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1. Developments in the Agriculture Sector in Africa

Food security in Africa is the oft-cited goal for all African governments. Many factors - such as climate change, financial challenges, rural youth leaving the farms, and low modernisation levels - impact the sector. This report addresses this and other recent developments in the sector.

REALITY CHECK: AFRICA'S FOOD PRODUCTION

A recent article published by two development economists rebuts the much-publicised claim that Africa is unable to feed itself, despite Sub-Saharan Africa's (SSA) 2019 food import bill of US$43 billion.

Authors Louse Fox and Thomas Jayne note that since 2011, SSA's food imports declined slightly, then levelled. The AfDB projection of Africa's food imports reaching US$90 billion by 2030 was based on 2000-2010 trends. As global food prices during this era rose rapidly, the AfDB model does not accurately reflect the 2011-2019 period during which the value of SSA's food imports was relatively flat due to SSA's expanding food production.

They find that while SSA does import more food today than it did two decades ago, the region now exports more. Over the past four years, SSA imported approximately US$40 billion per year while it exported US$35 billion. Some of SSA's countries, e.g. Côte d'Ivoire, Ghana, and Kenya, have become agricultural export powerhouses, with a net annual agricultural trade surplus of more than US$5 billion. SSA mainly exports commodities such as cocoa, coffee, tea, and cotton, while its main food imports are wheat, rice, soybeans, other oilseeds, and frozen meat products.

Countries that export oil and minerals and conflict-ridden states are responsible for most of SSA's net agricultural trade deficits. Nigeria is a net agricultural importer of over US$5 billion annually, while Angola, the DRC, and Somalia together account for another US$5 billion annually. Most of the region's fragile states are also net agricultural importers.

The demand for food will grow with Africa's population and increasing wealth, say the authors. This rising demand can stimulate intra-African trade, which averages only 20% over the past decades. South Africa accounts for over a third of the intra-African food trade. Assuming effective implementation, the AfCFTA should help Africa's farmers and agribusinesses meet the region's growing demand for food.

To exploit the opportunities for intra-African agricultural trade, they recommend that Africa's farmers improve their productivity to compete against low-cost imports from abroad. Africa's governments will have to reduce the costs of cross-border business by removing tariff and non-tariff barriers, streamlining customs procedures, and improving regional transport links.[1]

RWANDA TARGETS US$1 BILLION IN AGRI EXPORTS

Rwandan agricultural exports declined sharply in recent years. This decline was due mainly to trade disruptions caused by the Covid-19 pandemic and lower volumes, and sagging prices in international and regional markets. Its agricultural exports declined from US$515.9 million in 2017/2018 to US$419.1 million in 2019/2020. Rwanda now seeks to recover by doubling its annual agricultural exports to generate US$1 billion in revenue by 2024. Reaching this aggressive target will require addressing several significant challenges.

To do that, Rwanda must first diversify its exports beyond its traditional trade in coffee and tea to improve its resilience to international commodity price shocks. This will require a focus on promoting non-traditional export crops such as horticulture and animal products. However, the sector should continue to export high-value fresh products (French beans, snow peas, passion fruits, chillies, and cut flowers). Rwanda would also benefit from a shift to higher-value speciality tea and coffee.

The sector also needs to expand its market base. Ensuring sustainable and well-paying markets will require developing market linkages with big buyers through forward contracts. Rwanda's National Agricultural Export Development Board (NAEB) attracts big investors with a global presence, such as

Unilever. This link should increase the competitiveness of Rwandan agri-products. NAEB also deploys an e-commerce trading platform for various commodities.

Improving transport logistics and value addition can help achieve sector targets. High airfreight charges negatively impact the profits of horticulture exporters and farmers. A focus on value addition should lead to higher returns, as would growing produce that have long shelf-life. These investments would also enhance opportunities presented by the AfCFTA.

The Government must increase budgetary allocation to the sector.

CURTAILING FOOD IMPORTS IN TANZANIA

Tanzania is making an effort to reduce its dependence on agricultural importsImported products include cooking oil, wheat and sugar. All could be locally produced from crops grown in Tanzania. Tanzania was spending ±US$202.6 million annually on importing cooking oil, which could be reduced or abolished by increasing the production of crops such as sunflower and palms to produce edible oil. Tanzania was spending ±US$444,000 on importing wheat flour annually. Increasing local production of this crop would eliminate this expenditure of foreign currency.

Any shift in crops requires educating farmers on engaging in agribusiness. Such education would also help them address poverty while contributing to Tanzania's economic growth.

According to the chairman of the Parliamentary Standing Committee on Agriculture, Livestock and Water, Charles Mwijage, unless the government invests massively in the agricultural sector, developing an industrial economy would not be realised soon.[2]

POINTS OF INTEREST

- The revelation that Africa's food security situation is not as bad as generally assumed and widely publicised is welcome.However, Africa still imports food products that it need not, such as meat, rice and wheat. It can produce its own products and needs to focus more attention on doing so. The emerging problem is not only quantity but quality. Africa's population is urbanising and becoming wealthier, with a growing ability to pay for better quality food. Growing Africa's agricultural productivity has been a theme for decades, with its governments adopting various resolutions to increase budget contributions to agriculture to 10% of their annual budgets. Even after close to two decades, this has yet to take place. It is time for Africa to step up and honour its commitments to a vital sector on the continent. This path would support the development of competence, increase the levels of modernisation and support farmers overall.
- Rwanda wants to double its agriculture export revenues. This move is worth emulating by the rest of Africa. However, this kind of stretch goal requires a more comprehensive approach. Reaching such a goal is much more complex than merely stating an intention. Here we see yet another reason for Africa to actually implement its resolution to allocate 10% of its budgets to agriculture. In addition to increasing food exports, it also has the potential to secure food security. However, Africa must increase food production and exports and create more opportunities for value creation along the entire value chain. Rwanda's stated intention is welcome, and while punted for some time, unfortunately not yet embraced to the fullest extent.
- Tanzania's decision to limit food imports is a course of action that requires caution. Nigeria attempted similar initiatives in the 1980s and as recently as 2019. But this only led to smuggling and price rises. Tanzania reportedly requested its agricultural experts to formulate plans to boost local production of critical products as an alternative to imports. This seems a good way to go. It has the potential to increase its agriculture output and produce its own stockpiles of various crops. This strategy should be viable versus banning food imports.

2. China in Africa

China continues to expand its footprint in Africa, despite the challenges from the Covid-19 pandemic. Its Belt and Road Initiative (BRI) receives attention, even in some unusual countries on the African continent. China itself has become an exciting trading destination due to geopolitical turmoil in Asia and the Pacific Rim. This report addresses recent developments on China's role in Africa.

CHINA AS EXPORT DESTINATION FOR AFRICA

Marcus Ford of Wines of South Africa (WOSA) explained how South Africa's wine industry avoided the ravages of the Covid-19 pandemic. Despite bans on the sale of alcoholic products imposed by the South African government, a 50% increase in South African wine exports to China saved the day. This followed a 212% tariff levied on Australian wines by China due to escalating geopolitical tensions that reduced Australian wine exports to China by 95% in December 2020 compared to December 2019.

The ban on alcohol sales by South Africa's government resulted in a domestic wine surplus of around 400 million bottles. This would typically devastate both the industry and the country. The wine industry contributed 1.1% of GDP (US$3.69 billion) in 2019, providing 269,096 jobs and US$1.28 billion in household incomes. Wine tourism contributed US$1.81 million and 36,406 employment opportunities.

Wine Australia estimates the market in China for imported wine at 52 million customers, nearly double the number seven years ago. There is room for further growth. In 2019, South Africa captured only 0.9% of the Chinese wine market share, compared to the top three: Australia (35.4%), France & Monaco (28.7%), and Chile (14.2%).

South African wine exports to the lucrative Chinese market face several challenges. These include a decline in the overall demand for wine in China due to Covid-19, difficult transport logistics, complex foreign regulations, procedures and legal requirements, and broad cultural and language differences. The selection of the right business partners is thus a strategic imperative for wine producers.

South Africa can learn from other wine exporters on dealing with the Chinese market. China had established Free Trade Agreements (FTAs) with Australia, Chile, and New Zealand, which resulted in the elimination of duties from 2012 - 2019. As 49% of wine consumers from China purchase wine through e-commerce, exporters must promote South African wines online and offline. Greater visibility on Chinese supermarket shelves will also raise consumer awareness of South African wines.

