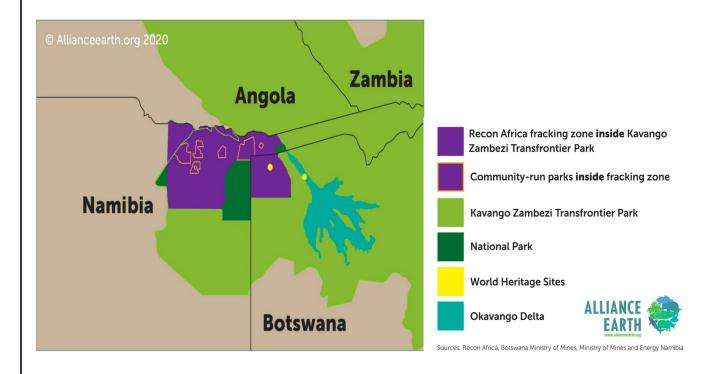
SYNTHASIS OF THE PROPOSAL TO EXPLORE FOR OIL AND GAS IN NORTHERN NAMIBIA AND BOTSWANA

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Background

During September 2020, a Canadian oil and gas company, ReconAfrica, announced their intention to begin drilling for oil and gas in north eastern Namibia and also in the adjacent area of north western Botswana, an area bordering on the Okavango Delta. In a document made available to potential investors, Recon Africa refer to the Kavango Basin as being "…one of the most significant undeveloped basins of such depth globally"



Namibia

An exploration permit was issued to Recon Africa for the PEL 73 petroleum exploration block by the Namibian Ministry of Mines and Energy. The exploration block is in the north eastern corner of Namibia in the province of Kavango, covering an area of some 25 000km², it borders on three national parks upstream of the Okavango Delta. It also includes 6 separate community conservancy concession areas, and part of the five-nation Kavango-Zambesi

Trans-frontier Conservation Area (KAZA TFCA), the largest protected area in southern Africa.

The current permit for exploration activity is to drill three vertical stratigraphic exploration wells to a depth of 2500m. According to a report in Energy Voice (https://www.energyvoice.com/oilandgas/africa/266953/namibia-reconafrica-fracking-drilling/) ReconAfrica indicated "There's a lot of confusion around what we're doing. This is opening a new sedimentary basin where there are no wells. We have to prove an active petroleum system"

A similar sentiment has been expressed by the MME in a statement issued on 11 September 2020

Botswana

In a similar situation, ReconAfrica also obtained the petroleum exploration rights to block PEL 001/20 located in the north western corner of Botswana. The size of the area is approximately 11 000km² and extends from the Okavango Delta in the east to the Namibian border in the west. Currently an environmental impact assessment is being conducted, however no public consultation has been conducted to date.

Recon Africa Proposal

ReconAfrica presented a technical brief at an investor presentation during September 2019, in which the company provide information on the geological characteristics of the Kavango Basin, which it described as being "...one of the most significant undeveloped basins of such depth globally". The presentations also go on to describing the geological formations in the Kavango Basin as "Targeting equivalent source rock as Shell's Whitehill Permian marine shale play in South Africa". The Whitehill formation is a shale formation, which has been identified as having a significant potential of producing gas. It is also known that the proposed extraction process included fracking.

The technical brochure also refer to "unconventional gas targets" which is an oil and gas industry term to describe resources trapped in rocks of low permeability and porosity that require unconventional means, such as hydraulic fracturing (fracking) to release the hydrocarbons.

Further indication of ReconAfrica's intention to resort to fracking as a means of gas extraction is their announcement that the company hired fracking pioneer Nick Steinsberger in June to run the Namibian drilling project, saying, "Nick is the pioneer of 'slickwater fracs'." and go onto say "...that hydraulic fracturing is a technique now utilised in all commercial shale plays worldwide". (https://www.marketscreener.com/quote/stock/RECONNAISSANCE-ENERGY-AFR-49477195/news/Reconnaissance-Energy-Africa-ReconAfrica-Appoints-Mr-Nick-Steinsberger-as-Senior-Vice-President-30821543/)

Although both ReconAfrica and the government authorities (https://neweralive.na/posts/no-fracking-to-be-conducted-in-namibia-mme) have declared that no fracking will occur and that the permit issued is only for vertical exploration wells, it was indicated to potential investors

in the project that the Namibian licence terms are favourable with "25 year Production Licence follows commercial discovery". It is therefore apparent that the company has the intention of proving the presence of oil and gas resources in the Kavango Basin in Namibia and Botswana, and ultimately to follow up any discovery by embarking on a production phase that will include fracking.

