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1. Developments in Agriculture

Food security remains an ever-present goal for African governments. We see a continuous stream of new developments, with some countries more successful than others. Africa needs to address the low productivity of smallholder farmers, while addressing the many challenges to producing optimal yields. This report addresses some of the more recent developments in this sector.

RICE PRODUCTION IN AFRICA:

The World Food Programme (WFP) in January 2020 included Nigeria (along with Zimbabwe, South Sudan, Haiti, Central Sahel (Mali, Burkina Western Niger) and Afghanistan) in its list of countries that face a food crisis. In response to this classification, the Buhari Media Organisation (BMO) stated that Nigeria was the largest rice producer in Africa, and declared the claim by the WFP as presumptuous. According to the BMO, Nigeria has over the last three years experienced a rice revolution to the extent that it now competes with Egypt. In the current period, Nigeria actually overtook Egypt as Africa's largest rice producer, with an annual production of 4 million tons.

The BMO also noted that the WFP purchased grain from Nigeria for delivery to other countries in the sub-region. They therefore queried the origin of the data for the report under discussion, stating that it did not accurately capture the situation in Nigeria, and that the UN should reconsider the report.¹

Guinea-Bissau is a country that seemingly did need support to produce rice. This country recently approached Nigeria to assist it to meet its food sufficiency, food security and nutrition targets through the production of rice. This request was based on the increasing success of Nigerian farmers in rice production. Successes by Nigerian farmers are reportedly ascribed to the provision of improved rice seedlings, farm inputs and the anchor borrowers' facility provided by the Federal Government.

The Nigerian government undertook to assist Guinea-Bissau in terms of personnel training and technical assistance in rice value chain. This would be formalized through the establishment of bilateral agreements between the two countries. Currently, 90% of rice consumed in Guinea-Bissau is imported, making up almost 40% of all food imports.²

ADDRESSING COFFEE PRODUCTION IN EAST AFRICA

At a recent Coffee Business Forum in Kenya, participants identified a number of factors that threaten the future of coffee production in Africa. These include low world prices, long value chains, exploitative intermediaries and limited access to credit. They named the exploitation of farmers by middlemen and co-operatives as one of the main challenges to development of the sector.

The participants viewed a very long value chain with more than 16 intermediaries as the main problem in the coffee industry. For farmers to generate a profit, this number must be reduced significantly. The need to entice more youth to enter the sector was also noted.

A mechanism was envisaged to ensure that funds set aside by governments to the sector actually reach the farmers. To achieve this, the role of co-operative societies in Africa would be re-evaluated.

A number of themes were addressed at the Forum:

- The removal of coffee trade barriers by focusing the spotlight on the WTO's Trade Facilitation Agreement
- Innovative mechanisms to facilitate access to credit, buyer and investor around the globe
- Regional growers and traders capitalising on new opportunities

Coffee exports represented a significant share of East African Community (EAC) revenues, with the average share of coffee in total merchandise exports exceeding 20%. Increasing EAC exports will have a considerable positive impact on the region's economic development. This, however, requires removal of the barriers noted above. Other factors that must be addressed include quality compliance, access to finance, value addition, packaging and branding. These factors are critical for market access and revenue generation. Improving them will help SMEs move up the value chain and increase their competitiveness.³

RENEWED FOCUS ON CACTUS PEAR

Due to climate change and drought, South African farmers have started to show renewed interest in cactus pears. The plant has numerous uses. While legislation in South Africa defines the prickly pear as an invasive species that must be destroyed, farmers can legally propagate the cactus pear. There are currently about 900 local farms that devote a total of about 4,500 hectares to cactus pear production, with 1,500 hectares devoted to the production of the fruit and 3,000 hectares for fodder.

The fruit has a wide range of uses:

- Farmers can use it as fodder and silage
- Consumers can eat the fruit
- Biogas made from the plant can produce electricity
- The fruit can be used to make oil, juice, jam, jelly, and chutney
- The cladodes can be turned into salads or preservatives like gherkins
- The fruit can be used to make beer, wine, manpower (a local high alcohol drink), or liqueurs
- The cosmetics industry uses Cactus oil to make face cream products
- The oil has excellent healing properties and is used in ointments to help with burn wounds⁴

Cactus pear is a very labour-intensive crop during harvesting, with about five people needed per hectare to harvest the crop. This currently leads to employing about 7,500 people to pick the fruit. Out-of-season, one worker per hectare is required to maintain the cactuses.

The selling price for the fruit varies between ~R47, 000 (~US\$2768) and ~R70, 000 (~US\$4122) per ton during high season (in October), while in midseason (during January and February), when there is usually an oversupply, the price falls to between ~R13, 333 (~US\$785) and ~R20, 000 (~US\$1178) a ton. A hectare can yield between 20 and 30 tons of fruit a year. Based on 1,500 hectares, at the low price of R13, 333 (~US\$785) a ton, and at a yield of 20 tons per hectare, the harvest could be worth at least R400 million (~US\$23.6 million).

A number of major retail chains, including Pick n Pay, Woolworths, and Shoprite, as well as some local fruit shops, greengrocers, and farmers' markets stock the fruit.

SUPPORT FOR SMALLHOLDER FARMERS

In Nigeria, Babban Gona (meaning "great farm" in Hausa language) is a social enterprise organization that provides services to smallholder farmers in the country. Babban Gona provides expansion services such as loans, training, storage, and fertilizers and other supplies. Their agribusiness training focuses on teaching farmers the techniques to improve their production of maize. The organisation also provides storage facilities (60,000 tons) to subsistence farmers in rural communities. These farmers also get access to business credit and information on the best ways to market and distribute their products.

Founder Kola Masha notes that the enterprise was established in 2012 to promote agriculture and reduce the unemployment rate in Nigeria. One target was expanding crop production in rural communities to create more jobs in the country. Masha wants to create approximately 10 million jobs by 2030. He believes that "agriculture is Nigeria's job-creation engine because it is massive, labour-intensive, and has tremendous growth potential."

