



# Africa Digest

Trends and Issues in Macro Environment

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## **Article 1: Agriculture in Africa**

Agricultural products provide food, feed, and fuel. Food demand is determined by population, income growth, and dietary trends. Demand for animal feed is driven by consumption of livestock products, such as meat, eggs and milk, and by evolving livestock production technology. According to the OECD, global agricultural and fish production is projected to grow by around 20% over the coming decade, with strong growth in Sub-Saharan Africa, South and East Asia, the Middle East and North Africa. However, production growth in the developed world is expected to fall.

Sub-Saharan Africa's share of global agricultural output is relatively low, despite having over 13% of the world population and close to 20% of global agricultural land. Agricultural production is constrained by challenging ecologies, limited access to and utilisation of technology, and the fact that economic growth in many cases is at best only marginally ahead of population increases. The region's key commodity is 'other coarse grains' (including millet, sorghum and teff), of which Sub-Saharan Africa today accounts for 14% of global production.

The OECD predicts robust growth in the region's agricultural production. Crop production will expand by 30%, followed by substantial growth in meat, dairy and fish production. This output growth will be accompanied by cropland expansions for maize, soybeans, and sugarcane and generally improved productivity based on increasing use of fertiliser, pesticides, improved seeds, and other technologies such as mechanisation and irrigation. Even with strong growth, the region's food security will continue to depend on global markets as domestic production capacity will be insufficient to meet the region's growing consumption.<sup>1</sup>

Growth in production will be achieved primarily through intensification and efficiency gains, coupled with upgrades to the production base such as herd expansion and conversion of pasture to cropland. Net exports from land-rich countries and regions - such as the Americas - will tend to increase. Many countries with high population densities and/or high population growth – in the Middle East and North Africa (MENA), Sub-Saharan Africa and parts of Asia - will increase their net imports. The OECD sees the main threat to food security in the African and Middle Eastern regions as a result of resource scarcity combined with political instability.

### **SOUTHERN AFRICA**

Zimbabwe plans to export citrus products to China as its government intensifies efforts to pursue low hanging fruits while waiting for larger projects to mature. The two governments agreed to explore other areas of cooperation with immediate benefits while waiting for bigger projects with a long time for fruition to take off. The citrus project was one such an immediate project that China and Zimbabwe are working on. Currently, Zimbabwe is exporting about 30,000 tons of citrus fruits, mainly to the EU and the Middle East markets. According to the Citrus Export Growers Association, the citrus growth potential was very high as most trees were still young, with growth expected to be around 5%.<sup>2</sup>

Zimbabwe's horticulture sector is set to contribute 10% of the country's total export earnings in the near future, depending on an anticipated growth in demand from new markets globally. Horticulture exports in 2018 amounted to more than US\$112 million, in comparison to US\$50.9 million in 2017. This sharp increase in exports is partly ascribed to the supply of produce Zimbabwe was previously not exporting.<sup>3</sup> Given its potential for job creation, poverty alleviation and foreign currency generation along the value chain, the horticulture sector is seen as strategic to Zimbabwe's economy and has the potential to turn around the country's ailing economy. It is believed the sector can eventually contribute 10% (US\$320 million) of the country's total exports (US\$3.2 billion).<sup>4</sup>

Due to the short-term nature of its products, such as passion fruit, fine beans, peas, blueberries, carrots, baby corn, baby marrow, courgettes, chillies and broccoli, horticulture is viewed as a "low hanging fruit." In addition, there are some so-called "super-foods" that are increasingly becoming popular in developed markets, such as avocados, moringa, turmeric, berries and broccoli, which farmers could exploit.<sup>5</sup>



## **WEST AFRICA**

Nestlé Central and West Africa (CWA) and the Alliance for a Green Revolution in Africa (AGRA) recently launched a new joint initiative, the Youth Agripreneurship Development Program, to stimulate the sustainable development of farmers and opportunities for the youth in farming and agri-food businesses in Ghana, Côte d'Ivoire and Nigeria. The programme, which seeks to promote agricultural entrepreneurship for the youth in West Africa, will benefit a total of 2,000 young agripreneurs and smallholder farmers. The training will involve good agricultural practices and entrepreneurial skills to produce and supply high quality agricultural products. The program seeks to transform agriculture into a job creating sector to attract young people.

In Ghana, the program will focus on the maize value chain and increase the incomes of the targeted youth agripreneurs and farmers. Project interventions include input and output aggregation; training in improved production and post-harvest management practices accompanied by services such as mechanization services and crop insurance.

Nestlé will provide technical support to improve grain quality and strengthen services offered to farmers in upgrading the maize supply chain. It will also provide a reliable premium market offtake of the maize by Sahel Grains. AGRA will leverage its learnings across Africa to support the design of activities and the development of technical packages of best practices.<sup>6</sup>

In Nigeria, a group of young professionals, operating under the banner of "Youth Advocates Nigeria," launched an aggressive move to revolutionise agriculture by removing the stigma of poverty associated with it in Nigeria. The group recently hosted a seminar on how to collaborate, synergize and harness the various available resources in the agricultural sector to become self-reliant, removing the youth from unemployment, social malaise and poverty. Their mission is "to connect, equip, empower the next generation of agricultural change makers to take collaborative and innovative action towards feeding the nation and the world." The group see themselves as sophisticated and changing the face of agric tech through improved agri-business practices.<sup>7</sup>

Nigeria has the largest population of young people in which agriculture can accommodate over 70% of them in employment opportunities. As the average age of Nigeria's farmers is 65, it is imperative to groom a generation of young people that are passionate about agriculture and have agri-businesses that work. YAN's objective is to ensure they have youths that own sustainable agro-businesses.

