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Editor's Note

Since we last published *African Review of Business and Technology*, the world has changed. The seriousness of the COVID-19 pandemic has been recognised globally and businesses, governments and individuals have been taking unprecedented measures to prevent the spread of the virus. Measures such as temporarily closing businesses and industries and government-enforced lockdowns are vital for reducing the impact of this disease, but it does come at an enormous economic cost.

For this issue, we have featured an extended analysis and commentary section from a range of respected writers, including Moin Siddiqi, our resident economist, who offers a detailed overview of what COVID-19 might mean for markets across Africa. The special analysis and commentary section starts on page 16 with an examination of the impact of COVID-19 on Africa's food systems and how this can be mitigated.

Elsewhere, on page 42, we have an overview of East African railways and the positive effect this is having on business, and a special report on page 49 on the benefits of best practice water management.

We trust all our readers are staying safe during this difficult time and hope we can provide some useful insights to help businesses and industries survive and, hopefully, thrive in the long term.

Samantha Payne, Editor

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A special section featuring analysis and commentary on the impact of this global pandemic across different industries in Africa, including a detailed study on how Nigeria can emerge stronger from this crisis.

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Water management

News, plus how good water management, especially in regard to wastewater, makes good business sense.

Orange launches Orange Money in Morocco

After securing approval last summer from the Bank Al Maghrib, Orange Morocco has announced the launch of Orange Money in the kingdom. This service will allow Moroccans to make mobile payments and transfer money using their phones. Morocco also becomes the 18th country in the Africa and Middle East region to offer the Orange Money solution

Orange Money offers every mobile user, regardless of their telecom operator, the option of having a mobile wallet backed by their phone number. The solution allows mobile phone users to carry out financial transactions, pay for phone recharges remotely or withdraw money from their Orange Money wallets at points of sale approved by Orange Money Maroc.

Non-Orange customers can take advantage of the service by downloading the mobile application.

Mobile money is revolutionising Africa's economy. A key driver in the continent's economic growth, Orange Money is a real vehicle for

The service will allow Moroccans to make mobile payments and transfer money using their phones.

increasing the financial inclusion of populations and the digitalisation of the continent.

For the Group, the ambition is to go further and to offer more services with a seamless customer experience.

Launched in 2008, the Orange Money mobile money solution allows millions of people excluded from the banking system to be able to deposit, withdraw, transfer and make payments easily and simply from their mobile phone, with complete security. The service is now available in 18 countries and used by 45 million customers, and the amount of transactions carried out through Orange Money reached 2.6 billion euros in 2019.

Orange's ambition is to make mobile money an essential means of payment and to become a leading player in mobile financial services in Africa and the Middle East including savings, credit and insurance in strict accordance with the banking regulations of the countries where it operates.

CONSTRUCTION OF EGYPT DESAL PLANT BEGINS

North Sinai Governor Mohamed Shousha has announced that construction of the largest desalination plant in Africa and the Middle East has started, according to a report in Egypt Today.

The capacity of the first phase is 100,000 cubic metres daily, and that of the second and third phases is 300,000 cubic metres per day.

The governor added that a number of infrastructure and renovation projects were scheduled to be inaugurated in the governorate's day, on April 25. These include four desalination plants in the governorate's capital, Arish. Three have a total capacity of 5,000 cu m per day, and one has a capacity of 10,000 cu m daily. The four plants will pump into the water supply network of Arish 25,000 cu m daily.

The governorate's municipal authority is renovating the seaport, and five main squares, while three hospitals are being expanded.

MIGA INSURES SOLAR PLANTS IN EGYPT

Against the backdrop of the COVID-19 pandemic, the Multilateral Investment Guarantee Agency (MIGA), a member of the World Bank Group, has issued guarantees to support the operation and maintenance of six additional solar power plants at the Benban Solar Park in the Aswan Governorate in Upper Egypt. The new plants are part of Egypt's landmark solar Feed-in-Tariff (FiT) Program, which mobilises private investments to build one of the world's largest solar photovoltaic generation parks.

The guarantees have been issued to Scatec Solar, which has extensive experience delivering sustainable clean energy systems and has worked with MIGA on multiple projects in the past. Amounting to US\$52.35mn, the guarantees cover Scatec's investments in the project against the risk of currency inconvertibility and transfer restriction for up to 15 years.

"In the face of uncertainty arising from the COVID-19 pandemic, MIGA remains committed to helping drive foreign direct investment by supporting investors who are helping Egypt achieve its long-term goals of diversifying its energy mix," MIGA executive vice president Hiroshi Matano said. He added, "To-date, MIGA has issued US\$145mn in coverage to support Egypt's FiT Program."

The new project consists of six additional solar power plants, each with a capacity of 65 MW. The project represents a total investment of approximately US\$446mn.

The plants will ultimately enhance Egypt's ability to manage outages, as well as to pursue its aspiration to export electricity.