Babban Gona has a presence in six Nigerian states and has so far provided its 100,000 farmer members with different farming-related services to improve their business. It has a large number of field agents across small communities in northern Nigeria. These agents specialize in teaching water retention, soil analysis, seed planting, and sustainable farming. Some farmers increased their harvest during harvest season from 40 bags to 200 bags of maize. The farmers pay a small amount for the different services provided to them. Leading financial institutions and governments, such as the Nigerian Sovereign Wealth Fund, the German government and the Entrepreneurial Development Bank, support and fund Babban Gona.⁵

TRANSFORMING CASSAVA INTO SANITISER

Cassava crops in Zambia are now processed into ethanol for alcohol-based hand sanitiser, which benefits farmers. In Zambia, cassava prices per ton surged from less than 2,000 kwacha (~US\$108) in May 2019 to 5,000 kwacha (~US\$270) in May 2020. The demand for cassava ethanol surged as companies rush to produce hand sanitiser to control the spread of the deadly coronavirus pandemic.

This specifically benefits small-scale farmers who typically farm on two-hectare plots. An increase in drought conditions in the country led a growing number of farmers to switch to water-saving crops, such as cassava. These crops are more likely to ensure a harvest. There are now over 25,000 farmers in Zambia who grow drought-tolerant varieties of cassava, up from 5,000 five years ago.

Currently, 250 tons of cassava flour a day go to produce ethanol for hand sanitiser and other products sold locally or exported to neighbouring countries in the region.

Some experts express concern that turning food crops like cassava into ethanol may negatively impact the region's food security.⁶

POINTS OF INTEREST

- Nigeria is reportedly ranked 14th in the world in rice production. According to 2019 USDA estimates, the country produced 4.9 million tons of rice, and imported 1.8 million tons. With a population of close to 200 million, demand still outstrips supply significantly, which has led to very high local rice retail prices. This lack of sufficient rice production is despite the fact that there is ample land and water available. Serious attention needs to be paid to the business model currently in existence in the country, as it seems to be not working.
- Guinea-Bissau is not the only country needing serious support to increase yields in the region. Quite a number of West African countries, including Ghana, Cote d'Ivoire and Guinea, have the potential for rice production as far as land and water is concerned. Yet, many of the farmers struggle with low productivity levels as measured by yield. This is where a new business model will help significantly, together with training and financial support of the smallholder farmers. For the sake of food security in Africa, and to support the preservation of foreign exchange, African governments and prospective investors must take the necessary steps to implement the required policies in support of rice farming in Africa.
- Revamping value chains in the various sub-sectors in agriculture in Africa is essential. There are too many intermediaries. Some contribute either zero or only marginally to value. This is the case across several sub-sectors, and not only agriculture. In the music industry, for example, redesigning the value chain and reducing the number of elements cut out many intermediaries. Agriculture in general, and not just coffee producers, might adopt this approach.
- Babban Gona joins the ranks of other entities, such as FarmCrowdy, that focus on creating valuable links between potential investors, farmers and the market. There are a number of these start-ups in Africa who fulfil an important role in generating investment finance (in the form of crowdfunding) for smallholder farmers. It does differ from many other crowd funders in that it apparently sources finance from large institutional players, including the government.
- Cassava is proven as a very versatile crop, with many uses. This includes use as a food, as an input for cassava flour, starch, glucose, maltose and even, as indicated, ethanol. In this instance, the ethanol is used as an ingredient for sanitisers that are in demand for disinfecting hands due to the Covid-19 pandemic. Given the lack of food security in Africa, the authorities must monitor this trend carefully to avoid threatening achievement of the above goal.

2. Digital Developments

Despite the digital divide that separates much of Africa from the rest of the world, a number of developments increasingly drive the adoption of digital technology on the continent. This report addresses some recent developments in this sector.

BLOCKCHAIN-BASED FINTECH GROWING ITS PRESENCE

The new blockchain-based Jamborow B2B fintech platform raised US\$400,000 to launch a number of financial services targeting the unbanked segment. Aiming to expand from Nigeria into the rest of Africa, Jamborow hopes to close a seed-funding round to support its move into new African markets.

The company creates a credit footprint and provides users secure access to digital payment options and mobile money via its AI-powered robo-advisor and blockchain tech. Jamborow aims to serve the growing informal sector by cooperating with major players in the financial ecosystem: banks, SME lenders, cooperatives, traditional savings groups, microfinance institutions, and related organizations.

Jamborow's vision is to "be Africa's first inclusive and intelligent fintech platform built for the unbanked and underbanked population such as street vendors, small-scale entrepreneurs, and the rural population." This vision stems from research indicating that the grassroots population throughout Africa faces barriers when attempting to access formal financial services. This target market segment is sizeable: approximately 66% of sub-Saharan Africans are unbanked and locked out of the formal financial sector. This leads to a cash-only transaction culture that makes it harder to grow, manage, or invest in a business.

The firm recently brought on-board seven micro-lending institutions that serve a total of 27 million members across Tanzania, Kenya, Nigeria, Uganda, Zambia, Liberia, and Sierra Leone. They also work with payment processors, credit reference bureaus, mobile network operators, and e-commerce providers, amongst other players, to simplify financial inclusion in Africa.

B2C users use Jamborow's mobile app to access loans, insurance, debit cards, healthcare products, pensions and risk management, plus financial education services to help improve their decisions.⁷

HEALTHCARE DELIVERY APPLICATION

In South Africa, entrepreneur Mphati Jezile founded health tech start-up BusyMed in April 2019 to connect consumers directly to pharmacies via its digital platform. This platform provides access to online consultations, and speeds home delivery for product and medication purchases. BusyMed allows pharmacies to access real-time stock information and performance data on best-selling items, manage inventory more effectively, and leverage existing pharmacy and third-party delivery solutions.