Growing South African wine exports will increase direct jobs at home, especially youth employment. Indirect job opportunities, such as in logistics and transport services, will also increase. Wages will potentially rise. As South African brands become more visible and reputable, increasing wine tourism could provide new employment opportunities in the services sector.[3]

THE DRC BECOMES A MEMBER OF CHINA'S BRI

The Democratic Republic of Congo (DRC) became the 45th country in Africa to join China's Silk Road Initiative (also known as the BRI) when it recently signed an MoU with China during the visit of the Chinese foreign minister, Wang Yi, to the DRC in January 2021. According to Wang Yi, the deal with the DRC will strengthen bilateral economic cooperation between the two countries, bringing "a stronger dynamic to their mutually beneficial exchange, and open new prospects for their relations."

The government of the DRC under the administration of President Felix Tshisekedi is trying to improve its collaboration with its international partners to revive the DRC economy. As part of these attempts, the DRC has succeeded in getting China to cancel US$28 million of its debt, in addition to gaining US$2 million to support DRC's candidacy to the African Union presidency.

The new Silk Road agreement could lead to additional Chinese investments in the DRC, whose large mineral reserves should play an essential role in the Silk Road project.

Liberal Chinese financing has characterised the implementation of the BRI to African countries. Between 2000 and 2015, China granted US$94.4 billion in loans to countries in Africa[4] as part of its BRI program.

CHINA IN UGANDA'S MINING SECTOR

Uganda's Ionic Rare Earths (IonicRE) signed a non-binding MoU with China's Aluminium Corporation of China (Chinalco) to advance the development of the Makuutu rare earths project in Uganda. The MoU covers funding for the project and an option for an offtake agreement. Chinalco's subsidiary, China Rare Metals and Rare Earth (Jiangsu) will act on its behalf to work with IonicRE in accelerating the development and production of the project.

IonicRE Managing Director (MD) Tim Harrison said he expects Makuutu to evolve into a huge, long-life producer of critical and heavy rare earths. The partnership with Chinalco would fast-track development for Makuutu and assist in value creation for IonicRE.

The Makuutu project is said to have an operational life of more than 30 years.[5]

SUPPORTING RWANDA DURING COVID-19

China plans to cancel a US$6 million loan to Rwanda and provide the country with a grant of US$60 million. The agreement signed by China and Rwanda on 19 February will enable Rwanda to channel funds intended to service debt into other activities. The grant will also fund a priority project yet to be agreed upon.

According to the Rwandan government, China has been supporting Rwanda in significant sectors of its development, mainly in its transport, agriculture, health, education and energy sectors.

According to Rao Hongwei, China's Ambassador to Rwanda, China perceived the extension of the financial support to Rwanda to contribute to Rwanda's transformation and recovery from the adverse effects of the Covid-19 pandemic.

CHINA IN EGYPT

President Xi Jinping has reaffirmed China's willingness to work closely with Egypt. In February 2021, Xi suggested closer cooperation in infrastructure, construction, production capacity, and science and technology. The Chinese leader defined the "China-Egypt relationship as a model of China-Arab and China-Africa solidarity and win-win cooperation." Over the past decade China and Egypt have forged ever deeper economic ties. Beijing has sought to leverage its relationship to produce BRI, while Cairo has looked to China in its efforts to revitalize its economy. At the core of this relationship have been Chinese financed mega-projects such as the Suez Economic and Trade Cooperation Zone (SETC) set up in 2008. Chinese firms have been using Egypt as production base to top the African and European markets. China has recently selected Egypt as a hub to manufacture COVID-19 vaccine for Africa.

CHINA EXPANDING ITS FOOTPRINT IN TUNISIA

Tunisia and China have signed an economic and technical cooperation agreement in April 2021. According to China's Ambassador to Tunisia, Zhang Jianguo, some projects carried out by Tunisia with the assistance of the Chinese government have become symbols of the cooperation between the two countries. These include projects such as the Ben Arous sports centre and the Tunisian diplomatic academy.

In addition to projects mentioned above, other projects in Tunisia aided by China include the sports and cultural centres of Menzah 6 in the north of Tunis, the new university hospital in the south-eastern province of Sfax, and the construction of the Medjerda River canal in the northwest of Tunisia.[6]

POINTS OF INTEREST

- African Digest reported on China’s role as an export destination for Africa, specifically for coal, some time ago. AfD noted that while this opportunity stretches further than coal: agricultural producers in Africa can utilise this situation to their benefit, with wine being an attractive sub-sector. South Africa’s wine sector has long looked longingly towards China as a desirable export destination. However, given the attractive trade agreements between Australia and China and South Africa’s seeming inability to arrange something similar, South Africa’s wine producers have found it challenging to tap into the vast Chinese market. There are obvious exceptions, such as Hein Koegelenberg’s L’Huguenot brand, which successfully developed a suitable footprint in China over the past decade. As more sophisticated Chinese wine consumers are very brand- and quality conscious, South Africa should take care not to push just anything to the Chinese market. In the early 1990s when South Africa first started exporting wine overseas, consumers were unwilling to pay a higher price even though they found the quality acceptable.
- The DRC is the latest African member of China’s BRI club. This move reveals China’s shift in focus beyond the countries sited along the original Spice Route. In China's opinion, any country that wants to become part of the BRI adds value to its aspirations seems an acceptable candidate. The DRC has tremendous mineral potential, has huge electricity generation potential and has a large population (approximately 87 million). This qualifies the DRC as a source of resources, a potential market for Chinese goods, and a country with vast infrastructure development potential that Chinese construction companies can tap. It is also the scene of significant security challenges and politically volatile, with a relatively stagnant economy. Such issues have rarely deterred China from becoming involved in a country. Africa has willingly embraced China’s support.
- For decades, Uganda, Rwanda and Egypt partnered with China to develop their economies. By entrenching itself in Africa, China is ensuring its access to sources of mineral and other resources. China also seeks markets for consumer products, electricity production, infrastructure development, and other products and services. China is not unique, as most countries pursue access to materials and markets as a matter of principle; this is what business is really about. China is very good at it, having learned to apply all its considerable resources to position itself as a partner of choice and is more successful at it than most. For obvious reasons, some countries are less than thrilled with China’s growing footprint on the continent.
- As its footprint in North Africa expands, China has an increasingly strong presence beyond Egypt; in Algeria, Morocco and Tunisia. In pursuing this strategy, China runs the risk of becoming embroiled in the internal squabbles of its partners. One example is the difficulties brought about by heightening tensions between Algeria and Morocco. Despite these issues, many African countries see China as an important development and investment partner.

3. Digital Developments in Africa

Despite lagging in its overall adoption of digital technology, and its pronounced digital divide, the digital sector on the African continent reveals many nuggets of pure gold. The most well-known is Safaricom's M-Pesa in the financial services sector. Other sectors experiencing significant growth in the adoption of digital technology include agriculture, education, e-commerce, health and government services, to name but a few. This report addresses some of the recent developments in this sector.

TECH HUBS POTENTIALLY DRIVING EDUCATION IN AFRICA

A UK research team recently examined the state of education in Africa to identify the roles of technology hub actors in the knowledge production landscape. Associate professor Oluwaseun Kolade and his colleagues at De Montfort University in the UK focused on tech hubs in Kenya, Nigeria, South Africa and Uganda. Their research focused on the ability of African tech hubs to address challenges in the educational sector, generate innovations, and meaningfully contribute to economic and social needs.

Their project found that African technology hubs doubled in number from 314 in 2016 to 643 in October 2019. They found that these tech hubs challenged traditional universities as sources of knowledge production and were becoming "better suited to a fast-paced knowledge economy." In contrast to conventional universities, these tech hubs are "effective in economic and social value creation by creating new jobs, stimulating the entrepreneurial ecosystem and improving the quality of life of the poor socioeconomic groups."

According to Kolade, "tech hubs are flexible and wired to create economic and social value and have a conscious multi-stakeholder approach that allows them to reach across the public sector and industry to make a difference." Kolade believes that hubs can equip Africa's workforce with the skills required for Industry 4.0. Lucienne Abrahams, director of the Learning Information Networking Knowledge Centre at the University of the Witwatersrand, agrees that tech hubs challenge universities as knowledge producers in the digital tech enablement field. Few African universities focus their investments, resources and energies on digital innovation.