Still in Nigeria, the global demand for coconuts and derivatives increased by over 500% in the last five years, indicating a huge economic potential. However, Nigerian farmers have not yet taken advantage of this massive opportunity. Currently, there is an underproduction of coconuts, and most farmers are not planting coconuts because they have not realized the economic implications of doing so. This is despite the fact that Lagos has become the hub for coconut trading in Africa, with Ghana, Togo and other countries being the major players.

All coconut oil used in sugar refineries in Nigeria is imported. Industrialization of the crop has been constrained by the capital-intensity of industrial coconut processing and low production resulting from old plantations and varieties. Challenges in the sector included the high cost of production, the absence of basic infrastructure and the grossly inadequate and costly power supply. Given this situation, without agricultural subsidies, farmers would not be able to produce profitably in Nigeria.<sup>8</sup>

## **THE HORN OF AFRICA**

Africa's top coffee producer, Ethiopia, is expected to export a record 4 million 60kg bags of coffee in 2019/20. This is due to both an improvement in yields and an increase in the areas dedicated to coffee farming production. Coffee production is expected to rise to 7.35 million tonnes in 2019/20, a 1.4% increase from the 2018/19 season. Exports account for just over half of overall production, and are forecast to grow 0.5% in 2019/20 from 2018/19 to reach 4 million bags. Coffee is Ethiopia's most

important export. Production continues to face the broader threat of farmers switching to other crops. Many coffee producers, mostly from the eastern part of Ethiopia, are replacing their coffee bushes with khat, a plant with stimulant properties. Domestic demand in Africa's top coffee consumer is expected to remain robust.<sup>9</sup>

## EAST AFRICA

In Tanzania the government's decision to control the haphazard importation of dairy products has led to the establishment of 15 new dairy industries, which have a total capacity of processing about 90,400 litres of milk a day. The new dairy industries will contribute significantly to the creation of jobs in the country. The control measures were in response to the haphazard importation of dairy products that suffocated the local market. The move provided local producers of dairy products with relief after they were assured of a reliable market for their products.<sup>10</sup>

## POINTS OF INTEREST

Certain issues and trends emerge from this review:

- Agriculture in Africa has immense potential. The continent has approximately 65% of the arable land left in the world, yet it imports food to the tune of between US\$35 billion and US\$41 billion.
- Zimbabwe has an economy that is struggling in a major way. It is now focusing on agriculture exports to stimulate its economy, and has China as its partner in this venture. It needs the quick wins associated with its horticulture exports to provide breathing space for its economy and its population who have been living under less than ideal conditions.
- The lack of a significant youth participation in agriculture is being addressed in various countries on the continent. Both the initiatives in Ghana and Nigeria will hopefully ramp up youth participation in those countries. Private sector participation has become an imperative and no longer a "nice to have." These countries are not the only addressing the issue of a lack of youth involvement in agriculture. Others like Rwanda, Tanzania, Ethiopia, etc. are all investigating ways of dealing with this significant challenge.
- Value addition and import substitution has become important policy drivers to help stimulate the economies of African countries, as can be seen by the examples above, i.e. coconuts in Nigeria and dairy in Tanzania.
- The developments in the coffee industry in Ethiopia are interesting to note. In spite of a projected robust demand and growth in exports, farmers are substituting coffee with khat. The scale of this development needs to be determined, as it could affect the production of coffee.
- Khat, a psychotropic leaf, is a legal drug in Ethiopia that is chewed by many for hours and produces effects similar, but less potent than amphetamines. Whether khat has the potential to negatively affect coffee in a significant way remains to be seen.
- Given the size of its markets and growing consumer demand, Asia (especially China) presents an attractive opportunity for export of surplus agricultural good from Africa.

## Article 2: The Battle against Plastic Pollution in Africa

Plastic pollution is caused by the accumulation of plastic waste in the environment. It can be categorized in primary plastics, such as discarded cigarette butts, bottle caps, and carrying bags; or secondary plastics resulting from degradation of the primary types. Since its commercial development in the 1950s, the global production of plastic has grown exponentially. Its success rests on its remarkable qualities: easy to shape and cheap to produce, it is an ideal packaging material. Unfortunately, most plastics degrade very slowly.

About 80% of marine litter originates on land, and each year, 8 million metric tons of plastic ends up in our oceans. This pollution comes mainly from household waste that is poorly recycled or abandoned. Such waste is carried by the winds, pushed by the rains into sewers, streams, or rivers, to end its journey in our oceans. According to a report presented by the Ellen MacArthur Foundation, “the ocean is expected to contain one tonne of plastic for every three tonnes of fish by 2025, and by 2050, more plastics by weight than fish.” Scientists also worry that countless tiny fragments drift to the bottom of the oceans, carpeting the sea bed. The potential environmental and health impacts of this form of plastics pollution are unknown.

The battle against plastic pollution is not by any means new. However, the issue is becoming more urgent. In 2018, the theme for World Environment Day celebrations was “Beat Plastic Pollution.” The impact of plastic pollution on the marine environment, human health and even climate change is deemed to be devastating. According to the World Bank, Africa’s urban population in 2010 produced about 169,000 tons of waste per day, and this is projected to surpass 400,000 tons per day by 2025, much of it plastics. With its rapidly growing population, and a high rate of urbanisation, the actual figure may be much higher.<sup>11</sup>

Governments in Africa have a major role to play in beating plastic pollution and the negative effects thereof in both the cities and rural areas of the continent. Many countries, such as Côte d'Ivoire, Cameroon, Kenya, Mauritania, Morocco, Tunisia, Rwanda, Tanzania, Uganda, South Africa and Tanzania, adopted laws related to the ban on the use, manufacture and importation of single-use plastic bags. Some have also introduced a levy on plastic bags.<sup>12</sup>

In Africa’s private sectors, smart ecopreneurs and social impact investors have identified opportunities in the handling of plastic waste, and are turning these opportunities into viable value-added businesses, while simultaneously addressing a major environmental challenge.