BusyMed recently raised an undisclosed investment amount from the R500-million (~US\$29.25 million) LionPride Agility Fund. The funds will reportedly help BusyMed develop a mobile app version of its platform for launch in July 2020.

BusyMed signed up 131 pharmacies in the cities of Cape Town (69), Johannesburg and Pretoria (50) and Port Elizabeth (12).

Customers who use the app to order and pay medicine will pay a small service fee and will have the option to either pick up medication from their nearest pharmacy or have it delivered to them. BusyMed partnered with delivery app Orderin and ride-hailing app Bolt to fulfil deliveries.⁸

DIGITAL TECH DRIVING GROWTH IN TANZANIA

According to GSMA, by the end of 2018 the number of mobile phone users in Sub-Sahara Africa had increased by more than 20 million from the year before. It is expected that an additional 167 million people will subscribe by 2025. Analysts are of the opinion that investment in and adoption of digital technology will play an important role in the development paths of countries in the near future.

Tanzania's nearly 49 million mobile phone subscribers at the end of 2019 are set to increase by ten million by the end of 2025. The country's strong telecommunications sector drives this strong increase and supports the population's eagerness to embrace new technology. Tanzania's mobile money service Tigo Pesa, serving

previously unbanked individuals in rural areas, plays an important role in raising the level of financial inclusion in the country. Tigo also provides the technology needed to stay digitally connected, supporting social media applications such as Gmail, Facebook and WhatsApp.⁹

M-PESA EXPANDED TO BUSINESS OWNERS

Safaricom recently announced the launch of an M-Pesa app for business serving more than 170,000 merchants. The Lipa Na M-Pesa app, called M-Pesa for Business, will empower business owners to access real-time statements, export statements, and track their business performance on the go. They can also withdraw funds from Lipa Na M-Pesa, transfer funds from their M-Pesa accounts, bank accounts or an agent. Business owners with a business till account can now send money to other M-PESA customers to pay wages, pay for supplies, and make payments to other businesses.

The app will also offer additional management features such as an overview of different tills for business owners with multiple outlets and till usage management. It also provides access to detail reports such as money-in and money-out charts, store overview and frequently used Lipa Na M-Pesa tills and PayBills.¹⁰

AGRICULTURE GETS NEW APP FOR FUNDING

As banks in Africa have always been reluctant to lend to farmers, smallholders face barriers to access the financing needed to purchase resources. In Nigeria, banks hesitate to participate in agricultural lending. This is why only 7% of the more than 38 million farmers in Nigeria have access to credit. Crop2Cash is a start-up with the aim of making formal financing a transparent process while providing much-needed capital to responsible farmers.

Crop2Cash developed a channel that enables payments both to and by farmers. Banks and other formal lenders are able to sign in to the platform, to find groups of farmers that have been authorized to receive credit for a season, and fund them directly. Banks can manage the portfolio of loans directly on the platform, and track credit usage.

Farmers use Crop2Cash to access not only financing, but also other necessary agricultural resources. These include access to one-click insurance, advice on mechanization, seeds, chemicals and, most importantly, credit.

Crop2Cash entered into partnerships with organizations such as First City Monument Bank (FCMB), GIZ, Royal Exchange General Insurance, Ignitia, Airbus and Traxi Continental. It makes money by charging banks a platform fee, as well as commission on the sales of agricultural services through the platform.

Crop2Cash has also launched its "super-app", called Gather, for extension agents. The role of the extension agents is to aggregate the demand for agricultural services such as mechanization, seeds, chemicals and insurance. They also serve as mobile money agents to help farmers bridge cash-in/cash-out gaps.¹¹

LIFTING A BAN ON E-COMMERCE IN SOUTH AFRICA

When South African authorities announced the lockdown in South Africa at the end of March 2020 to deal with the Covid-19 pandemic, they also decided to severely restrict e-commerce, at a period when it flourished elsewhere. Until mid-May, e-commerce platforms in the country were restricted to trading only certain "essential" products. As Weetracker stated, "it was a rather bizarre call that saw many of them basically become suppliers of toiletries, sanitary products, food, baby products, and healthcare products." South African e-commerce platforms consequently suffered a significant drop in revenue, which threatened their existence.

According to South African Minister for Trade and Industry Ebrahim Patel, he blocked e-commerce to be fair towards physical shops that would be unable to compete at a time when the rest of the world embraced it to sustain trade flows despite lockdowns and other disruptions.

Fortunately, on 14 May 2020 Patel lifted the limitations on South Africa's e-commerce, leading to many South Africans realising the importance of online shopping and turning towards this platform. South African e-commerce outlets have since experienced a welcome spike in sales.

While authorities lifted restrictions on e-commerce, allowing online stores to sell nearly anything buyers want, they restricted online stores from selling cigarettes (and still do).

One reason for the growth in online sales is that consumers may be avoiding physical stores in view of social distancing issues and the problems associated with panic buying. Some of the more popular items purchased online include cleaning and sanitation products, gas heaters, digital thermometers, TVs, mobile phones, and remote work/work-from-home tools like laptops, webcams, and LTE modems, as well as home gym equipment.¹²

POINTS OF INTEREST

- Digital technology is an increasingly important driver of economic growth in Africa. A number of sectors embraced this technology. These include mobile telephony, financial services, health, agriculture, entertainment and supply chain management. Fintech has been the most visible sub-sector with M-Pesa from Kenya and Jumia from Nigeria currently the most visible players. M-Pesa is now addressing needs emerging within the business owner community.
- As indicated above in the report on agriculture, crowdfunding is a growing phenomenon in that sector. The lack of financing for farmers is being addressed by the likes of Farmcrowdy and Thrive Agric. Crop2Cash employs a similar business model. However, demand is so high that even this new entrant stands a good chance of success. As indicated, there is a huge demand for financing in Nigeria as only 7% of the farmers in Nigeria have access to credit.
- South Africa's ban on e-commerce has been a baffling development and did not make any sense (it still doesn't, even with the benefit of hindsight). Various other measures were equally baffling. The same department that constrained the activities of e-commerce players, also placed restrictions on what types of clothing could be bought from e-commerce players. The government was also the only one globally that placed a ban on the purchasing of cigarettes. This ban is still in place, even after more than a 100 days of lockdown, and despite the relaxation of a number of the initial restrictions. These actions elicited severe criticisms from a number of quarters in South African society. The government has not covered itself in glory with the disappearance without trace of millions of Rand destined for support of businesses in South Africa, and thefts by government officials of food parcels intended for the poor.

