

Hakeem and Myma Belo-Osagie Distinguished Lecture on African Business and Entrepreneurship, December 2022

Topic: Extractives, climate change and the energy transition: what the future holds for Africa

BY SAM ESSON JONAH

Distinguished guests, Ladies, and Gentlemen, I am happy to be here as the fifth Speaker in this series - Hakeem and Myma Belo-Osagie Distinguished Lecture on African Business and Entrepreneurship.

Before I begin, I would like to acknowledge the remarkable contribution of the benefactors, Hakeem and Myma Belo-Osagie for their vision and generosity in establishing this lecture series. I would also like to acknowledge the contributions of those who gave these lectures before me; Aliko Dangote, Kola Karim, Dr. Vera Songwe and Tito Mboweni. Undoubtedly, these are eminent African leaders who have vast knowledge and experience in public policy in Africa and the promotion of private sector development within the continent.

Also, my profound gratitude goes to the faculty, students, and distinguished guests here present and online for taking time off your busy schedules to attend this lecture. Finally, I thank the management of Harvard University and especially its Centre for African Studies under whose organizational, institutional and management systems this lecture has become possible.

The title of my talk is, 'Extractives, Climate change and the energy transition; what the future holds for Africa.'

What I am about to share with you is based on personal experiences from decades of engagement in this industry which have given me perspectives I wish to share with as many of our policy makers in Africa and perhaps more importantly, with the youth. In the management of our well-endowed natural resources, my generation has many lessons to share with the youth in particular so that hopefully pitfalls can be avoided. When the frog in front falls in a pit, says the Nigerian writer, Ola Rotimi, others behind take caution.

I have been in the mining business personally and professionally since childhood. I was raised in Obuasi, a mining town in Ghana. In 1895, three Cape Coast merchants, Biney, Brown and Elis acquired a 100 square miles mining concession from the Kings of Adansi and Bekwai. The lease was for a term of 99 years and gave virtual sovereignty over the concession area. These merchants operated a thriving indigenous gold mining industry for two years and in 1897, they exchanged their interests for shares in a company known as Cote D'or owned by an Englishman, Edwin Cade. The company subsequently became Ashanti Goldfields Corporation and listed on the London Stock Exchange. The mine was quickly developed and began commercial production. The mine was often referred to as the the richest gold mine in the industry. As kids, we witnessed firsthand how a town could be so rich yet so poor and deprived, even if we couldn't understand the causes of the denuded hills, blackened waterways, haul parks created by effluence, prevalence of gastrointestinal and lung diseases, and the

reportedly high presence of heavy metals in bloods of some residents. Obuasi which produced much of the gold for the Gold Coast did not have potable drinking water or electricity supply. The mine was run on largely apartheid lines. There were two hospitals - one for the expatriate white workers and the other for the African workers and their dependents. There were even areas within the mine especially residential parts where Africans were not allowed, except for cooks and stewards. It wasn't until after 1973 that Africans were encouraged to join the golf and squash clubs!

The company used recruitment agents to round up men assessed for their physical strength and gave them short-term rolling contracts, with very poor working conditions. Many of them came from the Northern part of Ghana which as you may have read was made a labor reserve as a matter of colonial policy. Others came from Burkina Faso and Ivory Coast. Without decent housing, ghettos began to spring across the town, whichever's were locally called "Zongos". A recent book published last year by Benedikt Pontzen traces the name back to origins in the Ashanti region when it was used to describe the 'Lodging place for trading caravans' and strangers' wards. Nana Dr S.K.B. Asante described Obuasi as "a classic urban monstrosity serving the needs of one of the richest gold mines in the world". The mine which was largely underground had atrocious working conditions. The workings were squalid, hot and damp with poor ventilation. Mine fatalities were rampant in an environment that had no safety culture. Indeed, whenever there was a fatality, the company donated a cow to the local chiefs and fetish priest to conduct rituals at the site to ward off further occurrences. Clearly ensuring safe working conditions was not the responsibility of the Company!

