



OIL AND TEARS IN OUR LAND:

Monitoring, Documentation and Reporting
(MDR) of the effects of oil pollution on women
in the Niger Delta



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The Centre for Environment, Human Rights and Development (CEHRD) is a non-governmental and non-profit organization with secretariat in Port Harcourt, Rivers State in the Niger Delta region of Nigeria. CEHRD's mission is to "forge a common link with the rural Niger Delta communities primarily, through research, participatory training, campaigns and advocacy on the problems confronting them. Equipping them with basic knowledge of their situation and encouraging them to non-violently address the issue themselves"

The organization was formed as a response to the increasing problems of environmental degradation, underdevelopment, community health and human rights plaguing the Niger Delta region. Since her formation in 1999, CEHRD has been working in partnership with several local, national and international organizations to promote accountability and transparency in governance, enlighten local communities on environment conservation, human rights issues, human security in conflict and emergencies, rural health and community development,



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INTRODUCTION

The gender role of women places them under unhealthy pressure owing to social, cultural and biological differences in comparison to men. A society where women are predominantly burdened with the greater responsibility of catering for their children can be troubling especially in crisis situations. This research investigates the severity and peculiarity of the misery women in oil polluted communities in the Niger Delta experience. Sadly, a lot of them believe their plight is a lost cause and have lost the will to demand 'paradigm shift' for gender equality. Some of the common experiences they face on regular basis include loss of livelihood, poverty, health deterioration, psychological trauma, social vices and security concerns. The monitoring exercise was a lengthy observation of women who have been daunted by long-suffering. It was easy to sight women wearing rags and having emaciated children running around them.

The question that comes first to the mind is; where are the fathers of these children? In most African family settings, fathers assume the responsibility of primarily providing for the family. They are expected to handle larger family expenses such as

school fees, rent, etc. It then becomes over bearing for women to combine both responsibilities. Investigations conducted by CEHRD confirmed that the fathers of the children are unable to provide for their families. Being mostly communities of farmers and fishers, their financial stability largely depends on the quality and quantity of their harvests. Men however, have it easier than the women who would never stop supporting their children. Apart from this being a natural trait of mothers all over the world, it is inherent in the African culture for women to shoulder responsibilities regarding their children's upbringing. As natural care-givers, the smallest details of their children's well-being are their foremost duty. After conducting over 100 private, focused group and key informant interviews, in five and three communities in Rivers and Bayelsa State, respectively, majority of the women reported that the standard of living was higher in the past decades than now characterized by oil spills degraded environments. It has become conventional for oil companies operating in the Niger Delta to drag their feet in applying pragmatic and holistic practices targeted at

identifying all categories of victims and reducing the effects of oil pollution in communities. The special needs of women created by the effects of oil spills are neglected and the sufferings continue. Having heard and observed women in polluted communities, CEHRD has made a number of recommendations to mitigate the burden of women in oil-polluted communities in the Niger Delta.

HOW WE GOT HERE

Mode Of Pollution

Rivers and Bayelsa States seem to be the most polluted of the nine Niger Delta States in Nigeria. The main mode of pollution is oil spillage caused by operational and engineering failures, accidents and oil bunkering amongst others. When oil spills occur, they flow into farms, mangroves and water bodies, destroying the natural environment. To worsen the situation, run-off during rains ensures the spilled oil spreads to other areas that could have been free of pollutants. So, it is not unlikely to find a farm very far away from an oil spill site still badly affected. Once oil has contaminated wetlands, it is often very difficult to remove without causing further damage to the environment.¹ More so, oil spill management in

the region had been ineffective.² As a result of extensive contamination of land and water systems, which sustain the livelihood of the people, the local economy of the Niger Delta has been declining. The people and the land urgently need restoration. The air they breathe is equally polluted from gas flaring which is another mode of pollution suffered greatly in the region. It occurs during the removal of associated gas from oil through burning before refining. Although oil companies understand the environmental and health implications of gas flaring, gas re-injection and utilization technology is considered economically unviable.

OUR FERTILE LANDS FED US

Loss of livelihood among community women

People in local communities in the Niger Delta are predominantly farmers and fisher folks. This is because they have extensive alluvial farmlands and water bodies that provided avenues for farming and fishing. After interviewing 160 women in their farms and houses, CEHRD gathered that majority of rural community women in Rivers and Bayelsa States share same problems with regards to oil pollution.