Coca Cola, along with its bottling partners and other industry partners across Southern & East Africa, has undertaken to invest more than US\$38 million to stimulate plastic recycling industries and educate people about recycling. This is part of Coca-Cola’s commitment to support the actions against plastic pollution and to accelerate the implementation of its global World Without Waste vision, which aims to collect and recycle the equivalent of 100% of the packaging it sells by 2030.<sup>13</sup>

### CENTRAL AFRICA

In Cameroon, environmentally conscious entrepreneurs created Red-Plast, which leads the way to recycle plastic in Douala, the capital. They strive to turn waste into something useful while cleaning up the environment. Teenagers gather plastic bottles clogging up drainage canals and gutters, while others go door to door asking residents for their plastic rubbish. It is all loaded into giant tarpaulin sacks that are weighed at the end of the day and then sent to be remade into shoes, chairs and floor tiles, among other products. In this way, Red-Plast collects between 100 to 150 tonnes of plastic waste per year. Every quarter they organise a month-long rubbish collection campaign, creating a paying job for people ranging from teenagers eager for work experience to street children needing fast cash. In Kribi, boats are built from plastic bottles for fishing and eco-tourism.<sup>14</sup>

In Rwanda, regulators banned the use of single-use plastic bags as far back as 2008. The law prohibits all manufacturing, use, importing and selling of all polyethylene bags in the country. The authorities encouraged companies that used to manufacture plastic bags to start recycling them instead by providing tax incentives. The policy also created a market for environmentally friendly bags, which were virtually non-existent in the country before the ban.

## **EAST AFRICA**

In Kenya, Alternative Energy Systems Limited (AESL) developed a business to convert waste plastic into useable forms of energy. They use a technology that has been tried and tested in other regions, i.e. pyrolysis. They claim that they will produce a threefold positive social impact, i.e. reducing plastic pollution, generating employment and producing alternative sources of fuel. In order to ensure a sufficient supply of plastic waste, they pay waste collectors for their plastic waste. AESL's plant can process a wide range of waste materials, including municipal solid waste sorted out plastic, packaging waste plastic, post-consumer plastic waste, paper recycling mill plastic waste, crude oil sludge and mixed plastic. Their synthetic oil is a substitute for various industrial diesel oils and is used in a broad range of industrial applications, including stationary diesel engines, generation of heat energy (furnaces, boilers) and power generation.<sup>15</sup>

Still in Kenya, corporate giants such as Coca-Cola and Unilever are investing in a plastic recycling initiative, which they hope will provide a model for other developing countries. Many multinationals are scrambling to support recycling and are keen to re-use valuable polyethylene terephthalate (PET) plastic. However, developing nations such as Kenya do not have organized waste collection. Dysfunctional local governments in Kenya cannot organize recycling points, and the necessary funds are a fraction of what's needed. Kenya imposed one of the world's toughest bans on plastic bags in 2017. Now, disappointed that authorities have not even set up plastic collection bins, officials are considering a plastic bottle ban as well.<sup>16</sup>

Tanzania has been the latest country to adopt a total ban on plastic carrier bags, which took effect on 1 June 2019. Its government has recently announced that three companies have expressed interest in buying the remaining stock of plastic bags and use them as raw materials to make school desks and water pipes. Traders who have stocks of plastic bags, have the opportunity to approach these companies and sell off their stockpile of plastic bags.

## **WEST AFRICA**

In Lagos, Nigeria, environmentally minded entrepreneurs created Wecyclers, a for-profit social enterprise that promotes environmental sustainability, socio-economic development, and community health by providing convenient recycling services. They provide households with an opportunity to generate value from their waste and provide a reliable supply of raw material to the local recycling industry. Their solution is based on a rewards-for-recycling platform that incentivizes people in low-income communities to capture value from recyclable waste. They use a fleet of relatively cheap, and locally assembled, cargo bikes called "wecycles" that the collectors use to pick up recyclable waste from households and deliver the materials to their collection, sorting, and packaging hubs located around Lagos. The subscribers are rewarded with points per kilogram of recycled waste, which they can exchange for essential goods such as food and household items. More recently, Wecycle incorporated motorised tricycles, vans and trucks to expand their reach across the city.

In Ghana, a good proportion of the waste material is made up of plastic, of which only 10% gets recycled. Entrepreneur Nelson Boateng came up with a production process that mixes sand with shredded plastic and red oxide to make one-square foot pavement blocks. His process uses all kinds of plastics except PVC pipes. At US\$1 each, his company's blocks are cheaper than the average price of US\$1.50 for a concrete block. His plastic-infused blocks have been used to pave some homes and to rebuild a pitted stretch of road in Ashaiman. Nelplast Ghana employs 60 people directly and 500 others indirectly. Scaling up has been a challenge as he does not have the requisite equipment.