Kolade's study found that collaboration between tech hubs, universities, government and industry can contribute to sharing knowledge across institutions, leading to value for universities, tech hubs, and industry. Tech hubs, however, should push universities to "do things differently."[7]

DEVELOPMENT OF EDUTECH STARTUPS

Nigerian EdTech startup uLesson recently secured US$7.5 million to expand to Eastern and Southern Africa. The funds from its Series A funding round will expand its market coverage, bring in new talent, and build its product development and production infrastructure.

Nigeria's uLesson aims to provide 'cost-effective, high-quality, and accessible education across Africa using technology.' Lagos-based uLesson creates personalised and relevant content for learners in the K-7 to K-12 educational year in Nigeria, Ghana, Sierra Leone, Liberia, and The Gambia. Since its official launch in May 2020, users downloaded the start-up's app one million times.

Students can stream the educational content and lessons via mobile and PC devices or access the content via SD cards, where the content has been pre-downloaded for students. The download modality enables students to access lessons without a stable internet connection, increasing accessibility.

While education is always important, the means for delivering relevant education have often been problematic. Given the combination of increased availability of data networks in Africa, affordable smartphones, and an attitudinal change towards online learning brought about by Covid-19, uLesson now deems the foundations for an education revolution to be in place.

The startup plans to launch several new products, such as a new pan-African primary school library, one-on-one tutoring session, and interactive challenges. While currently only available as an Android app, the new firm plans to launch an iOS-compatible app.[8]

DIGITAL INSURANCE FOR SMALLHOLDER FARMERS

Pula is a Nairobi-based micro-insurer founded in 2015. Its mission is to develop and deliver online information services and provide agricultural insurance to farmers across Africa. Pula offers scalable insurance solutions that help mitigate the risks borne by Africa's 700 million smallholder farmers. The insurer recently secured US$6 million from a Series A funding round. It will use these funds to scale up its operations across 13 markets in Africa and expand into Asia.

The firm created a range of digital products and agricultural insurance that assist farmers in improving their farming practices, increasing their income, and dealing with climate risk and changes. Pula's business model focuses on offering an affordable alternative to costly traditional insurance providers by creating an insurance solution that meets the needs of smallholder farmers.

Pula leverages machine learning, crop cut assessment, and data points linked to weather patterns to minimize farmers' losses. These tools allow them to customise tailor-made products for specific farmers, taking into account various inherent risks such as drought, pests, diseases, and flooding.

The insurer reportedly assisted over 4.3 million smallholder farmers in Africa and received "InsurTech of the Year" at the African Insurance Awards 2020.[9]

EXPANDING ACCESS TO HEALTHCARE

Millions of Africans live without easy access to quality medical care. Play Zuri Health is a Kenyan startup that recently launched its Zuri Health mobile app to provide certified, affordable and accessible healthcare solutions to this segment. The app allows users to book appointments instantly with any medical professional or hospital within their region, book laboratory tests, talk to practitioners via message or video and request home visits. The app also provides a pharmacy service that enables users to order prescription and over-the-counter medication online for delivery to their homes.

The app includes SMS functionality. This design enables use by a wide range of users who lack access to WAP or internet-enabled devices,

The young company has a three-year growth plan and targets having more than 20,000 listed doctors, 250,000 premium users, and at least one million mobile downloads.[10]

DIGITISING SUPPLY CHAIN NETWORKS

Vodacom Business recently launched a suite of digital solutions for its connected supply chain network in Africa. These mobile tools provide end-to-end supply chain visibility. Vodacom Business will leverage key technologies — the cloud, IoT, Big Data, B2B integration, mobile and data solutions — to enable their business clients to create and use a connected supply chain network. Business users can also access information and engage with partners and customers across their global supply chain network.

According to Pearl Masoga, Acting Managing Executive for Retail and FMCG at Vodacom Business, the Vodacom Trading Bridge switches more than 84 million transactions valued at R200 billion (±US$13.7 billion) annually. The platform provides Vodacom clients with a digitized and connected supply chain network. Digitising their end-to-end supply chain system will provide businesses with visibility and control and provide in-depth data insights to improve customer service efficiencies. This functionality will increase resilience and minimise risk across business operations.

Firms that currently use a fully digital supply chain network will also benefit from Vodacom Business financial services. These include automated invoicing, mobile payments, and lending to suppliers and merchants. Users also benefit from Vodacom's scalability and reach via partnerships such as M-Pesa.[11]

BOOSTING NIGERIA'S DIGITAL ECONOMY

To help SMEs use IT to become Innovation-Driven Enterprises(IDEs), Nigeria will establish a Digital Innovation and Entrepreneurship Centre. Here, Nigerians can acquire the technological skills to develop hardware, software and emerging technologies, create an innovative ecosystem and a platform for technical skills, among others. IDEs reportedly need to have a global outlook, while SMEs tend to start small and often remain local. IDEs also generally require more capital than SMEs and tend to integrate more innovation into their activities than SMEs. However, they can have a far more significant impact on the economy than SMEs.

The Centre's development aligns with the Nigerian government's adoption of MIT's frameworks to accelerate innovation by creating localised strategies for developing and sustaining innovation-driven enterprises.

POINTS OF INTEREST

- Several of the articles above address the continuation of digital penetration and enablement of stakeholders in industries such as agriculture and healthcare. We are also seeing governments adopting policies aimed at empowering entrepreneurs and SMEs. Digital technology is boosting innovation and has been doing so in Africa for quite a while. Probably the most well-known example is the financial services' M-Pesa in Kenya. Farmcrowdy in Nigeria is another example in the agriculture sector. We also see various innovations in the healthcare sector in Africa at large. These innovations have improved business and the quality of lives of Africa's people quite significantly. It is unlikely that the trend will run out soon.
- Insurance is a key sub-sector of the financial services industry. Unfortunately, insurance for the bottom of the pyramid is a continuing challenge, given the cost structure of traditional insurance. In sectors such as agriculture, smallholder farmers generate 80% of Africa's food production. This segment mostly goes without crop insurance as they cannot afford it. Micro-insurer Pula provides insurance to smallholder farmers and added value in the form of knowledge and expertise. Such value additions are valuable in themselves, allowing micro-insurers to differentiate themselves from traditional insurers. This business model has the effect of convincing smallholder farmers that the insurance premium is justifiable and paid through increased crop production.
- Education is another sector that is experiencing significant disruptions. These result from, amongst other causes, the Covid-19 pandemic. While the virus threat hastened the adoption of digital technology as a portable interactive solution, access has long been a significant problem for African school children. In rural areas, many walked several kilometres to reach school long before the pandemic. With Covid-19, this problem is not only exacerbated but now affects tertiary students. Tech hubs and EdTech startups are emerging to increase access to education for Africa's students.
- The large telecommunications giants are digital sector players with huge potential to succeed in the education sector. While large and successful universities in Africa, and even globally for that matter, have relatively limited access to the market, telecommunications giants have millions of clients to whom they send communications quite regularly – this constitutes a captive market that is open to cross-selling opportunities. Some have global clout. The telcos already enjoy trust from their consumers. They already sell many services — airtime, data, entertainment and financial services — to their millions of clients. With their digital capability and market reach, big telcos are ideally positioned to become providers of educational products, either in competition with universities or as channel partners and service providers for higher education. African universities must take note of this and act early. They may otherwise soon find themselves in a position similar to the banks in Africa, who ignored the threat of M-Pesa and now must deal with the threat of disintermediation.

4. Developments in the Energy Sector in Africa

Energy in Africa examines not only oil and gas and electricity but renewable sources. It is well-known that more than half of Africa's population goes without network electricity. Equally prominent are the challenges Africa's most sophisticated economy faces regarding electricity generation. While Africa has significant oil reserves in North Africa, Nigeria and Angola, new oil discoveries have recently been made in East Africa. It is also in this region that we find the discovery of significant gas reserves. This report addresses recent developments in this sector.

TRANSFORMING FLARE GAS INTO POWER FOR AFRICA

Although about 75% of the population in Sub-Saharan Africa lacks access to reliable or stable energy, Africa flares around 40 billion cubic meters (bcm) of gas annually, of which 35 bcm are at sub-Saharan Africa. This wasted gas can be used to bridge the power gap if investors step in.