Egypt's Renewable Energy Program aims to increase its renewable energy capacity from eight per cent in 2017 to 20 per cent by 2022, and 42 per cent by 2035. To meet this goal, the Government of Egypt authorised the development of the Benban Solar Park, with a total targeted capacity of 1.8 GW.

BRIEFS

Coronavirus support

China State Construction Engineering Corporation (CSCEC) has sent teams to Egypt and Algeria to guide the COVID-19 prevention and control efforts on their



The teams brought medical supplies

sites and to pass on China's experience in containing the virus. They brought medical supplies including ventilators, medicines and protective clothing, and are providing medical services to employees as well as support to the Algerian and Egyptian governments and their people.

Construction continues in Egypt



Work is continuing or construction projects in Egypt.

Construction companies working on government-assigned projects in Egypt will continue working at full capacity to ensure projects under development are completed quickly, Prime Minister Mostafa Madbouly has announced. He also requested that contracting companies take the necessary precautions to combat Covid-19.

Egypt's construction sector accounts for around 22 per cent of GDP and employs around four million people. President Abdel Fattah Al-Sisi has said that the opening of major national projects will be postponed to 2021.



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Scatec Solar completes 258MW Upington project in South Africa

Integrated independent solar power producer Scatec Solar and partners have grid connected and started commercial operation of the third 86MW solar plant in Upington, South Africa, completing the 258MW solar power complex.

The 86MW facility, known as Dyason's Klip 2, is expected to produce 217 GWh annually.



The goal is to provide affordable energy sources to the people.

Raymond Carlsen, CEO of Scatec Solar, said that as the power supply is considered critical infrastructure, the company focuses on supporting the South African power supply with renewable energy to around 40,000 households annually.

The Upington solar power complex is estimated to deliver an annual production of 650 GWh, providing clean energy to around 120,000 households and lead to the abatement of more than 600,000 tonnes of CO2 emissions annually.

The three projects in Upington were awarded in April 2015 in the fourth bidding round under the Renewable Energy Independent Power Producer Programme (REIPP) in South Africa. Scatec Solar owns 42 per cent, Norfund holds 18 per cent, the surrounding Community of Upington five per cent and H1 Holdings, a South African black-owned investor holds the remaining 35 per cent of the equity.

IMF: ZIMBABWE'S ECONOMY TO CONTRACT BY 7.4 PER CENT IN 2020

Zimbabwe's economy may contract by 7.4 per cent in 2020, mostly due to the COVID-19 pandemic, according to the International Monetary Fund (IMF).

In 2019, IMF recorded the economy contracting by 8.3 per cent as Zimbabwe endured its highest crisis in a decade, with cash shortages, medicines shortages and rolling power cuts.

According to the IMF's 2019 Staff-Monitored Programme Article IV Consultations, the COVID-19 pandemic has impacted the economy of Zimbabwe, which requires additional health-related support.

In the April 2020 sub-Saharan Africa regional outlook released during the IMF spring meetings, the international organisation stated, "The sharp downward revision largely reflects the fallout from the spread of COVID-19 and lower-than-expected commodity prices."

In addition to this, idiosyncratic factors such as continued structural constraints (South Africa), policy adjustment (Ethiopia) and climate and other natural shocks (such as the locust invasion in eastern Africa) have contributed to the downward revisions, noted the IMF.

According to the investment promotion organisation ZimTrade, the intervention measures by South Africa in fighting COVID-19 are expected to have a strong impact on Zimbabwean exporters, as the country takes around 49 per cent of Zimbabwe's total exports.

BOTSWANA LAUNCHES COVID-19 ECONOMIC RESPONSE PLAN

Botswana has launched a COVID-19 economic response plan to address a number of strategic economic objectives.

As reported in *The Southern Times*, the objectives focus on supporting workers, stabilising businesses, ensuring availability of strategic reserves and boosting economic diversification opportunities.

To fight the pandemic, the government has established the COVID-19 Pandemic Relief Fund with capitalisation of around US\$160mn that has been contributed by the private sector, development partners, philanthropists and individuals.

According to the source, Botswana is set to provide a wage subsidy totalling US\$82mn that will assist businesses to retain employees. The government will contribute 50 per cent of base salary of employees of affected businesses. Additionally, the government is offering a subsidy for selected employees ranging between US\$82.19 and US\$205.48 per month for April, May and June 2020, reported the source.

Quoting the Ministry of Finance and **Economic Development permanent secretary** Dr Wilfred Mandlebe, the source reported that eligible businesses should supply payroll information to Botswana Unified Revenue Service (BURS), which will administer the subsidy including name, identity cards and basic monthly salary for each employee.

In addition, the Botswana government has developed guidelines targeting sectors that have been negatively affected by the pandemic. According to the source, BURS will allow deferral of 75 per cent of any two quarterly payments between March and September 2020 and deferred payments to be repaid from March 2021.

