



# HOTSPOTS OF CONFLICTS

Fossil Fuels driven community conflicts in Africa



[WWW.OILWATCH.AFRICA](http://WWW.OILWATCH.AFRICA)



## Acknowledgement

This mapping was prepared as part of re-enforcing the watch –strengthening Oilwatch Africa project aimed at helping Oilwatch Africa and others working on impacts of extractive activities in Africa. Oilwatch Africa is a network of groups standing against the expansion of fossil fuels exploitation on the continent.

We acknowledge the provision of information and reports to guide this mapping by partner groups and communities. The report was researched by HOMEF Team and compiled by Cadmus Atake-Enade, HOMEF's Fossil Politics project lead.

We are thankful for the support of Energy Transition Fund.

Health of Mother Earth Foundation (HOMEF)  
30, 19th Street, off Ugbowo-Lagos road,EDPA.  
P.O.Box 10577 Ugbowo, Benin city.  
Edo state, Nigeria.

July 2021

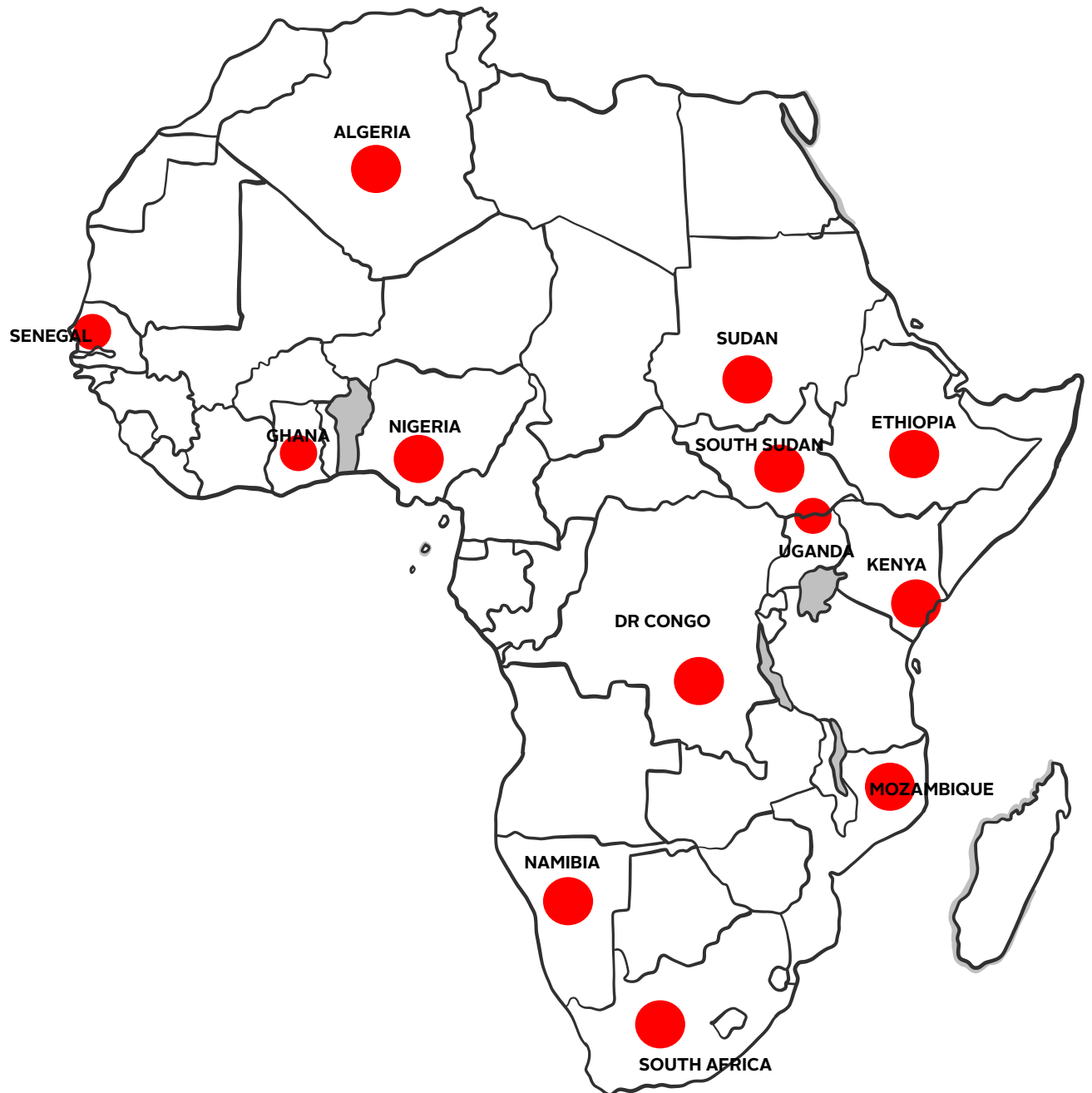


# Table of Contents

## Acknowledgement

1.0.	Introduction	1
2.0.	Mapping Extractive Crisis, Impacts, and Community Resistance	2
2.1.	Algeria	3
2.1.1.	Sahara	
2.2.	Democratic Republic of Congo	3
2.2.1.	Virunga National Park	
2.3.	Ethiopia	4
2.3.1.	Jijiga, Ogadan Basin, Calub	
2.4.	Ghana	5
2.4.1.	Sekondi-Takoradi	
2.4.2.	Ghana Côte d'Ivoire Conflict	
2.5.	Kenya	7
2.5.1.	Lamu	
2.5.2.	Tana Delta and Lamu Districts	
2.6.	Mozambique	8
2.6.1.	Cabo Delgado	
2.7.	Namibia	9
2.7.1.	Okavango Basin	
2.8.	Nigeria	13
2.8.1.	K-Dere and Bodo, Ogoniland	
2.8.2.	Goi Community	
2.8.3.	Ebocha Community	
2.8.4.	Ikarama Community, (Okordia Clan) Bayelsa State	
2.8.5.	Ikarama Community Bayelsa	
2.8.6.	Ogboinbiri-Tebidaba Bayelsa State	
2.8.7.	Ikebiri Community	
2.8.8.	Yiba-Ama Community, Bayelsa State	
2.8.9.	Ekpan Community	
2.8.10.	Ogbulagha Kingdom	
2.8.11.	Gelegele Community	
2.8.12.	Abule Egba Community	
2.8.13.	Ogbadibo and Effa Communities	
2.8.14.	Owukpa Community	
2.8.15.	Enugu	

2.9.	Senegal	23
2.9.1.	Ngadiaga area, Thiès	
2.9.2.	Dakar Region	
2.10.	South Africa	24
2.10.1.	Cape town- South Africa	
2.10.2.	Umbilo River, Durban- South Africa	
2.10.3.	Somkhele, Mtubatuba	
2.10.4.	Mpumalanga Province	
2.10.5.	Karoo	
2.11.	South Sudan	26
2.11.1.	Juba	
2.11.2.	Paloch and Tharajath	
2.11.3.	Melut	
2.11.4.	Koch County, Unity State .	
2.12.	Sudan	27
2.12.1.	Heglig/ Panthou, Khordufan State	
2.13.	Uganda	27
2.13.1.	Buliisa District,	
2.13.2.	Hoima District (EACOP)	
2.13.3.	Hoima District	
3.0.	Conclusion	31
	End Notes	72



Map of Africa showing countries covered by this mapping

# 1.0

## INTRODUCTION

There is literally no African nation without one viable resource or the other and this has made Africa a centre of attraction for exploiters and speculators.

Consequently, the quest for these natural resources has made Africa a highly exploited continent in the world and has led to series of resource-related wars and conflicts. Some of the bloodiest resource wars ever recorded in the world today occurred in Africa.

The fossil fuel crisis hotspot mapping is aimed at illustrating the extent of damage done to the peoples and the environment in Africa. Most of the cases were recorded in Nigeria, arguably one of the most impacted nations on the continent. Hotspot mappings across the global south have been done in the past by Oilwatch International while EJOLT<sup>1</sup> has produced a very valuable Environmental Justice Atlas (EJAtlas). The present effort focuses on Africa in way that researchers and campaigners in Africa, and others concerned about the continent, can have

snapshots of resource conflicts that have occurred within the last 5 years on the continent.

This mapping also serves to expose the growing infringement on the rights of community people by the extractive industries across African communities and the growing importance of the struggles by community people who over the years has shown great resilience in resisting the activities of the extractive corporations and the governments.

The report highlights a total of 36 major fossil fuel hotspots cases across Africa. It shines a spotlight on areas of oppressions and ethnocide<sup>2</sup>. This mapping will be useful for activists, CSOs and CBOs who are fighting against the harmful extractive activities as well as the destruction of the ecosystems across Africa. The mapping will also aid in understanding the fact that the struggles for environmental justice and human rights is everyone's responsibilities because the impacts and devastations of the extractive industries are

getting more pronounced by the day.

As the world reluctantly, but assuredly, shifts away from fossil fuels dependency, it is becoming clear that Africa stands to be left with a legacy of scarified peoples and communities with little hope of remediation or restoration.

This is especially so, because African governments are open to having fossil fuel corporations literally grab and scrape off as much resources as the can while the market stays open. The logic that locks in this patently harmful pathway is that with a hefty energy and infrastructural deficit the continent has a right to extract whatever resources are available to plug those gaps. It is our hope that this report will contribute to the conversation on the critical need to redefine development, progress and growth taking into cognisance the interconnections between the health of the environment and human wellbeing.



**MAPPING EXTRACTIVE CRISIS,  
IMPACTS, AND COMMUNITY  
RESISTANCE**



## 2.1. Algeria

### 2.1.1. Sahara

- Gas/Oil extractions
- Gas pipeline accident
- Company involved:

Algeria is the largest country in both Africa and the Arab world with a total landmass of 919,600 square miles. The country is rich in natural resources and is an OPEC member. Algeria has the tenth-largest proven reserves of natural gas in the world, is the sixth-largest gas exporter, and has the third largest reserves of shale gas. It also ranks sixteenth in proven oil reserves<sup>3</sup>.

The gas plant is situated in the Sahara Desert, 770km southwest of the capital city of Algiers.

Algeria has abundant natural resources including oil, gas, solar energy, iron, zinc, lead, silicon, and helium.

The gas pipeline leak was officially deemed to have been caused by an explosion. In the Skikda LNG accident which was recorded as the worst petrochemical plant fire in Algeria, 27 employees died, 56 injured and cost \$900million. The accident was caused by poor maintenance and poor

general condition.

#### Impacts

- Loss of livelihood
- Respiratory ailments
- Air pollution
- Water pollution
- Deaths

## 2.2. Democratic Republic of Congo

### 2.2.1. Virunga National Park

- Ituri Region, Virunga National Park
- Oil drilling and extraction
- Company involved: SOCO International

The Virunga National Park is one of the world's most extraordinary natural places. It is Africa's oldest national park, a World Heritage Site and a Ramsar wetland of international importance. Although Virunga National Park's pristine wilderness has been granted protections under Congolese and international law, companies from Europe and elsewhere are pursuing plans for oil extraction in and around the park.

About 30,000 people benefit economically from fishing within the park, and another 20,000 benefits from commercial activities related to the fishing industry.

Revenue generated by mountain gorilla ecotourism programmes has provided funding for conservation work and for community development projects in the area.