Although Nelplast was accepted into the Ghanaian government's "One-District, One-Factory" flagship industrialization plan, a promise by the minister of environment to help Boateng get more machines to increase capacity to a competitive 15,000 blocks a day, has not yet materialized.<sup>17</sup>

## **SOUTHERN AFRICA**

Further afield in South Africa, the Rethaka Foundation transforms waste plastic into school bags fitted with a portable solar-powered light to help children from disadvantaged backgrounds do their homework after dark.<sup>18</sup>

In the Eastern Cape province of South Africa, a road will soon be upgraded using plastic pellets. Non-recyclable plastic waste will be processed into pellets and be used to replace a large component of the bitumen in a conventional asphalt mix. This will produce a stronger and more durable road surface. Water, the main cause of potholes, does not penetrate the "plastic road" as easily as with traditional asphalt mixes. The plastic road is apparently also more heat resistant. According to the building company, the plastic road surface is cheaper and easier to maintain. Each km of road laid in this manner uses up the equivalent weight of 684,000 bottles or 1.8 million single-use plastic bags.<sup>19</sup>

Liberty Two Degrees (L2D), which owns some of South Africa's top shopping malls, announced it would implement a "no plastic shopping bag" policy at its malls by 1 January 2020. Some 1,808 tenant shops will have to drop plastic bags by the end of the year. According to its CEO, it is no longer a case of best practice to eradicate the use of plastic shopping bags, but rather a commitment of paramount importance and necessity. It has already introduced recycling drop-off booths at some of their malls and this will be expanded to all its malls.<sup>20</sup>

While the South African government has not made any firm commitments on the banning of plastics, at the end of February 2019, the Department of Environmental Affairs announced that it was in talks to phase out or completely ban plastic products including straws and microbeads in the country.

## **POINTS OF INTEREST**

From the reports above, the following trends are clear:

- A growing number of African governments are adopting legislation to cut the use of single-use plastic products.
- Private sector companies are entering the battle against plastic pollution on the continent.
- NGO's are joining the struggle against this pollution.
- Local communities are incentivised to recycle their plastic waste.
- Jobs are being created in the process.
- Plastic waste is being put to good use, producing products and services such as energy, roads, school bags, school desks, plastic pipes, etc.
- Given a population that will double from 1.2 billion to 2.4 billion between now and 2050, and again grow to more than 4 billion by 2100, Africa must do its utmost to deal with this phenomenon. With the level of urbanisation growing from 40% currently to more than 50% by 2030, the pressure on pollution will increase exponentially. Africa has no choice in this matter.



### **Article 3: Manufacturing in Africa**

Outside of Ethiopia and South Africa, the manufacturing sector in Africa is punching well below its weight. Although many governments on the continent have adopted policies to rectify this, manufacturing still contributes comparatively little to GDP in the rest of Africa.

In certain aspects the situation is improving. For example, duty-free access to the US and the EU is offsetting additional costs incurred by manufacturers. And according to the Chief Marketing Officer of SCM Garments, in the long-term, efficiencies will increase, infrastructure will be developed and investment will be worthy.<sup>21</sup> Mahindra & Mahindra, the large Indian auto manufacturer, plans to open assembly plants in Kenya and Sudan, in response to the increasing prevalence of trade barriers. The company is also planning to increase the local content of units produced in its Durban unit (South Africa) to 40% within 18 months, then to export these products to other African markets, thus bypassing or minimizing customs tariffs.<sup>22</sup>

#### **THE HORN OF AFRICA**

The cotton and garments industry in Ethiopia is the second most important growth sector for the Ethiopian government. The United Nations Industrial Development Organization (UNIDO) has closely collaborated with private and public partners for the last 30 years to develop the Ethiopian leather industry. Recently, the partners inaugurated a common production facility for footwear at the Ethio-International Footwear Cluster Cooperative Society (EIFCCOS). This initiative is considered as an important step to scale up EIFCCOS, as it will increase the cluster's productivity and efficiency, in the process creating up to 150 new skilled employment opportunities for manufacturing quality leather shoes in the first year of operations.<sup>23</sup>

In recent years, a number of global brands (from the USA and the EU) have either manufactured their textile products in Ethiopia, or sourced from the country. It was recently reported that Solidaridad, Cotton made in Africa, the Danish Ethical Trading Initiative and MVO Nederland have initiated a project to promote a sustainable cotton and garment value chain from Ethiopian cotton to European consumers. Sourcing garments from Ethiopia will provide an opportunity to develop the sector in a sustainable way. The project has the potential to benefit 2,000 cotton farmers, 2,200 rural workers and 17,000 garment workers. It will also generate business growth, improve working conditions, promote labour and environmental standards and responsible purchasing practices in the cotton and textiles industry in Ethiopia and Europe by 2021. The partners will also provide training and technical support to cotton farmers, commercial farms and ginneries to comply with sustainable practices and standards.<sup>24</sup>

Still in Ethiopia, a group from China, the Huajian Group, has two shoe manufacturing plants that produce five million pairs annually and employ more than 7,000 people. It recently signed an agreement with the Ethiopian authorities for the management of Jimma industrial park. Within the framework of that agreement, Huajian will invest US\$100 million in the construction of shoe manufacturing and coffee processing plants. It will also help to attract other Chinese groups to the Jimma park.

Golden Africa, a Malaysian company, is investing in edible oil manufacturing in Ethiopia, creating jobs for 1,500 people in two years' time. According to the MD of Golden Africa, factors driving the decision include the peaceful situation in Ethiopia, a good supply of labour, and the relative close proximity to the Djibouti harbour, all of which makes Ethiopia a good place for investors.