CEHRD interviewed and monitored the lifestyle of women from Gbe, Ebubu, Ogu, Isiokpo and Umuchem communities in Rivers State and Okordia, Imiringi and Otuasega communities in Bayelsa State.

The research was based on primary and secondary sources. Both sources yielded qualitative and quantitative information. The primary data was derived from Focus Group discussions (FGDs) and Key Informant Interviews (KII) and visits to relevant locations. Questionnaires with both open and closed ended questions were distributed to residents in the field. Data was also derived from secondary sources such as news analysis and various literatures.

Majority of the women who were solely farmers and fishers now augment their pitiable income with proceeds from petty trading as a result of decline in crop yield and fish production. Nine out of ten women claim they have lost their means of livelihoods. They had cultivated crops such as cassava, yam, cocoyam, plantain and vegetables in surplus and made lots of money to cater for their households. Most times, the income was enough to compete with their urban counterparts that are engaged in white collar jobs. Income from fish and

farm produce has always been the major source of livelihood for women in local communities. Charity Nkwe, a fifty-year-old woman from Ebubu, narrated how her mother had put a roof over her head from just farm proceeds. "No one can boast of doing anything tangible these days with money made from just farming and fishing. We farm and fish because that is all we know how to do. We are no longer hopeful but we must keep trying to survive", Charity said. Similarly, Umuchem women expressed opinions of hopelessness. There was a protest by women and the youth against degradation of their environment by Shell in 1990. The protest took place at Shell's facility at Umuechem. Sadly, it led to the killing of some eighty unarmed demonstrators and destroying or badly damaging four hundred and ninety five houses.³ Members of the community are not in a hurry to forget the events as their conditions have not significantly changed overtime. The protest certainly made no positive change but rather brought painful memories to homes.

The women interviewed at Ogu community were all fishers. This is a traditional economic activity that has been paying off prior to oil pollution. A close inspection of the rivers and mangroves show significant oil sheens visible on the watercourse



Poor growth of cassava

and degraded mangrove areas. Although there have not been recent local cases of oil spills, the chronic effects of previous spills have disrupted the aquatic ecosystem. Many women claimed they harvested six to eight baskets of crayfish (the estuarine prawn) and periwinkle (mud whelk) daily, when the creeks were still healthy –less oil

polluted. This has significantly changed as it takes up to a week to get half of a small basket.

Women in Otuasega community also opened up about their plights in a heavily polluted environment. CEHRD visited a farm where a few women were harvesting cassava.



Poor growth of cassava

The sizes of the roots were indeed discouraging. Some of the cassavas were already rotten when they were uprooted from the soil. The women were very emotional about the upsurge of poverty in the land. “We were definitely happy women. Our blessings did not mean so much to us because we were born in it. Nobody knew our fertile land would one day be barren. Nobody envisioned a time when there will be very little crayfish, oysters and periwinkle. Who knew 'amafe' (white cocoyam) would one day be near extinction? Who knew a full-blooded Otuasega woman could sell her body to feed her children? We are known to be women of pride and integrity. Nobody told us that our lives would be full of sickness, hopelessness, poverty and fear”, cried Oliemen Austin from Otuasega. The extensive pollution of rivers in coastal communities has led harvested fishes sold

in the community markets to have oil in their guts. This could be a pathway for public health concerns . A petty trader told CEHRD that there have been several cases of people returning fish they had purchased from her. She said the people that bought the fish always complain about the oil they found in the fish gut. “I have tried to explain to them that this is the fault of the oil companies and not mine but they still insist on a refund. Sadly, I always end up paying up”, she said. The same issues were observed in Isiokpo. Women painfully talked about the low crop yield and the small size of crops they harvest presently. They all agreed that they did not need fertilizers or improved seedlings of any kind to harvest very big crops in the past. Unknown to them, life then was a luxury. Gbe was one of the worst impacted communities. Clearly, there is diminutive development in terms of social amenities and general standard of living. The women commended CEHRD for conducting the study on women in the community and at same time appealed for a practical solution to the dilemma they have found themselves in. From the focus group discussion, one can rightly say that Gbe women have long given up on the Government and the International oil companies. A woman from the community commented thus: “Let us hope the NGOs can come to our rescue.