#### Resistance by Community people

In one nearby village, citizens conducted a public rally to voice their concerns over the proposed oil exploration. The people lamented that if the project scaled through, the area could suffer from socio-economic tensions, crime, and insecurity as witnessed in the Niger Delta of Nigeria.

The areas of Virunga National Park earmarked as oil concessions cover around 85 per cent of its land, and include the habitats of endangered chimpanzees, hippos, and forest elephants.

If the oil extraction is allowed to continue the development could put at risk hundreds of lesser-known fragile species such as the okapi, which is found in no other country in the world. Over 200 species of mammals live in Virunga National Park, including 22 types of primates. The Park is also home to over 700 kinds of birds<sup>5</sup>.



Map showing Virunga Park. Source<sup>4</sup>

The Oil drilling in Virunga National Park<sup>6</sup> by SOCO International Plc, DR of Congo has resulted in the displacement of community people, amongst other impacts.

#### Impacts:

- Biodiversity loss (wildlife, agro-diversity),
- Oil spills,
- Deforestation and loss of vegetation cover,
- Air pollution,
- Desertification/Drought,
- Loss of landscape/aesthetic
- Land degradation
- water pollution/decreasing water (physico-chemical, biological) quality,
- Large-scale disturbance of hydro and geological systems
- Oil explorations threaten the Virunga National Park which is one of the

oldest in the country.

- Repression activists face

### 2.3. Ethiopia

#### 2.3.1. Jijiga, Ogadan Basin, Calub

- Jijiga, Ogadan Basin, Calub
- Natural Gas/Oil drilling
- Companies involved: POLY Group Corporation and Golden Concord Group.

Ethiopia is endowed with energy resources such as coal, biomass, solar energy, and natural gas. The country is not a great consumer of petroleum fuels.

The Current natural gas reserves are estimated to be 24 million cubic metres. About 95% of the energy consumed in Ethiopia is derived from traditional energy resources. The Ethiopian government has

areas, and these have been made open for private investment. Among the selected regions is the Ogaden region of Ethiopia with estimated reserves of 2.4 billion cubic feet of natural gas<sup>7</sup>.

Presently Ethiopians living in proximity to the oil/gas extraction sites are bleeding from their noses and mouths before dropping dead because of a mystery sickness – caused by toxic waste dumping from a Chinese oil drilling company POLY-GCL. The company, POLY-GCL, is a joint venture between state-owned China POLY Group Corporation and privately owned Hong Kong-based Golden Concord Group. The company is located at Eastern Ogaden Basin, Calub, a boundary basin between Ethiopia and Somalia<sup>8</sup>.

### Impacts

- Victims' eyes turning yellow
- Fever symptoms
- Bleeding from noses and mouths and ultimately death
- Land grabbing/displacement of community people

## 2.4. Ghana

- 2.4.1. Sekondi-Takoradi
- Sekondi-Takoradi -

Western Region (Deepwater Tano and West Cape)  
 · Crude Oil drilling  
 · Companies involved: Tullow Oil PLC, Anadarko Petroleum Corp., Kosmos Energy, the Ghana National Petroleum Corporation and Sabre Oil and Gas

The Jubilee Oil field is located 60km offshore, between the Deepwater Tano and West Cape three Points blocks in Ghana. Offshore oil was discovered in 2007 and pumping began in 2011. The commercial partners of the Jubilee Field are Tullow Oil plc (34.70%), Anadarko Petroleum Corp. (23.49%), Kosmos Energy (23.49%), the Ghana National Petroleum Corporation (13.75%), Sabre Oil and Gas (2.81%) and the E.O. Group (1.75%)<sup>9</sup>. With the operation of the oil company, oil Pollution became the effects experienced by coastal communities, along with restricted fishing zones and increased sea traffic.

Serious concerns have been expressed regarding impacts on fisheries as an important source of income and food for many communities<sup>10</sup>. Fishermen are angry, about a 500-meter no-fishing zone around the Jubilee Field. Boats and motors have been

seized and fishermen say lighting from the vessels in the zone attracts fish. See Map<sup>11</sup>

### Impacts

- Biodiversity loss (wildlife, agro-diversity),
- Noise pollution
- Oil spills
- Land and water pollution
- Fishing restrictions
- Loss of livelihood

- 2.4.2. Ghana - Côte d'Ivoire Conflict
- Oilfield Conflicts
- Company: Tullow Oil

The Ghana versus Côte d'Ivoire case on 23 September 2017, which pertained to unilateral oil activities in disputed marine areas, both parties agreed that the dispute concerned the establishment of a single maritime boundary to delimit the territorial sea, exclusive economic zone (EEZ) and continental shelf, including the continental shelf beyond 200 nautical miles, between them in the Atlantic Ocean.

While both parties concurred that there was no formally concluded delimitation agreement between them, they disagreed as to whether there had been a maritime boundary established by a tacit agreement.



Ghana argued that both parties had recognized and respected a maritime boundary in the area concerned based on a tacit agreement which had been developed or confirmed because of the oil activities of both parties over years.

The special arbitral chamber has made a final decision on the maritime border between Ghana and Ivory Coast, preserving the former's billion-dollar offshore oil fields and allowing it to resume production. Ghana has retained ownership of its lucrative offshore oil fields following a final decision by an arbitral panel at the International Tribunal for the Law of the Sea (ITLOS) on the exact path of the maritime border with Ivory Coast<sup>12</sup>.

In a decision announced on 23 September, a five-judge panel determined that the new border should pass to the west of the Tweneboa, Enyenra and Ntomme (TEN) oil and gas fields, preserving Ghana's billion-dollar offshore drilling

extraction industry and allowing it to resume the development of the parts of the fields which are yet untapped.

The implications of this are that fishers and community people living around the offshores field will start experiencing various forms of livelihood loss, water pollution, oil spills amongst other impacts.

The border disputes between the countries go back decades, but the matter was relatively settled from the end of the 1980s until 2009, when both made submissions to the United Nations Commission on the Limits of the Continental Shelf. Then in 2010, Ghana's discovery of offshore oil fields was quickly followed by the Ivory Coast calling on the UN to settle the border<sup>13</sup>. This new oil discovery led to a new dispute between both countries on whose Marine/coastal environment the oil field located.

## 2.5. Kenya

### 2.5.1. Lamu

- Lamu District
- Coal power plant
- Companies involved: Amu Power Company

A coal power plant has been proposed to be set up at Kwasasi in Hindi by Amu Power Company. If the project is allowed to go on, about 600 landowners are expected to be affected.

Amu Power Company which was formed by Gulf Energy, Centum Investments and Power Construction Corporation of China had planned the 981.5-megawatt plant – Kenya's first ever coal project. Lamu coal-fired power plant is part of the government's plans to generate 1,920MW of electricity.

Although the project was suspended in 2019 by a court decision which was a great achievement for the people of Lamu County, the Amu Power Company is still pushing for its establishment in Lamu<sup>14</sup>.



**Impacts:**

If this project is allowed to continue the impacts of the coal power project will lead to:

- Air pollution
- Global warming
- Loss of landscape/aesthetic degradation
- Noise pollution
- Soil contamination,
- Surface water pollution
- Decreasing water (physico-chemical, biological) quality
- Groundwater pollution or depletion.
- Loss of biodiversity and natural mangrove forest.
- Loss of aquatic and marine organisms

**2.5.2. Tana Delta and Lamu Districts**

- Coast Province (Tana Delta and Lamu Districts) Kenya
- Oil/Gas extraction in Block L6, Lamu and Tana Delta Districts, Kenya
- Company responsible: Flow Energy Limited

Flow Energy Limited, an oil exploration company based in Melbourne, Australia, plans to acquire seismic data along profiles of up to 140 km in length near the towns of Witu, Kipini and Kiongwe.

Block L6 covers 5,010 sq km with about one quarter onshore and the remaining offshore to 400 metres water depth. The Block lies in the Lamu Basin and within the Tana River delta<sup>15</sup>, north of recent world-scale natural gas discoveries off the coasts of Mozambique and Tanzania<sup>16</sup>.

**Impacts:**

- Loss of biodiversity/landscape
- Surface and ground water pollution
- Air pollution
- Contamination/pollution of the ocean- Indian Ocean
- Pollution of ground water

- Destruction of the pristine mangrove forest along the Lamu Shore lines
- Deforestation, land degradation and loss of vegetative cover

**2.6. Mozambique****2.6.1. Cabo Delgado**

- Cabo Delgado (Area 1 and Area 4)
- Gas exploration/extraction
- Companies involved: Anadarko Petroleum Corporation (United States of America), Oil India Ltd. from India, PTT Exploration & Production Plc (PTTEP) from Thailand, ONGC Videsh Limited from India, Bharat PetroResources Ltd. from India, Mitsui & Co., Ltd. from Japan, Mitsui E&P Mozambique Area1 Ltd. from Mozambique - Subsidiary of Mitsui, Royal Dutch Shell (Shell) from Netherlands and Total Mozambique from France.

The Cabo Delgado gas project is an enormous project for the extraction and export of natural gas. Discoveries of gas and oil deposits in the northern region of Mozambique (Cabo Delgado, by the Rovuma Basin), triggered the interest of several fossil fuels multinationals. The LNG project is led by the Texan company Anadarko alongside many other companies exploring oil and gas such as the Dutch Shell, the Italian Eni or the Canadian Wentworth Resources.

The development of gas industry in Cabo Delgado province is complicated with a local militant insurgency. The group is being called Ahlu Sunnah Wa-Jama, meaning, "followers of the prophetic tradition". Its emergence is often compared to that of Boko Haram in Nigeria, that started as a religious group and transformed into a guerrilla group. Between October 2017 and February 2018, they are suspected to have killed over 40 people in the province. The militants raid villages located deep in the forest, burns houses, and steals food. More than 1,000 villagers have fled their homes.



The tension with the rebel group reached a new level by early 2019. Anadarko is also constructing a liquefied natural gas (LNG) plant in Palma. For this construction, Anadarko have displaced several villages, including the village of Quitupo. The residents of Quitupo were displaced near Senga. Yet that village is also under threat of being displaced by Shell as they plan to build another gas refinery in Senga.

The fishermen from Milamba have also been forced to move 15 kilometres away from the sea. They are very concerned about how they will be able to feed their families since they will lose their ancestral way of living. Women farmers also express their concerns regarding the loss of families' lands, they won't be able to feed their children anymore with their traditional subsistence crops.

In June 2015, after a national court decided in favour of Anadarko in the region, and the U.S. Company committed to a \$180 million dollars resettlement package to affected communities. However, farmers frowned at the decision of the company to compensate with lands that were far lesser than what was collected from them by the company. While the fishers are finding it difficult to access their fishing ports, this has resulted to loss of livelihoods<sup>17</sup> for fishers.

Although in April 2021 Total withdrew from the LNG Project due to heavy fighting by Islamic groups. According to a report, "On Monday April 26th, 2021, the French energy giant Total announced that it is suspending its \$20 billion liquefied natural gas (LNG) project in Mozambique following recent militant attacks in resource-rich northern Cabo Delgado province. Considering the evolution of the security situation in the north of Cabo Delgado province in Mozambique, Total confirms the withdrawal of all Mozambique liquefied natural gas project personnel from the Afungi site," the

company said in a statement."<sup>18</sup>

#### Impacts:

- Air pollution due to the release of greenhouse gases
- Food insecurity (crop damage)
- Biodiversity loss (wildlife, agro-diversity),
- Fires
- Global warming,
- Forced eviction of community people
- Loss of land and seizure of agricultural lands from the people without any form of compensation
- Exposure to dangerous chemicals for human health and ecosystems.
- Ethnic and religious tensions.
- Fishing communities, living within 100 meters of the sea, are now being moved 10-15 km inland and thus losing their main sources of livelihoods.