Aggreko has developed end-to-end solutions that position them as the go-to provider for projects in Africa that use the flare gas to generate power. They have already completed a gigawatt of projects doing this. Aggreko is still evolving its offerings to minimise further the problems caused by flaring. The firm uses intelligent solutions that require little expertise or heavy financing arrangements. Aggreko's model works by capturing gas that would typically be flared, piping it to a generator, then burning it to create electricity. While the generators produce modest emissions, these are far lower and less intrusive than produced by flaring and therefore reduce the pollution burden.

The flaring of gas will become far more expensive when governments adopt more robust clean air legislation and implement fines. However, with the right solution, such as Aggreko's, it is possible to use flare gas to deliver cheap and stable power. The power is essentially free to the service provider. Aggreko uses a simple connection to a grid and gas treatment to remove impurities. After that, the system produces power that is competitive in price compared with traditional power infrastructure.

The flare gas-to-power model also addresses the future energy issue of climate change. Oil producers can now translate pollution into accessible power for governments, businesses, and the public. They can transform potential reputational blame into a reputational advantage. These are over and above the environmental benefits they can generate by turning a polluting waste by-product into a profit.[12]

THE LACK OF MOVEMENT IN TANZANIA'S LNG SECTOR

Tanzania is struggling to benefit meaningfully from its oil and gas finds. The question arises as to why its oil and gas boom has yet to take off. Even the security challenges in Mozambique did not generate a positive spinoff for Tanzania. Up to 2010, Tanzania used its two (later three) mid-sized onshore gas fields for domestic purposes. However, following 16 discoveries from 2010 to 2015, Tanzania rapidly increased its aggregate gas reserves eightfold to more than 40 TCf.

Various large multinationals such as Norway's NOC and the US-based ExxonMobil have interests in these fields. According to analysts, Tanzania's favourable location vis-à-vis South and East Asia, i.e. the primary prospective market for its LNG exports, as well as its utilization of natural gas in electricity generation (accounting for roughly 50% of its electricity output), point towards a bright future for gas, provided the economics work for the offshore fields.

The international majors have shied away from committing to Tanzania's LNG reserves. Tanzania's challenges in developing its offshore oil and gas resources fall into three main groups: structural, psychological and technological. The structural challenges evolve around the competition between Tanzania's LNG with Mozambique's two concurrently developed LNG projects and the fact that Mozambique has so far outclassed its neighbour in terms of gas reserves in place. Mozambique also has the advantage of a more stringent and delineated set of upstream terms; it set participation by domestic National Oil Companies at 10% (Tanzania set it at 25%). The psychological effects hinge on the 3-year pause in offshore exploration drilling, aggravated by safety concerns linked to the pandemic.

From a technological perspective, Tanzania's gas is more difficult to extract. While Mozambique's reserves are found at moderate depths (1000-1500 metres), those of Tanzania are in ultra-deep water (2400 metres), leading to much higher extraction costs.

These developments do not mean Tanzania lost its opportunity to benefit from its LNG reserves. Should the authorities drop their insistence that oil companies' adhere to Tanzanian law (disallowing any foreign court of justice), the current situation could change. Currently, the oil companies are concerned that upstream terms are vulnerable to arbitrary government changes. Should Tanzania's government not take active steps to deal with the situation, its LNG sector will stagnate.[13]

PRIVATISING REFINING CAPACITY IN NIGERIA

According to the Major Oil Marketers Association of Nigeria (MOMAN), the Dangote Refinery will be hugely beneficial once it commences production. MOMAN has also advised the Federal Government not to limit the importation of refined petroleum products once the Dangote Refinery comes on stream to create an open market for the sector. MOMAN believes that free-market competition is the best protection for the final consumer.

A statement release by the Association says, "Anyone involved in the fuel supply chain, either as operators or regulators, must demonstrate cost optimisation in every practical and public way possible. In line with the recently launched Nigerian Upstream Cost Optimisation Programme (NUCOP), the industry must reduce costs for production, administration and governance throughout the petroleum value chain in the Nigerian petroleum sector, particularly downstream. Such a program will promote efficiency and competitiveness within the industry and ensure value creation for all consumers."

Nigeria stills imports refined products despite being blessed with significant petroleum resources. The reality is that despite the building of the Dangote refinery, refining will not start in Nigeria immediately, as a result of many diverse and varied reasons.

According to MOMAN, Nigeria must track the progress of work at all the new refineries under construction across the country to ensure they are delivered timely, efficiently and sustainably. They also stated that should it be necessary, the sector must bring private investors on board to facilitate the rehabilitation and upgrade of the state-owned refineries. Better facilities will ensure the growth of Nigeria's internal refining capacity and guarantee energy sufficiency for the country.[14]

KARPOWERSHIP IN SOUTH AFRICA

Karpowership from Turkey is a preferred bidder for South Africa's Risk Mitigation Independent Power Producer Procurement Programme (RMIPPPP). The Programme will supply three power ships to address the country's electricity supply challenges. South Africa's Minister of Mineral Resources and Energy Gwede Mantashe reports that the vessels will feed power to the grid in three ports: Coega, in the Eastern Cape, Richards Bay in KwaZulu-Natal and Saldanha in the Western Cape.

The government released the RMIPPPP in August 2020 to alleviate South Africa's electricity supply constraints and reduce the extensive use of diesel-based generators in the medium-to-long-term.

Powers ships are privately owned and operated floating power stations, which contain their complete sets of generation, electrical control, and substation components. The vessels also manage their maintenance workshop and engineering capabilities. The onboard substation can deliver power through connections to the national grid without lengthy delays or complicated engineering. The ships can operate both on liquid fuels (HFO/RFO) and natural gas. With high efficiency and availability, power ships can provide uninterrupted electricity at various high voltage levels.[15]

The value of the South African contract to Turkey's Karpowership is R218 billion (±US$15.23 billion) with a term of 20 years. This contract term is the company's longest to date. Liquefied natural gas will fuel the three vessels to provide 1,220 MW of electricity. This power will close a supply gap in South Africa that results in periodic blackouts. The Council for Scientific and Industrial Research in South Africa estimates the deal will cost as much as R10.9 billion annually (±US$762 million).

According to analysts, the long duration of the contract is an indication of the seriousness of South Africa's power crisis, as well as a sign of its "questionable long-term planning in light of dropping renewables costs." Karpowership will dock its powerships in South Africa around August of 2022.

According to Karpowership, they keep costs low through their reach into the LNG market and an exclusive, long-term deal with Shell.[16] Currently, only around 3% of South Africa's energy mix involves LNG, which is cheaper than the diesel used to run Eskom's Open Cycle Gas Turbines but far more expensive than coal.

Environmental groups have raised concerns about the continued use of fossil fuels. Researchers have warned that Karpowership's 20-year contract could generate close to 20 million tons of carbon dioxide equivalent emissions per site.[17]

POINTS OF INTEREST

- To put the flare gas situation into perspective, 1 billion cubic metres of gas is equivalent to 6.6 million barrels of oil. Africa thus wastes the equivalent of 264 million barrels of oil by burning it off, while SSA wastes the equivalent of 231 million barrels. At the current oil price of about US$65 for Brent crude, this amounts to US$17.16 billion for Africa and US$15.015 million for SSA. This waste is more than the combined GDP of the bottom nine countries in SSA, at approximately US$13 billion. Until recently, lacking the necessary technology, this was an unavoidable waste. The technology now exists to make this wasteful exercise of gas flaring not only unnecessary but also profitable. With governments potentially on the verge of imposing fines for pollution, adopting flare gas to power will also save costs. The reality is that gas is not oil, but it also serves as a source of energy. With large parts of Africa without electricity, this source of energy can make a meaningful contribution. Lowering the price of this source of electricity will be difficult as producers would be cannibalising their main product unless they can ringfence the target market and focus on the bottom of the pyramid. The economic benefit of the flare to power model is that it would lower the average cost of production, theoretically allowing the producers to drop the average price of energy and still retain a similar profit. Hopefully, oil giants will do the right thing instead of focusing mainly on increasing their margins.
- Due to its lower carbon footprint, gas is increasingly popular as an intermediary source of energy in the transition from fossil fuel to renewable energy. The lack of progress in developing Tanzania's gas reserves has been a source of concern for several investors who committed billions to exploit these reserves. Before the Magufuli administration, the government dragged its feet and failed to exploit its gas reserves. Despite high expectations, the situation did not improve under the Magufuli administration. With the poor security situation in Mozambique and the recent attacks in the Cabo Delgado province, Tanzania might have a window to renew the interest of the oil and gas majors in its reserves. This depends on the political will of the new Tanzanian government under President Samia Suluhu Hassan and its willingness to increase the ease of doing business in the country. The Tanzanian government is losing out on a significant potential source of new revenue and on providing more meaningful employment opportunities for its population.
- Nigeria's oil refineries have long been a source of grave concern and debate. The country has, until now, primarily exported its crude oil, only to import the refined products later on. This process loses out on higher revenues for value-added products and misses the opportunity to benefit from more meaningful employment opportunities. One major issue in the country's oil industry is the poor condition of its state oil refineries. Their productivity levels at times reportedly amounts to a mere 10% of theoretical capacity. The government and the country might move to privatise the refineries and bring the private sector on board with better management and maintenance. However, the government shies away from adopting this option. Aliko Dangote built a private refinery with an annual refining capacity of 10.4 million tons (Mt) of gasoline, 4.6Mt of diesel and 4Mt of jet fuel, capable of refining 650,000 barrels of oil per day. The four state refineries have a collective theoretical capacity of 445,000 barrels per day. Should they one day operate at full capacity, Nigeria could refine one million barrels per