Golden Africa has the requisite sophisticated technology, the financial capacity and a well-organized logistics supply chain to implement the project. As it is, 90% of the edible oil in Ethiopia is imported from foreign countries. Even though Ethiopia has the potential to grow oilseeds, the country imports 350 million metric tons of subsidised palm oil annually, mainly due to challenges in the oil value chain. As the living standards of people improve, the consumption of edible oil and choice of preference should increase, including in the rural areas. The Ethiopian government has prioritised investors who invest in

the manufacturing sector, and has provided strong tariff protection for those who invest in import substitution products.<sup>25</sup>

KPR Export Plc and SCM Garments, both from India, have generated over 1,500 jobs in Ethiopia. The Makelle Industrial park in the Tigray region, Ethiopia, with its plug-and-play work sheds, is attracting Indian textile companies. The prime reason why Indian textile companies, especially garment manufacturing factories, are expanding to Africa, is the duty-free access to the U.S. and the EU markets. Apart from Ethiopia, Kenya is attracting investments from garment manufacturers, while Tanzania and Uganda are also opening up. It is not only Indian factories, but also textile companies from China, Sri Lanka, and Bangladesh that are investing in these countries.

Indian exporters using Africa as a base from where to ship to the USA, save between 16% and 32% on import tariffs that are avoided. Given that the industry works on thin margins in India, this is a substantial advantage even if the buyer does not pass on the entire benefit. The African market per se is also growing. By setting up capacities in Africa, Indian companies can tap the potential in both these growing markets in the coming years.

Furthermore, with the Indian economy growing, costs are on the rise. Indian textile and garment manufacturers need to be competitive in the international market. Ethiopia is therefore preferred to Kenya as the latter's labour costs are high. The Ethiopian government also developed an attractive investment policy. However, there are challenges facing companies in Ethiopia. It is a land-locked country; hence, transporting goods to and from the ports in neighbouring countries means longer time and higher cost. Infrastructure is also an issue.

Recently in Ethiopia, Horizon Plantation Ethiopia Plc, a subsidiary of the MIDROC Investment Group, initiated the construction of a bakery and flour factory in Addis Ababa. The factory, the first of its kind in the country, will have the capacity to produce 80,000 loaves of bread per hour, and will take 4-6 months to construct.<sup>26</sup>

## **EAST AFRICA**

In Rwanda, Mara Corporation will be manufacturing mobile phones that will be available in Rwanda and the rest of Africa within two months. The construction and setting up of the factory at the Special Economic Zone in Gasabo District are in the final stages. The factory will employ at least 200 people, 16% of whom will be women, which is in line with the Sustainable Development Goals. This project is expected to enhance access to digital services and deepen internet penetration in Rwanda. The various models will retail between US\$100 and US\$200. Mara Corporation also has a smartphone factory in South Africa where it has invested US\$100 million.<sup>27</sup>

The Uganda Manufacturers' Association (UMA) requested the Ugandan government to focus on manufacturing to spur economic development. In addition, they requested that the National Development Plan (NDP) focus on reforming tax administration as the current tax regime was antagonistic and did not support businesses growth. The UMA also stated that government needed to capitalise the Uganda Development Bank (UDB) and fund the Uganda Development Corporation to ramp up enterprise growth and provide cheaper credit. Ugandan businesses are struggling to find funding amid rising commercial bank interest rates at as much as, or more than 18%.

In addition, the UMA demanded that government legislate local content that must be adhered to by government agencies and contractors. These steps, according to the UMA, would brighten the future of manufacturing in Uganda. It is interesting to note only 10% of SME's were in the manufacturing sector, with 52% in the services sector, 33% in commerce and trade and the rest in other sectors.<sup>28</sup>

## **SOUTHERN AFRICA**

A company from India, Agrawal, is planning to build a 100MW capacity solar panel manufacturing facility in Zambia at a cost of US\$5 million. The project would result in job creation and skills transfer to the Zambian population, especially the youth. Agrawal has special skills in executing OFF-grid and ON-grid projects for the open market. The advantage of Zambia is that it has 8 months of continuous sunshine, a progressive banking system and a strong legal framework that supports private sector investment.<sup>29</sup>

## **WEST AFRICA**

Chinese firms present at this year's China Homelife Fair have urged Nigerians to invest in machineries to enhance manufacturing in Nigeria. Chinese manufacturers are seeking to expand their footprint to Nigeria and the West African region. There has been more interest in Chinese firms in promoting local manufacturing and some manufacturers are looking at backwardly integrating production of certain electronic items in the country. Amongst others, a company from Shenzhen will be offering some Semi-Knocked Down (SKD) aspect of television production in Nigeria. On the purpose of the fair, the Chinese manufacturers were in Nigeria to deepen their investment, negotiate prices and determine the best market penetration strategy. The Chinese manufacturers were advised to start some local production as the days of importation were over.<sup>30</sup>

## **POINTS OF INTEREST**

Interesting patterns emerging in the sector include:

- Many countries are moving aggressively to stimulate their manufacturing sectors.
- Africa, considered as a whole, presents a huge market. With the move towards a AfCFTA, it is in the best interest of the foreign companies to have a physical presence in Africa. Given that African governments are looking to stimulate their local manufacturing sectors, imports are often actively discouraged. Local content requirements and other policy measures provide impetus to an "Africanisation" drive.
- Ethiopia has moved to the forefront of Africa's recent industrialisation drive and is attracting companies based in many foreign countries.
- These companies benefit from lower factor costs than in their home country, although some companies produce in Africa mainly to escape tariffs imposed by the USA.
- Ethiopia's textile and leather industries are attracting support, as is the edible oils industry. This has the benefit of creating jobs, stimulating exports and tapping into the advantages of import substitution.
- The manufacturing of high tech products such as automobiles, smart phones and solar panels clearly indicate the increasing sophistication of African manufacturing.
- As expected, Chinese companies are entering the sector. India's footprint on the continent is increasingly significant.