3. Developments in Energy

Africa still battles to provide electricity to its population. New initiatives emerge from time to time, ranging from new applications of renewable energy to attempted acquisition of nuclear capacity. This report addresses some recent developments in this sector.

STEPS TO REGULATE THE OIL INDUSTRY IN AFRICA

Dr Sambit Bhattacharyya at the University of Sussex Business School recently published research that reveals the political benefits to leaders associated with the discovery and exploitation of oil. For example, he reports that a giant oil discovery in the sixth year of an autocratic African leader's reign that entered office at the age of 55, would on average increase his or her tenure by eight years.

According to Dr Bhattacharyya, the research indicates oil has more political currency for autocrats than minerals. This is due to the structural characteristics of the oil industry. Oil is capital- and skill-intensive and generates little local employment in skills-deficient poor countries. It also offers very few forward and backward linkages with the local economy, so the rent generated is relatively easy to appropriate.

Apparently the political benefits for the autocratic incumbent are felt most strongly almost a decade after the oil discovery, indicating that the sizable rents from actual production matter far more than news of the find.

This situation could be significantly improved if the oil industry acted responsibly and implemented steps to bring about transformative change in Africa. Dr Bhattacharyya suggested the following three steps:

- Oil companies could set up industry-level reporting procedures for full or partial disclosure of commercial contracts in Africa and other developing countries without harming their commercial interests. The industry should also work with local and international civil society organisations to eliminate corruption and promote good practice.
- The industry should take adequate steps to ensure environmental protection while working in Africa. Frequent audits must ensure that required companies, their partners, contractors and sub-contractors meet standards.
- Companies should use local contractors where applicable. They should explore and engage in the building and upgrading infrastructure in partnership with local governments or businesses as minority equity partners where applicable. Such steps will have long-lasting effects on local economies.

Improved governance and reduced corruption would significantly reduce the lead time between deposit discovery and production. This would improve oil companies' profit margins. It would also reduce exploration costs in countries suffering corruption and bad government. Moreover, adopting responsible and sustainable practices would make industry stocks more attractive to the growing number of investors with strong preferences for responsible corporate action and sustainability.¹³

MOZAMBIQUE SET TO PROSPER FROM ITS LNG RESERVES

Mozambique's liquefied natural gas (LNG) potential could place it among the world's 10 largest exporters of LNG within the next decade. By 2022, 3 million tons of natural gas per year will travel in a liquefied state to destinations abroad. This provides a small indication of the huge reserves held by Mozambique. By 2024, the plan envisages two LNG pipelines with a capacity of 12.88 million tons per annum LNG on the Afungi peninsula, running from the Golfinho and Atum reserves. The number of these pipelines could eventually grow to eight lines.

The exploration of the Mamba deposits will feed two LNG pipelines at an overall rate of 15.2 million tons per annum, from 2024/25 in the Afungi industrial area.

As for developments in the sector, progress on construction of the extraction and exportation vessel is at over 60%. Work on tow-in installation in the Mozambique Channel is scheduled for the end of 2021.

The subcontracted companies and oil and gas enterprises have kept 5,000 workers on the ground for developing the land-based infrastructure at Cabo Delgado.

In addition to the above, many kilometres of pipeline on the sea floor were installed to pump natural gas from the reserves directly to land. Everything is continuing despite armed attacks by Islamist militants casting their dark cloud over rural areas of Cabo Delgado.

A portion of the LNG production will be used for industrial projects in Mozambique. Those approved include the following:

- A fertiliser factory owned by Norwegian company Yara
- A fuel refinery operated by Anglo-Dutch company Shell
- A plant that will convert gas to electricity run by GL Energy Africa, a British company

Several prospecting operations are in the preparation stage after Mozambique granted licences at the end of 2018 to various foreign players, such as Eni, Qatar Petroleum, Sasol and Mozambican state company ENH.¹⁴

KENYAN OIL SECTOR ON GO-SLOW

According to Tullow Oil Kenya, falling oil prices, delayed delivery of key infrastructure by the government and rising costs endanger Kenya's dream of exporting oil. Tullow Oil said Kenya was slow in tendering for the upstream facilities and pipeline and acquiring access to land and water. This delayed the final investment decision (FID) it was to strike with the Kenyan government before the end of the year. This in turn depended on the Kenyan government facilitating access to land and water, constructing and handing over the Lamu Port berth, and successfully tendering for the construction of the pipeline and other upstream facilities.

With the slow progress, reaching FID by the end of 2020 became problematic. This could result in higher costs. These could lead to the project becoming economically non-viable at current oil prices.

The lower than expected oil prices in recent months now casts doubts on Tullow's ability to export at a profit in the absence of efficient infrastructure. In addition, the government has hesitated to deliver key infrastructure, and on several occasions shifted the timelines within which Kenya is expected to be ready for full commercial exports.¹⁵

EAST AFRICA NEEDS TO PLAN FOR THE FUTURE OF OIL

Tullow Oil submitted a notice of force majeure to the Kenyan Ministry of Petroleum and Mining, citing complications from COVID-19. With the major oil and gas developments in Turkana now on hold, the oil and gas industry in Kenya is in a state of transition.