After graduating from high school in 1969, I shared my desire to train as a mining engineer with my parents. Their reactions were predictable! They had high hopes for their son and would never want to see me work in a mine despite all my explanation of the distinction between a mine laborer and a mining engineer, their impressions of African mine workers were not attractive, these were the barely shirtless ones! But I persisted. I obtained a scholarship from the company to study mining engineering. The scholarship was instituted largely in response to criticisms about the lack of qualified Ghanaians in the top echelon of management. An important condition of the scholarship was that I had to prove that I had the mental and physical aptitude to work underground. So, I got my first job as a miner working in the pits a mile deep. I learnt at the feet of men who had had no formal education but were well versed in all aspects of mining. I did this for one year before going on to Camborne School of Mines. It was a most humbling experience. I learnt a lot about leadership, teamwork, the conditions of the underprivileged. I witnessed basic human decency and honesty and learnt the importance of cooperation, even in those circumstances in which one would expect naked self-interest to dominate. I was exposed to the hazards of the business and indeed witnessed at first hand several mine accidents which resulted in the deaths of some of my colleagues. I really shouldn't be standing here today to have this conversation on extractives with you. Providence has been kind to me. As I said earlier, occupational health was not a priority for the Company.

After graduating from Camborne School of Mines, I returned to Obuasi to work at AGC in the 1973. I started off as a first line supervisor and steadily moved up to Mine Captain, Underground Manager, then through Chief

Mining Engineer, Deputy Managing Director, and in 1986 became Managing Director.

As someone who had lived it, I was quite affected by the issues I had seen growing up in a mining town and working as a miner. The mine was an enclave, a totally unacceptable condition which I was determined to address if and when I had the opportunity. In 1986, I became the first Ghanaian Managing Director of Ashanti Goldfields. I was determined that mining operations should be done with a human face and that mines need not be enclaves. In furtherance of this, we initiated the Obuasi Rehabilitation and Development Project. We extended the electricity grid to the township, rolled out environmentally friendly policies, constructed several dams to facilitate the provision of potable water to the town. We invested in better housing for employees, we rehabilitated local schools, modernized and expanded the hospital and extended access to all inhabitants.

In 1986, the Company employed 250 expatriates. At the time of the merger with AngloGold in 2003 there was only a handful and of course Obuasi annual gold production had increased more than fourfold over the period. This was made possible because of significant investments we made in the development of our human capital. To enhance local content in our operations, we made a deliberate policy to buy as much as possible from local suppliers. And these were not just in Obuasi but extended to all African countries during the company's expansion period. In Guinea, for example, when we went to the Siguir mine, there were thousands of artisanal miners working on the mining concession we had acquired. It was unconscionable to expect the miners to just walk into emptiness because we had acquired legal rights over their land. Our social license to operate placed on us a

moral obligation to act responsibly and in the long-term interest of all of our stakeholders, including our employees and their dependents. We provided training for those who were interested in working with the company and those who opted for alternative jobs (especially the women) were granted micro credit to go into business. Like Obuasi, the villages did not have water. We constructed a water delivery system and made sure to connect every village on the road to the tap. We built schools and other social facilities for the community.

I share these experiences to underscore the lingering issues that have been with us for ages in relation to mining and extractives in general but which have rarely been adequately dealt with. Most of these issues have been the subject of much research and discussion at various levels. A number of reports published in 2008/2009 from studies under the general theme of African Mining Vision (AMV) sponsored by the African Union (AU) and the United Nations Economic Commission for Africa (UNECA), among others, detailed these challenges faced by most African countries. A bulletin on the AMV website read, *“The paradox of African mining today lies in its historical structural deficiencies. The sector’s key characteristics —and challenges — are those of an enclave industry. Even today, most of the industry has very weak links with the rest of the national economy, ownership and operation of mines is in the hands of foreign companies, most of the minerals are exported in raw form and the industry imports most of its inputs from abroad”*. For example, a 2008 report by an International Study Group under the same AMV theme identified some of these issues, namely, the orientation of mining towards satisfying the interest of foreign capital, foreign ownership and control of Africa’s resources, the enclave nature of the industry, lack of

attention to industrial minerals and environmental governance and sustainability.

To a large extent, the integration of African economies into the world economy was synonymous with subordinating African economies to European economic interests. In other words, these economies under colonial rule were directed and managed to serve largely European interests.