The two areas where the gas projects in Cabo Delgado<sup>19</sup> are taking place are called Area 1 and Area 4, spreading over more than 2.6 million acres only 40 kilometres off the coast of Mozambique.

## 2.7. Namibia

### 2.7.1. Okavango Basin

- Okavango Basin
- Oil Drilling/extraction
- Company involved: ReconAfrica

The regions of Kavango East and Kavango West are home to 200,000 people — including the indigenous San — making a living from farming, fishing, and tourism. The region is a host to diverse landscapes sustained by the Okavango Delta a home to more than 1,000 plant and 500 bird species. It's also a wetland paradise for mammals, home to the continent's largest remaining elephant herds<sup>20</sup>.



PHOTO: Eelco Bötlingk / Unsplash



The Okavango Basin is one of Earth's remaining cradles of biodiversity. Each year, 11 billion litres of water flow into the Okavango Delta from upstream Angola, the proposed exploration area in Okavango is estimated to contain 120 billion barrels of oil beneath its crust, and this would make it one of the biggest global oil finds in recent years.

ReconAfrica, an oil and gas company headquartered in Canada, are currently drilling three test wells in the sedimentary Kavango Basin of Namibia. The company has a license for an area of 9,800 square miles, plus an adjacent area in neighbouring Botswana — 13,250 square miles in total. According to a 2019 investor presentation obtained by National Geographic, the company's goal is to drill hundreds of wells under a 25-year production license.

However, ReconAfrica is not the only company planning to drill in Namibia this year. Other plans are primarily focused on the offshore. Total will drill its Venus well around mid-year, while Shell and Maurel et Prom may drill in 2021-22<sup>21</sup>.

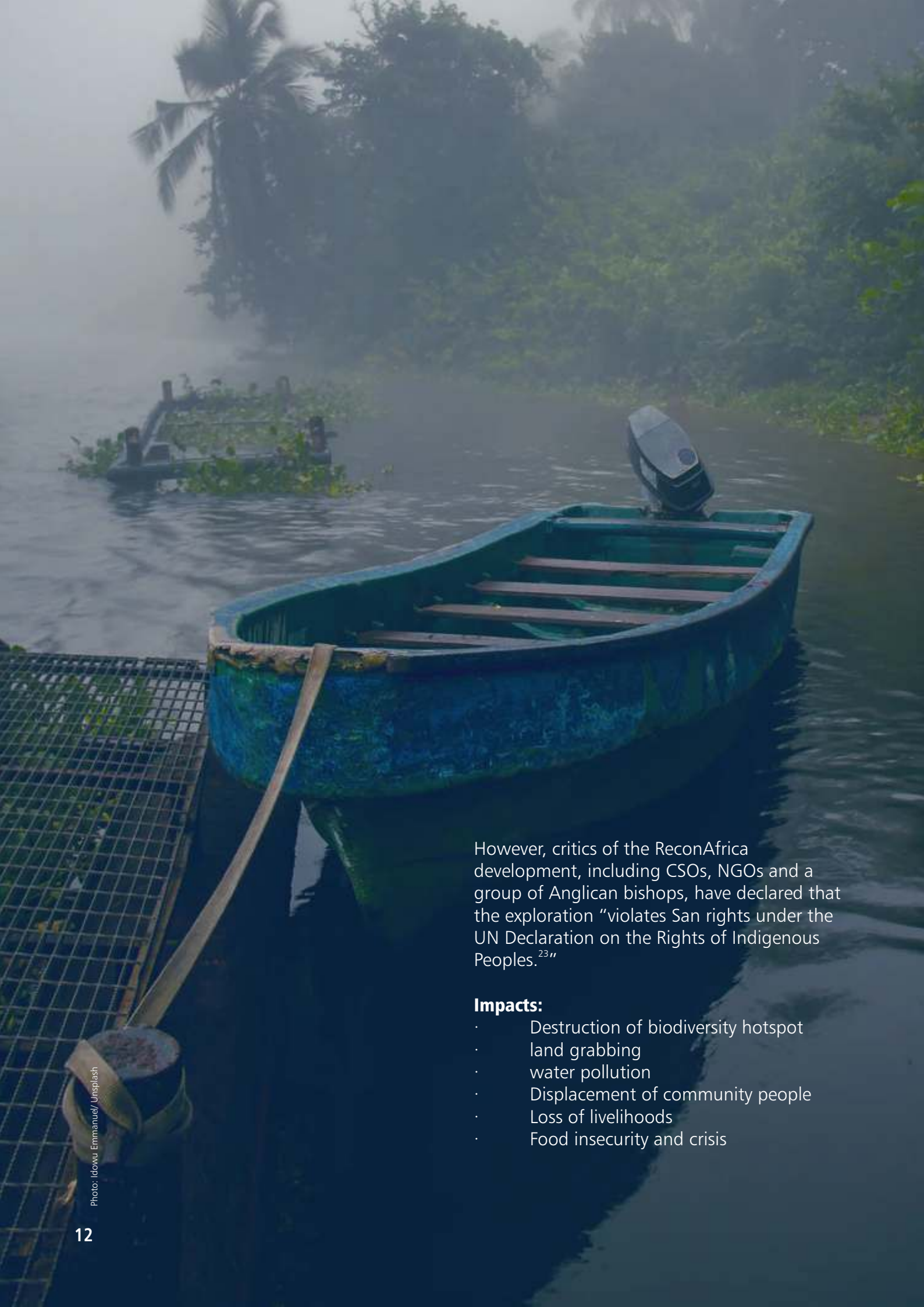
A network of rigs, pipelines, and roads would sprawl across an environmentally sensitive, semi-arid region that is home to Africa's largest remaining population of savanna elephants as well as numerous threatened or endangered wildlife species.

The renowned Okavango Delta is a UNESCO World Heritage Site and must be protected and conserved from every form of extractive activities capable of destroying the rich biodiversity of the area. The Kavango Basin, which spans north-eastern Namibia and north-western Botswana, is part of the Kalahari Desert and the

ReconAfrica's operational area is home to the Kavango people which are made up of five tribal groups who mostly make their living fishing, cattle herding, and farming pearl millet, maize, and sorghum<sup>22</sup>.

Namibia gained its independence from South Africa in 1990 and has enjoyed political stability envied around Africa ever since and It's the first country in the world to incorporate protecting the environment into its constitution and about 14% of its land is protected. So, the concerns over how one of Africa's natural treasures would be impacted if oil is discovered are widespread.

It is quite worrisome for a nation who has incorporated the protection of its environment into its constitution can be cajoled into accepting oil drilling in one of its most protected Delta Basin.



However, critics of the ReconAfrica development, including CSOs, NGOs and a group of Anglican bishops, have declared that the exploration “violates San rights under the UN Declaration on the Rights of Indigenous Peoples.”<sup>23</sup>

**Impacts:**

- Destruction of biodiversity hotspot
- land grabbing
- water pollution
- Displacement of community people
- Loss of livelihoods
- Food insecurity and crisis

## 2.8. Nigeria

### 2.8.1. K-Dere and Bodo, Ogoniland

- K –Dere and Bodo Communities in Gokana Local Government Area (LGA) of Rivers State
- Crude Oil Spill
- Company responsible: Shell Petroleum Development Company (SPDC)

The Ogonis are an indigenous community in Rivers State, Niger Delta, Nigeria. This region of the country is populated by communities from several ethnic groups; the region is rich in natural resources. In recent decades, the region has been a site of tremendous devastation, particularly since oil extraction operations were initiated in the 1950s. The people are predominantly farmers and fishers. The land, water, and air have been polluted to such a great extent that the livelihoods of the people have been threatened<sup>24</sup>.

Ogoniland in the Niger Delta region of Nigeria is one of the most polluted hotspots in Nigeria. Between 1976 and 1991, over two million barrels of oil polluted Ogoniland in 2,976 separate oil spills. While active oil production has ceased since 1993, pipelines operated by Shell still traverse the land, creeks, and waterways<sup>25</sup>. Leakages still occur in the area due to failure of corroded pipelines as well as by activities of third parties. The area is thus still plagued by oil spills.

In 2011 the United Nations Environment Programme (UNEP) issued a report on the assessment of the Ogoni Environment<sup>26</sup>. The report detailed the

ecological devastation caused by years of hydrocarbon pollution in the area. The government of Nigeria set up an agency for the remediation and restoration of the devastated environment.

The agency, Hydrocarbons Pollution Remediation Project (HYPREP) became fully set up in 2016 and thereafter commenced the clean-up process. At the time of this report about 16 sites with minor levels of contamination have been cleaned while plans are being made to begin work on more complex sites.

#### Impacts:

Loss of farmlands, contamination of water sources including rivers, creeks, streams and ground water. There are also health impacts. See map<sup>27</sup>.

### 2.8.2. Goi Community

- Goi Community, Gokana LGA, Rivers State, Nigeria
- Crude oil spill and fire outbreak
- Company responsible: Shell Petroleum Development Company (SPDC)

The first major incident here was crude oil spills from outside the community that led to a fire outbreak, burning down of a large part of the community as well as destruction of mangroves in 2007/2008<sup>28</sup>. Since that time the community has been largely deserted while the creek continues to suffer incessant pollution mostly due to the tidal nature of the creek.

## Impacts:

The fire outbreak in the community resulted in the loss of biodiversity, loss of houses, massive air pollution, ground, and surface water contamination, loss of livelihood- fishing gears /canoes /boats, loss of farmlands, displacement of citizens and various health issues.

The clean-up recommended by UNEP in 2011 did not mention the incident at Goi. The initial pollution has been a subject of litigation against SPDC in both Nigerian courts and courts in The Netherlands.

The incidence in Ogoniland is a clear indication of corporate impunity going on in the Niger Delta region of Nigeria.

### 2.8.3. Ebocha Community

- Ebocha Community, Ogba/Egbema/Ndoni Local Government Area of Rivers State
  - Crisis: Natural Gas Leakage
  - Company responsible -Agip
- Ebocha Community is in Ogba/Egbema/Ndoni LGA of Rivers State and is home to Agip's Ebocha<sup>29</sup>, Obrikom and Obiafu oil and gas facility.

A Gas leak occurred here on August, 2010 and led to a fire outbreak which resulted in the loss of lives, livelihoods and biodiversity. The people, who are predominantly fishermen and farmers, depend on their streams as sources of water and livelihood for the community. The streams have all been polluted by contaminants related to the gas

leaks and extraction activities.

## Impacts<sup>30</sup>:

- Air Pollution
- Loss of biodiversity
- Loss of livelihoods
- Human rights violations
- Land dispossession
- Respiratory ailments (asthma, bronchitis, death)
- Visual challenges

### 2.8.4. Ikarama Community, (Okordia Clan) Bayelsa State

- Oil spills
- Company Responsible: Shell Development Company (SPDC)

The frequent crude oil spills in Ikarama community, Okordia clan in Bayelsa state, Nigeria have resulted in a series of environmental harms that have greatly affected the communities.