Environmental Impact Assessment

An environmental impact assessment has been conducted in Namibia with a limited scope of reference, looking only at the impact of drilling the three exploration wells. ReconAfrica is however, also proposing to conduct 400km of 2D vibroseis seismic in the area beginning in December 2020. To date no EIA has been conducted to determine the impact of conducting the seismic survey.

The EIA was concluded with limited public consultation, and only regional representatives of various government departments were informed of the proposed project. No consultation or efforts to obtain the opinions of rural communities or members of the indigenous Bushmen communities that inhabit the area were conducted. Similarly, no public consultations were conducted with Interested and Affected Parties, such as the Namibian Chamber of Environment, an industry-funded environmental organisation, who were not informed of the proposed petroleum exploration activities in Kavango.

In clear contravention of Section 45 of the Namibian Environmental Management Act (Act 7 of 2007) the partiality of the Environmental Practioner (EAP) was displayed when making the following plea to the permitting authority;

"Loss of potential added value to the unknown underground potential petroleum resources that maybe found within the PEL No. 73, socioeconomic benefits derived from current and future exploration and possible petroleum production capital investments, license rental fees, royalties payable to Government, direct and indirect contracts and employment opportunities, export earnings, foreign direct investments and various taxes payable to the Government"

No effort was made to balance these comments with known social and environmental injustices derived from oil and gas activities learned from other parts of the world.

It is apparent that the EIA is incomplete, and poorly conducted by an EAP who throughout the process displayed a biased attitude. No transparency has been displayed during the EIA process and ultimately with the granting of a permit by the MME.

Impacts

Hydraulic fracturing, or fracking as most people know it, is a way of getting gas that is trapped in shale rocks deep underground. Specialised drilling machines are used that are capable of drilling borehole to a depth of between five and six thousand meters. Eventually, when the rocks containing gas are reached the borehole is drilled horizontally along the gas bearing layer for a length of up to 2500 meters. The borehole is filled with water and chemicals and high pressures are applied to the toxic mixture that fractures the rocks, thus freeing the trapped gas, enabling it to flow to the surface.

Fracking in the USA has shown that between 28 to 46 million litres of water are required to frack each well. After the well has been fracked between 20 and 80% of the poisonous water as well as natural water that is very rich in minerals flows back to the surface and is a hazardous waste product that cannot be used for any other purpose. To prevent impacts on the environmental and human health the wastewater must be disposed of in a safe and environmentally acceptable manner.

When considering the social and environmental impacts of fracking it must be borne in mind that these activities occur over very large areas that will affect many thousands of people and also some of the last remaining pristine wildlife areas in Africa. The legacy of fracking will last for many generations.

- Fracking is thirsty and requires vast volumes of water. Both countries are considered
 as water deficit, and the only possible source of water will be from ground water or
 the Kavango River.
- Fracking is a dirty process that pollutes ground and surface water.
- Fracking will impact on the traditional lifestyle of rural and indigenous communities.
- Indigenous heritage sites such as Tsodilo Hills fall within the licence area.
- Fracking requires highly specialised skills and therefore few employment opportunities are available to local people
- Okavango Delta is an UNESCO World Heritage site form the eastern border of the lease area.
- Three National Parks and the Kavango Zambesi Transnational Park are located within the lease area.
- Fracking will fragment the area with roads and pipelines and will devastate much of the existing natural habitat.
- Wildlife migration corridors including elephants, cheetah and African wild dogs will be impacted.
- Fracking and the disposal of wastewater causes earthquakes which could affect the flow of water in the Okavango Delta.

What now?

Currently several local and regional NGO's conservation organisations and community organisations have been made aware of the proposal to explore and potentially produce oil and gas in northern Namibia and Botswana. Popular awareness has been created in media article internationally such as National Geographic

(https://www.nationalgeographic.com/animals/2020/10/oil-drilling-fracking-planned-okavango-wilderness/) regionally in Daily Maverick

(https://www.dailymaverick.co.za/article/2020-09-16-mystery-shrouds-plans-to-start-fracking-near-namibias-kavango-river-and-botswanas-tsodilo-hills/) and many local outlets.

With the current situation being that;

- ReconAfrica have been permitted to conduct drilling and 2D seismic surveys in Namibia
- An EIA process is in progress in Botswana.