BRIEFS

Angola to construct solar PV plants



Construction will commence in October

The Angolan government is set to install a 26MW photovoltaic solar power plant in Saurimo. The construction is expected to commence in October 2020

Part of a large-scale project, the project includes a transmission line and a 220 kV substation. The Angolan government is set to invest around US\$586.30mn

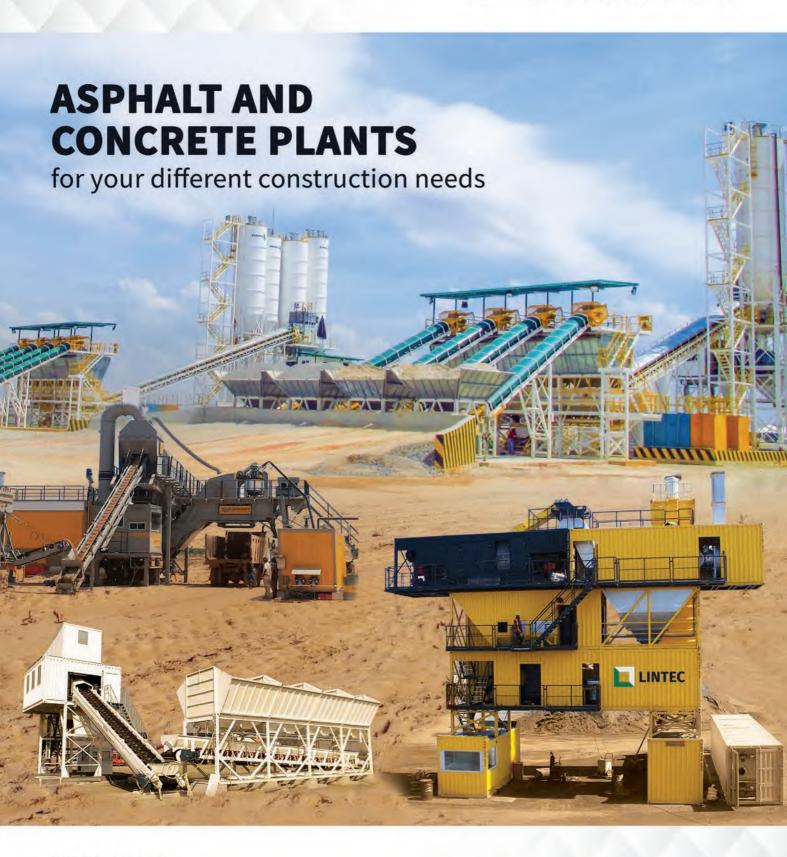
Alexander Forbes to sell Namibia insurance unit



The deal is worth US\$2.69mn.

South Africa-based pension fund administrator Alexander Forbes has signed an agreement to dispose of the last of its short-term insurance business to Momentum Holdings. As reported in the BusinessDay, the US\$2.69mn acquisition is in line with Alexander Forbes's ambition to dispose of the group's insurance





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Raxio Data Centre signs deal with Uganda **Internet Exchange Point**

Tier-III, carrier-neutral Raxio Data Centre and the Uganda Internet Exchange Point (UIXP) have signed a deal that will expand the UIXP's peering network into the country's first Tier-III carrier neutral data centre.

The UIXP currently interconnects 28 networks and handles more than 10 gigabits of Internet traffic daily. This deal will enable network operators to peer at multiple locations within the country.

Kyle Spencer, executive director of the UIXP, said, "This deal represents a significant



James Byaruhanga with other project members at the Raxio Data Centre construction site in Namanve.

milestone in the development of Uganda's Internet ecosystem. Internet exchange points have a symbiotic relationship with carrier neutral data centres. Our deployment in Raxio will catalyse a virtuous cycle of growth that will make the Internet significantly cheaper, faster and more reliable."

James Byaruhanga, Raxio Data centre general manager, said, "This partnership with the UIXP will provide a scalable, robust, and highly available alternative location for telco, ISP, carriers, parastatals, content delivery networks and corporate enterprises to peer with each other and exchange local Internet traffic/content without breaking out to the global internet. This lowers the overall cost of network service delivery, improves routing efficiency, and increases fault-tolerance."

This move by Raxio Data Centre expands the growing portfolio of competitive connectivity options that will be available within its facility. Unlike data centres which are owned by network operators, Raxio's neutral ownership has a direct incentive to offer its customers the widest possible array of service providers. This ensures that they do not get locked into a specific vendor, and that pricing will be as competitive as possible. According to reports, the Africa data centre market is likely to expand at a compound annual growth rate of around 14 per cent during the period 2018-2024. This growth is driven by rapid digitisation of the African economy, an increasing wave of ICT infrastructure deployments, a growing youth population, and a rising middle class.

METIER, TEMBO POWER SIGN DEAL FOR KENYA'S HYDROELECTRIC PROJECT

The private equity fund manager Metier and Tembo Power, the company that is developing the Kaptis hydroelectric project in western Kenya, have signed an agreement to start the construction of the Kaptis hydropower project. According to Tembo Power, the agreement with Metier will enable it to select financial partners and complete the financing of the hydropower project, which will result in the production of 14.7 MW of a run-of-river hydropower plant.