One of the main consequences of this externally-oriented extractive policy was not only that the industry was geared towards foreign interest, but also an enclave unto itself with little linkages to the local economy. This situation persisted even after independence in many parts of Africa where the extractive economy, especially mining and oil remained largely exclusive and separate from the real economy. Vital forward and backward linkages were missing making the extractives industry an isolated enclave dominated by foreign capital, foreign workers, for foreign profits. The advent of the African Mining Vision launched in 2008 by the African Union was a major step in bridging this gap between this hitherto isolated enclave and mine support service providers in different African countries. The isolation of the extractives industries meant that value addition was not a priority, with significant negative implications for the macroeconomic fundamentals of these African countries; it contributed to cementing them as raw material export economies whose value was always far less than the value-added consumer goods produced in the advanced economies. It also failed to contribute to job creation, and unemployment increased as profits of the multinational companies rose, leading to what some economists have called “jobless growth”.

All these have had significant impacts on livelihoods, the environment, resources and the climate. The long-term economic development of Africa had been greatly affected as significant value was extracted from the continent with little or no regard to the needs of the local economies and local populations, including those living within a stone throw from the very places that these minerals are extracted. Now and then, high commodity prices lead to narratives of high economic growth in Africa. During the commodity boom, many of the fastest growing economies in the world were in Africa. But going beyond the high GDP figures, one could see the real economies. Take Equatorial Guinea, this country registered the highest GDP growth for the decade from 2000 to 2011¹, yet in 2012, 75% of the population were living below the poverty line, on less than \$2 a day². In Angola, Chad, Tanzania to name a few, the growth rate was equally robust. But poverty levels did not improve. Ghana recorded a whopping 14% growth rate after its first commercial output of oil but a few years later, it had to go to the IMF to support the economy. The reason why this happened and is still happening is that the produce from the commodity extraction was exported in raw form by a workforce largely expatriate in an enclave industry whose profits were repatriated to their parent companies overseas.

Ladies and Gentlemen, another effect of the outward orientation of extractives policy was the over-concentration on precious minerals to the

¹ Africa Progress Report 2013 <https://reliefweb.int/report/world/africa-progress-report-2013-equity-extractives-stewarding-africa-s-natural-resources>

² Equatorial Guinea: African Economic Outlook <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Equatorial%20Guinea%20Full%20PDF%20Country%20Note.pdf>

neglect of industrial minerals. Gold, diamonds, bauxite, manganese and copper were prioritized over kaolin, salt, clay, feldspar etc. This was not for lack of these resources in significant reserves. In fact, Africa is just as rich, if not more, in these resources as it is in the precious minerals that have dominated extractives over such a long period of time. Let's take Kaolin for instance. This resource is said to be present in many parts of the world, but Africa has the most significant commercial quantities of kaolin deposits. West and Southern Africa especially have been identified as having large deposits and occurrences of Kaolin. But there are occurrences also in Cameroon and DRC in Central Africa as well as Kenya, Burundi and Tanzania in East Africa. As a mineral, the uses of kaolin are many and its development as an industrial mineral could have significant linkages with the local economy as its uses are very relevant to the lives and livelihood of the people, such as the manufacturing of ceramics and tiles, bricks, fertilizer, medicines, and as fillers to mention but a few.

Ladies and Gentlemen, the legacy of colonial extractive policies, which continued after independence, was the near complete ownership and control of the industry by foreign capital with African countries left to benefit mainly from royalties and corporate taxes. Even taxes have in many cases been waved in favor of foreign investors, which in the extreme weakens the very capacity of the state to regulate these very companies to whom they have granted tax waivers. Admittedly, there were attempts to address this through widespread state acquisition of equity in the extractive companies. In 1970, Zambia acquired 51% of the Anglo-American and Roan Selection Trust copper-mining companies. The Sierra Leone government also took 51% interest in the diamond mines of the Sierra Leone Selection Trust, while

