



RISK ASSESSMENT OF THE MINING INDUSTRY IN SOUTH SUDAN: TOWARDS A FRAMEWORK FOR TRANSPARENCY AND ACCOUNTABILITY

Saturday, July, 20th, 2019

Juba, Grand Hotel

Introduction

This is a summary of the presentation and discussions on the TAF/PDF discourse on **Risk Assessment of the Mining Industry in South Sudan: Towards a Framework for Transparency and Accountability**. The summary consists of opening remarks, main presentation, a summary of the discussion, key issues, consensus on issues that emerged, policy recommendations and conclusion.

Opening Session

The session started at 9:57 am by opening remarks from Dr. Lual A. Deng. He reminded the audience to come 30 minutes earlier for networking. He introduced Dr. Peter Adwok Nyaba as a researcher and a Geologist by training. He added that Dr. Nyaba was Minister of Higher Education and Scientific Research in Sudan after the signing of the (CPA). He also served twice as Minister of Higher Education, Science and Technology in South Sudan. Dr. Lual mentioned that this research was funded by Ebony Center for Strategic Studies (ECSS) with a donation from the Foreign Ministry of Norway. He highlighted the natural resource conference held in 1999 in Yambio. The agenda of the conference was based on mining and timber. Then he introduced the panelists namely:

1. **Hon. Dr. Andu Ezbon Adde, Undersecretary of the Ministry of Mining.**
2. **Hon. Jaden Tongun Emilio, Undersecretary of the Ministry of Environment & Forestry; and**
3. **Mr. Nhial Titmamer, Director of Environment and Natural Resources Program, Sudd Institute**

THE PRESENTATION

General Remarks

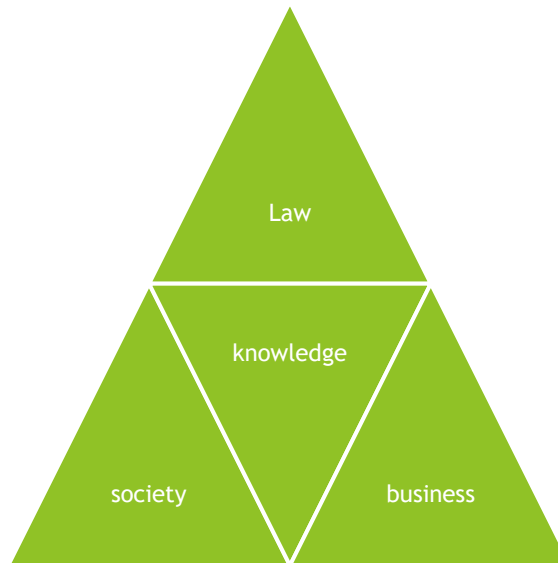
South Sudan is one of least socioeconomically developed countries in the world. Most of its productive forces remain potential. Very limited geological knowledge, in respect of its mineral resources, has so far been generated. Nevertheless, local entrepreneurs and foreign investors have shown great interest to invest in exploiting/extracting its minerals.

Minerals, and for that matter, economic minerals migrate and concentrate, above a certain earth average, to become ore deposits in parts of the crust as a result of chemical, physical and tectonic processes. An ore is a mineral in which occurs an economic concentration of the metal or non-metal.

Introduction

The Transitional Constitution of the Republic of South Sudan 2011 makes provisions for '**Land**': ownership [Art.170] and under Schedule (A) 17; tenure [Art. 171], and classifies 'minerals' as source of government revenue [Art. 177 (2)] in form of royalties [Art. 177 (2) m]. The Mining Act 2012 classifies all resources under the subsoil as the responsibility of the central government, with a rejoinder for the states authorities and the community.

The **Risk Assessment** study of the Mineral Industry in South Sudan situates at the interface between geological (**knowledge**), provisions of the (**law**), entrepreneurship (**Business**) and **society**, as can be represented in a segmented pyramid, without claiming any domain; but poses the issues of **transparency** and **accountability** that should bring harmony to the development of the mineral industry in the Republic of South Sudan.



Evolution of the Ministry of Mining

Classically, geological knowledge of a country is a state mandate; hence the Geological Surveys or Ministry of Mining whose function is the systematic geological investigations and the production of the **geological map**. The geological map depicts rock formations, structures and mineral occurrences in a qualitative manner.