day. By serving its demand instead of importing, the economy would benefit from import substitution. It could export the surplus to West Africa and even beyond into Africa. The benefits are self-evident.

- South Africa's state-owned utility, Eskom, is unable to keep the lights on consistently and affordably. The government has now turned towards Turkey's Karpowership for a long-term contract of 20 years. This conveys a clear message - Eskom is unlikely to sort out its capital equipment and management challenges anytime soon, despite what the government and Eskom itself regularly tells its citizens and consumers. In a recent development, it recently surfaced that Eskom's procurement managers were colluding until very recently with private sector companies to fleece the company, continuing the corrupt practices at the company. For example, in March 2019, a buyer at one of Eskom's power stations placed an order with a company for the refurbishment of two compressors to the value of R368,550 (US$25,781). It was later discovered that this company had sub-contracted another company to perform the work, which in turn sub-contracted yet another company, who then completed the job for US$2,895. Eskom further discovered that two completely new compressors would have cost only R112,000 (US$7,832). This is sadly only one example of many. The South African public and business sector end up paying the price for this situation.

5. Developments in the Leather Sector of Africa

Africa has many large cattle herds. Yet, the continent imports large volumes of leather products while exporting commodity leather products such as hides and skins. The stakeholders in Africa's leather sector have identified this as unacceptable and initiated action to address the issue. This report addresses some recent developments in this sector.

FASHION BOOSTING AFRICA'S LEATHER SECTOR

Africa's leather industry faces many challenges. Today, the best quality African leather is exported, processed abroad and then re-imported as finished goods. Parts of Africa lack basic infrastructure, such as good machinery for drying. In some markets in Africa, e.g. in the Mushin market in Lagos, the leather sold is imported from Europe. African tanneries tailor their policies according to the needs of their largest buyers, often Western businesses. This bias leads to high minimum order quantities, shutting out African designers that place smaller orders.

Consumers don't appreciate African leather as EU laws allowed luxury fashion houses that source raw leather from Africa to avoid using a Made in Africa tag. Made in Africa leather goods were thus under the radar, struggling to build an image for quality and excellence, even though much of the leather used globally originates in Africa.

This branding challenge could soon fade. A tweet in March 2020 claimed that a Nigerian tannery supplied leather to luxury fashion houses such as Louis Vuitton and Ralph Lauren. This revelation led to a flood of orders as the fashion industry sought new sourcing opportunities that supported Black-owned businesses. In June, Nigerian leather brand Winston Leather received its most significant orders in its 30 years in business.

Some African leather goods companies have adapted and use local material resources to the full in response to such phenomena. Ethiopia-based Tibeb Leather Works uses leather to create leather purses and other accessories from material that many premium houses would discard as flawed.

According to Mark Stephenson, Managing Director (MD) of Sandstorm Kenya, the question is how Africa can use technology to create more jobs for artisans and tanners and optimise value within Africa using slow fashion.

African designers are now using local resources and their design capacity for sustainable fashion to alter buyer perceptions of African leather and to promote it to a broader market. Tanners receive education on less toxic methods of tanning and dyeing leather and motivation to push for more environmentally friendly policies in leather production.

African designers need and can develop a new quality image for Made in Africa. Tibeb Leather is partnering with Ethiopian businesses to create educational materials that help young designers understand Ethiopia's design history and design with sustainable materials from Africa. Nigeria's Femi Olayebi of Femi Handbags uses initiatives, such as Lagos Leather Fair, to connect tanners to designers and groups of buyers organised to enable small designers to buy in bulk from tanneries with high minimum order quantities.

According to Stephenson, tanners and manufacturers must convince Western designers and luxury houses to use their leather and make themselves accessible to African designers and brands who can tell and celebrate an authentic story of African artisanship.[18]

BOOSTING KENYA'S LEATHER SECTOR

Kenya's share of the US$13.9 billion global leather market is at most a mere 0.89% (US$124 million). However, its producers have excellent growth potential. They can start by optimizing their exports of raw and semi-processed hides and skins that constitute over 95% of the sector's export value (±US$87 million). By processing these skins and hides before exportation, the industry in Kenya could create at least 50,000 jobs and generate US$150-250 million in added GDP.

The industry in Kenya faces several serious challenges. These include counterfeits, inadequate value addition and a persistent skills deficit.

Poor quality counterfeit products in Kenya lead directly to losses of potential tax revenue and jobs. The industry is developing a policy paper on the harmonisation of nomenclature, branding and traceability to help deal with counterfeits. Kenya raised import duties on finished leather products to protect local manufacturers against countries that offer significant subsidies to their leather businesses.

Various institutions in Kenya now collaborate to develop new products intended to enable local companies to compete for huge contracts with global retail chains. Also, creating joint production units helped SMEs to enhance the quality of their leather products.

Currently, local value addition for hides and skins averages only 5%. This lost opportunity costs the country billions in direct earnings and thousands of jobs. In addition, most small producers use sun drying, suspension drying, and other crude techniques to preserve their skins, which leads to inferior quality.

Kenya's leather sector suffers from a huge skills deficit. The growing focus on quality and strict import quality benchmarks requires the industry to adopt global best practice. Manufacturers need training and more specialised technical skills to deal with the competition from cheaper and better-quality imports. Most manufacturers use on-the-job training to upskill their workers. Networking with leather companies from the developed world has provided local leather product manufacturers with new knowledge on product finishing, branding and marketing.

Kenya's export markets currently include China, Italy and India (its main markets), the EAC region and other parts of Africa, and the USA and parts of Europe.

The Kenya-UK economic partnership deal recently signed by the two countries presents an opportunity for the sector to grow its exports.[19]

To further boost Kenya's leather industry, the sector built the Ngozi Leather Park in Machakos, ready for use by December 2021. The park will benefit from its EPZ status. The park intends to revolutionise Kenya's leather value chain, creating a new market for skins and hides. The park will be a one-stop-shop for leather, leather goods and related industries, including tanneries.[20]

SUPPORTING ESWATINI'S LEATHER SECTOR

Eswatini (formerly Swaziland) and COMESA (the Common Market for Eastern and Southern Africa) recently agreed to organise a training program for leather artisans. The two parties signed a Grant Agreement to receive an overall amount of more than €1.185 million from the European Development Fund (EDF) through the Regional Integration Support Mechanism (RISM). This collaboration supports the training of more than 150 artisans in various areas of the Leather Value chain in Eswatini, such as in footwear design and fabrication, leather goods design and fabrication, vegetable-based tanning and the establishment of a vegetable tanning cluster. The project also funds the development and validation of a feasibility study on establishing a leather tannery in Eswatini.

Eswatini is highly dependent on imported footwear and other leather products. Its annual footwear imports averaged US$17.8 million in the period 2011 to 2017, which indicates a good local market.

Generally, factors such as lack of skills in business management, collaboration (clustering), and limited access to suitable equipment/machinery and technical production skills constrain the artisans in Eswatini that are involved in producing footwear and other leather products.