Michael Goldblatt, principal, Metier Sustainable Capital International Fund II, said, "The signature of the JDA marks the next positive step in our relationship with Tembo Power. We are excited about the prospects of the Kaptis project as well as the broader Tembo Power portfolio which fits in well with the fund's strategic focus on small to medium scale renewable energy projects across the continent, and we are looking forward to making an investment into the Kenyan energy sector and delivering clean energy in support of the Kenya Power and Lighting Company's power supply objectives."

EU, UK CLEAR SOMALIA'S US\$122MN DEBT

Arrears on loans owed by Somalia to the African Development Bank (AfDB) Group have been cleared following the payment in full of US\$122.55mn by the governments of the UK and the European Union.

This marks the end of sanctions and the resumption of full re-engagement between the AfDB and the East African nation. The long road to the resolution of Somalia's debt arrears began in 2014 and included the completion of three staff-monitored programmes of the International Monetary Fund (IMF) and significant advances on a fourth programme.

The process saw the high level of political commitment and consistent engagement of Somali President Mohamed Abdullahi Mohamed 'Farmaaio', and Prime Minister Hassan Ali Khayre. This translated into the implementation of reforms that gave confidence to international financial institutions, including the AfDB and the IMF.

Speaking on behalf of the Somali government, minister of finance Abdirahman Beileh, said, "The settlement of the arrears of Somalia to the AfDB is a new beginning for us in Somalia. We stuck with our reforms, we were persistent, and it has paid off."

In response, the AfDB president Akinwumi Adesina noted, "I commend the government of Somalia for their diligence in implementing reforms, and the UK government and the European Union for paying off Somalia's arrears to the African Development Bank Group. Together, we got it done for the people of Somalia."

AfDB will immediately provide a policybased operation to help boost economic growth and accelerated development of Somalia. AfDB's current portfolio in Somalia totals US\$135mn, covering operations in the agriculture, water and sanitation, transport, social and energy sectors, and capacity building for multiple sectors of the economy.

BRIEFS

Rwanda secures US\$109mn loan

The Executive Board of the International Monetary Fund (IMF) has approved an emergency funding of US\$109.4mn to Rwanda for the fight against Coronavirus. The

The executive board of the IMF.

amount collected under the Rapid Credit Facility, which will be disbursed immediately, will support Rwanda's efforts to stop the spread of COVID-19 and its impact on the economy. "The COVID-19 pandemic has ground Rwanda's economy to a halt, creating an urgent balance of payments need," Tao Zhang, IMF deputy managing director, said in a statement.



The new wind farm will connect 1.500 customers

Tanzania's first wind farm

Tanzania's first wind farm to reach financial closure and start construction is nearing completion following a US\$1.2mn loan from the Renewable Energy Performance Platform (REPP) supported by the UK Government. Upon completion, the new wind farm will complement the existing 4 MW hydropower plant that has been running the rural grid since 2012. The new wind farm will facilitate the planned expansion of the rural network which is expected to connect an additional 1,500 customers over the next two years.



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Nigeria: CACOVID orders supplies for 400,000 COVID-19 testing kits

The private sector-led Coalition Against COVID-19 (CACOVID) has ordered 250,000 supplies for tests and another 150,000 extraction kits to fast-track molecular testing for the coronavirus.

The coalition disclosed that no less than 1.7 million households would benefit from its food relief package as part of complementary efforts to help alleviate the effects of the lockdown and restrictions adopted by governments across the nation.

Briefing the media in Lagos on the group's activities in helping the Federal government halt the spread of the virus, leaders of CACOVID stated that



The coalition disclosed that no less than 1.7 million households would benefit from its food relief package as part of complementary efforts.

the coalition has set up isolation centres in five states of Lagos, Kano, Rivers, Borno and Enugu as well as FCT, while renovations of hospitals and medical supplies are being carried out in other states.

Zouera Youssoufou, CEO of Aliko Dangote Foundation (ADF), explained that all the partners in CACOVID are ready to roll out in all parts of the country, having commenced building and equipping of isolation centres in some states.

According to her, there are currently three testing platforms for molecular testing in Nigeria, one of which is the "Open PCR machines", of which the Coalition has ordered 10 units, with eight laboratories certified to conduct COVID-19 tests.

"We also have Cepheid Gene Expert Machines - there are 400 machines installed in the country. 250 are expected to be functional with trained lab technicians. Cepheid has developed a COVID-19 testing cartridge that has received FDA approval, and will begin shipping to Africa in two weeks. We have ordered 250,000 cartridges and expect shipment receipt in two weeks," said Youssoufou.

Herbert Wigwe, managing director of Access Bank, said the CACOVID-19 is approaching the fight against the virus from three levels, "One, it was clear from beginning that no one institution can go it alone, so we solicit everybody's cooperation in tackling this scourge. Two, while several measures are being taken to stop the spread, including lockdowns, restrictions and social distancing, there is the need to address the hunger." Wigwe explained that the third level was the thought leadership aspect of the plan, which is to tackle the post-pandemic aspect.