## **Article 4: The Mining Industry in Africa**

Africa has a tremendous wealth of mineral resources: ranging from minerals to precious metals and gemstones. Exploration reveals new reserves on a regular basis. The challenge for African countries is to develop a policy environment in which value is added to the population. Ongoing issues are relationships among mining companies, government and investors, the thorny topic of environmental impact, and labour welfare

Rare earth minerals are in the news. Africa has millions of tons of rare earth reserves, valued at US\$135 billion. One question being asked is whether Africa could be an alternative to China for the USA, given the current trade spat between these two economic powerhouses. Kenya, Burundi, Gabon, Madagascar, South Africa, Malawi and Tanzania might compete with China, although the latter has up to 47% of the world's reserves in rare earths. Projects in these African countries need development financing, in the hundreds of millions of dollars for mining and processing mineral resources. The economic benefits of rare earths exploitation for Africa include employment, tax revenues, royalty payments and export revenues.<sup>31</sup>

### **EAST AFRICA**

Although Rwanda is relatively resource-poor, over the years it has discovered gold, tantalum, tin, gold and tungsten deposits. In Tanzania, Tanzanian Gold Corp has found significant gold reserves as it aims to expand the resource at its flagship Buckreef joint venture. The prefeasibility study outlined an initial capex of US\$76.5 million for a 16-year operation from four open pits, with an after-tax NPV (5% discount) of US\$130.96 million and an IRR of 74%. Tanzanian Gold has the right to earn 55% of the previously-mined project from the Tanzanian State Mining Company, which holds the remainder.<sup>32</sup>

The Tanzanian government is at an advanced stage of establishing government-controlled mineral trading hubs to curb tax evasion and illegal exports of the country's mineral wealth. The establishment of mineral markets and trading centres will enable miners to conduct business with banks, retailers, brokers, jewellers and other traders in a well-regulated environment. They will also help to ensure that businesses pay the required levies to the government.

Tanzania has recently announced it will start cancelling inactive mining exploration licences and distribute them to artisanal miners who are able to immediately commence activity in the area. The government has also adopted regulations to reform the mining sector to maximise its value and ensure citizens have a bigger slice of the country's natural resource wealth. Artisanal miners were also provided tax relief on their sales of precious minerals and gemstones to boost their revenues from the sector. There was discontent that small-scale miners would discover and open up mineral-rich areas only to be displaced by wealthy and well-connected individuals who secure the licences over the areas and speculate with them.

### **MINING SPAT IN TANZANIA**

Still in Tanzania, Barrick Gold, the parent company of Acacia Mining, has now for two years attempted to end the dispute between Acacia and the Tanzanian government. It recently offered shares in itself to shareholders in Acacia Mining. Once it owns Acacia Mining outright, Barrick would be able to conclude an agreement with the Tanzanian government, which in turn has said it will not deal with Acacia's executive. The Tanzanian government stated it would no longer allow Acacia Mining to manage its mines in Tanzania and would only work with Barrick Gold to resolve the challenge that has now dragged along for two years.

According to Fidelity International, which owns 3.2% of Acacia, Barrick's offer is 50% too low, with Barrick responding that the offer was fair given the additional risk the company would be taking on. Subsequently, UK hedge fund manager, Odey Asset Management (which owns 1.62% of Acacia) approached Acacia to buy the rights it holds over any future investment by Barrick in Africa. While it



was uncertain whether Acacia would be able to sell such rights, the action could force Barrick to improve its offer for Acacia Mining. In theory, Odey would be able to sell the rights to a competitor of Barrick.<sup>33</sup>

## **WEST AFRICA**

Despite massive mineral wealth, the Nigerian mining industry is underdeveloped, accounting for only 0.3% of the country's GDP – largely due to exploitation of its oil resources. The Ivory Coast has extensive gold and copper deposits, etc.

In Cote d'Ivoire, IronRidge Resources recently completed their corporate and technical due diligence over the Zaranou Gold Project. IronRidge has secured access rights to the highly prospective and granted Zaranou Gold license. They have also held introductory meetings with government officials and community leaders within the license area, allowing field work to commence.<sup>34</sup>

Also in Cote d'Ivoire, Perseus Mining is looking at developing its third gold mine. Yaouré will deliver large gold volumes in excess of 200 000 ozpa. With the potential to transition easily from open pit to underground, the mine will also hold the company's flagship operation status. The project development will require US\$265 million through to production. Three international banks, namely Macquarie Bank from Australia, Nedbank (Corporate and Investment Bank) from South Africa and *Société Générale* of France have syndicated to provide Perseus with a revolving cash advance facility of US\$150 million to partially fund the development of Yaouré. The remaining cash will be sourced through debt, US\$81 million of existing cash and bullion, together with future cash inflows from operations and proceeds from the exercise or underwriting of Perseus warrants.

Based on a gold price of US\$1,250/oz, Yaouré will generate a 27% real rate of return and a short 32-month payback period. It is anticipated that the project will require around 1,200 people during the construction phase and between 300 and 400 people, excluding contractors, in full time employment to operate the mine thereafter.<sup>35</sup>

Ghana is forecast to consolidate its position as Africa's largest gold producer, overtaking South Africa. The proposed re-start of the Obuasi gold mine owned by AngloGold Ashanti, is expected to add 350,000 to 450,000 ounces a year to Ghana's total output, which at 4.8 million ounces in 2018 eclipsed South Africa's output of 4.2 million oz for the first time. In addition to AngloGold Ashanti, Gold Fields is also shifting its attention to Ghana where mining is easier technically and from a regulatory point of view. According to Gold Fields, which has operated in Ghana for 26 years, the authorities in Ghana are good at creating a business-enhancing policy environment. Ghana cut corporate taxes in 2016 and in 2017 and changed Gold Fields' mineral royalty to a sliding scale based on the gold price, from a 5% flat rate.<sup>36</sup>