These impacts include, the displacement of community people, loss of livelihood and loss of sources of potable water. Others are impacts on health, biodiversity loss (wildlife, agro-diversity), fires, food insecurity (crop damage), loss of landscape/aesthetic degradation, deforestation and loss of vegetation cover, air pollution, soil contamination, and erosion.

In addition, the oil and gas exploration and extraction in this Okordia<sup>31</sup> community have left the people with untold hardship with loss of their sources of livelihoods, leaving them in poor health and exposed to various forms of human rights violations on the communities by military operatives.





Photo: Cadmus Atake / HOMEF

On April 7, 2021 the people of Ikarama Community In Yenegoa Local Government area of Bayelsa State lamented the adverse impacts of Oil leaks from a nearby Oilfield owned by Shell. The leak was from Shell's 14-inch Okordia-Rumekpe pipeline which discharged crude into the ecosystem.

Some residents of Ikarama community in Yenagoa Local Government Area of Bayelsa are lamenting the adverse impact of an oil leak from a nearby oilfield. The Okordia-Rumemkpe crude trunkline is part of the Trans Niger Pipeline (TNP) operated by Shell Petroleum Development Company (SPDC) which conveys crude to the oil firm's crude export terminal at Bonny in Rivers.

JIV is a statutory probe into the cause of any recorded spill incident involving the oil firm, regulators, host communities and state ministries of environment. The JIV report indicated that some 213 barrels which had no impact on the environment outside SPDC's right of way leaked from its asset, while approximately 110 barrels polluted 1.34 hectares of land.

### **Testimonies of Impacts**

Residents near the spill impacted site say that they have suffered untold hardship from the pollution of land, air and lakes near the area due to the evaporation of the leaked crude by the scorching sun.

*Mr Education Ikiowori, who works at the Ikarama oilfields and witnessed the JIV, said the spill was because of corrosion. He said that Shell and the regulators have visited, and they excavated the place in search of the cause of the spill. "They all saw that the rupture was caused by corrosion, yet Shell disagreed.*

*"Normally, SPDC will always blame the spill on third party to avoid responsibility to the landowners, even if they see that it was caused by corrosion. "For this one, thank God that it was very obvious that it was equipment failure; as the government representatives and regulators and all who were here have confirmed it," he said.*

*Chief Washington Odoyibo, a community leader, said that residents have been experiencing the antics of Shell attributing every spill incident to sabotage times without number. "When the spill occurred at this place in November 2019 during the flood, Shell came here and blamed it on sabotage. "This pipeline is over 40 years, I was a child when they laid this pipe here, but they refused to replace it and it is failing every now and then," Odoyibo said.*

The community leader also dismissed the claim by SPDC that some 213 barrels have no impact on the environment and wondered if the environment where the 213 barrels of crude leaked into was isolated from the area. He explained that due to the high intensity of the sun, the leaked crude evaporates into the air and causes choking sensation that triggered cough and respiratory difficulties amongst the people.

He said the people of Ikarama were in dire need of medical intervention following the pollution of air, water and land as well as relief materials "When our people inhale this, in a short while they can come down with cough. This crude oil can give different kinds of sicknesses; cough, running nose and so on<sup>32</sup>.

#### Impacts

- Air and land pollution
- Water contamination and pollution
- Loss of livelihood and lands
- Emergence of Respiratory and other diseases

#### 2.8.5. Ogboinbiri-Tebidaba Bayelsa State

- Oil spills
- Location:
- Company Responsible: Nigeria Agip Oil Company (NOAC)

#### Impacts

- Biodiversity loss (wildlife, agro-diversity),
- Food insecurity (crop damage),
- Global warming,
- Loss of landscape/aesthetic degradation,
- Soil contamination, Oil spills, Deforestation and loss of vegetation cover, Surface water pollution.

Agip's Ogboinbiri-Tebidaba oil pipeline's multiple spills over the years have severely impacted local lives and farmlands. The impacts have been so devastating to the extent that the community people have lost all hope of a clean and safe environment due to the spills that is left unattended to by the company and the government.

#### 2.8.6. Ikebiri Community

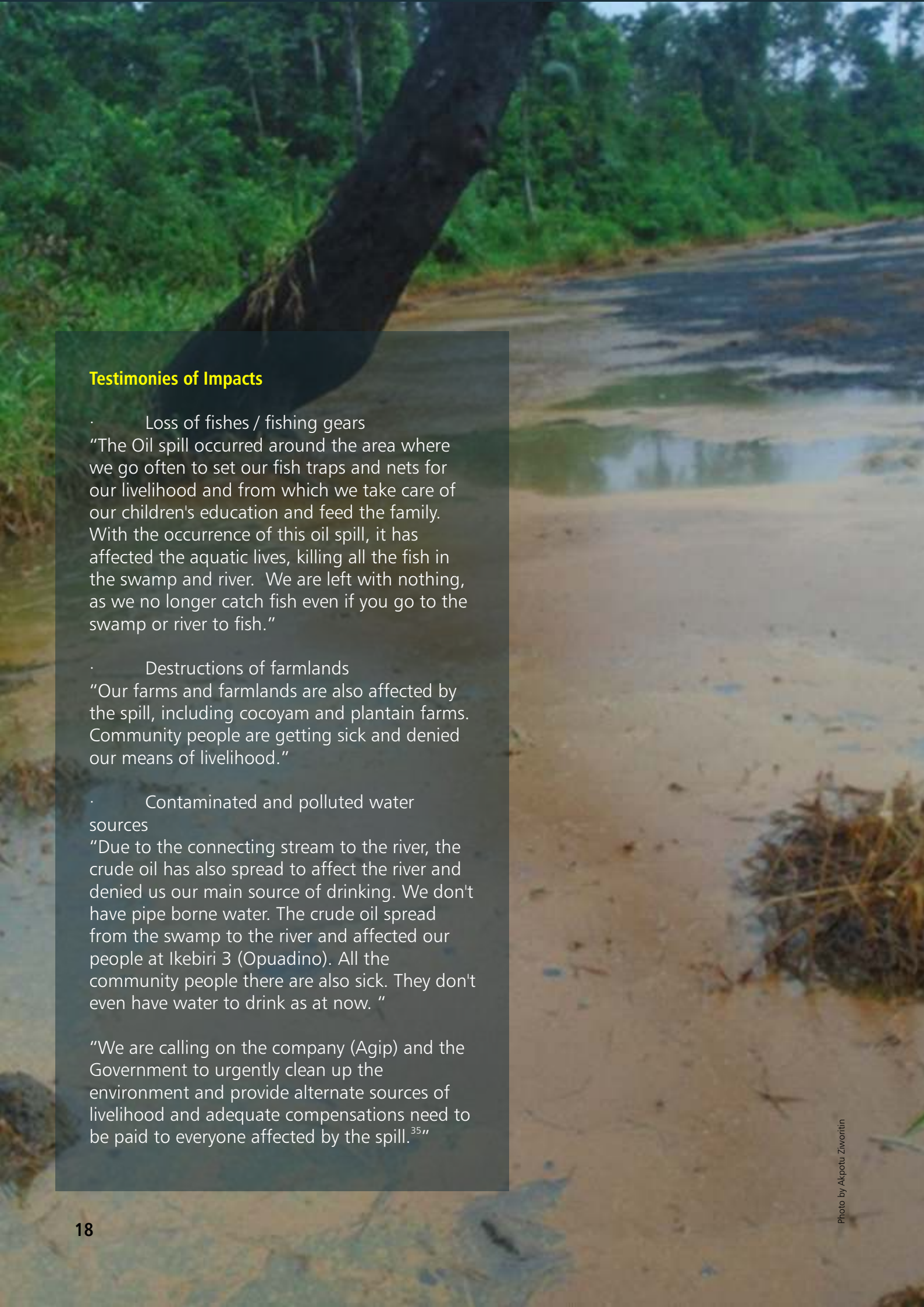
- Ikebiri Oil Spill –Bayelsa State
- Crude Oil Spewed into Ikebiri Environment
- Location: Agip's 10" Clough Creek/Tebidaba pipeline at Boloukubu - forest/swamp/creeks in Ikebiri kingdom.
- Company responsible

Ikebiri has Ikebiri 1, 2, 3 and 4 communities. Even though there are community heads in all four settlements, the Paramount Ruler of Ikebiri 1 is the overall head. Ikebiri is located along the Ikebiri Creek in Olodiana clan<sup>33</sup>, Southern Ijaw LGA of Bayelsa State. The only oil company operating in the environment is Nigerian Agip Oil Company (NAOC/Eni). Most oil spills here result from equipment failure, especially those occurring on well heads. These spills have resulted in bitter conflicts and have often ended with contentious conclusions in favour of NAOC, leaving the community bitter and frustrated.

Apart from the equipment failure incident in 2010 which attracted litigation against Agip, other major equipment failure incidents occurred in early 2015 and in 2020.

Ikebiri was first community in Nigeria to sue Agip (Eni) in an Italian court, in respect of clean-up issues and damage caused by a spill from Agip's pipeline in 2010. That case was later withdrawn in 2019 at the instance of Agip (Eni), for out of court settlement<sup>34</sup>.





### Testimonies of Impacts

- Loss of fishes / fishing gears

"The Oil spill occurred around the area where we go often to set our fish traps and nets for our livelihood and from which we take care of our children's education and feed the family. With the occurrence of this oil spill, it has affected the aquatic lives, killing all the fish in the swamp and river. We are left with nothing, as we no longer catch fish even if you go to the swamp or river to fish."

- Destructions of farmlands

"Our farms and farmlands are also affected by the spill, including cocoyam and plantain farms. Community people are getting sick and denied our means of livelihood."

- Contaminated and polluted water sources

"Due to the connecting stream to the river, the crude oil has also spread to affect the river and denied us our main source of drinking. We don't have pipe borne water. The crude oil spread from the swamp to the river and affected our people at Ikebiri 3 (Opudino). All the community people there are also sick. They don't even have water to drink as at now. "

"We are calling on the company (Agip) and the Government to urgently clean up the environment and provide alternate sources of livelihood and adequate compensations need to be paid to everyone affected by the spill."<sup>35</sup>



#### 2.8.7. Yiba-Am Community, Bayelsa State

- Yiba –Ama Community
- Crude Oil spills
- Company responsible: Shell Petroleum Development Company

Monday, 12th June, 2021 it was reported by the leadership of Yiba-ama community about the incidence of crude oil spreading into the community environment from the neighbouring Odua Community in Abua/Odua Local Government area of Rivers State, a boundary community.

This report prompted environmentalist from Environmental Rights Action- Friends of Earth Nigeria to immediately contact the community representative from Yiba-ama, Churchill Efanga. Who explained that he was not aware of any such incident, but after investigation he confirmed the incidence to be true.

The crude oil has flooded the swamp of Yiba-ama environment. According to him, his investigation indicated that the crude oil was spreading from neighbouring Odua community. Odua is a boundary community, in Abua/Odua local government area of Rivers State. On Tuesday, 13th July, 2021 ERA/FoEN field monitors visited Yiba-ama and was led to the sites of interest.

During this visit to the environment of interest ERA/FoEN saw crude oil in areas Yiba-ama indigenes had previously taken ERA/FoEN field monitors around, and the crude oil observed in the environment believed to be spreading from neighbouring Odua community and from facility belonging to Shell Petroleum Development Company [SPDC].