GP GLOBAL ACQUIRES LUBRICANTS ASSETS

GP Global, an energy-to-agriculture conglomerate, has announced that it has made a strategic acquisition of the lubricants assets of Grand Petroleum, Nigeria's lubricants player and part of the Nosak group, in order to expand and strengthen its presence in Nigeria and west Africa.

The acquisition includes assets such as lubricants brand HiSpeed and a blending plant with an annual capacity of around 50,000 metric tonnes in Lagos, which includes storage tanks with a capacity of 6,000

"Nigeria is one of the core markets for our lubricants and base oil business with a significant opportunity now opening up to expand our presence in Africa," said Sudip Shyam, global head, Lubricants & Base Oil, GP Global, adding that they would support the local economy and will focus on unlocking the potential of the lubricants and base oil business in the continent through this strategic acquisition.

CENTRAL AFRICAN REPUBLIC GETS IMF SUPPORT

The executive board of the International Monetary Fund (IMF) has approved US\$38mn emergency assistance for the Central African Republic (CAR) under the Rapid Credit Facility to address the urgent balance-ofpayments needs stemming from the COVID-19 pandemic.

The country will benefit from IMF debt service relief under the Catastrophe Containment and Relief Trust.

The CAR will receive relief from the CCRT on debt service falling due to the IMF in the next six months (around US\$4mn). This relief could be extended for up to two years, subject to the availability of resources under the CCRT.

The authorities have acted fast by preparing, in collaboration with the WHO, a response plan to strengthen the national health system and by implementing measures to help contain the COVID-19 spread and mitigate its impact on the economy, the IMF said in a statetement.

The IMF continues to monitor CAR's situation closely and stands ready to provide policy advice and further support as needed.

Mitsuhiro Furusawa, IMF deputy managing director and acting chair, said, "The global COVID-19 crisis is expected to have a considerable economic and social impact on the Central African Republic (CAR), a fragile country with a volatile security environment, limited administrative capacity and weak governance.

"The outbreak will likely affect CAR's economy both directly, as containment measures impact domestic demand and disrupt supply and trade, and indirectly, as the marked slowdown in economic activity worldwide will affect demand for CAR's commodity exports. Along with a decline in financial flows, the latter will create substantial urgent external financing needs," he said in a statement.

BRIEFS

FMN response to COVID-19



Four Mills of Nigeria's COVID-19 response operations.

Flour Mills of Nigeria (FMN) has activated an action plan to support the government in the fight against the coronavirus. FMN has procured US\$1.5mn worth of medical supplies for Nigeria which will rapidly beef up the Nigerian COVID-19 testing capability. It commenced a US\$840,000 food relief distribution activity spanning 12 Nigerian states, delivering food supplies to the most vulnerable communities hit by the national

Civil engineering firm debarred



In June 2019, the Bank debarred Oceanic Construction and Engineering Nigeria for a period of 48 months.

The African Development Bank group has announced the debarment of China Zhonghao Nigeria, a civil engineering company registered in Nigeria, for 18 months, for fraudulent practices. An investigation conducted by the Bank's Office of Integrity and Anti-Corruption established that China Zhonghao Nigeria Limited, as a member of a joint venture with Oceanic Construction and Engineering Nigeria, was jointly responsible for its joint venture partner's fraudulent misrepresentations.

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Upcoming Events Calender 2020

JUNE

25-27

NIGERIA BUILDEXPO

Lagos, Nigeria www.nigeriabuildexpo.net

30 - 1 July

SECUREX WEST AFRICA

Lagos, Nigeria

www.securexwestafrica.com

JULY

9-11

WEST AFRICA WATER EXPO

Lagos, Nigeria www.westafricawaterexpo.com

22-24

MINEXPO AFRICA

Nairobi, Kenya www.expogr.com/kenyaminexpos

AUGUST

20-21

POWER & ELECTRICITY WORLD AFRICA

Johannesburg, South Africa www.terrapinn.com/exhibition/power-electricityworld-africa/index.stm

SEPTEMBER

16-18

AFRICAN CONSTRUCTION EXPO

Johannesburg, South Africa www.africanconstructionexpo.com

22-24

POWER NIGERIA

Lagos, Nigeria www.nigeria-energy.com/en/home

23-24

EAST AFRICA ENERGY FORUM

Addis Ababa, Ethiopia www.eastafrica-energy-reform.com

OCTOBER

13-15

INTERBUILD AFRICA

Bertsham, South Africa

20-22

AFRICA ENERGY FORUM

Amsterdam, The Netherlands www.africa-energy-forum.com

NOVEMBER

3-6

ECOMONDO

Rimini, Italy www.ecomondo.com

4-6

THE BIG5 CONSTRUCT KENYA

Nairobi, Kenya www.thebig5constructkenya.com

Securex West Africa 2020 rescheduled to 30 June-1 July

Following the escalation of COVID-19, Securex West Africa has been rescheduled to take place at the Landmark Centre on Victoria Island in Lagos from 30 June – 1 July 2020, encompassing fire and rescue, commercial, perimeter, homeland and cybersecurity.