We are going through hell. We did not need fertilizers in the past to grow very fleshy high-yielding crops. Now, we can hardly get anything substantial when we go to harvest”.

WE HAD OUR WAYS

Depletion of Culture

In a report published in the journal of epidemiology and community health, Norwegian researchers were able to show that participation in receptive and creative cultural activities was significantly associated with good health, long life, low anxiety and depression scores in both genders.⁴ Each of the eight communities in Rivers and Bayelsa States has cultural practices that are rapidly going extinct relating to oil pollution This is not to say that there are not other co-founding factors, such as Christianity, urban pull and alienation from traditional cultural practices.

Culture gave the women a sense of belonging and immeasurable joy. In Ogu, the women were nostalgic about their 'Iria' cultural rite. The ritual signifies the welcoming of adolescent females into the world of womanhood. The teenage girls come together to bathe in the community river in the

early hours of the morning. The initiation evokes a sense of pride and ensures respect from every other member of the community. This is no longer practiced due to extensive pollution of the rivers. “In the past, even if life became gloomy, we had these cultural activities to keep us going. There has always been genuine excitement attached to 'Iria'. The young women always use the opportunity to interact on personal levels. In fact, very strong friendships have been made possible by the Iria ritual. Those moments have been reduced to mere memories now. The next generation may never experience nor understand the value of this cultural practice. The water is badly polluted and any contact with it has been known to cause skin diseases and other associated health issues” said Adumo Potter from Ogu.

Gbe community women have a similar cultural practice, called 'Kpoagbaa'. Here, women bathe together in the river every 31st of December. This is believed to usher the New Year with good luck and good fortune. Most cultural practices in the community involve water bodies like creeks and streams. Women in the community lamented on the depletion of this culture as a result of oil pollution. Another illustration is the 'Umougbi' ritual practiced in Umuchem where every new

mother is expected to be indoors for a three-month period. This is to ensure that the mother and infant get maximum rest. At the end of the three months, the new mother, accompanied by other women goes to bathe in the village stream. It is then that she is free to go about her normal daily activities. This has stopped due to pollution of the village stream.

Ebubu community practice the 'Ogbonja'. This culture involves every woman in the community to cultivate their crops together. The exercise is concluded with everyone bathing at same time in the river. The Ogbonja is no longer practiced because women are trying to limit their exposure to the polluted farmlands. The water is also polluted making it dangerous to bathe in. The level of Culture depletion in the three communities in Bayelsa State (Immiringi, Otuasega and Okordia) is not any different from the situation in Rivers State. During a focus group discussion in Otuasega, the women discussed their 'Alagba' culture. It involves children being taken in groups to bathe in the river. The ceremony is regarded as very important for the transitional development of children to adulthood. The children are believed to be strong and immune to drowning after this activity. Research has shown

that children are among vulnerable groups to pollutants⁵. Thus, going to polluted rivers could be an exposure pathway for children, which could be of health concerns. The 'Alagba' culture can no longer be practiced. A woman in the community said, "It is sad that my child would not be experiencing the joys of this ceremony. No one in their right minds would let their little one swim in contaminated water. We have seen people that had developed rashes and very strange skin conditions because the water splashed on their bodies."

Women of Immiringi also shared details of their 'Ekuedum' culture. They admitted to have missed the old days when they all took part in it. Ekuedum is an annual fishing festival mainly for women. It is considered an invaluable experience. On the eve of the fishing festival, every member of the community is expected to converge at a specified venue for storytelling. These stories were passed down from generation to generation. The next day, the women go out to fish in the creeks. They come back with lots of fish and there were always enough for everyone. This culture has almost gone extinct. The polluted state of the water has made it impossible to make a reasonable catch. "Of what use is a fishing festival with little or no fish to catch?" asked Pauline Kogimu Owudogu.



Water contaminated by oil spill

The last community monitored in Bayelsa State was Okordia. Surprisingly, women were more 'enlightened' than other communities monitored. They were more outspoken and confident amidst obvious poverty. Okordia women have the Agbala culture. In that culture, a large number of women troop to each other's farms and cultivate collectively. It continues till everyone's farm is

reached. This practice could be referred to as collective farming. It had reduced cost of labour and maximized profit in the past. Sadly, it has been jettisoned as oil pollution has discouraged general farming interests.