The project will enhance the performance of the leather value chain by mitigating some of the inhibiting factors noted above.[21]

CALLS FOR GREATER COLLABORATION IN AFRICA'S LEATHER INDUSTRY

The recent South-South Leather Industry Exchange (SSE) virtual forum examined policies in the region. The leather industry in some countries generates more value across the value chain. In some other countries, nationalistic policies resulted in the opposite effect.

Executive Director in the Africa Leather and Leather Products Institute (ALLPI), Prof. Mwinyikione Mwinyihija noted that leather industry policies should ensure real growth and development through measurable, scoped, and scoped targets and address the expectations of industry stakeholders. Those local companies that benefit from policies providing an unfair advantage over competitors frequently fail to develop an adequate capacity to create value. In some cases, nationalistic policies block regional integration and synergy among stakeholders. While nationalistic policies tend to be slow at building skills, regional policies that encourage competition can build skills.

Leather industry speakers at the forum emphasized the importance of having an industry-led policy development mechanism, including incentives for stakeholders to create synergy. Examples cited are leather parks and cities. Egypt provided incentives for tanneries to move out of Cairo to the Robbiki leather city with free land and compensation for damages during movement.

Government support was essential to ensure that new policies resolve logistical problems, provide access to finance, address the local market, solve input problems, and enable quality assurance through continued skills development.

The Ethiopian Leather Industry association collaborated with the Leather Industry Development Institute (LIDI) on four sector focus areas to provide technical support, conducting research and development.

Mukashaka Germaine, the chairperson of Rwanda's Leather Value Chain Industry Platform, proposed developing time limits to avoid delays in implementing agreed policies in the East African Community.

Stakeholders in the forum called for more collaboration between countries to eliminate fake and illicit leather from the market, strengthen national associations in policy formulation and implementation, and transfer knowledge that will enable the region to contribute more to the global leather industry.[22]

POINTS OF INTEREST

- Africa's leather industry is a prime example of a sector with huge potential not only to take the import substitution route but to build a strong brand for African leather. Several countries, such as Kenya, import leather products even though African has vast cattle herds. As stated above, they export raw hides and skins and then import value-added products such as shoes. From a development perspective, Africa trend toward premature deindustrialisation, despite adopting goals to increase the contribution of manufacturing to GDP. One of the initiatives planned to boost leather manufacturing in Kenya was a new industrial park for leather apparel in Machakos. If successful, it could boost Kenya's exports of manufactured leather goods and help reduce imports.
- Several Africa countries show a decline in the contribution of manufacturing to GDP. In South Africa, the manufacturing sector's contribution to GDP declined from 26% in 2007 to less than 13% by 2020. In Kenya, the sector's contribution dropped from a high of 12.79% in 2007 to 7.54% in 2019. These led to measures aimed at boosting manufacturing in Kenya to 15% of GDP by 2022. This happy outcome is unlikely in the leather industry without support for the sector to increase value-added locally before exportation.
- Adding value to Africa's raw hides and skins will have a wide range of benefits. They include saving foreign currency on imported shoes and other leather products that can be produced locally, generating revenues from exporting leather products abroad and creating more complex and meaningful job opportunities. These benefits can potentially boost the general economy and lead to a higher quality of life for Africa's citizens.
- The sector is making slow progress in positioning Africa as the origin of high-quality leather. The AfCFTA as an entity must focus on adopting policies that will enhance the coordination

and cooperation within Africa on issues such as building the Made in Africa brand. Such collaboration is not only applicable and relevant to the leather industry, but various other industries. While quality has become a non-negotiable factor, the perception of Africa as the origin of low- quality products will take hard work to change. A resolute political will and the implementation of globally acceptable standards is essential to bring this about.

6. Renewable Energy in Africa

The renewable energy sector in Africa is growing in leaps and bounds. This trend reflects rising affluence and the accelerating diffusion of small-scale renewable energy technologies. Today's technology is easier and more affordable to install, provides lower operating costs, and has a smaller carbon footprint. Many small African countries embrace the trend, with several industries adopting solar to generate electricity to support operations. This report addresses some recent developments in this sector.

AFRICA TRENDS TOWARD RENEWABLE ENERGY

By 2030, Africa's energy capacity will equal twice its current consumption. The decreasing cost of renewable energy technologies will drive the shift to renewable energy sources. Despite this trend, a 2021 report sees fossil fuel sources as continuing to dominate Africa's power mix over the coming decades. Renewable energy sources such as solar and wind will contribute less than 10% of total Africa's power up to 2030. However, the cost of renewable energy technology decreased in recent years and should drop even further by 2025.

Ideally, Africa's governments will use renewable energy technology to build renewable energy farms. This initiative would reduce the use of fossil fuels and subsequently decrease carbon dioxide emissions. Building renewable power plants has the additional benefits of creating jobs for professionals and the youth. University of Oxford scientists report that small renewable energy plants have better chances of success than large projects. The plant's source of funding was another factor, as projects funded by big public agencies, such as the World Bank, tended to be more successful.[23]

INCREASING RENEWABLE ENERGY CAPACITY IN DJIBOUTI

Djibouti recently approved the construction of a 30 MWp solar PV power plant in Grand Bara after a long delay. The preliminary agreement for this solar PV project dates back to June 2019. Construction will be within a public-private partnership (PPP) framework. Engie will develop, build and operate the plant. The electricity generated will be fed into the grid of the state-owned company Electricité de Djibouti (EDD) and help increase the country's national production capacity to meet rising demand. The project will contribute to Djibouti's sustainability goals by reducing its carbon footprint and its social development goals by creating jobs. The project will also reduce its electricity imports from Ethiopia.

The Djibouti government also approved construction by Djibouti Wind Company (DWC) of the 60 MW Ghoubet wind farm. DWC is a special purpose vehicle owned by four partners: Africa Finance Corporation (AFC), a pan-African fund dedicated to infrastructure development, based in Lagos, Nigeria; Climate Fund Managers (CFM), an investment fund manager; Great Horn Investment Holding (GHIH), an investment fund set up for development projects in Djibouti; and the Dutch Development Finance Corporation (FMO). The new wind farm will cost about US$63 million and will effectively double the country's power generation capacity. [24] [25]

Djibouti sees a capacity-building strategy as essential for attaining its energy independence. The country recently established the Red Sea Drilling Company (RSDC) as its national geothermal energy engineering company. RSCD will develop Djibouti's geothermal power reserves and contribute to training engineers and technicians. These capabilities will position the country to operate in mining and oil and gas drilling, plus water drilling to reinforce the country's water security. RSDC apparently plans to become an East African drilling major, tapping markets in nearby Ethiopia, Kenya and Somalia. In the near term, the country remains dependent on foreign expertise. In February 2021, the government awarded a USD 6.5 million contract to Kenya's KenGen to drill three wells in Lake Assal.

Djibouti's target is to use its 100 MW geothermal energy capacity to fully supply its domestic market, then become a power exporter. To this end, the country's government invested heavily in energy-related projects over the past eight years. In 2013, a US$6.83 million loan from the African Development Bank enabled geothermal exploration around Lake Assal, reportedly the most promising area in the country.

An additional loan of US$14.68 million in 2016 and a final loan of US$3.22 million in May 2020 laid the ground for the future establishment of a 20 MW geothermal power plant, with the potential to expand to 50 MW at a later stage. This plant will contribute to Djibouti reaching its goal of powering 100% of its economy through renewable energy by 2030.

Djibouti is heavily dependent on its small fuel-based power generation capability, supplemented by electricity imports from Ethiopia, to serve its power needs. As a result, its users consume some of the most expensive electricity in the region, up to six times the price of power in Ethiopia.[26] The new initiative aims to address this issue.

INSTALLING MINI-GRIDS

Off-grid power, driven by economic growth, rising expectations, and falling costs for clean energy platforms, is trending in Africa. Winch Energy joined other leading off-grid players in January 2021 to launch its new Winch Energy IPP Holdings Limited (WIPP) platform. The consortium, composed of Total Eren, Itochu Corporation, Al Gihaz Holdings and Winch Partners, reportedly holds Africa's most extensive mini-grid financing portfolio. WIPP recently completed its funding round for solar mini-grid projects in 49 villages across Uganda and Sierra Leone. The funding originates from Winch Energy Limited and NEoT Offgrid Africa (NOA). Previously, NOA invested more than US$36 million to electrify 25,000 homes and businesses in Ivory Coast and Nigeria. Other industry players and EU agencies also joined WIPP to provide funding.