Afrocet Montgomery, the organiser of Securex West Africa, said in a statement, "The effects, actual and projected, of coronavirus are evident across the globe and the climate in which we are operating is changing in real time meaning we could not be sure that the event could go ahead as planned on its scheduled dates. Paying close attention to the World Health Organization's advice and the Nigerian Health Ministry, we have reluctantly made the decision to postpone the event to later in the year when we hope the effects have subsided."

The conference is created in close collaboration with leading industry associations, commercial partners and ministries to ensure its relation to issues most relevant and vital for West Africa.

The year 2020 will welcome back West African Cyber Security Summit (WACSS) once again. A full day is dedicated to this high-level conference that will focus on analysing the most effective methods of cyber protection from growing threats posed by new technology such as the internet of things. Up to 300 cybersecurity professionals from within the region will attend..



Securex West Africa 2020 will see the return of Firexpo, a dedicated fire and safety pavilion, that will be running alongside the exhibition. This will be a good opportunity for business owners to explore overlapping interests in fire and safety, as Firexpo will be concentrating on these sectors.

With sister events Securexpo East Africa and Securex South Africa, Securex West Africa is part of a bigger brand and guarantees to deliver an international trade platform for its visitors and exhibitors. Discover the prominent issues affecting security, hear industry experts and leading brands as they share insight and crucial

knowledge to strengthen the security measures.

"As we look ahead to our new exhibition dates, we are excited to make this year's show, our 10-year anniversary, our best yet. We have still got our specialist line-up of expert speakers, globally renowned brands on display and unmissable networking opportunities. Now, more than ever, we are determined to ensure that Securex West Africa provides a much-needed platform for security, safety and fire professionals to keep abreast of the latest threats, prevention, and protection methods for their business," the organiser added.

AFRICAN REVIEW / ON THE WEB

A selection of product innovations and recent service developments for African business. Full information can be found on www.africanreview.com

AFDB TO DEVELOP SMALL-**SCALE RENEWABLE ENERGY PROJECTS**



The aim is to develop renewable energy sources across the region

The African Development Bankmanaged Sustainable Energy Fund for Africa (SEFA) has approved a grant of US\$760,000 to Empower New Energy (EmNEW) to develop small renewable energy projects across sub-Saharan Africa.

The grant aims to support eight small renewable energy projects, each of which will have the capacity of one-10MW. These projects are expected to reduce CO2 emissions by 320,000 tonnes, by producing 585GWh of clean electricity, thus creating 20,000 jobs. The funding is expected to start a broad spectrum of activities, under project preparation and development, such as technical feasibility studies, legal due diligence, environmental and social impact assessment, quality assurance and risk management.

AFRICA AIMING TO MINIMISE LOSSES AS COVID-19 CONTINUES

The UN secretary-general António Guterres has pledged that the international organisation is standing in solidarity with Africa as it braces against the unprecedented economic, social and health impacts of the COVID-19 pandemic.

"The crisis has wide-ranging implications," said the UN chief, delivering remarks at a meeting with leaders of the African Group of countries. "This is in no way of Africa's making. But as with the climate crisis, the African continent could end up

suffering the greatest impacts." According to the International Monetary Fund's latest regional economic outlook for the sub-Saharan Africa, COVID-19 is likely to cause an acute economic crisis on a continent that has often lagged behind in development, threatening to reverse hard-won gains and recent momentum. The IMF is urging African countries and their partners to boost health spending and provide social transfers to those whose livelihoods are being upended.

NIGERIA'S LEGISLATIVE ARM PASSES ECONOMIC STIMULUS PLAN



The bill aims to provide temporary relief to those affected by the economic slowdown.

The House of Representatives, an arm of Nigeria's National Assembly, has passed the Emergency Economic Stimulus Bill to boost Nigerian economy given the debilitating effect of COVID-19. The bill, which still have to be passed by the other arm the Senate, aims at providing temporary relief to companies and individuals affected by the slowdown in economic activities caused by the COVID-19. The bill is expected to provide a moratorium on mortgage obligations for individuals at a time of widespread economic uncertainty

Additionally, it seeks to eliminate additional fiscal bottleneck on the importation of medical equipment, medicines, personal protection equipment and other such medical necessities as may be required for the treatment and management of COVID-19 disease in Nigeria.



This crisis has shown us we are only as safe as our most vulnerable people. It is in all our interests to keep local food systems going, protect rural communities and mitigate a health crisis as people who lose their jobs in the city head back to rural areas."