Responses from the different communities indicated that oil pollution has not only taken away the means of livelihood from the women, it has

also broken their spirits. There is a breakdown of trust and confidence in the oil companies and even the government. Government and the oil companies need to take deliberate steps to rebuild the confidence of the local population. This is expected to create opportunities for participatory decision making in developing a plan for community development and emancipation. It is essential to rejuvenate local community wellbeing, livelihood, culture and the total environment.

OUR LIVES MATTER

Deplorable Health conditions

The general health situation in the eight communities was very poor. Many of the women interviewed lived in areas close to oil spills or gas flaring facilities. CEHRD found visible oil sheen and patches right at the backyard of some family houses.



Skin disease caused by contaminated water

More women talked about several miscarriages. They said the number of miscarriages has escalated and the frequent occurrence is strange. “It all started with a cup of water. I boiled the water I got from the stream. The nearby borehole water is located in the next village. It is not close by and does not always work. After a few minutes, I started feeling sweaty and weak. It did not take long before I started having a runny stomach. At first, I thought it was not serious until I started feeling the uneasy movement of the baby in my womb. After that night, I began to bleed and this led to a miscarriage. I was four months pregnant when it happened. Later, the women who came to console me shared their own experiences. Some of them said it also started with a cup of water. Miscarriages happened to a few women in the past but it can never be compared to its frequency now” said Happiness Moses from Gbe.

Diseases like typhoid fever, is also considered very common in the communities. In line with the interview findings, typhoid fever is no longer considered to be serious as everyone have been infected a good number of times.

Some women with very large swellings on the sides of their necks said the condition has become

rampant. CEHRD spoke to a medical consultant in Port Harcourt, Rivers State who said they are suffering from goitre. According to her, these women reside in riverine areas where they normally consume enough fish and crustaceans. Most seafoods are high in iodine. The oil pollution has immensely reduced the amount of seafood thereby reducing iodine in their diets. This may likely be the reason for the rise in goitre cases. Another explanation given by a different medical expert was that goitre could be caused by the over consumption of cassava which is considered a goitrogen. 'Goitrogens are naturally occurring substances that can interfere with the function of the thyroid gland. Goitrogens get their name from the term 'goiter' which means the enlargement of the thyroid gland. The goitrogenic action of cassava is due to endogenous release of thiocyanate from linamarin, a cyanogenic glucoside present in cassava, particularly in the tuberous roots.⁶ When there is little or no seafood to consume, people make do with cassava. It is not uncommon to find families that feed on cassava thrice daily.

Another health hazard familiar to all the women interviewed in the focal communities is reproductive tract infection.



Non-functional Health Centre in Gbe

“Some of our farms are very far away. We have to walk through mid waters to get to them. The problem is that the water is badly polluted. We develop very bad itchy rashes. The worst part is the pain we feel in our genitals. It has become normal to itch down there. When we scratch, it becomes very painful to urinate. Some women even have smelly discharges. It is really dreadful”, said Barigondee.

Women in the communities were relieved to express their selves without the disapproving glare of the opposite sex. One cannot help but wonder how they cope psychologically with all the misery and discomfort they have to live with. More than half of them who were interviewed narrated different experiences that show they might be going through psychological trauma. “These days, more women die from sickness in our community. It was only a few years ago that a visiting medical consultant educated us on the peril of not pampering our mental health. He said constant struggling and worrying is one of the causes of high blood pressure. Majority of us are already hypertensive”, said Harriet Okilo, a part time farmer and civil servant from Otuasega

The worry and fear for tomorrow is a major threat

to the psychological wellbeing of a large percentage of the women interviewed. They all complained about having sleepless nights from constant worry.

IT IS WILD HERE

Increased Social Vices

There is a strong nexus between poverty and rise in social vices. When there are no employments for the youth, no secure means of livelihood, no suitable environment to live a comfortable life, it becomes easy to justify crime. This claim is a reality in the lives of women in the mapped out communities. Otasi Ebi from Okordia told us how she witnessed the shaming of a widow who went to steal cassava from another woman's farm. According to them, this was unheard of in the past. There had always been enough for everyone to eat before the farms were polluted.



