IMPACT OF OIL AND GAS EXPLORATION AND PRODUCTION ON FISHERIES



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1.0 **Introduction**

The exploration and production of oil and gas is a major industrial development and regarded as a blessing. The sector is a major source of jobs and revenue for many oil producing economies globally. Since 2010, Ghana's petroleum sector has generated over \$3 billion dollars in revenue and currently the second most important sector for the economy and therefore expected to contribute to improved living conditions of Ghanaians in general, and citizens in the fishing communities around the oil enclave in particular, through royalties. While most Ghanaians had high expectation for the sector as a catalyst for high income and wealth creation, others were apprehensive because no oil producing country with a history of offshore hydrocarbon has escaped the negative impacts of the sector on citizens and socio-economic activities.

2.0 Impact of Oil and Gas Activities on Socio- Economic Conditions

Oil production all over the world is associated with oil spills or pollution which may have health implications for human lives from consuming contaminated marine fishes while carcinogenic compounds leaked into the ocean can lead to public health issues. Empirical research also links oil activities to fever due to heat generated by gas flaring activities. Various gastrointestinal disorders are contracted through the consumption of fish from polluted water bodies in oil producing communities as well as respiratory ailments such as bronchitis, asthma, and cough asphyxiation, among others. Oil exploration activities lead to income losses, migration and negative social vices such as prostitution, sexually transmitted diseases, high rate of school drop outs, wars, corruption and kidnapping.

In many oil producing nations such as Nigeria, the oil exploration activities have caused destruction of delicate marine ecology, which is the main source of livelihood in the oil-bearing communities, leading to loss of fish catches, exacerbation of poverty, social conflicts, population displacement, and loss of livelihoods. Fishermen are told to move their boats and other fishing gears to allow for drilling activities that disrupt fishing activities and force most of these fishes to run several kilometers away, thereby reducing the number of catches. The question is, how has oil and gas exploration and production impacted on the fishing industry, and what measures have been put in place to mitigate the adverse impact of oil production on fishing and fisher folks who are among the poor around the oil enclave? The answers to these questions are critical for securing livelihoods and peaceful co-existence between the petroleum and the fisheries sectors?

3.0 Impact of oil and gas exploration and production on the fishery industry in Ghana

In Ghana, the negative impacts of oil exploration is beginning to be felt on livelihoods of fishing communities around the oil enclave. Ever since oil exploration started in Ghana in the Jubilee Fields at Cape Three Points of the Western Region, fishermen have been banned from fishing within 500 km radius around the oil rigs by Tullow-Ghana. As a result, fishermen have to travel far away from the shores into the deep sea for their catch. This situation has increased their expenditure on premix fuel used for powering their fishing boats, leading to reduced income. According to the deputy director of Ghana's Fisheries Commission, Emmanuel Marfa, "since the commencement of oil exploration, the number of supply vessels on Ghana's territorial waters have increased leading to the destruction of some Ghanaian boats and canoes without any compensation. Some fishermen in the six coastal districts of Shama, Sekondi, Takoradi, Ahanta West, Ellembelle and Jomoro of the Western Region of Ghana, in a documentary by the Institute of Financial and

Economic Journalist (IFEJ) said "ever since oil exploration started, they have experienced poor catches even during bumper fishing season in August because the activities of oil companies on the oilfields were scaring fish stocks away from Ghana's territorial waters to neighboring countries, resulting in dwindling fish stock in Ghanaian waters. Some ocean mammals such as whales also continue to die mysteriously, raising concerns about the safety of marine life. Consequently, civil society groups have called for a fisheries' impact assessment on the oil fields by the oil companies. A SEND-Ghana report on the extractive industry revealed that fishmongers in the Enosie Community in Half Assini, the capital of the Jomoro District have resorted to petty trading such as sale of iced water, groceries and farming as alternative livelihoods.

3.1 Mitigating harms and securing livelihoods for peaceful co-existence between the petroleum and the fisheries sectors.

From the foregoing, securing a peaceful coexistence between the fishing communities and the oil and gas sector will depend particularly on good environmental management and minimizing potential conflict situation as discussed below.