The partners view the platform as an enabler for rapidly scaling up operations in Africa. CEO of Winch Energy Nicholas Wrigley views the joint effort as positioning Winch Energy as a future leader in large-scale off-grid renewables. He says the funding "stimulates economic growth and improves education and healthcare provision in remote communities." NEoT Offgrid Africa (NOA) Director Frédéric Pfister sees the deal as positioning NOA as a critical player for financing mini-grids and other off-grid solutions such as solar home systems and commercial and industrial installations.

The mini-grids, based on Winch Energy's proprietary technology, are "expected to be operational within the next 12 months, providing remote communities with affordable, clean energy and access to essential services." The project will reportedly connect more than 6,500 customers in Uganda and Sierra Leone, supplying clean energy to over 60,000 people. It also provides for the installation of 6,000 portable batteries to provide people outside of the mini-grid catchment area with clean electricity. In addition, the project will provide internet to the communities through partnerships with telecommunication operators in both countries.

WIPP expects to expand its operations in Africa and aims to reach approximately US$100 million of operating projects in the next 24 months. Winch Energy is also active in Benin, Mauritania and Angola.[27]

RETAIL GOING THE RENEWABLE ROUTE

The Shoprite Group, South Africa's largest retailer, recently announced that it now generates enough electricity – about 12,300 MWh – from solar energy to power over 1,100 households for a year. The company placed rooftop solar PV panels at 19 sites in South Africa and Namibia. Shoprite also fitted 649 solar panels to its refrigerated trucks. These generate 760 MWh annually – enough to run 1,040 refrigerators all year. This innovation allows truck drivers to switch off truck ignitions at delivery locations, reducing fuel use, noise, and exhaust pollution while keeping the cold chain intact.

Located at its Basson distribution centre in Brackenfell in the Western Cape, the group's largest installation has a considerable impact on its strategy to reduce its impact on the environment. According to Shoprite, the solar panels at this distribution centre covers an entire soccer field.

The group also replaced fluorescent lamps with energy-efficient LED at R98.3 million (±US$6.8 million) to save 83.8 million kWh of energy over the four years since this change.

The group plans to procure 434,000 MWh of renewable energy per year for the next seven years. Shoprite is the first retailer to embark upon such a strategy, which is reportedly a first for Africa.[28]

POINTS OF INTEREST

- The march towards renewable energy adoption in Africa continues. At the national level, renewable energy like solar PV and wind is increasingly part of the energy mix. While coal is still a very cheap source of electricity in Africa, the countries needed to import coal now have options and can embrace renewable energy as complementary to their existing sources of electricity. The shift towards renewables is increasingly an easy choice, given the increasing efficiency and decreasing cost of renewables, plus emergent opportunities to create hybrid systems (solar, wind and batteries). Such renewable solutions do not need scale economies. Given the ease and speed of installation in rural and remote areas, they are becoming attractive.
- This holds even for countries that once provided reasonably efficient and low-cost energy, such as South Africa. An unreliable and corrupt state-owned electricity utility is seemingly incapable of meeting the needs of South African consumers. The electricity Eskom does supply is increasingly expensive. Rising costs motivate private homeowners, businesses and large municipalities to adopt renewable energy. This problematic situation boosts the trend towards the adoption of renewable energy to save costs and reduce dependence on a failing provider.
- We also see increasing use of mini-grids to electrify homes and businesses. Until recently, many consumers had little choice but to remain a captive of the existing infrastructure. This is due to the high initial costs of many renewable energy systems. The solution was new business models to address the financing needs of different types of consumers. These innovative business models include rent-to-own solutions that are attractive for consumers. Larger businesses prefer to adopt a leasing model. This solution converts upfront capital expenses into tax-deductible monthly operating expenses. Leasing avoids large initial outlays and stabilizes monthly energy costs while providing access to more reliable and affordable electricity.
- Given the vast energy consumption of retailers, Shoprite's welcome move towards converting both horizontal and fixed surfaces into solar energy production opportunities is laudable. It is not the only retailer in South Africa to take this path. A 2016 Greenpeace report ranked South Africa's five most prominent retailers, Massmart, Pick n Pay, Shoprite, Spar and Woolworths, on their energy policies. The report used four criteria – energy transparency, commitment to renewable energy, greenhouse gas mitigation and lobbying for clean, renewable energy. None fared well: Woolworths did the best overall with a score of four out of ten. Shoprite received the lowest ranking due to a lack of transparency regarding its energy information. However, South African retailers have since then increased their commitment to the use of renewable energy. Woolworths were early in using rooftops on their owned buildings as energy production sites. Shoprite's new approach to renewable energy generation is a clear break from the past. Their commitment to embrace low carbon electricity is hugely advantageous to the environment and will reduce demands on the national grid, perhaps easing the challenge to Eskom.

7. Multinationals in Africa

Many multinationals view Africa as a positive investment destination – reflected in the continuous investments on the continent that are of Western origin. Some investors are multinationals seeking a first-time presence, while many others are growing existing footprints. They represent a wide range of diverse industries, ranging from hospitality providers to motor vehicle manufacturers, chemical companies and digital services firms. This report addresses some recent developments in this field.

EXPANDING THE STARBUCKS FOOTPRINT IN AFRICA

Taste Holdings owned the Starbucks franchise until it sold its South African master franchise licence to Rand Capital Coffee for R7 million (±US$490,000) in late 2019. A year later, Rand Capital announced its plan to open eight new Starbucks outlets by mid-December 2020. These new outlets in Cape Town, Stellenbosch, Johannesburg and Pretoria would promote 21 employees and increase headcount by 69 full-time employees. The total number of Starbucks permanent employees would increase to 300.

According to the owner and chief executive of Rand Capital Coffee Adrian Maizey, the move not only creates dozens of jobs during harsh economic conditions but also generates new business for the contractors and sub-contractors who were fitting out and equipping the eight stores. He noted that “Starbucks operated on a licensing model as opposed to a franchise, which was an honour to him to be awarded the licence for South Africa as it seldom went to an individual.”

He saw the challenge for newcomers to the increasingly discerning coffee market in South Africa as making the public more knowledgeable about the value that Starbucks has to offer.[29]

BAYER SUPPORTING AGRICULTURE IN AFRICA

The Bayer company has a long-term commitment to support African farmers. The life-science multinational will run its new "Better Farms, Better Lives" initiative programme again in 2021. This process will see 100,600 smallholder farmers in Tanzania receiving grain and vegetable seed grants worth US$493,500 to assist them in sustainable food production.

Bayer provides more than 700,000 smallholder farmers in Africa with free hybrid corn and vegetable seeds. The programme also aims to assist growers by providing market access. This assistance is in line with Bayer's overall aspiration to build a world where there is “Health for All, Hunger for None.”

Bayer views smallholder farmers as essential in providing food security to billions of people. However, the Covid-19 pandemic is placing extra challenges on their ability to produce food for their communities and beyond. According to Bayer Tanzania Manager Frank Wenga, the Bayer initiative in Tanzania will assist the smallholder farmers in combating the effects of the global Covid-19 pandemic.

Although the programme launched in Tanzania, Bayer will eventually implement it in several other countries across Africa, including Kenya, Malawi, Nigeria, South Africa, Zambia, and Zimbabwe.

The initiative focuses on providing smallholder farmers with the assistance needed to address the additional challenges they may be facing as a result of the coronavirus pandemic.

Bayer will collaborate with governments, NGOs and local organisations to provide accelerated access to agronomy services and knowledge to scale up existing and new value chain partnerships and further expand value chain partnerships across Africa. According to Laurent Perrier, the MD of Bayer East Africa, Bayer intends to utilise its partnerships “to multiply the social and economic impacts of smallholder farmers in tackling poverty and hunger, improving health and livelihoods and, ultimately, spurring economic development for their families, communities and nations."[30]

AUTO MANUFACTURERS BOOST CAPACITY IN AFRICA

Ford Is betting on the future of the African vehicle market. The company announced in February 2021 its plan to invest heavily in its South African manufacturing operations. Ford intends to use the funds mainly to expand the production of its Ranger pickup truck. The carmaker plans to increase its annual production capacity in the country from 168,000 to 200,000 vehicles. Of the US$1.05 billion new funding, US$683 million goes towards technology upgrades and new facilities at its plant in Pretoria, with US$365 million going to upgrade tooling for major suppliers.