- ReconAfrica have announced that a specially adapted drilling rig has been acquired and is due to be shipped to Namibia during November 2020.
- Establishment and drilling are due to commence during December 2020.

A concerted and co-ordinated effort will be required to oppose the exploitation of oil and gas in Namibia and Botswana. This is particularly critical when considering the unique social and environmental circumstances present in each country.

- Although the EIA is underway in Botswana, little disclosure is available and local organisations must be encouraged to determine the status of the investigation and to register as Interested and Affected Parties (IAP's) to ensure a fair and transparent process.
- ii. Similarly, the opportunity to register as IAP's in Namibia is open. Although the current permit has been awarded to ReconAfrica, the list of IAP's may be consulted during later environmental assessments. It is therefore critical that as many individuals and organisations register with the environmental consultants, Risk-based Solutions at Email: smwiya@rbs.com.na
- iii. Local campaigns that creates awareness amongst the approximately 200 000 people currently resident in the area of interest must be initiated. This will include liaison with local community organisations, faith groups, agricultural co-operatives and liaison with representatives of the First Nations people, the San, who live in the region.
- iv. Regional awareness and advocacy must be initiated within the SADC member states that will be directly and indirectly impacted.
- v. Awareness and pressure must be applied to international organisations and bodies in particular drawing attention to the Global Climate Crisis, the rights of Indigenous People, and the loss of biodiversity.
- vi. Due to the advanced stage of the proposed exploration project in Namibia, consideration is being given to pursue legal intervention on the grounds of improper application of Namibia's EMA. Seeking an urgent court interdict to halt or at least to pause the proposed oil and gas exploration is also considered an option.
- vii. The KAZA TFCA is supported and sponsored by many internationally recognised brands as well as government agencies. These organisations must be lobbied to apply appropriate pressure on the Namibian and Botswana authorities to withdraw the permits issued to ReconAfrica.

The Green Connection

The Green Connection (GC) was established in South Africa in 2000 and registered as a Not for Profit Organisation (NGO) in 2010. The organisation is comprised of 66% women and 83% Previously Disadvantaged Individuals (PDI) and prides itself on its relevance to the democratic South Africa. The organisation's Public Benefit Organisation (PBO) status was approved in 2011.

We are a group of dynamic professionals drawn from diverse fields who offer their insights and perspectives into the achievement of Sustainable Development. The Green Connection believes in teamwork and has a wide range of experienced associates who can be drawn into specific projects as appropriate.

Our specific areas of environmental expertise include:

- Climate Change & Renewable Energy and Energy Efficiency
- Governance research and advocacy
- Development of Educational Resources & Translation
- Empowerment and Training of youth for Socio-ecological development
- Policy and Legislature Review

Currently Green Connection is running a "Who Stole Our Oceans" campaign that recognises that there is a small window of opportunity to prevent a fossil fuel exploitation explosion in our oceans. By extending the fight for climate justice to opposing deep-sea oil and gas exploitation, GC will serve the South Africa and the African continent as a whole, by seeking to build on existing networks of small scale fishers and other coastal and ocean communities, as well as engaging with other civil society organisations working on climate change and the energy sector.

It is recognised that there is a sensible connection between the offshore oil and gas campaign and similar terrestrial activities in the region. GC are therefore currently exploring means and options available to expand our influence into opposing oil and gas exploration in Namibian and Botswana.

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The Green Connection

https://thegreenconnection.org.za/

Media Links

https://www.energyvoice.com/oilandgas/africa/266953/namibia-reconafrica-fracking-drilling/

https://neweralive.na/posts/no-fracking-to-be-conducted-in-namibia-mme

https://www.nationalgeographic.com/animals/2020/10/oil-drilling-fracking-planned-okavango-wilderness/

https://allianceearth.org/fracking-the-okavango/

https://www.dailymaverick.co.za/article/2020-09-16-mystery-shrouds-plans-to-start-fracking-near-namibias-kavango-river-and-botswanas-tsodilo-hills/

https://www.marketscreener.com/quote/stock/RECONNAISSANCE-ENERGY-AFR-49477195/news/Reconnaissance-Energy-Africa-ReconAfrica-Appoints-Mr-Nick-Steinsberger-as-Senior-Vice-President-30821543/

https://reconafrica.com/

https://theconversation.com/how-fracking-plans-could-affect-shared-water-resources-insouthern-africa-147684