Liberia acquired 50% of the iron-mining company, Lamco. In Ghana, the state did not have any ownership in the Obuasi mine until 1969 when it took 20% equity in exchange for extending the mine lease for another 50 years at a time when the 99-year lease was left with 15 years to expire. Three years later, within the context of general disenchantment with foreign investor ownership of Africa's resources, the government of the day decided to acquire 55% equity in all foreign mining companies in Ghana including Obuasi. A number of lessons could be drawn from these acquisitions;

1. Equity ownership does not equal control. In the case of Obuasi for example, even though the state had majority shares, the agreement gave managerial and operational control to Lonrho and all key decisions were taken in London. One of the things, which I had to fight hard to change when I became Chief Executive was the practice where roles at the mine were replicated in London. There was Chief Mine Engineer in Obuasi and Chief Mine Engineer in London, and London has no mine, but as you can guess London had all the authority while Obuasi bore all responsibility.
2. In most of the cases, the state ownership led to the appointment of people to the boards of directors and some managerial roles based not on their competence but on political patronage. This in turn led to the inability of the states concerned to derive the maximum benefit from their equity ownership. Management of these institutions ought to have been protected from unhelpful state involvement.

I believe we are all aware of the history of economic decline during the 1980s, which led to significant changes in extractives policy based on World

Bank/IMF prescriptions. State ownership was drastically reduced or eliminated while a wide range of incentives were introduced to attract foreign direct investment (FDI). Decades later, we are having the same conversation about ownership and control of Africa's resources by Africans. According to Bennet Kpentey and John Sutton in their book, *"An Enterprise Map of Ghana"* (2012) about 70% of the gold production and export in Ghana is controlled by five multinational companies. In fact, as I have observed in recent speeches, not a single Ghanaian has even 1% equity share in the extractives industry in Ghana even as the industry contributes significantly to the Gross Domestic Product of the country. One of the biggest and highest-grade copper mines is in the Katanga Province of the Democratic Republic of Congo - the Tenge Fungurume mine - owned and operated by Tenke Fungurume Mining, is owned 80% by a Chinese company. Just about 30 km away from this is the Kisanfu mine, which is said to hold one of the world's biggest copper-cobalt deposits, also 95% owned by a Chinese company. Some of the the largest oil and gas projects currently underway in the continent are in Algeria, Mauritania, Egypt, Angola, Guinea and Nigeria with developers mostly from Europe, America or Asia. This lack of significant ownership by indigenous Africans in the extractive industry is therefore a sensitive matter which needs to be addressed. Given the huge amount of capital investment normally required in the industry and the associated risk it is difficult to see how this situation would change in the near future unless some very innovative ways are found to tackle it. An example of such innovation is the Black Economic Empowerment (BEE) policy in South Africa which was introduced to help achieve significant ownership in the mining industry by racial groups who previously had no shareholding interest. The policy has had some successes but has also thrown up some very negative

unintended consequences in its implementation. I believe that focusing too much on getting shareholding interest for individual entrepreneurs from the targeted racial groups and not enough on ownership or other interest in the businesses by broad-based groups such as the affected host communities or workers can lead to problems. As an example, we must avoid creating seasonal local entrepreneurs through political patronage. Tribal and ethnocentric considerations, family affiliation and friendships must not be the only route to gain business opportunities. Crony capitalism comes with too high a price. This is a key lesson we must learn from Malaysia in their two decades promotion of “bumiputra” (Malay sons of the soil policies). The consequences were massive corruption, cronyism and Malays fronting for local Chinese and foreigners, the so called “Ali Babas!”

Please allow me to throw out a suggestion to provoke some thinking on this matter. In those African countries where there is no significant ownership interest by either the government or indigenous entrepreneurs,

- i) As an immediate priority, there needs to be a discussion across party political lines within African countries of how to enhance the capacity of the state to play a meaningful and informed investment role as a partner to big business within our countries. The sort of role that, say, Temasek, played in Singapore. Too often, the narrative is that we should cut down on the size of the state. This is correct in so far as in most countries, the state is ineffective and is a source of economic rent that is used unproductively. This is a different problem from one in which the state is too small and largely underfunded and so becomes ineffective in directing capital towards

areas that have longer term benefits to citizens – specifically, health, education, infrastructure, and innovation.