In Uganda, the Lake Albert Project is moving forward, with Total declaring its intent to acquire Tullow Oil's stake in the project. Planned developments in Uganda, reportedly including a pipeline and refinery, have the potential to open up regional oil and gas developments and opportunities.

Kenya has the most natural resources in East Africa and is the most thoroughly explored country in the region. Other East African countries need to explore and seek out other projects. Offshore blocks with significant oil flows such as those operated by Eni in Kenya will potentially help the economy.

Transitioning into deep-water explorations is expected to be doable as some of the companies in the region, such as Baker Hughes, are already involved in offshore projects across Africa and have actively interacted with Eni in Kenya.

Baker Hughes turned to their local Kenyan partners with experience in onshore activities. This enabled them to raise their capability levels to meet offshore operational demands. This approach required a bit of trial and error, integration and cooperation among the parties to further develop the skillset of the personnel and acquire the equipment needed to operate in deep-water fields.

At a recent conference, speakers encouraged synergies and regional collaboration to overcome the challenges faced by the oil and gas industry. Local companies and countries need to collaborate to find solutions to these challenges. Some participants emphasised cooperation, synergy and simplicity.

African governments were advised to consider the long-term effects of COVID-19 on oil and gas projects, and to focus on regaining investors' interest. In addition to developing fiscal incentives that allow fair and equitable taxation on revenues, governments must create an attractive investment environment.¹⁶

SASOL REDUCING ITS ASSET BASE TO REDUCE DEBT LEVELS

South African petrochemicals giant Sasol has recently been struggling and intends to sell its stakes in assets in Mozambique. These include a power plant in Mozambique and a gas pipeline running from Mozambique into South Africa. It has reportedly appointed advisers to assist in these endeavours. Sasol intends to use the proceeds from this sale to pay off its debt pile and avoid a rights issue of up to US\$2 billion. It intends to raise US\$5 billion.

Sasol recently stated that it also intended cutting jobs and exiting its West African oil operations as part of its transformation.¹⁷

Sasol reportedly appointed Nedbank to manage the sale of its 50% stake in the Republic of Mozambique Pipeline Company (ROMPCO), the JV operating the pipeline that runs 865 kilometres from Mozambique into South Africa.

Apparently, Sasol also appointed Deloitte to sell its 49% stake in Central Termica de Ressano Garcia, Mozambique's first permanent large-scale gas power plant, which has a capacity of 175 MW and generates close to 25% of Mozambique's demand. Sasol is expecting binding bids, with the bidding round underway for the Rompco gas pipeline stake, reportedly concluding in late July.

The South African government, which owns 25% through its iGas unit, has apparently expressed interest in a bigger stake in the pipeline. According to Gwede Mantashe, the Minister of Mineral Resources and Energy, South Africa should focus on accessing Mozambique gas and the government is therefore hoping to increase its shareholding in that.¹⁸

POINTS OF INTEREST

- It cannot be denied that oil reserves have the potential to boost any country's economy in a meaningful way. However, in Africa it often seems a curse when it leads governments to become dependent on oil revenues, while ignoring the optimal development of other sectors of the economy. Whenever the oil price hits a snag and falls severely, as in 2014/2015 and again today, countries such as Nigeria and Angola vow to diversify their economies to reduce their vulnerability. However, these "firm resolutions" disappear like mist in the sun as soon as oil prices rebound.
- Another challenge of the oil industry for Africa is the resource curse. High inflation becomes a problem. Also, corruption seems inclined to raise its ugly head in these oil-producing countries. Kenya and Uganda should learn from this and rather use a country such as the UAE as benchmark, as this country has been quite successful in diversifying its economy and developing the country in a significant manner. This includes creating meaningful jobs for the local population and using the revenues for the benefit of its population and not just for the political elite.
- Sasol has had a rather bumpy ride the past two or three years. It recently looked for a buyer of a large stake in its US\$13 billion chemical complex in the USA. It also lost its co-CEOs and various senior executives following cost overruns at its Lake Charles project. Final costs came in at US\$12.9 billion instead of the budgeted US\$8.9 billion, and completion was two years late. Its share price over the last two years fell from a high of R576.00 on 31 August 2018 to a low of R21.88 on 23 March 2020. It has since rebounded to R172.05 on 8 June, but is currently trading at R133.34 as on 10 July 2020. It seeks to divest a number of assets to reduce its debt and to avoid a rights issue. The low current level of oil prices is not good for the company. As oil prices rise, the company's share price should return to former levels, all else being equal.

4. Developments in Infrastructure Development

Africa badly needs to develop its infrastructure. Some observers see a funding gap between US\$130 and US\$170 billion annually. This includes transport infrastructure (roads, rail, ports and airports), houses, water, electricity, and office space. This report addresses recent developments in this sector.

DEVELOPMENT OF THE PORT OF BERBERA IN SOMALILAND

A number of infrastructure projects boosted economic activity in Somaliland, a semi-autonomous region of Somalia. These include the following:

- The expansion of the Port of Berbera
- The building of the road linking Berbera to the Ethiopian border
- The planned construction of the Berbera Economic Free Zone
- The rebuilding of the Berbera airport to transform it into an international commercial airport

These projects have the potential to transform Berbera into a regional maritime hub in the horn of Africa.

The world's largest port operator, DP World, will play a key role in rebuilding Berbera. They invested US\$442 million to expand the port and are also involved in the associated economic free zone. DP World's vision is to develop Berbera into a regional trading and transportation hub. The government of Somaliland wants to achieve economic growth and share it with the region and the world.

The Berbera Economic Free Zone will complement the growth of the Port of Berbera as a regional trading hub and generate jobs, attract investments, encourage trade and position Berbera as a gateway port for the region.

The port, with access to the maritime trade routes connecting Europe, Asia, the Middle East and Africa, has the potential to establish Somaliland as a gateway to East Africa.