Ogu oil bunkering

Women freely discussed how married women relate sexually with strange men just to make ends meet. “We know many instances of husbands that know about their wives infidelity and do nothing about it. They know it is for the sake of the family that their wives have decided to sell their bodies”, said Helen Osaro from Ebugu.

When some men in the community were asked if oil pollution had played any role in their marriages, they talked with a lot of pain. The Community Development Chairman of Gbe spoke about the rise in broken homes. “Many men have left their marriages because their wives have been involved sexually with other men to survive. A man's ego should be held sacred and not wounded. These days however, a lot of men are beginning to turn a blind eye with broken hearts”, he said. Considering the general penury in the land, CEHRD asked questions to solve the enigma surrounding the men who some of these women have been said to have sold their bodies to. It was very interesting to find out that majority of these men are oil company workers and civil servants who reside in the urban areas and occasionally visit their communities. They are considered affluent simply because they can afford to feed, pay their bills and have a couple of nairas to give women

who are desperately in need. Married women are not the only ones in this trade. There is just more emphasis on them because they are married. Young girls are actually leading in the trade. From our investigations, we can audaciously say that girls as young as fourteen are involved in prostitution. This has led to a rise in teen pregnancies, abortions and HIV infections. “If you ask a lot of these children around who their fathers are, they would not give you an answer because they do not have the answer. Their mothers are mostly desperate and very young teenagers who were taken advantage of”, said Kowelam Imo from Imiringi. According to her, the children practically come to the world to suffer. They start looking out for themselves at very early ages. Those that are not brave enough to birth their unwanted babies, resort to crude and dangerous abortions. Some of the girls have lost their lives that way.

CEHRD also visited the cottage clinic in Otuasega where the doctor in charge, confirmed the high rate of HIV and other STDS among women and young girls in the community. “My two daughters live in Port Harcourt. I couldn't afford to send them to school. The eldest is twenty years and the younger one is sixteen years. They both bring back money to cater for their younger brother and me.

It pains my heart to think of what they are doing for the money. I know they don't have jobs. I know this makes me look like a terrible mother but I am left with no choice but to pretend they are doing something safe and legal to make a living. I have failed my children. I fear for them but I can only pray for their safety and well being”, said a woman from Okordia.

In each of the communities, the women bitterly lamented on the issue of cultism, armed robbery and kidnapping. They said the heart breaking part is the reality that these criminals are their children. A woman in Imiringi (name withheld) said cultism is no longer a male dominated affair. According to her, young women now have cults like the 'Greenlanders'. Cults are used as foundations for committing heinous crimes in many communities. Recently, the paramount ruler of K-Dere, a community close to Gbe in Ogoniland, was kidnapped. This is believed to be abominable and could attract curses and misfortune in their culture but cultism has emboldened the young people. CEHRD visited the popular Ogu River situated near Ete-ol community. It was shocking to see hundreds of plastic containers of various sizes being used to sell bunkered petroleum products, refined illegally. The illegal business was seen to be conducted so openly without any fears. The sellers

who were interviewed laughed when they were asked if they were not afraid of being caught by security agencies.

We were told by some of the locals that the security agencies may be part of the whole business. “Some of them pray and wish they would be posted to work in our communities. They come here and make a lot of money for turning a blind eye to what we do”, said Dennis Peters (real name withheld) from Ogu. Women are not left out in the bunkering business. CEHRD met as many as twenty-six women who admitted to have joined in the refining process or sales of bunkered products. They all said they are not happy to be involved in any illegal business but they must do something to survive. One of them said that since oil was discovered in their land, they have not benefited from it. In fact, they have lost more than they could ever imagine. If the benefit of what is in their own land would not trickle down to them, to take it by force is only natural. The lands are already polluted from oil and gas related activities. They reasoned that their own little contribution to the huge mess already left by the oil companies should be considered as a desperate move to survive.

During a Key informant Interview in Imiringi, CEHRD spoke to the leader of the 'Women for Environmental Justice', a women group established in Imiringi by one of CEHRD's interventions some three years ago. The woman leader shared some sexual harassment experiences faced by young women in Imiringi. She alleges that the security agents attached to the oil companies have on several occasions, molested many young women. The more desperate girls eventually fall prey and get pregnant for these vile men. The cycle of dysfunctional family unit, coupled with poverty and inexperience continues. These children with no real care and love grow and become fresh hazards to the communities. "In almost every case, the men leave the community and never show up again. The poor children are left with their naive mothers to fend for them", said Owudogu Theresa from Imiringi.