- ii) Secondly, the government must negotiate to have an option to acquire high ownership interest in mining companies on some pre-determined very favorable terms after a certain number of years of operation and/or after a company has achieved a certain return for its foreign shareholders,
- iii) after acquiring such large interest, the government must use existing institutions to sell shares to the general public and to specific stakeholders such as the company's workers, the host community and allow local institutions such as pension firms to co-invest in mining companies.
- iv) Last but not least, the state's role as regulator must not be overlooked. The environmental shortcomings that I witnessed growing up in Obuasi can only be tackled by a well-resourced and informed state. This needs to be built deliberately.

As I have mentioned earlier most of the issues I have raised here have been identified in many studies about the industry and recommendations for resolving them have been made. Therefore, the question that we must ask ourselves is: Why have we not been able to adequately resolve these issues to any significant extent up to now? How come the problem of lack of capital, which led to the take-over of Obuasi mine in 1895, is still being given as a reason for our inability to invest in our own resources?

A major reason, I believe, has been poor leadership. Post-independence Africa has not managed to achieve the level of development commensurate

with its potential due in most part to bad governance and poor leadership. Endemic corruption, weak institutions, and self-serving politics have remained the bane of the African continent for many decades. Within this environment, entrepreneurship is easily killed and investments cannot thrive unless they pander to the political objectives of the ruling classes. Systems of patronage and clientelism are pervasive with drastic consequences for the development of the continent. A few weeks ago, a court hearing in the UK revealed how a mining company literally flew cash in private jets to bribe government officials in some African countries. The prioritization of private gain at the expense of the collective is at the root of these schemes. Corrupt companies then take advantage to extract as much as they can without due regard to the concerns consistently raised. In addition, illicit financial flows and tax concessions deprive the continent of billions of dollars. Some estimates put the figure of illicit financial flows at \$88 billion annually³ while officials either are not well-equipped to deal with those or are incentivized to look the other way.

But there is a new urgency under which we cannot continue with business as usual.

Ladies and Gentlemen, in addition to the destructive impact on the physical environment caused directly by natural resource extraction, we are in a new era where the use of some of the products from the industry, such as coal and oil, has brought us to the brink of climate catastrophe. Consequently, the most significant driver of development discourse currently is the issue of

³<https://www.un.org/africarenewal/magazine/november-2020/illicit-financial-flows-its-time-end-plunder-africas-resources>

climate change. It is no longer a debate, as the science is patently clear that climate change is fast making the world uninhabitable. The COP27 was held in Egypt just over a couple of weeks ago where once again, discussions centered on phasing out fossil fuels and other extractive resources. World leaders are scrambling to find a balance between saving the world and developing it, while communities bear the brunt in the form of increased weather events such as floods, droughts etc. This year alone, several hundreds have died in Nigeria due to exacerbated floods. Climate change is causing devastating droughts in East Africa and the Horn. Changing course is no longer an option, it is THE only option. There is no doubt that the extractive industry has contributed to this state of affairs in no small measure and this is mainly what has led to Environmental, Social and Governance (ESG) considerations becoming an integral part of the appraisal process and funding decision for most major natural resource projects.

The notion of sustainability has become essential, and it is to drum home the point in line with ancient African wisdom, that these mineral endowments are not ours and we are only custodians of these minerals for generations yet unborn. Thus, to be so reckless in their exploitation that we are almost at the brink of a catastrophe is most unfortunate. The imperative that the climate emergency places on us is to find cleaner, better means of powering, heating our homes and driving production without putting the earth at risk. Let me say before going further into this that as much as I believe in the tremendous capacity of humans to destroy, I also believe in our ability to innovate and we have the brain power and energy to introduce new ways of being comfortable without destroying the planet. Only the will is needed.