## **CENTRAL AFRICA**

In Cameroon, Oriole Resources has also found positive soil results at the Wapouzé gold project. Results identified two main zones of interest, namely the Bataol Zone (8 km by 5 km) in the north-east of the licence and the Bizdar Zone (2 km by 4 km) in the south-east of the licence.<sup>37</sup> Oriole has the option to earn a 90% interest in the project by spending US\$3.12 million.<sup>38</sup>

## **SOUTHERN AFRICA**

Countries in the Southern Africa region have widely varying mining profiles. Malawi endeavours to exploit its sand, bauxite, phosphate, uranium and rare earth deposits, while in Angola, diamonds are responsible for more than 98% of the government's earnings. South Africa is rich in a wide variety of minerals, including diamonds, gold, coal, platinum, palladium, chromium, uranium, manganese, ilmenite, zirconium, vanadium, rutile and vermiculite.

In Angola, Lucapa Diamond Company announced it would spend US\$3.3 million on a new exploration phase at its Lulo mine over the next 12 months. In 2018, a drilling campaign confirmed the existence of

70 kimberlites within the Lulo alluvial diamond field, which increased the total known kimberlites within the concession to more than 100 kimberlites.<sup>39</sup>

In Namibia, the mines and energy minister stated he had no objection to Rio Tinto's sale of its uranium mine stake to China provided it respects the African nation's laws. Rio Tinto is selling its 69% stake in Rossing Uranium to China for up to US\$106.5 million. China already owns stakes in Namibian uranium production, which, along with diamonds, is the mainstay of the Namibian economy. The Namibian government holds a 3% stake in Rossing and 51% of the voting rights. The transaction effectively makes China the owner of Namibia's uranium deposits.<sup>40</sup>

In South Africa, the mining sector is facing some harsh realities. Full-time employment in the mining sector has shrunk from 600,000 in 1994 to 453,543 in 2018. In the last five years alone, 56,366 employees lost their jobs. In addition, a number of large companies have disappeared from the investment landscape. AngloGold Ashanti is selling its last South African mining assets and Lonmin is merging with Sibanye-Stillwater. For various reasons, the consequences of this shrinking mining sector can be catastrophic for the country. Job losses will impact the trade union environment negatively, and will also extend to technical training colleges. This will be a setback for empowerment through skills development. A shrinking sector also means that institutions whose existence is directly linked to mining will have to downscale. In addition, government's tax take is falling. Finally, as mines close down, the number of ghost towns will increase. Moreover, illegal mining activities will proliferate as the jobless are driven to criminal activities.<sup>41</sup>

## POINTS OF INTEREST

Emergent trends in African mining include:

- South Africa has lost its position as the top gold producer in Africa to Ghana. A number of the big miners in the country have left, and they have a number of aggressive labour unions. This has not worked well for the South African mining industry so far.
- Countries are increasingly looking at how they can broaden the benefits of their mineral wealth in order to also benefit their population. Tanzania has been doing this quite actively since John Magufuli took over as president at the end of 2015.
- Small miners are also the focus of measures in Tanzania to facilitate their operations and profitability. This is a step towards "democratisation" of the mining industry in the country.
- The Acacia Mining saga that started a few years ago with a US\$1990 billion penalty and back taxes the Tanzanian government slapped on Acacia is still with us. The status of the company in Tanzania is problematic, with the government refusing to allow the company to negotiate on its behalf. This situation raises questions on the future prospects for investors in the mining industry in Tanzania.
- China has obtained de facto control, if not ownership, of the uranium reserves of Namibia.
- It will be interesting to see whether Africa would replace China as a source of rare earths for the USA. Given that China has close to 50% of the world's reserves, it is not clear whether the reserves in Africa are enough for the needs of the USA. However, it would be in the best interests of the USA to diversify its source of rare earths minerals. Africa can only benefit from this situation.

## **Article 5: Renewable Energy Trends in Africa**

African governments increasingly support the adoption of renewable energy to meet the energy needs of its 1.2 billion population, of which 640 million people (about half) are without access to electricity. These renewable energy strategies will substantially reduce Africa's carbon footprint, and help African countries to curb the climatic disasters that are threatening the continent. The primary new sources of renewable energy are solar and wind.

Solar renewable energy offers many benefits: it is faster, easier and cheaper to create energy generation capacity in the rural areas of Africa than with fossil fuel. These rural areas tend to be isolated and are not (and often cannot be) connected to grids. Renewable energy provides the benefits of offsetting the consumption of fossil fuels and reducing pollution. In addition, its use generates job creation in the communities surrounding the generation sites. By supplying remote schools with clean energy through mini-PV systems, solar becomes a key driver of socio-economic development. And with the rapid pace of technology innovation in the renewable energy field, it becomes even cheaper and more effective.