In 1974 the Ministry of Mining and Industry was established in the High Executive Council, Southern Region. Its mandate was to start the process of developing the mineral industry in Southern Region. Being essentially a research institution, the HEC did not have sufficient funds to undertake this mandate. In 1980, some limited geological investigation was undertaken by Hunting Geophysical Group (Juba area) and The Belgian Mineral Exploration Project (Kapoeta). Other studies include the work on gold mineralization in Luri basin (Adde, 2003); the study of lamprophyre dykes in Juba area (Nyaba, 1983).

In 2005, the Ministry of Petroleum and Mining was established. In 2012, the Mining Act was promulgated and in 2015, the Mining Regulations (Mineral Title) was enacted. In 2016, Mining became a separate ministry in the Government of the Republic of South Sudan.

The purpose of the Mining Act (2012), which essentially translates to the mandate of the Ministry of Mining, is to provide for, encourage, promote and facilitate reconnaissance [geological surveys and mineral prospecting], exploration, development and production of minerals and mineral products in a manner consistent with the principles of sustainable development.

The Mining Act does not mention explicitly the research as the primary role of the Ministry to generate geological knowledge of the South Sudan requiring establishment and acquisition of information storage technology. The Ministry is a service to provide information (maps and data) to prospective investors.

The Risk Assessment Study

The following concerns prompted the risk assessment study:

- ▶ The dearth of scientific knowledge of minerals and mineralization. No systematic study had been carried out. In face of this, there growing interests for mineral extraction;
- ▶ Environmental conservation in face of use of toxic chemicals like Mercury, Arsenic, cyanide etc., and the use of heavy earth moving machinery in mineral extraction;
- ▶ Closing the loopholes inherent in the interface between the constitution 2011, the Mining Act 2012 and Mining Regulations 2015, which investors exploit to their advantage; and
- ▶ Crafting a transparency and accountability framework for the mineral industry in South Sudan.

Study Objective

The principal objective of the study is to make recommendations towards a framework for **transparency** and **accountability** in the mineral industry in the Republic of South Sudan. This is by no means a simple job. The nature of the industry itself and the business practice, in the current social, economic, political and security context of the country, renders its difficult to gather correct information. Lack of information poses serious threat to transparency and accountability regime.

Methodology

The study is multi-disciplinary. The initial idea was to conduct field visits for scientific assessment of the active mineral extraction operations as per information obtained from the Ministry of Mining (MoM). However, the security situation in the country, the time line and funding could not permit execution of this plan. The study, therefore, became a desk top research in Juba.

It entailed a review of the existing literature of geology, mineralization and mineral occurrences in South Sudan; examining the number of ‘reconnaissance’, ‘mineral exploration’, ‘small-scale mining’ and ‘mineral dealing’ activities in Jubek and Kapoeta States; a review of the Mining Act and Mining Regulations to identify areas of weakness in respect to accountability and transparency in the mineral extraction business.

The study lasted six (6) weeks.

Study Findings

There is no ‘**mining**’ *sensu strictu* in South Sudan involving underground workings: shafts, adits, tunnels, heavy machinery, mining engineers and miners.

Most of what has been classified and licenced by the MoM as small-scale mining (SSML) activities are essentially artisanal mineral workings undertaken by local people in search of gold nuggets, grains and dust. The SSML are issued strictly to the local entrepreneurs or communities.

These are found in Kapoeta, Luri basin, southern Bari (Lobonok) and locations in Kajo-Keji and Yei River State. The Mining Regulations limited the SSML area to 5 Cadastral Units (approximately 1km²). The artisanal mining essentially digging and panning for gold nuggets, grains and dusts in the overburden soil and alluvial deposits in the running or dry streams

Investment in mineral extraction/development as per the Mining Act 2012 and Mining Regulations 2015 involves a series of steps presupposes that a scientific (mineralogical and petrological) investigation had been undertaken, and that the deposit is classified economic.

