ENVIRONMENTAL AND SOCIO-ECONOMIC EFFECTS OF CRUDE

OIL EXTRACTION IN BENTIU -SOUTH SUDAN

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Background

- South Sudan is a landlocked country in Northeastern Africa.
- Gained her independence on July 9th 2011 from Sudan after twentyone years of civil war.
- Population: (2022 est.) 14,235,000
- GDP: \$1Billion (2019 world Bank)
- Area 644,330km2
- Regions: Three (3)
- States: (10)) & three administrative areas.
- Official language: English







cont.

Oil in African countries and South Sudan in particular.



Source: BP Statistical Review, EIA, Oil & Gas Journal

Marrakech, April 26-30 2004

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Cont. South Sudan

□ Only about 30% of the explored oil is extracted putting South Sudan at the lowest position in the map (Augé, 2021).

Oil value chain is controlled by foreign companies; Chinese and Malaysians

Shares of oil by companies

- A consortium of China National Petroleum Corporation (41%),
- Petronas (40%),
- Nilepet (8%),
- Sinopec (6 %) and
- Tri-Ocean Energy (5%),.

□Nilepet as the only National oil company in the crude oil value chain

- Regulates
- Import
- Store oil
- □ Oil in South Sudan accounted for;
- about 50% of GDP,
- exports about 97 %
- and government's revenue 98 % in the period 2008-2011
- The economy of South Sudan is entirely dependent on crude oil production.

Problem statement

Despite economic benefits, crude oil production in South Sudan has major pitfalls;

- hundreds of open waste pits
- Oil and hazardous chemical spills

The above have lead to;

- Birth defects
- miscarriages
- Environmental degradation
- Skin rushes
- And generally deteriorating health issues
- Exposure to toxic chemicals such as <u>lead</u>, <u>arsenic</u>, <u>manganese</u> and <u>benzene</u> can cause a variety of health problems including cancer, respiratory problems, impotence and stillbirths, (World Health Organization).



Oil spill in Bentiu (May 2, 2016) Wim Zwijnenburg

- Mother Abui Mou with his son Ping Mayak who was born with one stunted leg, six fingers on each hand, deformed foot and swollen kidney in Upper Nile Palouch oil field.(ASSOCIATED PRESS FEB. 13, 2020).
- These effects have not only been on human beings but also cows and goats have had such birth complications in oil fields of South Sudan.



Ping Mayak Geer with his mother Abui Mou Kueth while in Nairobi for treatment (AP Photo FEB. 13, 2020)

Egbert Wesselink (former head of European coalition) said that South Sudan is running one of the dirtiest and poorest managed oil operations on the planet.

- Report accuses the Chinese-led Dar Petroleum Operating Co. and the Greater Pioneer Operating Co. of;
- Neglecting environmental and socioeconomic concerns
- Silencing those trying to write and publish reports on the problem



Sudanese engineer points at a damaged oil pipline in Heglig Oil field. (April 23 2012)

- Waste management by oil companies is very poor as seen in the photo
- Oil companies fill hazardous wastes into containers which still make spillages on the environment.
- Local communities lack clean drinking water
- Clean water provided by oil companies is always not enough
- The last option is to fetch water from open sources which are contaminated.



Containers used for hazardous chemicals are piled up at a junkyard near Paloch, South Sudan, in 2018. (Associated Press)



Residents collecting water, between Melut and Paloch town, in South Sudan. (AP Photo/Sam Mednick February 13, 2020,)

Cont,

Despite the visible crude oil problems, the extend of the problem has not been critically analyzed and therefore this study will best link the environmental and socio-economic consequences of crude oil extraction in Bentiu South Sudan.

Objectives of the study

DMain objective

• To investigate the environmental and socio-economic effects of crude oil extraction in Bentiu South Sudan.

Specific objectives

- To assess the effects of exposed crude oil on productivity.
- To assess the effects of crude oil exposure on people's health.
- To assess the perceived effects of crude oil exposure in the quality of land, water and biodiversity.

Methodology

The study will use mix methods paradigms combining both the qualitative and quantitative approaches.

Qualitative method.

- Focus groups discussions.
- Interviews.
- Self administered survey questionaires.

Quantitative method.

Secondary data such as statistics from;

- Published reports or journal articles
- Quantitative statistics obtained by survey questionnaire.

Justification

- The study will provide evidence as to whether there are environmental and socio-economic effects of crude oil production in Bentiu oil field.
- This will help in establishing the extent or severity of the problem and therefore offer a potential room for decision making and drafting of solutions.

THE END

THANK YOU ALL