The expanded production will create 1,200 new jobs with Ford in South Africa, increasing the local workforce to 5,500 employees. The move will add an estimated 10,000 new jobs across the carmaker's supplier network. The plant will also manufacture Volkswagen pickup trucks as part of the Ford-VW alliance. Ford targets making the plant entirely energy self-sufficient and carbon neutral by 2024.

This commitment represents Ford's most significant investment in its 97-year history in South Africa and one of the largest ever in South Africa's automotive industry. About 33% of Ford's local production goes to South Africa and other sub-Saharan African countries, with the rest exported elsewhere.

According to South African President Cyril Ramaphosa, Ford helped bring twelve automotive component suppliers to the country. The South African government wants to double the industry's annual production to 1.4 million vehicles by 2035 and raise the proportion of auto components made locally to 60% from 39% by offering investment and tax incentives.

Ford is not the only global vehicle manufacturer to boost its production capacity in Africa, as others, such as Volkswagen, Toyota and Nissan, have done so already. They all seemingly view Africa "as a large, untapped market for new car sales."[31]

TWITTER PICKS GHANA AS ITS AFRICAN BASE

Twitter announced its plan on 12 April 2021 to set up its first Africa base in Ghana. Twitter described Ghana "as a champion for democracy, a supporter of free speech, online freedom, and the Open Internet." It also referred to Ghana's hosting of the secretariat of the AfCFTA as another reason for moving there, as they believed it aligns with Twitter's ambition to "establish a presence in the region that will support our efforts to improve and tailor our service across Africa." Ghana's President Nana Akufo-Addo described Twitter's selection of Ghana as a "beautiful partnership between Ghana and Twitter", a critical link for the development of Ghana's technology sector.

Twitter's decision led to strong reactions among Nigerian Twitter users. Many Nigerians saw Twitter's decision as a snub to Nigeria, which is Africa's largest economy and experiencing rapid growth and investment in its technology sector. There are reportedly more Nigerians with a Twitter account (39.6 million) than people in Ghana.

However, other Nigerians referred to the poor conditions in Nigeria as the motive for Twitter's strategy. One is the suspension of new phone lines registration because of a federal government policy to link all active SIM cards in Nigeria to a national identity number for security reasons, a very time-consuming process. Also, in 2019, Ghana was 13 places higher than Nigeria in the World Bank's Ease of Doing Business Index and viewed even by some Nigerians as a more productive market. Ghana also ranked as the 43rd most peaceful country in the 2020 Global Peace Index, 104 spots ahead of Nigeria.

According to some tech investors, Nigerians had to learn from why Twitter chose Ghana to understand what it would take for Nigeria to remain a competitive destination for investors. Factors to be considered include "enhancing democracy and the rule of law, freedom of speech, and Nigeria's role in enabling the AfCFTA". Being a huge market was no longer sufficient to attract investments.

Other international technology giants that have expanded their operations in Ghana, where they targeted software developers and young creatives in Africa, include Google, Microsoft and Huawei.

In contrast to Twitter, Facebook opened its first community hub space in Africa in Lagos in 2018 while announcing plans last year to open an operational office, also in Lagos.[32]

WESTERN ONLINE DELIVERY SERVICES TARGETING AFRICA

Online delivery services companies such as Bolt (Estonia), Glovo (Spain) and Uber Eats (USA) have invested in Africa over the past four years. Due to the fierce competition within the online delivery sector, they seek to offer their wide range of delivery services in many markets and as quickly as possible.

While their traditional markets in Europe and the USA experience shrinking profits, Africa appears to promise higher margins. According to William Benthall, who heads up Glovo in Africa, while revenues are lower in Africa, so is the required capital investment.

Glovo employs 150 direct employees in Africa. The company reportedly also created more than 300 indirect jobs (notably via call centres). It also employs 2,500 independent delivery staff. Glovo operates in Morocco, Côte d'Ivoire, Ghana, Kenya and Uganda. Growing urbanization boosts the growth of Glovo on the continent.

Bolt began operations in Nigeria and South Africa. It now operates in seven African countries (Ghana, Kenya, Nigeria, South Africa, Tanzania, Tunisia and Uganda).

These delivery companies must deal with several risks. These include administrative delays, inaccurate addresses, unforeseen weather conditions, and high order cancellation rates. The cost of delivery, depreciation of vehicles, cost of breakdowns and accidents, and time spent managing cash are other issues that require good management and integration into the economic model.

Helpful risk mitigation strategies include a dynamic pricing system for delivery fees depending on the market. Glovo charges a higher surcharge in Kenya during bad weather. Its users are usually understanding and accept the extra charge. In Côte d'Ivoire, however, they do not charge any surcharge as marketing research shows that Ivoirians value certainty more than potential economies.[33]

POINTS OF INTEREST

- Starbucks launched in South Africa in April 2016 with great fanfare. In those early days, people would join long queues to buy a cup of Starbucks coffee. All initially went well. The challenge the brand later faced was that its products are more expensive than many available options. Mug & Bean, another branded coffee franchise in South Africa, offers bottomless coffee at close to half the price of that of Starbucks. Even though the Starbucks product in South Africa is priced well below the equivalent Starbucks product in overseas markets, consumers see it as expensive in local rand terms. Unsurprisingly, Starbucks put its initial expansion plans on hold, and the franchise was eventually sold. The new franchise owner plans to expand to cities with huge populations, especially those with large student populations. The new owner feels that South Africans must be made fully aware of the value Starbucks has to offer. It is not clear why that would alter perceptions of it as an expensive product with cheaper alternatives. It will be interesting to see whether the brand can achieve success under its new owner.
- Bayer's presence in Africa and its commitment to supporting smallholder farmers in various ways indicates a strategy of over-delivery at the price point. Bayer is moving from its role as the supplier of insecticides and other products to becoming a partner to smallholder farmers. This makes a lot of sense. There are many competitors in the market, and companies are struggling to differentiate themselves. Also, the market segment of smallholder farmers is vast, with few manufacturers targeting this segment. However, by increasing their production capacity and yields, these farmers can become an attractive segment. With Bayer positioning itself as a partner overdelivering at the price point, it will become a viable option as the supplier of choice.
- Ford and other motor manufacturers are increasing their investments in Africa. This is surely welcome from Africa's perspective. The US$1 billion investment by Ford in its South African plant is a brave step and a vote of confidence in the country's future. Despite the general decline of the South African economy, the rampant corruption in politics and government departments and the aggressive and militant labour unions with their frequent unrealistic wage demands, Ford committed. Therefore, Ford management must believe that the political future of the country is rosier than indicated by current signs and that the economy will pick up again in

future. While it is clear that their investment is despite and not aligned to current conditions, investing this amount of money should always be aligned to views of the future. Ordinary South Africans can take this to heart and be less pessimistic about their country in its present state.

- Twitter's choice of Ghana as the site of its head office in Africa was always going to be contentious. Nigeria has a much larger population and a vastly more extensive economy. However, it does have more challenges than Ghana in certain areas, including the scale of its endemic corruption and challenges to security. Ghana is seen as a much safer country. It also outperforms Nigeria on many other indices. Ghana came in at 63, with Nigeria ranked at 124 in the 2019 Global Finance ranking of country safety, which scores countries on three factors: war and peace, personal security, and natural disaster risk. In Transparency International's 2020 corruption index, Ghana was ranked at 75, with Nigeria ranked at 149. In the World Bank's 2020 Ease of Doing Business ranking, Ghana was ranked at 118, with Nigeria ranked at 131. On the WEF's 2019 Global Competitiveness Rankings, Ghana was ranked at 111, with Nigeria at 116. Given that Twitter delivers a digital service that is not tied to a specific geographic location, its decision to pick Ghana as the location for its regional head office comes as no surprise.
- Online delivery services in Africa are in great demand. One issue is the many problems with addresses faced by the continent. The lack of a common geocode or another standard way to describe a given location increases both cost and uncertainty. However, as a result of the vast market in Africa, the sector is attractive. Foreign players investing in Africa may be better off, given their currency strength. We can expect more competitors to try to tap into the lucrative

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