle Ford contains significant quantities of oil, gas, and condensate. As such, the recent boom in energy production presents an i