This is not the case. The study found out that most of the licenced businesses relied on casual information about the minerals for which they have applied. The MoM issues them with:

- ▶ **Reconnaissance** (prospecting) Licence – is issued for a period of two years in an area of area of max. 250,000 and min. 10,000 km²]. It permits visits and study to undertake sampling and making the decision to undertake further development of the prospective deposit. The reconnaissance licence is not renewable.
- ▶ **Exploration Licence** – affords a detailed geological, geochemical, geophysical and drilling at large scale sampling of the deposit. It is issued for a period of five years. It is assumed that the licensee will have completed the necessary work in order to start the mineral extraction.

- **Dealing in Minerals Licence** – enables the purchase and export of minerals for a period of one year. The licences issued by MoM are mainly for gold produced by the Artisanal miners and have all expired. It was difficult to trace any of the gold dealers

Mineral prospection and exploration are capital intensive operations. Only companies in possession of expertise and capital can undertake this operation. Under the conditions prevailing in South Sudan, only two companies managed to undertake serious geological work. New Kush Exploration and Mining Co. Ltd in Kapoeta [EL 01-2015] and Kajo-Keji [EL 04-2015], CEMRIC-Kivu-Equator Gold in Luri basin [PPL-2007]

It obvious, most the Prospection or Exploration Licence holders did not possess sufficient capital and have now changed to Small-Scale Mining Licences. This allows them to extract gold while undertaking the functions specified in the prospection of exploration licence – a transparency and accountability issue.

Licence Type	Number of Licences	Validity	Minerals	Remarks
Reconnaissance - [RL]	-	-	-	-
Mineral Exploration Licence	61	Most of them valid until 2022	Au, Ag, Cu, C,U, Pb,	Only two companies demonstrate seriousness
Small-Scale Mining Licence	12	Most of them are valid until 2028	Au	
Dealer in Minerals Licences	23	All have expired?	Au	It is possible the operation has shifted underground.

Two SSML Holders **Gorom Mining Limited** [4MB] and **Kano for Trading and Investment co. Ltd** have established gold washing plants in Gorom. These are huge investments for SSML area. The plants will need huge supply of alluvial or eluvial sediments to process and therefore would require bring this material from outside the circumscribed cadastral area.

Risks involved in Mineral extraction

The study revealed the following risks in the mineral extraction business.

Artisanal Mining areas – the greatest risk involves **safety** of the artisan. In attempts to recover gold bearing rocks they dig ten to fifteen metres into the ground causing the walls to collapse and bury artisan. Artisanal mining area attracts peasants, villages and children and therefore become source of social and health hazards, beside people abandon their cultivation and become delinquent who sometimes forget

Risk to the environment – the risk to physical environment due to use of toxic chemicals in the extraction of gold prompted the study. However, the findings reveal that most of the artisanal mining operations in Kapoeta, Lobonok and Luri basin employ wind and water in their operations. There is therefore no risk of mercury, arsenic or cyanide poisoning in South Sudan.

The risk to physical environment obtains from the small-scale mining operations in which huge volume of alluvial or eluvial material is carried using large earth moving machinery over a long distance not covered by the Cadastral area licenced.

Risk to Investors – The risks to the investors stem from the following:

- ▶ **Lack of concrete information about mineralization** – as mentioned before, no systemic geological investigation has been carried out in South Sudan as a result investors choose and are issued licence on an area based on casual information. Gorom Mining Ltd. [4MB] and Kanu are examples
- ▶ **Investments without experts** – 4MB and Kanu do not have independent geologist but relied on those seconded by MoM. It would mean that most of these investors are speculators.
- ▶ **Insecurity** – is a major risk, but the greatest risk in the reluctance to grant *force majeure* given that the period of idleness due to insecurity is not considered.
- ▶ **Loopholes** in the legislation that allows the investors to cut deals with the state authorities and local community behind the authority of the Ministry of Mining is a risk.

Corporate Social Responsibility [CSR]: The Mining Act and the Mining Regulations provide for the relationship between the RL, SSML, EL Holders, MoM, State Authorities and the Community. The multiplicity of rights and authority inherent in this relationship is sometimes not properly understood or deliberately ignored. It hinges on the principles of transparency and accountability. The questions **when, what** and for **whom** should CSR operate, has led to misunderstanding, tension and conflict between the investors and the community leading to loss

or destruction of property as exemplified by the Chinese investor **The Great Ramciel International** and the community in Wundoroba,

Conclusion

There is no mining, in the real sense, in South Sudan to warrant risk assessment, nevertheless, the risk assessment study could not have come at an opportune time. The study revealed weak points in the emerging industry and therefore makes it easy, now or in the long run, to rectify, through review of the legislation and strengthen the observance of transparency and accountability regime in the industry.