Ethiopia supports Somaliland and owns 19% of the Berbera port. It imports between US\$600 and US\$700 million of goods from Somaliland, a trade relationship that is to Ethiopia's advantage. The Berbera development will also increase Ethiopia's flexibility in its international trade activities.¹⁹

SOUTH AFRICAN PORTS HURT BY COVID-19 LOCKDOWN

Miners in the copper belt of the DRC and Zambia are diverting exports of their copper and other ore from South African ports to other ports in Africa. Dar es Salaam is the primary beneficiary. This change of strategy is reportedly due to South Africa's strict coronavirus lockdown. This lockdown was implemented on 27 March 2020 and was initially intended to last only three weeks. While the government stated ports would process only essential goods during this period, the Department of Transport said ports would remain open to all types of cargo.

However, the miners did not wait for clarification to end the confusion and rerouted trucks destined for the port of Durban to Dar es Salaam in Tanzania. Exports of copper cathodes and copper concentrate through Dar es Salaam subsequently increased by between 20% and 25%.

Other non-South African ports benefitting from the South African lockdown include Beira (in Mozambique) and Walvis Bay (in Namibia); both seeing increased copper and cobalt export volumes.

Although South Africa's ports are open again to non-essential cargo, the lockdown hurt capacity. Mining companies now avoiding South Africa, include:

- First Quantum exporting through Dar es Salaam
- Barrick, exporting through Dar es Salaam and Walvis Bay
- China Nonferrous Metal Mining Group Co (CNMC), exporting through Walvis Bay

While South Africa's lockdown benefits ports such as Dar es Salaam, Beira and Walvis Bay, it also hurts Maputo port in Mozambique, which depends on South African mine production.²⁰

The above situation is not the only challenge facing South African ports. Covid-19 caused long delays at the port of Cape Town, which led to several large shipping companies avoiding the port. Several shipping giant, (including some of the biggest in the world such as MSC, Ocean Network Express (ONE), and CMA CGM) expressed concern over the levels of congestion at the port. Both MSC and ONE removed Cape Town from their main Europe shipping line, and CMA CGM now charges extra to deliver cargo to the port.

Transnet recently announced they were taking steps to boost their capacity to get back up to speed after a backlog caused by the Covid-19 lockdown restrictions. A spokesperson for Transnet acknowledges that at the start of lockdown at the end of March, the port was operating at only 40% capacity; due to staff infections with Covid-19.

The port subsequently implemented special measures to alleviate the backlog that led to cargo remaining on vessels for weeks.²¹

NOT ALL INFRASTRUCTURE PROJECTS IN AFRICA IMPACTED NEGATIVELY BY COVID

While it was inevitable that the COVID-19 pandemic would have a negative impact on the progress of infrastructure projects around the world, it seems this is not the case throughout Africa. The news regarding project financing and progress of projects in Africa reveals progress on a number of fronts.

The African Development Bank approved grants worth €40.94 million for a bridge project to connect Cameroon and Chad across the Logone river. The funds will co-finance costs to construct the bridge and access roads, and for feasibility studies. The bridge will strengthen bilateral and sub-regional integration and facilitate cross-border trade.

Renewable energy projects across Africa receive a boost through shared risk financing. According to Wessel Wessels, head of alternative energy sales at NEC XON, solution providers will now invest their own equity. It then makes sense for them to look after the investment by creating robust maintenance and operations agreements with customers. Customers then procure customer agreements of their own. Considering that reinsurers provide exceptionally good yield cover, it is clear why banks and other institutions are increasingly keen to invest.

In Equatorial Guinea, the government intends to invest in infrastructure for the mining industry. The Covid-19 pandemic has not dampened these intentions. The Ministry of Mines and Hydrocarbons is promoting major projects in the mining and minerals sectors, including an industrial mining area that provides a gold refinery.²²

THE IMPACT OF THE TANZANIAN SGR

The Tanzanian government seeks to make significant investments in infrastructure projects to boost mobility and the distribution of goods in the country. Recent road improvements facilitated public transport and transportation of goods, providing benefits to farmers and business people.

The Standard Gauge Railway (SGR) project is to link Tanzania's strategic regions to its neighbouring countries, such as Rwanda, Uganda, Burundi and the DRC. After road, rail transport is the second most important transport mode in Tanzania and the rest of East Africa to transport freight and passengers. Construction of the SGR will play an important role to facilitate the movement of people and goods, not only in Tanzania, but also in the rest of East Africa. This is an important driver of economic growth in the region, which can contribute towards the creation of much larger markets.

As more than 70% of the Tanzanian workforce is employed in the agriculture sector, and the SGR expected to reduce transport costs of crops to markets, the development of the SGR will boost the earnings of this segment of the population and subsequently improve their living standards.²³

THE RISE OF MOROCCO

According to the Austrian Institute for European and Security Studies (AIES), "Morocco's investments in its ports and rail infrastructure will help the country become a dominant maritime hub in the region and create a corridor between Europe and West Africa." Morocco is an increasingly attractive investment destination.

Through substantial expansion of its port capacity, Morocco surpassed Spain and could become the dominant maritime hub in the western Mediterranean. The following is relevant to this potential:

- Tangier's Med port is the busiest in Africa and the largest in terms of container capacity in the Mediterranean,
- Morocco plans a US\$1 billion port in the southern province of Dakhla, with another large port in Nador,
- These are in addition to specialized industrial ports dedicated to LNG and phosphates.

These ports, as well as Morocco's high-speed rail, the fastest in Africa, potentially provides global car manufacturers with a logistics hub from which to export their products across the globe.

Morocco's extension of high-speed rail to the Mauritanian border will transform Morocco into the pre-eminent connectivity node in the nexus of commercial routes connecting West Africa to Europe and the Middle East.

Thanks to this asset, Morocco has become a hotspot for global competition between French, Chinese, Russian and Gulf companies, which are keen to exploit investment opportunities in the country.