SABRINA DHOWRE ELBA UN goodwill ambassador

Africa needs different solutions from the rest of the

world, and we need to find those solutions together. We have an opportunity to come out of this stronger if we lean heavily into local manufacturing. But we must organise in order to bring to bear the strengths of African private sector in this response."

DR AMY JADESIMI

Managing director, LADOL

Leveraging private sector support is integral to UNDP's COVID-19 response and we look forward to seeing the footprint of Africa's Influencers for Development."

AHUNNA EZIAKONWA

UNDP regional director for Africa

The driving force of our OPEC policy is first the stability of our national economy as well as the stability of the global economy which is heavily dependent on OPEC and its strategic partners, popularly referred to as OPEC+."

TIMIPRE MNARLIN SYLVA

Minister of State, Petroleum Resources, Nigeria

As part of the community, we are happy to support the President's call for all of us to unite in containing a pandemic that continues to ravage our society. We believe that our contribution will go a long way in supporting the purchase of the much-needed medical facilities and crucial equipment necessary for the containment of this disease."

CHEIKH TRAVALY

EcoBank Kenya managing director

🖊 If I can change the life of one person, it makes a whole difference because behind that person there is a whole family. It's a family, it's a society."



KATOR HULE

Founder of Kator Hule Enterprises, a Nigerian fintech company specialising in mobile platforms

🖊 🖊 Now, more than ever, we need to support African agrifood entrepreneurs and the small and medium agribusinesses on the continent. They are the people who produce food and get it to the people who need it. They will be the people who help to rebuild our economies after the pandemic is over."

SVEIN TORE HOLSETHER

Yara International president and CEO

There is a large number of strong small or medium scale projects across Africa that remain unrealised because they can't access competitive financing. Our approach allows us to bridge this gap and working with SEFA (Sustainable Energy Fund for Africa) will help us to accelerate this process and support more high-quality projects. Together, we can bring impactful investment to Africa, while helping the continent to meet its electrification, carbonreduction and sustainable development targets."

TERJE OSMUNDSEN

CEO, EmNEW, an investor in renewable energy projects in Africa

We have seen that in responding to COVID-19, countries are opting for a combination of emergency fiscal and monetary policy actions with many central banks in the region taking important actions like cutting interest rates and providing extraordinary liquidity assistance."

ALBERT ZEUFACK

Chief economist for Africa, World Bank

🗸 🕻 A paperless, digitally-driven work environment is one of the first steps in digital transformation. Efficient operations are all about delivering the right information to the right person at the right time. Data capture and integrating digital documents into business processes using the right technologies, help organisations make fast decisions, at a lower cost and with improved customer outcomes."

NAJI KAZAK

General manager, Middle East, Africa, Turkey and Russia, Alaris

Oil has been our blessing in Equatorial Guinea's diversity and we should use it to build a thriving future."

CESAR A. MBA ABOGO

Minister of Finance, Economy and Planning, Equatorial Guinea

I will stay calm and resolute. I will not be distracted. No amount of lies can ever cover up the truth. Soon the truth will come out. I will continue to discharge my duties and responsibilities as president, with the highest level of professionalism,



dedication and unshaken resolve, to lead and support the Bank's bold mission for Africa's accelerated development, and to help protect the continent at this time of the COVID-19 pandemic."

DR AKINWUNMI ADESINA

President, African Development Bank, responding to allegations which were published in a French newspaper

With multiple flight cancellations that has strained worldwide air freight capacity, we remain committed to leveraging our capabilities, global network and customised solutions to ensure that goods and critical resources continue to reach people and communities in Africa and the Middle East."

AMADOU DIALLO

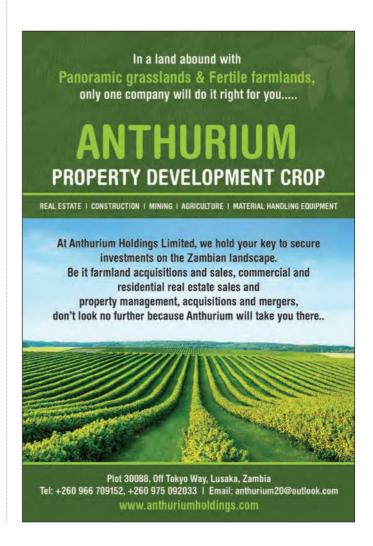
CEO, DHL Global Forwarding, Middle East and Africa

Stop sitting around and just rely on the government to make big decisions. They are already making big decisions. Now the question is, 'Where do we go?' We have many regions in Ghana and every region must have one or a few wealthy people who can afford to help others. This is the time to stop thinking about yourself, but to rather think about Ghana."



HERBERT MENSAH

Businessman and president of Ghana Rugby in an appeal to Ghanaian businesses to play their part in fighting COVID-19



African lockdown: No time for test runs

As part of our series of special reports analysing the impact of COVID-19 across Africa, Victor Oladokun, former director of communication and external relations. African Development Bank Group, shares his views.

frica has had some lead time to learn important lessons from other countries, including China, Italy, Spain, the UK and the US. To Africa's credit, long before the first reported COVID-19 cases appeared on the continent, many countries had proactively put in place containment and preventative measures given by the World Health Organization, the Centers for Disease Control and Prevention and other multilateral institutions. Rapid lessons are being learnt.