Given the fact that minerals are non-renewable and therefore their development and extraction should be undertaken in a manner that does not compromise the rights of the future generations.

The study has been an eye opener to some of the small-scale mining licence holders who made investment without having concrete and correct information about gold mineralization in the areas they applied for. It is expected that the Ministry of Mining and the Ministry of Justice to take note of the findings and recommendations of this study.

Recommendations

There is urgent need to review of the Mining Act and the Mining Regulations to strengthen closer supervision, build the capacity of MoM to enforce transparency and accountability in the industry. We recommend the following: -.

1. Licence the artisanal gold mining in order to organize and regulate its activities, and make it contribute to the growth of the national economy.

- ▶ Improve the condition of work and equipment of the artisanal miners;
- ▶ Register their production; and
- ▶ Enforce law to curb smuggling and criminal activities in the artisanal gold mining areas.
- ▶ Clarify and differentiate the role and responsibility of the central authority (Ministry of Mining) from that of the State, County or Payam administration in the issues of the artisanal gold mining licences to avoid conflict

2. The Ministry of Mining should issue small-scale, or mining licence for that matter, only after the completion of the exploratory work whence the parameters of the mineral deposit and

associate mineralization and other rare earth elements have been completed, known and registered. This may mean revoking some of the small-scale mining licences which have not started operation.

3. Develop the technical and professional capacity of the Ministry of Mining

- ▶ First, to enable it to scientifically validate the data and information availed by the mineral exploration licence holders; and
- ▶ Secondly, construct and equip a chemical laboratory and a geophysical laboratory to examine the duplicate samples the licence holders would be required to avail to the Ministry of Mining.

4. Linked to above is the technical and professional training of the geologists and technicians in the Ministry of Mining to meet their functions and duties in the development of the mineral industry;

5. The Ministry of Mining to accelerate the on-going talks and discussions with foreign governments (China and Belarus) to expedite the regional geological survey and the production of the geological map of South Sudan. It is hoped that this would be undertaken in the next five to ten years such that the mineral resource potential of South Sudan is classified.

6. Minerals resources are non-renewable; should be extracted with the hindsight for the future generations. There is urgent need to look at best practices elsewhere in the world e.g. putting aside money to be saved for the future generation. Legislation to provide for part of the royalties paid to the state to be saved for the generation of South Sudanese fifty or hundred years from now.

7. The protection of the environment is a shared responsibility, nevertheless, the mining licence holders carry the most responsibility in terms of rehabilitation of the land, rivers and streams affected by the mining activities. The Mining Act and Mining Regulation provides for responsibility for strict observance of environmental impact of mineral activities.

8. Starting large mining activity in any areas in South Sudan should only be approved after a thorough **environmental impact assessment** of the enterprise. The experience of South Sudanese communities in the oil development areas of Paloich (Northern Upper Nile) and Pan Aru (Unity state) where development preceded proper EIA must be an eye opener to the development of minerals.

The Panelists

Hon. Dr. Andu Ezbon Adde observed the protocol and appreciated the research findings. He acknowledged the work of the research assistant who is a graduate from the University of Juba and mentioned that, the information was collected from the ground. Dr. Andu noted that geology takes a long time and it depends on the geographical locations. He added that the Mining Act 2012 should be amended as suggested by the former Minister of Petroleum and Mining, Stephen Dhieu; there were necessary amendments made from 2016 to 2017 but still in the Ministry of Legal Affairs. He emphasized on the importance of mapping exercise. However, he mentioned that the mining sector lack finances for the mapping exercise. Dr. Andu calls for constitution amendments in relations to land ownership. “Where is the power of the central government”. He identified the main risk as people rely on rumors. Additionally, he mentioned that there are **3 to 4 factors for successful mining which are:** availability of minerals, employment of skilled and knowledgeable personnel, experienced and honest employees and sufficient funds for exploration and evaluation of the mining activities. He added that there is need to enact laws that support the host communities to respond to investors in order to determine the success of mining