Wind energy in Africa has found global supporters. The African wind energy market is set to add 6GW of additional capacity between 2019 and 2023, more than doubling the current total capacity of 5.3GW. The Global Wind Energy Council (GWEC) has set up a new Task Force to speed up and facilitate the development of wind energy in Africa. The Council brings together leading developers, manufacturers and associations that are active in the African market. GWEC will also advise Governments on regulatory frameworks and energy auction systems. The GWEC will foster regional power pool discussions to maximise the potential for the development of wind power.<sup>42</sup>

The private sector, in many cases supported by international aid agencies, is beginning to view renewable energy in Africa as an attractive investment opportunity. The African Development Bank (AfDB) has granted British start-up Bboxx an US\$8 million loan to fund distribution of its solar kits in rural areas in Rwanda. Bboxx entered Rwanda as its first market in Africa, and has to date sold 80,000 solar kits in remote areas.<sup>43</sup>

### **EAST AFRICA**

Kenya recently concluded a deal to construct a 300MW solar plant in Zambia at a cost of US\$500 million, aimed at expanding Zambia's generation capacity, reducing the dependency on hydropower and supporting Zambia's rural electrification programme. Xago Africa will undertake the project in a Joint Venture with Zambian firm Blue Chip Resources. Zambia's adoption of renewable energy strategies, in its bid to diversify its energy mix, has attracted private sector interest in the past few years. As it is, hydropower is still the dominant form of electricity production in this country. Xago Africa has various renewable projects in East and Southern Africa.<sup>44</sup>

Gabon will be building eight solar power plants with a combined capacity of 2.8MW in three provinces of the country, i.e. in Ndjolé, Booué, Ovan, Makokou, Mekambo, Medouneu, Bitam and Minvoul. An estimated 100,000 households will be served with electricity generated by these plants. The plants are projected to save nearly one million litres of fuel oil per year. It will also reduce the production costs of the Gabonese Energy and Water Company (SEEG) by 40%, as well as reduce the many power outages that the population very frequently endure. The project will also save 2,600 tonnes of CO<sub>2</sub> and reduce generation costs by 30%.<sup>45</sup>

### **WEST AFRICA**

Daystar Power has partnered with Trine, a Swedish investment platform, to finance solar plants in West Africa. The partnership opens up investments in Daystar Power's solar power installations, previously limited to large-scale investors, to the wider public. Individuals can now invest in Daystar's power projects with a minimum investment amount of US\$27. The partnership will help Daystar Power expand

its footprint of installations from Ghana and Nigeria to Togo and Senegal. This reminds one of M-Kopa in Kenya.<sup>46</sup>

Senegal is another West African country with aggressive renewable energy plans. It will install several small solar power plants with a total production capacity of 2MW. The mini hybrid power plants will be fitted with batteries to store up to 2MWh of power. Dhybrid, a German company, has been selected to develop the project. In addition to providing electricity in rural areas that have not yet been electrified, the solar power plants will avoid 19,000 tonnes of CO<sub>2</sub> emissions annually.<sup>47</sup>

Senegal is also implementing wind energy projects. Lekela, a renewable power company from Britain, expects its wind farm, located close to the capital Dakar, to reach 158.7MW by 2020. President Macky Sall is keen to make Senegal a leader in renewables in Africa, with a 30% target for clean energy in the coming years. New wind energy will provide half of this target. The wind farm will avoid 300,000 tonnes of annual carbon emissions, and will cost US\$342 million. Note: Lekela also has renewable projects in Egypt, Ghana and South Africa.<sup>48</sup>

## **SOUTHERN AFRICA**

Zimbabwe, Zambia's southern neighbour, will construct three solar PV power plants with a total capacity of 250MW, at a cost of US\$400 million. The three solar plants will be installed in the cities of Goromonzi, Bulawayo and Harare. Currently, Zimbabwe is struggling to provide in the country's energy needs, and the adoption of renewable energy will make a significant contribution to its economy. Ideally, Zimbabwe would like to become an energy exporter.<sup>49</sup>

Another southern African country, Malawi, is also actively pursuing solar power development. Droege Energy, a German-based independent power producer, recently obtained approval to build a 20MW floating solar power plant in Malawi, to be located on Lake Malawi. This floating solar power plant will be the third in Africa, joining those in Cote d'Ivoire and the Seychelles.<sup>50</sup>

In addition to its solar projects in the Northern Cape, South Africa increasingly focuses on wind power. The latest wind project is the 140MW Oyster Bay wind farm in the East Cape province, budgeted at approximately €180 million. The wind farm will be built by Enel Green Power, their fourth project of this kind, and supported by a 20-year power supply agreement with Eskom.<sup>51</sup>

The Botswana Power Corporation (BPC) recently cancelled a tender for the construction of a 100MW solar power plant. BPC plans to reissue its tender with terms to make the project fully privately-owned. Industry observers expect BPC to float this new tender by end June 2019.<sup>52</sup>

## **THE HORN OF AFRICA**

In Ethiopia, the government has committed itself to develop over 1,000MW of greenfield solar and wind based Independent Power Producer (IPP) projects. They are also increasingly seeking to involve the private sector in the provision of new renewable energy capacity. The latest project (with World Bank support) apparently has the potential to leverage over US\$1.5 billion in private sector investments.<sup>53</sup>

## **POINTS OF INTEREST**

- Increasingly, countries in every African region embrace the acquisition and use of renewable energy technology. Given the rising costs (both in monetary and environmental damage terms) of fossil-fired energy generation, we anticipate this trend to accelerate.
- Wind, solar, hydro and geothermal renewable energy technologies are steadily reducing the half of the African population without access to energy. This will help the continent achieve targets in the UN's Sustainable Development Goals, the AU's Agenda 2063 and the African Development Bank's High 5 Priorities.



- The declining cost, speed of installation, and ease of use of renewable energy (especially solar), steadily increases its attractiveness to consumers and the private sector.
- An increasing number of foreign companies are poised to enter Africa's energy sector, both by providing capital equipment and in partnering with local players.
- Operators are developing innovative business models to address the high upfront capital cost of electricity to be replaced by a monthly operating expense.
- In addition to job creation and increasing the African people's quality of life, increased access to electricity will also boost the development of Africa's manufacturing sector.

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