Although pipeline belonging to the Nigeria Agip Oil Company [NAOC] also runs through the environment side by side with that of SPDC; that of NAOC conveys only gas. This

means the source is traceable to SPDC facility.

According to a community representative "this is not the first time we are experiencing such. When it occurs in that environment it spreads into our environment damage our crops and aquatic lives such as fishes, crabs, crayfish amongst others leading to loss of livelihood and poor fish catch.

In addition, there has been several spills during the dry season. But with the rain [flood] the already existing spills has spread to our environment along with the flood. The spill occurred during the dry season, and they did the clamping then and Instead of a proper clean up the spills was sets on fire to cover their tracks on the impacted site. They thought the fire has consumed the crude oil. But now, it looks as if there is a fresh oil spill in the environment he lamented. They urged the facility owners to take urgent steps to prevent further spread of crude oil to our environment."

#### Impacts:

- Air pollution
- Water pollution
- Community displacement and poor crop yields
- Spread of water borne diseases
- Loss of livelihoods

#### **Demands by the Community people**

- The National Oil Spill Detection and Response Agency [NOSDRA] should rise to the occasion; especially as we are getting into the thick of the rainy season. NOSDRA should prevail on the facility owner; Shell to do the needful and urgently too.

- The Bayelsa State government, through the State Ministry of Environment should also try and visit the community and impacted sites and take necessary steps to ensure Shell does the needful in the interest of our people and environment.

- The people of Yiba-ama should continue to be vigilant in terms of monitoring their environment and remain peaceful. They should not hesitate to reach out to the regulators [NOSDRA and State Ministry of Environment], NGOs like ERA/FoEN and the media whenever there is need.

- Shell should take full responsibility and mobilize for clean-up without delays. Containment by booming is good and desirable; but that does not stop downstream pollution once the crude oil to be so contained is on a flowing body of water.

#### **2.8.8. Ekpan Community**

- Ekpan Community, Uvwie LGA, Delta State
- Carbon Black emission from Warri Refinery
- Gas / Crude Oil refining
- Company responsible: Nigeria Petrochemical and Refining Company a subsidiary of NNPC

In Ekpan Community in Uvwie Local Government Area of Delta State, there have been visible impacts such as layers of soot on floors, cars, buildings, etc. caused by pollution from the refinery.

This has resulted to various health problems and economic challenges in the community. Children have been diagnosed with various respiratory diseases such as cough and catarrh, bronchitis, and asthma attacks caused by the air pollution, loss of livelihood occasioned by poor agricultural produce. Whenever the black carbon is released

during operations in the refinery, the water, air, land, and clothes and domestic animals in the community and adjoining areas are soaked in carbon black or soot<sup>36</sup>.

#### **2.8.9. Ogbulagha Kingdom**

- Ogbulagha Kingdom in Burutu LGA, Delta State
- Crude oil extraction/toxic waste/dead fishes

Large numbers of dead fish washed ashore at Ogbulagha Kingdom on February 20th, 2020<sup>37</sup>.

"The incident has replicated itself in other fishing communities along the Atlantic coastline in the Niger Delta states of Ondo, Bayelsa, Rivers, and Akwa Ibom. The species of fish mostly affected is the croaker fish popularly called Broke-Marriage or Onah in local dialect," According to a report by HOMEF, Dead fish Not manner, the report stated that on the 20 February 2020, the people from Ogbulagha kingdom in Burutu LGA of Delta State reported the massive numbers of fish floating and littering their shores. "the incidence later replicated itself in other Niger Delta coastal states.

The report added that, "The immediate cause of the incident is yet to be known, but there are speculations that it may be related to the activities of multinational oil and gas production companies operating in the region. Among other pointers to the oil companies as the source of the incident are environmentalists attributed the dead fish littering the Niger Delta coastline to discharge of toxic chemicals from Shell's operations at Forcados oil export terminal. Environmentalists from the impacted region urged the government to wake up to its responsibilities in the protection of the environment and providing services to the people<sup>38</sup>.

Due to the impacts environmentalists, members of FishNet Alliance, and people in the Niger Delta region called on relevant government agencies to investigate the cause of sudden death of fish that were washed ashore across the Niger Delta coastline.

They specifically called on relevant regulatory agencies, including the National Oil Spill Detection and Response Agency (NOSDRA), the Nigerian Maritime Administration and Safety Agency (NIMASA), and the National Environmental Standards and Regulatory Enforcement Agency (NESREA), to act<sup>39</sup>.

Impacts:

- Loss of livelihood for fishers
- Water Pollution
- Emergence of diseases in communities
- Public health crisis in impacted communities

#### 2.8.10. Gelegele Community

- Gelegele Community, Ovia North – East LGA, Edo State
- Gas flaring and Oil extraction
- Company responsible: Dubri Oil Company Limited

The emissions from gas flare stack located at the heart of the Gelegele community has caused serious health crisis in the community. Dubri oil company Ltd (DOCL) which operates in the community produces its oil from oil wells sited in Gelegele oil field with its gas flare and flow station located at the heart of the community and within close proximity to residential buildings<sup>40</sup>.

The oil company flares about 800,000m3 of associated gas per day into the community environment.

The production of oil and flaring of gas at Gelegele by Dubri Oil Company Ltd has had a great impact on the community people and other adjoining communities within the Gelegele oil field.

Impacts:

The resultant effects of the gas flares and other oil extractive activities are:

- Environmental pollution
- Dermatitis, conjunctivitis, cardio-pulmonary disease, asthma, chronic bronchitis, cancers and other diseases.
- Contamination of surface and ground water in the community
- Land grabbing
- Destruction of lands and poor agricultural yields
- Poor fish catch in rivers and streams in the community

The Gelegele community people have demanded that they should be adequately compensated for the environmental damages and health challenges caused by the gas flare and demanded for the removal of the gas flare stack from the heart of the community. See map<sup>41</sup>

#### 2.8.11. Abule Egba Community

- Abule Egba-Community, Lagos
- Gas pipeline
- NNPC

On the 15th March 2020 an explosion at a liquefied natural gas (LNG) pipeline in Lagos, Nigeria, killed at least 15 people. The incidence occurred in Amuwo Odofin area where a pipeline belonging to Nigerian National Petroleum Corporation (NNPC) exploded on Sunday, killing several people and starting a fire that spread over three districts in Lagos<sup>43</sup>.

Similar incidence occurred in 2006 also in Abule Egba area in Lagos state, where a gas pipeline exploded killing hundreds of people<sup>44</sup>.

Impacts of the explosion:

- Loss of properties
- Loss of lives and livelihoods
- Air Pollution
- Water pollution

### 2.8.12. Ogbadibo and Effa Communities

- Ogbadibo (Benue State) and Effa (Kogi State)
- Coal Mining
- Company involved Dangote Coalmine Company

Both communities share common boundary, one in Benue State and the other in Kogi State in the Middle Belt of Nigeria.

Coal is mined in the communities and is used for power generation by manufacturing companies, notably the Dangote group of companies and its counterpart BUA group of companies who run cement production factories, among others. The coal mines have drastically affected the well-being and livelihoods of the people in the communities.

#### Impacts:

- Air pollution
- Water pollution
- Cracks on walls of houses due to the use of heavy-duty machineries
- Damage of community roads
- Increase in respiratory diseases
- Infertility issues in women and men
- Loss of farmlands and poor crop yields

due to pollution

- Accidents and loss of lives of community people living close to the mines<sup>45</sup>

### 2.8.13. Owukpa Community

- Coal mining Owukpa community, Benue State
- Coal Mining
- Company involved: Owukpa Consolidated Mining Company , Dangote Coalmine Company

The coal mine in this community is located a few poles away from a secondary school while the extracted coal dump site is directly situated on the premises of the school.

#### Impacts

- Air pollutions,
- Cracking of walls
- Water pollution
- Corrosion of roofing sheets
- Black soot dust emitting from the coal site,
- Poor crop yields and various forms of health challenges<sup>46</sup>.



Photo by Treasure Orokpo/donavoice.com

### 2.8.15. Enugu

- Enugu State, Nigeria
- Coal mining

Coal mines at sites in Onyeama, Iva Valley, Ogbete, and Okpara, now abandoned, still have environmental and public health impacts as locals have resulted to selling the abandoned mines sites/properties for more mining and coal power processing activities<sup>47</sup>.

#### Impacts

- Groundwater pollution
- Air pollution
- Loss of landscape/aesthetic degradation
- Soil contamination
- Loss of livelihoods
- Respiratory diseases

## 2.9. Senegal

### 2.9.1. Ngadiaga area, Thiès

- Thiès<sup>48</sup>
- Oil/gas extractions
- Incident: Gas explosion
- Company involved: Petroleum of Senegal (Petrosen, Halliburton, Forteza)

On the 19 December 2020 a fire broke out at the Dieleuk Peul site following a natural gas eruption during a drilling operation in the Ngadiaga area, an onshore platform in the Thiès region of Senegal. The well continued to burn on for several days have come from local authorities and villagers to contain and put out the fire. The Senegalese authorities claim to have secured the site surrounded by several villages.

The Ngadiaga gas field consists of 11 wells and has a production capacity of 30,000 cubic meters per day. This output is entirely purchased by Sococim, a cement plant near Dakar, to where it is transported over 36 km by pipelines. Ngadiaga's

onshore gas, discovered in 1993, is different from the offshore gas discovered in recent years at the Senegal/Mauritania border, which these two countries have agreed to jointly exploit<sup>49</sup>.

#### Impacts:

- Loss of properties
- Loss of livelihood
- Biodiversity loss (wildlife, agro-diversity)
- Loss of lives
- Food insecurity (crop damage)
- Surface water pollution/decreasing water (physico-chemical, biological) quality

### 2.9.2. Dakar Region

- Dakar Region
- Coal power plant
- Company involved: Compagnie d'Electricité du Sénégal (CES) from Senegal - owner of the power plant. Nykomb Synergetics Development Group from Sweden – shareholder, Quantum Pacific Group from United Kingdom - Shareholder

The city of Bargny<sup>50</sup> has been threatened by the construction of a new coal power plant in the nearby village of Sendou. Citizens complain of already being victims of the pollution from the Sococim cement plant located 1.5 km from the community. They also suffer coastal erosion due to climate change.

#### Impacts:

- Loss of livelihood
- Displacement of community people
- Loss of Biodiversity

Strong opposition to coal power plant in the city of Bargny

## 2.10. South Africa

### 2.10.1. Cape town- South Africa

- Cape town
- Refinery Explosion
- Company responsible: Astron Energy

On the 2 July 2020, a refinery operated by the Astron Energy Refinery in Cape Town which was formerly owned by Chevron or (Caltex) refinery exploded. The incident led to the death of two people killed and seven [7] others were seriously injured. The refinery is an aging refinery which has had many explosions and fires over the many years of operation.

Just like the Durban refineries Engen, Shell and BP these refineries causes huge health problem and deteriorate the quality of life as well as posing a risk threat to life.

A number of community members were invited from all hotspot areas of South Africa where the petrochemical and chemical industries are located cheek by jowl to present air quality information to the national portfolio committee on environment in Cape Town.