Africa once again will be pivotal in the world's attempts to achieve the energy transition. We have significant deposits of the critical minerals needed for this to happen - Copper, Lithium, Cobalt, Nickel, Manganese, Graphite, Zinc and rare earths. Electric vehicles need lithium-ion batteries to run. In fact, the largest annual market for lithium-ion batteries is the electric vehicles industry, overtaking consumer products in 2018 (according to Bloomberg) and as demand for electric vehicles increases, so will demand for the batteries and the minerals needed for their manufacturing. As you well know, the main raw materials used in lithium-ion battery manufacturing are lithium, cobalt, nickel, manganese and graphite. Africa is not lacking in these minerals. There needs to be a concerted effort, led by your generation, to build the businesses that develop these minerals at source as part of the global supply chain. The technology boom means this is an opportunity that must not be missed. As young Africans solve FinTech, HealthTech, and EduTech problems, you must also seek to become the generation that develops these critical minerals at source and retains economic value at home.

Perhaps one of the most abundant endowments Africa has is the sun. And as you know, solar energy is also a critical pillar of the clean energy transition. The International Energy Agency has noted that Africa has 60% of the world's best solar resources. However, the mere existence of all these resources does not guarantee value or results as the history of the extractive industries has shown us. There are bold and smart choices to be made and huge investments are needed to ensure that we do not end up with another "resource curse".

Against this background, Ladies and gentlemen, let me conclude with four very specific recommendations. First, as I have said earlier, there is the need to build local capacity for value addition and local industrialization. As I have noted, Africa is endowed with the resources and minerals needed for the energy transition. We are therefore in pole position to help the world save itself from climate catastrophe. But we must also be ready ourselves to take due advantage of the opportunities this offers for our economic development. We must begin by building the capacity to add value to these minerals and become part of global supply chains. It will be a big shame if our experience with the oil, gas, and mining industries were to repeat itself. In this regard, I welcome the recent decision of the Government of Zimbabwe to ban the exports of raw minerals and concentrates especially raw lithium ores.

Secondly, African countries must forge serious and practical unity and cross-border collaboration in the sector. A fact too often ignored is that African countries cannot go it alone. We may recite the statistics on the mineral endowments of the continent and talk about creating local industries, but the truth is that significant financial and other forms of investments are required to translate them into meaningful development. Coming together within the framework of regional integration can help us to achieve this regard, I pull resources and raise the needed capital. We must learn to cooperate more in Africa than compete. Competing with one another will mean long and costly arbitrations to determine ownership. In one such case between two countries, one of them claimed that due to the geology of the area concerned, their oil was flowing to the territory of the other party. Cooperation on the hand will ensure that they work together and develop these resources jointly to benefit the African people. The joint development of the 3.5-million-

hectare Great Limpopo Trans frontier linking the Kruger Park of South Africa with National Parks in Zimbabwe and Mozambique shows how this can be done. In the same vein, I will recommend to young Africans like you to create partnerships and venture into the critical minerals production and innovations for the energy transition. You have the capacity to create innovations to facilitate the value chains in this industry. We are in a history-making epoch and I suggest you step up and be counted.

Thirdly, there is an urgent need for development of the necessary human resources with skills and expertise to be in charge of the new frontier of industries to be supported by critical minerals in the era of the energy transition. Educational programs and curricula must prioritize technical and STEM education. This is not to say that liberal arts education is not important, but Science, Technology, Engineering, Mathematics, Machine Learning, Big data, Artificial Intelligence etc. are the drivers of the knowledge economy currently ruling the world and Africa must keep up. We cannot be left behind in these fields. But knowledge and expertise need to be guided by attitudes, character, and positive worldview. This means we don't only have to train the hands and heads of African youth; we have to train their hearts as well.

Finally, and the most urgent of my recommendations is governance reforms. The anchor for any sound economic policy is sound governance. Citizens must insist on transparency and accountability from governments. That is the only way to build trust in the management of our natural resources. I will not shy away from saying that Africa has lacked the necessary leadership in the past few decades. Corruption, unethical conduct, and nepotism have characterized African governance. Within the context of these systems,

policymaking tends not to be based on sound analysis by the most qualified persons, but on political patronage and rent-seeking behavior. There is a need for significant reforms to stem out corruption. In my experience, corruption can be significantly minimized through the creation of systems, that do not depend much on human discretion. Africa has a youthful population and our policymaking has to be informed by the needs of this large segment of the population. Additionally, we must encourage our brightest young people to enter into public service. They are the continent's future, which is now.

Thank you for your attention.