Morocco has been diversifying its trading and strategic partners. The following investments are on the cards or are now in operation:

- Large investments in the automotive sector by leading French carmakers
- Increasing activity by parts suppliers from China and the USA
- Interest from Russian companies in building a refinery in northern Morocco
- Chinese companies built Morocco's impressive suspended bridge, the longest in Africa, and now plan to build Tangier Tech city, an industrial high-tech hub in northern Morocco

Morocco is also prominent in the financial sector, offering Africa a finance hub in its Casablanca Finance City. This is now recognized as Africa's most important financial centre.²⁴

POINTS OF INTEREST

- Ethiopia is doing its best to reduce its dependence on Djibouti as the sole entrepôt for its imports and exports. In addition to the Port of Berbera, it cultivates ties with its neighbours to gain access to Port Sudan in Sudan, Port of Berbera in Somalia, and Lamu Port in Kenya. These links should significantly reduce its vulnerability. With the advent of peace between Ethiopia and Eritrea, Ethiopia has also reaching out to this country. It is clear that President Ahmed is not just creating new port access, but is also growing Ethiopia's influence amongst its neighbours, thereby positioning itself as a regional power.
- Covid-19 negatively impacted the state-owned enterprises of South Africa, such as Transnet, which operates the ports of South Africa. The country's neighbours, especially landlocked Zambia, Zimbabwe and Botswana, constantly attempt to reduce their dependence on South Africa. In addition to the actions described above, Botswana, Zimbabwe and Mozambique have in recent times agreed to develop a railway line to link Botswana and Zimbabwe with the port of Maputo in Mozambique. The current poor state of affairs at South African ports will provide greater stimulus to these diversification efforts.
- The various major railway line projects in East Africa seek to connect coastal cities and ports with their hinterlands. While Tanzania is developing the southern SGR, Kenya is developing the northern SGR. Ethiopia recently announced the development of a SGR to the north of Sudan, specifically, to the Port of Sudan. These railway lines will increase the efficiency and effectiveness of the logistics lines between the landlocked countries and coastal ports. This should decrease the costs and increase the level of inter-African trade, which is at a low of between 15% and 17%. It should also provide impetus to the implementation of the AfCFTA.
- Morocco goes from strength to strength. The country has grown and developed its ports, manufacturing sector, renewable energy sector and tourism sector in meaningful ways. One of its achievements is overtaking South Africa as the top producer of automobiles in Africa. Morocco reached out to Africa, and renewed its membership of the African Union. It also applied for and received membership of the Economic Community of West African States (ECOWAS). Recently, it concluded an agreement with Ethiopia to cooperate in the field of renewable energy. The country



has positioned itself as a gateway into Africa for European countries, and has succeeded in growing its economy. It is a country worth tracking for investment purposes.

5. Developments in Manufacturing

The manufacturing sector in Africa struggles to grow. Some commentators believe that the continent is experiencing premature de-industrialisation, and that more needs to be done to grow this sector. This report addresses some of the recent developments in this sector.

BOOSTING EGYPT'S ARMS MANUFACTURING INDUSTRY

At the end of February 2020, Egypt launched a three-year weapons manufacturing plan, with a total investment of US\$479 million, to achieve self-sufficiency and export Egyptian weapons abroad, including to African countries. This will further extend Egypt's influence on the continent.

Egypt's plan includes modernization and adding 84 production lines. This will ensure self-sufficiency in ammunition. For Egypt to properly implement the manufacture of its own weapons would take three years.

On 17 February 2020, Egyptian President al-Sisi inaugurated Military Factory 300. This facility will manufacture multiple small- and medium-calibre weapons, ammunition and missiles. President al-Sisi also inspected the manufacture of an Egyptian armoured vehicle, the Sinai 200, to meet the needs of the Egyptian army. It is fast and flexible and has a strong network that enables risk prevention during mission execution.

Egyptian arms showcased in the recent period include:

- An armoured vehicle, Temsah-3 (Arabic for crocodile) was presented to the industry as a vehicle to carry out combing operations and raids
- Drones were manufactured to enter the world market for the manufacture of drones
- Other weapons such as the vehicle ST-100/ST-500, the armoured vehicle Fahd-300 and the modified Egyptian 13 mm gun M-46w were introduced in December 2019
- Egypt also intends to produce the M1A1 Abrams tank.

A cooperation agreement for the supply of military equipment, weapons and ammunition to Senegal was recently finalised with Senegalese armed forces minister Sidiki Kaba, during his visit to Cairo.²⁵

The Egyptian Navy also recently launched its third locally built Gowind class corvette. This ship was constructed at the Alexandria Shipyard in cooperation with France's Naval Group. With the Gowind programme, Alexandria Shipyard reportedly upskilled from a civilian shipyard to one that meets complex military qualifications and is capable of high-quality results.²⁶

An additional economic benefit of the development of the Egyptian arms manufacturing industry is that it serves as an additional source of inbound revenue through exports to neighbouring countries.

USING BAMBOO AS RESOURCE FOR MANUFACTURING

In Rwanda, the government intends to build a factory to manufacture several products from bamboo, including toilet paper, toothbrushes, clothes brushes, furniture and even building materials.

Several potential investors are currently negotiating with the government to invest in the project. This entails building the factory, as well as planting seven species of bamboo suitable as inputs to the factory. The feasibility studies for the construction of the bamboo beneficiation plant are complete, as is its construction plan.

While there are already about 200 hectares of bamboo ready to be planted to help start up the plant, the bamboo required will be cultivated in the Eastern Province on an area of 2,119 hectares. The government intends to eventually increase bamboo production from 530 hectares in 2018 to 3,645 hectares in 2021 to supply the plant. The future factory has a demand for 5,000 hectares of bamboo plantations.