Impacts:

- Air pollution
- contamination of ground water
- displacement of people living within and around the refinery
- Health issues such as respiratory diseases
- Loss of lives and livelihood

### 2.10.2. Umbilo River, Durban- South Africa

- Umbilo River, Durban
- Crude Oil spill
- Company responsible: Transnet Pipelines (TPL)

There has been a massive spill of oil into the Umbilo River, Durban, from a Transnet pipeline. The Umbilo river runs through several communities, a nature reserve and into the

Durban Harbour. Local environmental groups say the pipeline is corroded and should not have been in use.

Transnet Pipelines say the spill was caused by thieves.

Crude oil has been spilling into the Umbilo River from a Transnet pipeline in the Bellair area, Durban. The Umbilo River flows through various communities and a nature reserve before reaching the Durban harbour. Pollution from industry and high levels of E coli bacteria in the river had already raised alarm among environmental activists before this latest incident.

The director of South Durban Community Environmental Alliance, Desmond D'Sa, said it will take days or even weeks to clean up. "This is a massive spill- this is not only a tragedy for humans but for the environment and marine life as well."

"We were informed in 2008 that this pipeline was going to be closed but we see this is not the case. No wonder we have the leak," said D'Sa. The pipeline was corroded and was supposed to have been sealed with concrete.

### Impacts

- Loss of livelihood for fishers and community people
- Displacement of community people
- Air pollution
- water pollution
- Loss of marine and aquatic organisms<sup>51</sup>

### 2.10.3. Somkhele, Mtubatuba

- Somkhele, Mtubatuba KwaZulu-Natal Province
- Coal Extraction

The open cast coal mine in Somkhele<sup>52</sup> has been operating since 2007, in the Umkhanyakude District (one of the 11 districts of the KwaZulu-Natal Province<sup>53</sup>). This district is known for its lack of hydraulic resources and its poor delivery services of water and sanitation.

#### Impact

- Loss of landscape/aesthetic degradation
- Noise pollution,
- Surface water pollution
- Decreasing water quality
- Desertification/drought
- Air pollution
- Biodiversity loss
- Groundwater pollution/depletion
- Soil contamination, and
- Mine tailing spills.

#### 2.10.4. Mpumalanga Province

- Mpumalanga Province,
- Kusile coal-fired Power Station
- Coal Extraction
- Company involved: Eskom

The Kusile power station<sup>54</sup> is a coal-fired power plant project sponsored by the South African State electricity utility, Eskom. Eskom proposed a plant consisting of six 900 MW coal-fired generating units, adding up to a total generating capacity of 5,400 MW<sup>55</sup>.

#### Impacts:

- Air pollution,
- Soil contamination
- Surface water pollution/Decreasing water quality
- Groundwater pollution or depletion

#### 1.1.5. Karoo

- Western Cape, Eastern Cape, Northern Cape
- Greater Karoo Basin
- Oil and gas exploration and extraction
- Shale gas fracking
- Company involved: Shell Petroleum and Development Company

The applications to explore for shale gas in the Karoo were placed under a temporary moratorium endorsed by Cabinet in April 2011. This moratorium was renewed for another six months in Sept 2011. In Feb 2012 the moratorium was extended again. Till date the project is still gaining grounds, undermining the resistance from the community people.

#### Impacts

- Air pollution
- Biodiversity loss (wildlife, agro-diversity),
- Food insecurity (crop damage),
- Global warming,
- Loss of land
- Noise pollution
- Soil contamination, Soil erosion, Waste overflow,
- Deforestation and loss of vegetation cover
- Surface water and ground water pollution
- Large-scale disturbance of hydro and geological systems

## 2.11. South Sudan

### 2.11.1. Juba

- Juba, South Sudan
- Oil and War
- Company involved: Dar petroleum, China National Petroleum Corp., Malaysia's Petrolia Nasional Bhd and India's Oil & Natural Gas Corp, CNPC, Petronas, Nile Petroleum Corp., Sinopec Corp., and Tri-Ocean Energy Co.

South Sudan is the world youngest independent nation and ever since they got their independence from Sudan in 2011, following a referendum, Oil has become the main sources of violent clashes and wars<sup>56</sup>.

South Sudan oil has been fuelling conflict in the country as oil revenues have been used to fund war, according to one of the country's top political analysts.

Oil revenues and income from other natural resources have continued to fund the [South Sudan civil] war, enabling its continuation and the resulting human rights violations," according to The Sentry, a website focused on "dirty money connected to African war criminals and transnational war profiteers." In addition to being the world's youngest country, South Sudan is also the one most dependent on oil, and Dar Petroleum is one of the country's most important entities. While most of the country's oil rigs were shut down or destroyed during the long civil war, the oil consortium continued operating. Oil revenues constitute more than 98% of the government of South Sudan's budget, according to government data.

Oil production from the Unity oilfields, operated by China National Petroleum Corp., Malaysia's Petrolia Nasional Bhd and India's Oil & Natural Gas Corp., has resumed after being halted by the war. And output from the Paloch oilfields, operated by a consortium made up of CNPC, Petronas, Nile Petroleum Corp., Sinopec Corp., and

Tri-Ocean Energy Co., which continued operating through the conflict, has been scaled up.

The economy of South Sudan is one of the world's weakest and most underdeveloped. South Sudan has little existing infrastructure and has the highest maternal mortality and female illiteracy rates in the world.

### Impacts of Oil wars

South Sudan is rich in agricultural land and has one of the largest populations of pastoralists in the world. However, since 1999, when Sudan first started exporting oil, agricultural production in the country has fallen. Many people have lost their lives and livelihood, water pollution is ravaging the country, increase in various diseases due to poor sanitation and polluted environment<sup>57</sup>.

### 2.11.2. Paloch and Tharajath

- Paloch and Tharajath, Unity State, Upper Nile state and Jonglei State
- Oil exploration and extraction
- Companies involved: Petronas, Nilepet, SINOPECo, Tri-Ocean Energy

The community people at Paloch and Tharajath<sup>58</sup> who are living around the oilfield are facing threats from oil pollution. One of the major impacts of the extraction activities is displacement of community people. The People are now living in Internally Displaced Persons (IDPs) camps and the environment is at risk because of pollution and overcrowding.

### 2.11.3. Melut

The DAR Petroleum Operating Company is a consortium of oil exploration and production companies operating in the Republic of South Sudan. These companies are currently engaged in oil exploration and production in blocks 3 and 7 which are oil areas located in the Melut in South Sudan.



#### 2.11.4. Koch County, Unity State

- Koch County, Unity State
- Crude Oil contamination
- Companies involved: DAR Petroleum -- composed of the China National Petroleum Corporation (CNPC), Petronas of Malaysia, Nilepet, SINOPECo and Tri-Ocean Energy<sup>59</sup>.

##### Impact:

- Biodiversity loss
- Food insecurity (crop damage)
- Loss of livestock
- Loss of farmlands and degradation
- Soil contamination
- Increase in water borne diseases/loss of lives in severe cases
- Surface water and groundwater pollution

Oil contamination in Thar Jath, South Sudan<sup>60</sup>, has led to increasing salinity of drinking water with human incompatibilities and rise in livestock mortalities.

#### 2.12. Sudan

##### 2.12.1. Heglig/ Panthou, Khordufan State

- Heglig/Panthou, khordufan State
- Oil exploration and extraction

Companies involved: Greater Nile Petroleum Operating Company (GNPOC), the 2B Operating Petroleum Company, and Petro-Energy.

The war fuelled by fossil extraction has devastated the population and the environment is at risk of oil spills and pollution.

In Khordufan State, the company responsible for the extraction activities is the Greater Nile Petroleum Operating Company (GNPOC), the 2B Operating Petroleum Company, and Petro-Energy. These companies are jointly owned by Chinese, Malaysian and Indian investors along with the Sudanese state.

##### Impacts

- Community displacement

- Water pollution
- Soil pollution
- Air pollution
- Poor health status of community people

#### 2.13. Uganda

##### 2.13.1. Buliisa District,

- Buliisa District, Uganda
- Oil/gas extractions
- Company involved: Tullow oil company

The extraction of oil and gas in this district has given rise to conflicts between the oil company, Tullow oil company and local people and pastoralists, near Lake Albert.

The conflict arose because of land grabbing, population displacement, threat to wildlife, loss of livelihood and loss of farmlands. Map links<sup>61</sup>:

##### Impacts

- Land grabbing
- Population displacements
- Loss of biodiversity and threat to wide life
- Loss of livelihood and farmlands
- Violation of human rights

##### 2.13.2. Hoima District (EACOP)

- Hoima District
- East Africa Crude Oil Pipeline (EACOP)
- Company involved: Total, China's CNOOC, Uganda National Oil Company and the Tanzania Petroleum Development Corporation

Crude oil pipeline with a length of 296km within Uganda affecting eight districts and 24 sub-counties. The 1,443km long crude oil pipeline project was originally estimated to cost \$3.5bn. French oil and gas giant Total and China's CNOOC will be the shareholders of the pipeline project alongside the Uganda National Oil Company (UNOC) and the Tanzania Petroleum Development Corporation<sup>62</sup>(TPDC).



Map showing the route of the proposed EACOP

The pipeline is to convey heavy crude with ten heating stations along the way to the export terminal in Tanzania. The route passes through the Lake Victoria basin and poses special threats to pristine ecosystems and livelihoods.

The route of the pipeline according to Total was designed to avoid areas of environmental interest as much as possible, however it crosses community settlements and farming areas<sup>63</sup>. When the project is completed, the 1,443km EACOP will be the world's longest heated oil pipeline, running from Hoima in western Uganda to Tanga port in Tanzania. The pipeline will transport 230,000 barrels of oil per day at peak production and the total cost of constructing this pipeline is estimated to be about \$3.5Billion, presently over 500,000 tonnes of equipment has been imported<sup>64</sup>.

### Implications of EACOP on communities and Livelihoods

The pipeline passes through sensitive ecological areas in the region and about 70% of the EACOP project will pass through Tanzania and this will have drastic impacts on the lives and livelihood of the Tanzania people whose main sources of livelihood lies in the tourism sector which provides employment for 1,337,000 people. If this project is allowed to scale through this will mean the loss of jobs and livelihood of over one million people and reaction to this, activists has termed it an economic and environmental risk that tends to produce 34.3 million tonnes of carbon dioxide emissions per year<sup>65</sup>. Currently major banks and corporations are pulling out their funds from the EACOP project due to its negative impacts on the lives and livelihood of the community people and resistance from civil society groups and community-based organisation across Africa.

BNP Paribas, Société Générale and Crédit Agricole have all withdrawn their funds and interest in the EACOP project, France's Les Echos newspaper reported.

Their reason was that “the project is too hard to defend,” Les Echos quoted an unnamed source as saying. A statement from Reclaim Finance noted that Barclays, Credit Suisse and ANZ had also said they would steer clear of the EACOP plan<sup>66</sup>.

### **Resistance, Resilience and Solidarity**

In reaction to the environmental devastation, degradations, and destruction of the EACOP project more than 260 charity organisations have urged banks not to finance a U.S.\$3.5 billion oil pipeline in East Africa. Their concerns are that the project could lead to the loss of community land and livelihoods, massive environmental destruction, and surging carbon emissions. Nearly a third of the pipeline will run through the basin of Lake Victoria, which more than 40 million people rely on for water.