Environmental Management and Oil Spill Response

The government should develop its natural resource management systems that include strategies for catering for future compensation and management of environmental damages that might occur as a result of oil and gas production. Fishermen need to be assured that fishing communities will be compensated should there be oil spills that affect their livelihoods or loss in their fishing rights due to oil and gas activities. There should also be an intensification of the oil monitoring activities in order to forestall oil spills and associated impact on fish stocks and marine ecology.

Minimizing Conflict with Local Industries

There is the need to reduce the conflict that will arise between the oil and gas sector and the fisheries sector. The restrictions on the use of the ocean resources due to oil and gas activities should be tackled properly by government. Already migrant labour from outside communities as a result of the oil and gas activities have been attracted to the oil enclave with a lot of pressure on scarce social amenities such as housing, schools, and health facilities. If not properly managed, this will inflate social pressures and further marginalization of the poor communities.

Furthermore, there should be capacity building for stakeholders' involvement. The oil and gas companies in Ghana must help in building capacity in the various communities in which they operate. The involvement of citizens, civil society, opinion leaders and the traditional rulers in the oil and gas policy designs and implementation would reduce potential conflict that usually exists between oil companies and communities. According to Mr. Rayborn Bulley, the vice president of the Institute of Financial and Economic Journalists (IFEJ) "the fishing industry has been in existence long before the oil and gas sector started. The country therefore needs a spatial plan policy to prevent one entity from crossing each other to ensure harmony among the two groups". Oil exploration companies can help train citizens to understand issues of oil spillage and alternative livelihood activities to ensure peaceful coexistence and mutual trust.

4.0 CONCLUSION

The Ghana Petroleum Revenue Management Law (Act, 815) was carefully enacted in 2011 with input from the public and civil society. The law aims to develop the upstream, mid-stream and downstream industry in the oil and gas sectors and offers one of the transparent means by which

revenue accruing from the petroleum sector can be tracked and utilized in the most equitable way. The Environmental Protection Agency (EPA), realizing the susceptibility of the country to the risk of oil spill developed a National Oil Spill Contingency Plan which provides the framework for coordination of an integrated response, responsibilities, reporting and alerting procedures and means of communication, training, equipment among others in the oil and gas and fishing industry. The expectations of citizens of Ghana in general and those at the Cape Three Points in particular seems to be fizzling out. If the legal framework meant to regulate the petroleum sector and negative impact of oil and gas activities on citizens and the fishing sector fails, it may have serious implication for the country. Ghanaians have not forgotten, the demand in 2010 by the Western Regional Chiefs for 10 percent of Ghana's total oil revenue because they feared oil exploration in their region might not be of any direct benefit to their people.

Everything must therefore be done to ensure that Ghana's oil is not a curse onto Ghanaians, but a blessing. If the recommendations are considered by stakeholders in the management of Ghana's petroleum and fisheries, it will reduce the potential conflict that looms between the sectors and improve the living standards of the people of Cape Three Points and the Western Region. Ultimately, the positive spill-over effect will go a long way to reduce Ghana's vicious cycle of poverty and prevent the endemic social conflicts, which has pervaded most oil producing countries.

REFERENCES

- Aaron, K. K. (2006). Human rights violation and environmental degradation in the Niger Delta, In: Elizabeth Porter and Baden Offord (eds), *Activating human rights*, Oxford, Barne, New York.
- 2. Asiamah, Frederick (2011). Ghana: spending oil revenue. Available on line: http://ghanaonline.org/2011/08/ghana-spending-oil-revenue
- 3. FAO (2004). Information on fisheries management in the republic of Ghana. Available on line: http://www.fao.org/fi/oldsite/FCP/en/GHA/body.htm. Last sourced on 18.05.2016
- 4 Egyir, Isaac Kwasi (2012). The impacts of oil and gas activities on fisheries in the Western Region of Ghana, *Norwegian college of fisheries*, Norway.
- 5 http://edition.myjoyonline.com/pages/news/201011/56081.php