Insecurity remains one of the biggest woes faced by the women. The rate of armed robbery incidence in the communities is on the increase. Women amidst other problems they are facing fear the night because they do not feel safe. It seems like it could not get any worse.



Reduced means of livelihood



Deplorable condition of community women in Rivers State

WHAT WE WANT

Recommendations

It was really interesting to know that each woman, irrespective of her educational background had a clear vision of how her life could be made better. One can easily assume that majority of them would think economic empowerment is the only answer to all their problems. That assumption would have been wrong. When community women were asked what could be done to make lives better, they replied that they want subsidized medical treatment, fertilizers, more women in key leadership positions, birth control, free education for their children, low interest loans from micro finance banks, value orientation for their 'lost' children and clean up of the water bodies and farmlands.

In all eight communities, women talked about strange diseases that have emanated and claimed many lives. The head nurse in Otusega cottage clinic told CEHRD that the women were referring to cancer cases. Apparently, the deadly disease has been on the increase and may be linked to the heavily polluted environment.⁷ The women all asserted that life would be better if they could easily afford good medical services as a reward for

exploiting their lands to their own peril. Fertilizers are also on a very high demand in these communities. Even in slim cases when there are funds to purchase, they are hard to find in the easily accessible markets. "Since the fertility of our lands have been destroyed by the oil companies, it is only fair that they work out a plan that involves making fertilizers available to us", said Faith Noah from Okordia.

Women prioritized the importance of being adequately represented publicly. They said that issues directly concerning them are best represented by fellow women. In the past, the male folks in the community engaged with the oil companies, government and non-governmental organisations. They have failed to involve women in the deliberation of issues that directly affect them. Only a woman would be able to paint a true picture of the nature of problems her kin are passing through for a tailored solution to fit the exact issues.

As expected, all the mothers were more interested in the progress of their children. Interestingly, many women over fifty years, still worry about their children who are thirty years and over.

“If only our children have opportunities to acquire sound education at subsidized rates, we would be sure they have good prospects to get out of this cycle of poverty. Gone are the days when farmers could compete financially with white-collar job holders in the cities. The few that managed to be employed by the oil companies are given very low positions that make it impossible to change the standard of living of their extended families. Whenever we women bring up this argument, we always get the response that our children are not qualified for the kind of position that would make such difference. It is so sad to see a child you knew when he was born, terrorizing the community” said Emesua Beauty from Imiringi. CEHRD deduced from these women that frustration and survival instincts are the basic factors that lead the young people to crime at first. They get used to the crime and it becomes normal to them after a while. The influence of their mates who make money through violent means remains a constant inducement to crime, as there are limited fruitful alternatives. Apart from schools and jobs, there is a need for value re-orientation for the young people. They need to view crime as appalling to abstain from it. Murder, kidnapping, rape, robbery, oil bunkering, etc., must be made to look exactly how they are- disgusting. They would need

to have mentors who they can emulate amidst the struggles. This would go a long way in changing their twisted mind sets.

ENDNOTES

- 1 National Research Council (US) Committee on Oil in the Sea: Inputs, Fates, and Effects. 2003
- 2 UNEP (2011), Environmental Assessment of Ogoniland. UNEP, Switzerland.
- 3 Letter from J.R. Udofia, SPDC Divisional Manager (East) to the Commissioner of Police, Rivers State, October 29, 1990.
- 4 Mental healthy, Rebecca Cocson, <http://www.mentalhealthy.co.uk/news/350-cultural-activities-linked-to-better-health-and-low-stress-levels.html>> last accessed 2nd of December 2017
- 5 Anna bruederle et al, The Effects of Oil Spills on Infant Mortality: Evidence from Nigeria in CESIFO Working Papers ,September, 2017,< file:///C:/Users/collins/Downloads/Oil%20Spills%20and%20Infant%20mortality%20%20%20%202017.pdf>
- 6 Amar k. Chandra, bioactive foods in promoting health<<https://www.sciencedirect.com/topics/veterinary-science-and-veterinary-medicine/goitrogen>> last accessed January 17th, 2017.
- 7 UNEP (2011). Environmental Assessment of Ogoniland. UNEP, Switzerland.

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