In an open letter signed by 263 charities - including the Africa Institute for Energy Governance, the Alliance for Food Sovereignty in Africa, Greenpeace and Friends of the Earth - they urged the banks not to grant loans or any form of finance for the project<sup>67</sup>. In addition, some activists working across Africa further showed their solidarity and support by adding their voices to campaign against the EACOP project – In their words,

**“We cannot drink oil. This is why we cannot accept the construction of the East African Crude oil pipeline. It is going to cause massive displacement of people, destruction of ecosystems and wildlife habitats. We have no future in extraction of oil because it only means destroying the livelihoods of the people and the planet. It is time to choose people above pipelines. It is time to rise up for the people and the planet.”** Vanessa Nakate, a Ugandan activist,

**“Total's fossil fuel developments pose grave**

**risks to protected environments, water sources and wetlands in the Great Lakes and East Africa regions. Communities have been raising concerns on the impact of oil extraction on Lake Albert fisheries and the disastrous consequences of an oil spill in Lake Victoria, that would affect millions of people that rely on the two lakes for their livelihoods, watersheds for drinking water and food production. -Andre Moliro, DRC activist,**

**“At a time when the international scientific community is telling us that the world cannot absorb any new fossil fuel developments if we are to tackle the climate crisis, Total is still pushing for the construction of highly controversial pipelines such as the East African Crude Oil Pipeline and the Mozambique LNG that threaten to destroy the livelihoods of tens of thousands of people, while affecting a great portion of diverse ecosystems and adding millions of tons of carbon emissions yearly.”** Landry Ninteretse of 350.org<sup>68</sup>

### **Impacts**

- Oil spills
- Land pollution
- Destruction of Biodiversity hotspots
- Displacement of communities
- Livelihood loss
- Degradation and destruction of Nature Reserve

### **2.13.3. Hoima District**

- Hoima District, Uganda
- Oil refinery and evictions
- Company involved: Ugandan Petroleum Exploration and Production Department (PEPD). The Oil extraction in Albertine Graben region has impacted residents in several ways. 7000 individuals belonging to communities in Kabale-Buseruka, Hoima District, were evicted to pave way for the construction of the oil refinery which entails the development of 211-kilometre petroleum products pipeline from Hoima to Northwest of Kampala.

The project is estimated at US\$ 3 – 4 billion<sup>70</sup>.

#### Impacts

- Land grabbing
- Population displacements
- Loss of biodiversity and threat to wild life
- Loss of livelihood and farmlands
- Violation of human rights



# 3.0

## CONCLUSION

This document has revealed that the impacts of the extractive industries on the lives and livelihoods of community people cuts across all regions in the African continent. It stresses the fact that all forms of extractive activities have one negative component or the other on the environment.

From this research (Fossil hotspot mapping) we discovered that the common denominator amongst these nations occasioned by the extractive activities are –environmental degradation, water, air and land pollution, community displacements/land grabbing, destruction of lives and properties, loss of livelihoods, loss of biodiversities, food insecurity, emergence of strange diseases, communal clashes /violence, oil-wars as well as human rights violations- which encapsulate the impacts of the extractive industries operating in communities across Africa.

The document has also shown that the community people have built resistance and resilience against the activities of the extractive industries for decades through collective collaborations with NGOs', CSOs as well as the establishment and building of community-based groups across Africa to amplify the voices of those oppressed people by the extractive corporations.



1. EJOLT. Environmental Justice Atlas. <https://ejatlas.org>
2. Oil Politics in the Amazon: From Ethnocide to Resistance and Survival, María Teresa Martínez-Domínguez (University of Strathclyde) 2018, [https://www.gla.ac.uk/media/Media\\_81280\\_smxx.pdf](https://www.gla.ac.uk/media/Media_81280_smxx.pdf)
3. Algeria - Oil and Gas – Hydrocarbons; retrieved 2021, <https://www.privacyshield.gov/article?id=Algeria-Oil-and-Gas-Hydrocarbons>
5. Updates on Oil Exploration In Virunga/ 2020 wwf - World Wide Fund For Nature [https://wwf.panda.org/discover/knowledge\\_hub/where\\_we\\_work/congo\\_basin\\_forests/oil\\_extraction/virunga\\_under\\_threat/](https://wwf.panda.org/discover/knowledge_hub/where_we_work/congo_basin_forests/oil_extraction/virunga_under_threat/)
4. Mapping the Oil Threat [https://savevirunga.files.wordpress.com/2012/04/80478\\_600x450-cb1233345.jpg](https://savevirunga.files.wordpress.com/2012/04/80478_600x450-cb1233345.jpg)
6. Map link: Virunga National Park- MapData@2021 CMS /Airbus – Maxar Technologies <https://www.google.com/maps/place/Virunga+National+Park/@-0.05005,29.5140676,14z/data=!4m5!3m4!1s0x1760c58d92cdead3:0x8582444c8bdb383f!8m2!3d-0.0502217!4d29.5142877>
7. Ethiopia: Oil And Gas Industry: Posted on [10 Dec 2001] <https://web.archive.org/web/20070615081309/http://somalawatch.org/archivedec01/011210101.html>
8. Villagers Ethiopia bleeding through noses mouths dropping-dead; By Faith Ridler for Mailonline  
Published: 20:10 BST, 1 March 2020 | Updated: 00:56 BST, 2 March 2020  
<https://www.dailymail.co.uk/news/article-8062709/Villagers-Ethiopia-bleeding-noses-mouths-dropping-dead.html>  
Map link: Map Data@2021  
<https://www.google.com/maps/place/Jijiga,+Ethiopia/@9.3560835,42.7756966,14z/data=!4m5!3m4!1s0x162e37392eebcd55:0x9c2d6307fe7dabfa!8m2!3d9.3567838!4d42.7955185>
9. Environment and social Assessments; October 2009, PDF retrieved 2021  
[https://www.afdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/ghana%20\\_%20FSPO.pdf](https://www.afdb.org/fileadmin/uploads/afdb/Documents/Environmental-and-Social-Assessments/ghana%20_%20FSPO.pdf)
0. Jubilee field-oil-versus fish-Ghana <https://ejatlas.org/conflict/jubilee-field-oil-versus-fish-ghana>
11. Map link; Map Data 2021, <https://www.google.com/maps/place/Sekondi-Takoradi,+Ghana/@4.9681607,-1.7883509,12z/data=!3m1!4b1!4m13!1m7!3m6!1s0xfe7799a7b4d8bd9:0xd5df62ba6ac74520!2sTakoradi,+Ghana!3b1!8m2!3d4.9015794!4d-1.7830973!3m4!1s0xfe77b84254c1379:0x22e96bc5819876dd!8m2!3d4.9536293!4d-1.7343807>
12. Ghana v. Côte d'Ivoire: Unilateral Oil Activities in Disputed Marine Areas  
09.November 2017 | <http://opiniojuris.org/2017/11/09/ghana-v-cote-divoire-unilateral-oil-activities-in-disputed-marine-areas/>



13. Ghana retains offshore oil fields following arbitration ruling on Ivory Coast border  
Published by: at 02/11/2017, <https://iclg.com/alb/7715-ghana-retains-offshore-oil-fields-following-arbitration-ruling-on-ivory-coast-border>
14. Map link Map Data 2021 <https://www.google.com/maps/place/Lamu/@-2.2714825,40.8280329,12z/data=!4m5!3m4!1s0x18171c11b40ac0b9:0xd0803fae0427abf9!8m2!3d-2.290435!4d40.8677469>
15. Tena River, Delta site –Map Data 2021,  
<https://www.google.com/maps/place/Tana+River+Delta+Ramsar+Site/@-2.4191336,40.346066,10z/data=!4m12!1m6!2m5!1sTana+Delta-Lamu+!5m3!5m2!4m1!1i2!3m4!1s0x1816411156bff083:0xa4f12ee04bd6a91c!8m2!3d-2.5647939!4d40.3647137>
16. Lamu Basin -16; 18 Aug 2019 <https://pancon.com.au/project/lamu-basin-l6/>  
<https://ejatlas.org/conflict/oil-and-gas-exploration-in-block-l6-lamu-and-tana-delta-districts-kenya>
17. Cabo Delegado Communities Impacted by Gas exploration, Last update: April 01, 2021  
<https://ejatlas.org/conflict/cabo-delegado-communities-impacted-by-gas-exploration-projects>
18. Total suspends Mozambique gas project over terror attacks Hassan Isilow | 27.04.2021  
<https://www.aa.com.tr/en/africa/total-suspends-mozambique-gas-project-over-terror-attacks/2221698>
19. Cabo Delegado Map Imagery TerraMetrics Map Data @2021 , AfriGIS (Pty)Ltd  
<https://www.google.com/maps/place/Cabo+Delegado+Province,+Mozambique/@-12.3147456,38.2299583,313895m/data=!3m2!1e3!4b1!4m5!3m4!1s0x18936bd11211bf15:0x4b622bf8dae8804e!8m2!3d-12.3335474!4d39.3206241>
20. ReconAfrica's plan to drill for oil in the Okavango draws the ire of environmentalists  
written by Jacob Dykes, 09 June 2021, <https://geographical.co.uk/nature/climate/item/4070-reconafrika-s-plan-to-drill-for-oil-in-the-okavango-draws-the-ire-of-environmentalists>
21. ReconAfrica spuds first Namibia well (Map) Imagery NASA TerraMetrics Map Data @2021  
<https://www.energyvoice.com/oilandgas/africa/ep-africa/290773/reconafrika-namibia-wells-drilling/>
22. A Big Oil Project in Africa Threatens Fragile Okavango Region By Heather Richardson April 22, 2021  
<https://e360.yale.edu/features/a-big-oil-project-in-africa-threatens-the-fragile-okavango-region>
23. A Big Oil project in Africa threatens fragile Okavango region, by Heather Richardson  
Published May 08, 2021/ <https://grist.org/energy/a-big-oil-project-in-africa-threatens-fragile-okavango-region/>
24. Ogoni People vs. Shell; 2021,  
<https://www.arcgis.com/apps/Cascade/index.html?appid=a43f979996aa4da3bac7cae270a995e0>
25. A journey through the oil spills of Ogoniland; 17 May, 2019,  
<https://www.foei.org/news/oil-spills-ogoniland-nigeria-shell>
26. Environmental Assessment of Ogoniland Report. August 2011.  
<https://www.unep.org/explore-topics/disasters-conflicts/where-we-work/nigeria/environmental-assessment-ogoniland-report>
27. Ogoniland map  
<https://www.google.com/maps/place/Gokana/@4.6641298,7.2208329,20014m/data=!3m2!1e3!4b1!4m5!3m4!1s0x106847beb519c7b5:0x292e9bfb1ae5f5e!8m2!3d4.669214!4d7.286868>
28. Goi case against shell in Nigeria; Last update 18/08/2019 <https://ejatls.org/conflict/goi-case-against-shell-nigeria>