This project aligns to the Rwandan government's goal to develop bamboo as a viable alternative to deforestation. To support achievement of this goal, Rwanda concluded an agreement with the China Bamboo Aid Project in April 2019 to import and grow several varieties of bamboo in Rwanda.²⁷

BOOSTING 3D-PRINTING IN KENYA

The phenomenon of 3D-printing drives the growth of industries around the globe. The technology replaced the labour-intensive requirements of many physical tasks. The potentially viable products range from food, medical equipment, aircraft spare parts and smartphones to body organs, furniture and clothing. Kenya experienced notable growth in its infant 3D-printing industry, and relies on it to address industrial challenges and maintain a positive cash flow in turbulent times.

Kenyan experts express their opinion that 3D-printing could offer faster, low-cost and high quality local production of certain types of general equipment. These are currently imported at high cost from abroad, especially from developed countries. This is enabled by online access to well-designed prototypes at low cost, and the affordable cost of materials. This approach will help protect job opportunities in the country.

One local company currently works closely with doctors and anaesthetists in Kenya to test and approve 3D printed ventilator splitters that can be used in the fight against Covid-19. In addition to many uses in manufacturing, 3D designs are also used in the medical industry, where doctors create 3D designs before complex surgeries such as separating conjoined twins to know where to cut. This is true also for reconstructive surgery, such as the replacement of fractured or broken bones.

Kenya, despite being regarded as the technology powerhouse of Africa, is still well behind South Africa in the large-scale adoption of 3D-printing technology.²⁸

INVESTMENT POTENTIAL IN THE LEATHER INDUSTRY IN TANZANIA

The leather sector in Tanzania remains weak. Exports are mainly traditional products such as raw and wet-blue hides. The entire Tanzanian finished leather export production flows from a group of around 40 micro, small and medium-size enterprises, plus two larger enterprises.

This low degree of product diversification has been ascribed to weak technology adoption, limited access to finance and a number of supply-side constraints. Tanneries also face unproductive investments in equipment without a concomitant increase in production, mainly due to the inadequate quantity and quality of raw hides and skins. Tanneries operate well below their capacity.

The industry needs to increase the domestic supply of raw materials and increase its support to local entrepreneurs. The Tanzanian tanning industry produces mainly wet-blue leather, while crust and finished leather account for a smaller share of production. The industry currently produces no high-fashion finished leather. Only five small firms produce leather footwear in the country.

The sector employs about 1,000 people directly, while the leather footwear sector employs less than 200 workers. Micro/small enterprises employ less than 10 people.

This is the situation despite a growing domestic and international market for leather and leather products. The large markets such as the USA and China have a stable market, while the middle class is growing in emerging countries, adding numbers to the growth.

A number of other challenges are also inhibiting the productivity of the Tanzanian leather sector, one of them being weak customer service when dealing with the delivery requirements of buyers.

The expanding domestic and international markets indicate significant investment potential for this sector.²⁹

FOCUS ON MANUFACTURING IN KENYA

Six months after governments around the world locked down their economies to combat the Covid-19 pandemic, they are now researching ways and means to alleviate the revenue and job losses and supply chain disruptions that drive the unusual “twin supply-demand shock” facing their economies.

According to the World Bank, most of Africa's economies will fall into recession, although Kenya's economic growth may drop to 1.5%. However, it is forecast to jump back to 5.2% in 2021. The sectors worst hit by Covid-19 include manufacturing, tourism, aviation, exports and agriculture.

The manufacturing sector is one of the pillars of President Kenyatta's Big Four Agenda and is at the centre of the country's industrialisation effort. The sector plays a significant role in creating jobs, increasing foreign direct investment, promoting exports and improving the ease of doing business.

However, the sector has not been performing well. In 2019, its contribution to GDP was only 7.6% and its real value added grew by 3.2%, compared to 4.3% in 2018. This clearly represents a wake-up call to the sector. To deal with this, a number of factors require attention:

- The sector must identify existing skills gaps and deal with them. Most of the unemployed people lack specialised skills demanded by a modern manufacturing job
- Building a manufacturing talent pipeline requires setting up sector-specific manufacturing institutes aligned to a skills certification system
- A business continuity Emergency Response Fund, amounting to at least 50% of the amount advanced to manufacturers by banks in the previous financial year, is needed. The ERF will assist in reducing the cost of doing business associated with expensive credit facilities, reduce the cost of new investments and create more jobs.
- To boost innovation as a focus area, new technologies, materials, products and processes to drive the sector to a double-digit growth rate, must be adopted.
- To reduce its vulnerability to foreign-sourced raw materials, home-grown solutions must be considered, and the sector's domestic supply chain capacity must be expanded.³⁰

POINTS OF INTEREST

- Egypt's focus on its armaments industry will provide it with several benefits: technology development, meaningful job creation, revenue generation, and import substitution. These could give the country's economic growth a meaningful boost. A complementary benefit of technology development in the arms industry, if dealt with from a strategic perspective, is the potential application of military technology to add value in the civilian sector.
- Kenya's manufacturing sector has seen its contribution to GDP drop from over 12% a few years ago to 7.6% in 2019. This was despite the adoption of the Big Four Agenda of President Kenyatta, which wanted to increase this figure to 15% by 2022. This was deemed a very ambitious figure, even in the best of times. Covid-19 has definitely put paid to this ambitious objective. This phenomenon will not be limited to Kenya, but all African countries will see this sector's contribution to GDP take a nosedive.
- Inward-oriented strategy to develop manufacturing sectors has become a crucial imperative to create jobs and stimulate economic growth. Tanzania is not the only East African country where much more needs to be done to grow and develop the leather industry. Kenya has also been importing millions of pairs of shoes instead of manufacturing them locally.
- While some countries in Africa demonstrate competence in digital technologies such as 3D-printing, the continent is still far from tapping new technology in a meaningful manner. To move forward, Africa must celebrate its early small successes and actively drive the adoption of this technology. We already see students building 3D-printers from e-waste in Togo and other countries, including Ethiopia, Ghana, Nigeria, Tanzania, and obviously South Africa.

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