Hon. Jaden Tongun Emilio thanked both Dr Lual for inviting him to this discourse and thanked Dr Peter for the comprehensive presentation. He requested Ebony Center to carry out more studies on all natural resources in South Sudan based on the threats. Hon. Jaden explained that lack of information and comprehensive research in the mining sector results to inadequate data to policymakers. Additionally, he added that transparent procurement procedures, inclusion of law and policymakers in the negotiation process is important. He also requested that all licenses must be issued after a comprehensive assessment to address the issue of environmental recovery which should be the responsibility of the operating companies for efficient and effective institutions. He also emphasized the importance of corporate social responsibility; the companies should reward communities with social projects. Hon. Jaden recommends provision and implementation of social amenities such as electricity, water supply, construction of schools, markets among others instead of giving the money to few individuals. These social amenities should be managed by potential and qualified South Sudan to quantify natural resources.

Mr. Nhial Titmamer

Refer to the attached comments titled “comments on risk assessment of the mining industry in South Sudan”.

Key issues raised and consensus that emerged

- Lack of funds to finance research in the mining industry attributed to lack of information for the investors;
- Insecurity and political instability hinder mining operation of the companies;
- Mining has the potential to have severely adverse on the environmental loss of biodiversity, erosion, contamination of surface and ground water and soil as well in addition to formation of sinkholes;
- The use of radioactive materials and heavy metals may affect the host communities;
- There is inadequate concrete information to determine mining activities and implementation;
- Local investments in the mining sector lack equipment and expert;
- The concerns of the host communities are not addressed as such they still living in miserable and squalor conditions;
- Lack of transparency in mining industry;
- Employment of unskilled personals at the Ministry of Mining;
- Tribalism should be avoided in appointment of geologists and other technical staff at the Ministry of Mining;
- Ministers should be appointed to positions where they have basic qualifications;
- Exploration licenses in mining sector should be less than five years
- No regulations to safeguards the exploration and extraction of minerals and to prevent investors from exporting other minerals;
- Inadequate national budget allocated to mining industry;
- Lack of diplomatic skills to solicit investors in mining industry;
- Some foreign business investors don't disclose other minerals that they discover during exploration stage.

Policy Recommendation:

- Employ geologists in the ministry of mining and attached the honest ones to companies to supervise sampling from the fields and test reports of foreign investors;
- Conduct research to obtain data and information for principles of accountability and transparency in the mining industry;
- Reduce the duration of operational license to monitor mining activities;
- Constitution amendment on the issue of land is crucial to clearly spell the role of communities, state governments and national government in terms of natural resource and minerals ownership;
- The government should avail funds to finance research that involves the use of satellites and aerial photographs;
- Good relationship between government at all levels and mining companies;
- Responsibilities at the mining ministry should be assigned based on the skills and experiences;
- South Sudan policies should align with the international standards in the mining sector;
- Improve the existing criteria for registration of mining companies;
- Set-up check and balance system for companies in the mining sector;
- Women should be included in making effective environmental policies for the mining industry;
- Call for amendment of the Mining Act 2012;
- The Ministry of Mining and the mining companies should conduct training to employees in mining industry and civic education to the host communities;
- Security and political stability is important for mining activities.
- It is essential to establish an up-to-date mining mapping for the country;
- Implementation of social corporate responsibility to ensure better relations between mining companies and their host communities;
- Establish database system to store and manage mining information;
- There should be review of the laws governing natural resources after formation of the R-Government of National Unity;

- The Ministry of Mining to contract special expertise to analyze mineral data, train and improve the capacity of geologists at the Ministry;
- Diversification of the economy through investment in mining and other sectors to reduce dependency on oil revenue (Dutch disease);
- There is a need to allocate 10% of the generated revenue from mining to host communities and to save certain amount for the future generation;
- The role of government in regulating private sector such as mining industry is paramount;
- South Sudan should focus on teaching of practical science to improve exploration, exploitation and production of minerals.

Conclusion

Although South Sudan is rich in minerals, there is no mining in South Sudan. Therefore, there is need for skilled man-power and funds to improve mining operations. The seminar was attended by 104 participants: one Presidential Advisor (Economic Affairs), two National Ministers (Minister of Federal Affairs and Minister of Animal Resources and Fisheries), and delegation from South African Embassy headed by the Ambassador and 26 women. The seminar ended at 2: 13 PM.