29. Agip pipeline leaks gas in Ebocha community, Last update 18/08/2019  
<https://ejatlas.org/conflict/agip-pipeline-leaks-gas-in-ebocha-community-nigeria> Map Link Ebocha Copyright © 2005–2016 maplandia.com.  
<https://www.google.com/maps/place/Ebocha/@5.4775034,6.6769185,9994m/data=!3m2!1e3!4b1!4m13!>
30. Oil Exploration and Exploitation in Nigeria The Case of OGBA EGBEMA in One LGA, posted: 13 Aug 2019 [https://www.researchgate.net/publication/335150238\\_/ Map link: Ikarama/ Okodia Map@2021](https://www.researchgate.net/publication/335150238_/Map-link:Ikarama/Okodia-Map@2021)  
<https://www.google.com/maps/search/Ikarama+/@5.1636595,6.384241,19999m/data=!3m1!1e3>
31. Okodia, Map data 2021 – Tebidaba flow station  
<https://www.google.com/maps/place/Tebidaba+Flow+Station/@4.693334,5.8059858,40026m/data=!3m1!1e3!4m8!1m2!2m1!1sOgboinbiri-Tebidaba+,+Bayelsa+State!3m4!1s0x0:0x8020cae064fcb99!8m2!3d4.5564899!4d5.9197855>
32. Residents of Ikarama in Bayelsa bemoan impact of spill from Shell's ruptured pipeline by NAN 26 April 2021 | <https://guardian.ng/news/residents-of-ikarama-in-bayelsa-bemoan-impact-of-spill-from-shells-ruptured-pipeline/>
33. Olodiana Clan Map - Imagery @2021 CNES/ Airbus, Mazar Technologies. Olodiana  
<https://www.google.com/maps/search/Olodiana+clan/@5.1570747,5.965554,1141m/data=!3m2!1e3!4b1>
34. Bayelsa community takes Agip's ENI to Italian court, seeks compensation for oil spill by Edu Abade (Lagos), Julius Osahon (Yenagoa) and Terhemba Daka (Abuja) 10 May 2017  
<https://guardian.ng/news/bayelsa-community-takes-agips-eni-to-italian-court-seeks-compensation-for-oil-spill/>
35. Unprecedented Volume of Crude Oil Spewed Into Ikebiri Environment, field report by Nimimi Morris and Alagoa Morris, 2nd July, 2020. Facility: Agip's 10" Clough Creek/Tebidaba pipeline, Location: Boloukubu [Special forest/swamp/creeks] in Ikebiri kingdom.
36. Carbon black emission from Warri refinery; 18 August 2019,  
<https://ejatlas.org/conflict/carbon-black-emission-from-warri-refinery-Nigeria/> / Map of Warri refining and Petrochemical Company; Imagery @2021 Map Data, Maxar technologies  
<https://www.google.com/maps/place/Warri+Refining+and+Petrochemical+Company+Ltd,+Clinic/@5.5661419,5.7180405,312m/data=!3m1!1e3!4m8!1m2!2m1!1sPetrochemical+Company+Ekpan,+Warri!3m4!1s0x0:0x4e0eff9c854b0d8e!8m2!3d5.5661419!4d5.7191348>
37. Dead fish Not Manna, Health of Mother Earth Foundation, 2020. pg67 Appendice.  
<https://homef.org/wp-content/uploads/2021/06/Dead-fish-is-not-manna.pdf>
38. Group calls for probe into dead fishes across Niger Delta; 8 May 2020 ,  
<https://guardian.ng/business-services/group-calls-for-probe-into-dead-fishes-across-niger-delta/>
39. Impact of oil exploration in Gelegele community, Archive 2017,  
<https://www.gelegele.org/impact-of-oil-exploration/>
40. Gelegele ,map  
<https://www.google.com/maps/search/Gas+flare+site+in+Gelegele+/@6.1551169,5.3429804,569m/data=!3m2!1e3!4b1>
41. Pipeline explosion in Lagos; By Matthew Farmer 16 Mar 2020 (Last Updated March 16th, 2020) <https://www.offshore-technology.com/news/pipeline-explosion-lagos-Ing/>
42. Nigeria gas explosion: 17 dead, rescue efforts under way; 16 Mar 2020,  
<https://www.aljazeera.com/news/2020/03/nigeria-gas-explosion-17-dead-rescue-efforts-200316062153076.html>

44. Hundreds burned alive in Lagos pipeline fire  
<https://www.theguardian.com/world/2006/dec/27/oil.topstories3>
45. 'How improper coal mining poses danger to health, others' By Kehinde Olatunji 12 August 2020  
<https://guardian.ng/news/how-improper-coal-mining-poses-danger-to-health-others>
46. Kogi, Benue communities speak-up against adverse impacts of coal mining— By Olugbenga Adanikin On Sep 10, 2020 <https://www.icirnigeria.org/kogi-benue-communities-speak-up-against-adverse-impacts-of-coal-mining/>
47. Coal mining in Enugu district, Nigeria updated 2021-01-08  
<https://ejatlas.org/conflict/enugu-communities-apprehensive-about-planned-resuscitation-of-moribund-coal-mines>
48. Map Link Map Data “2021  
<https://www.google.com/maps/place/Thies,+Senegal/@14.7885542,-16.9974826,12z/data=!3m1!4b1!4m5!3m4!1s0xec1bf9aca37b4bf:0x5b086f4c73a3056b!8m2!3d14.7910052!4d-16.9358604>
49. "Senegal calls on American Halliburton to extinguish burning gas well", 1 January 2021 /AFP in En24news.com <https://www.business-humanrights.org/en/latest-news/senegal-2/>
50. Map Link: Bargny MapData@2021  
<https://www.google.com/maps/place/SENDOU,+BARGNY+SENEGAL/@14.6986144,17.2293463,18z/data=!4m12!1m6!3m5!1s0xec19ff401f9d855:0xd8add7321a61967f!2sSENDOU,+BARGNY+SENEGAL!8m2!3d14.6984847!4d-17.2282225!3m4!1s0xec19ff401f9d855:0xd8add7321a61967f!8m2!3d14.6984847!4d-17.2282225>
52. Somkele map Imagery TerraMetrics Map Data @2021 , AfriGIS (Pty)Ltd  
<https://www.google.com/maps/place/Somkele,+South+Africa/@-28.3229533,32.1030799,16z/data=!4m5!3m4!1s0x1efa5bea826da5e7:0x7372204780a576ca!8m2!3d-28.3230587!4d32.1078868>
53. Mtutbatuba map Imagery TerraMetrics Map Data @2021 , AfriGIS (Pty)Ltd  
<https://www.google.com/maps/place/Mtutbatuba,+3935,+South+Africa/@-28.4220114,32.1476633,13z/data=!4m13!1m7!3m6!1s0x1efa4f6e659eec65:0x9033102ea7cecf30!2sMtutbatuba,+3935,+South+Africa!3b1!8m2!3d-28.4059334!4d32.2143323!3m4!1s0x1efa4f6e659eec65:0x9033102ea7cecf30!8m2!3d-28.4059334!4d32.2143323>
54. Kusile; Imagery TerraMetrics Map Data @2021 , AfriGIS (Pty)Ltd  
<https://www.google.com/maps/place/Kusile+Power+Station/@-25.9106943,28.9137722,17z/data=!3m1!4b1!4m5!3m4!1s0x1eeab899f5bf3ae5:0xc6e1cfb52111526c!8m2!3d-25.9106943!4d28.9159663>
55. Kusile coal power plant ; Aug 8 2018,  
[https://www.banktrack.org/project/kusile\\_coal\\_power\\_plant](https://www.banktrack.org/project/kusile_coal_power_plant)  
Map link: Eastern Cape; Imagery NASA TerraMetrics Map Data @2021  
<https://www.google.com/maps/search/Western+Cape,+Eastern+Cape,+Northern+Cape+Greater+Karoo+Basin/@-34.5627828,9.1371831,4z/data=!3m1!4b1>
57. Kusile; Imagery TerraMetrics Map Data @2021 , AfriGIS (Pty)Ltd  
<https://www.google.com/maps/place/Kusile+Power+Station/@-25.9106943,28.9137722,17z/data=!3m1!4b1!4m5!3m4!1s0x1eeab899f5bf3ae5:0xc6e1cfb52111526c!8m2!3d-25.9106943!4d28.9159663>

58. Kusile coal power plant ; Aug 8 2018,  
[https://www.banktrack.org/project/kusile\\_coal\\_power\\_plant](https://www.banktrack.org/project/kusile_coal_power_plant) Map link: Eastern Cape: Imagery NASA TerraMetrics Map Data @2021  
<https://www.google.com/maps/search/Western+Cape,+Eastern+Cape,+Northern+Cape+Greater+Karoo+Basin/@-34.5627828,9.1371831,4z/data=!3m1!4b1>
59. Map Link: Haglig-Sudan Imagery@2021 TerraMetrics Map Data@2021  
<https://www.google.com/maps/place/Haglig,+Sudan/@9.9939885,29.3352943,12z/data=!4m5!3m4!1s0x16e0fde2c7c75445:0x4b7aabd523cde20b!8m2!3d10.002559!4d29.4063234>
60. Map link: Koch, South Sudan Map Data@2021 CNES /Airbus – Maxar Technologies  
<https://www.google.com/maps/place/Koch,+South+Sudan/@8.5953215,29.9837064,15z/data=!4m5!3m4!1s0x171e87f5c8acc85d:0xee1c627db5c30bd5!8m2!3d8.5959244!4d29.9928415>
61. <https://www.google.com/maps/place/Bulisa,+Uganda/@2.112115,31.3993547,14z/data=!4m3!1m7!3m6!1s0x176ff13d5f0d5e7d:0x66f2b31ab8e932f!2sBulisa,+Uganda!3b1!8m2!3d2.1127266!4d31.417046!3m4!1s0x176ff13d5f0d5e7d:0x66f2b31ab8e932f!8m2!3d2.1127266!4d31.417046>
62. Tanzania, Uganda sign key pact to enable construction on EACOP pipeline by NS Energy Staff Writer 21 May 2021  
<https://www.nsenergybusiness.com/news/eacop-pipeline-project-update-2021/>
63. Tilenga and EACOP: acting transparently <https://www.total.com/projects/oil-gas/tilenga-and-eacop-acting-transparently>
64. Total's suspension of the East African Crude Oil Pipeline is a chance for Standard Bank and others to think again By: Ryan Brightwell – BankTrack Sep 19 2019  
[https://www.banktrack.org/blog/total\\_s\\_suspension\\_of\\_the\\_east\\_africa\\_crude\\_oil\\_pipeline\\_is\\_a\\_chance\\_for\\_standard\\_bank\\_and\\_others\\_to\\_think\\_again#](https://www.banktrack.org/blog/total_s_suspension_of_the_east_africa_crude_oil_pipeline_is_a_chance_for_standard_bank_and_others_to_think_again#)
65. Eacop's financing blues as lenders desert \$3.5b project Tuesday 04 May 2021  
<https://www.theeastafrican.co.ke/tea/business/eacop-financing-blues-3385942>
66. French banks disavow Total's EACOP plans  
<https://www.energyvoice.com/oilandgas/africa/pipelines-africa/317029/total-eacop-french-banks/>
67. Banks Take Flak for Backing East Africa Oil Pipeline 2 March 2021 The East African (Nairobi) By Julius BarigabaMarch © 2021 AllAfrica  
<https://allafrica.com/stories/202103020841.html>
68. Hundreds protest against TOTAL across Africa  
<https://www.africanews.com/2021/05/25/hundreds-protest-against-total-across-africa/>
69. Map links: Hoima, Uganda/ Map Data "2021 Imagery"2021 TerraMetrics  
<http://www.maplandia.com/uganda/hoima/buhaguzi/hoima/>
70. The Uganda Refinery Project; 2020 Petroleum Authority of Uganda all Rights Reserved.  
<https://www.pau.go.ug/the-uganda-refinery-project/>