While others have wasted precious early moments, some countries have been exemplars of what it takes to counter the spread of COVID-19. Rwanda, for example, was the first country to take swift containment actions by placing portable sinks with running water in public spaces in its capital city and backing it up with a public awareness campaign. The Governor of Lagos State, Nigeria's commercial hub, was quick to convert a stadium into an isolation and recovery area.

Several other countries are following the suit. Innovations from citizens, the private sector and international organisations across all spectrums have been stellar.

But many others are woefully lagging behind. There is still an unwillingness to acknowledge that not taking decisive and painful short-term action, will have devastating long-term consequences. For such countries, the end result is a cost that will be too high to pay. The outlook for the continent is grim unless swift proactive actions are taken. The pandemic is exposing deep cracks and systemic weaknesses.

Africa is dealing with multiple challenges including a general lack of emergency preparedness, weak



social networks and governance. and political, economic, social, cultural and health threats.

A lack of access to money, food, water and electricity means extended lockdowns will not be easy to implement. High levels of poverty and other communicable diseases were already impacting health and wellbeing. A shortage of healthcare facilities is the tip of the iceberg.

Africa's social and communal culture could be a threat if social distancing and self-isolation protocols are not strictly followed. The Ebola outbreak in Sierra Leone and Liberia and collaborative action by African leaders and global partners show that where there is a will, there is always a way. While our societies are not wired or configured to cope with sudden or extended periods of self-isolation or lockdowns, both measures are urgent

and necessary.

COVID-19 could not have arrived at a worse time for Africa. A crash in global commodity prices and a glut in the oil and gas markets has seen revenues drop precipitously. Further threats from nature, including a recent plague of locusts, have to be managed alongside the pandemic.

The private sector and financial markets have taken a beating. The sudden reversal of fortunes is in stark contrast to a more positive projection in the African Development Bank's 2020 African Economic Outlook when it was released in January 2020.

The bandwidth of fiscal headroom is very thin. Commoditysensitive economies are reeling under the effects of sudden price drops and reduced global demand. Crude oil prices have fallen more than 68 per cent since January. Nonoil commodity prices have also taken a nosedive.

All lockdowns are not equal. Asia, the resources required to support limited lockdowns. Even then, it is a Herculean undertaking. Imagine then, what will the impact be for Africa if we fail to act fast?

We must act fast and think authentically. Africa has its own particularities and to a certain extent, local contexts will require locally suited solutions, while drawing from global lessons.

Governments and citizens must humbly yet urgently come face-toface with a blunt reality. Pandemics do not respect boundaries, titles or positions, creed, faith, gender, culture or hierarchy. Together, we must therefore commit to reverse negative ethnicity, inequality, decades-old public profligacy, corruption and the chronic lack of investment in education, electricity, roads, water and sanitation projects.

For now, governments and citizens must humbly yet urgently come face-to-face with a blunt reality. Pandemics and other global crises do not respect boundaries, titles or positions, creed, faith, gender, culture or hierarchy.

Together, we must commit to reverse negative ethnicity, inequality, public profligacy, corruption and the chronic lack of investment in education, electricity, roads, water and sanitation projects.

Abiy Ahmed, the Ethiopian prime minister and 2019 Nobel Peace Prize Laureate, rightly tells us: "COVID-19 teaches us that we are all global citizens connected by a single virus that recognises none of our natural or man-made boundaries."

We are in this together, regardless of where we call home. "Umuntu ngumuntu ngabantu." I am because you are.

Mitigating COVID-19's impact on food systems

The global spread of COVID-19 and the rising number of coronavirus cases in Africa are fueling anxiety about negative economic growth, failing healthcare and collapsing food systems. By Atsuko Toda and Martin Fregene.



e are facing great uncertainty on the African continent. The global spread of COVID-19 and the rising number of coronavirus cases in Africa are fueling anxiety about negative economic growth, failing healthcare and collapsing food systems. We are already grappling with a locust outbreak in the Horn of Africa, drought and flood extremes due to climate change and increasing food importation costs of more than US\$47bn in 2019. The convergence of these sets the stage for an imminent food crisis - unless measures are taken to mitigate the impact of the pandemic.

Consider also that the US dollar has surged against emerging market currencies, reducing the purchasing power of countries reliant on commodity imports and sparking higher consumer prices. Inflationary pressure on food staples can breed

social tension and even unrest.

Anti-pandemic measures like nationwide lockdowns and border closures compound food shortages especially of nutritious but perishable foods like fruit and vegetables. Restrictions on movement and quarantine measures impede farmers' access to markets. In Nigeria, rice prices are 30 per cent higher than in January, thanks to panic buying, transport restrictions and rising global prices.

Also, foreign direct investment and aid into Africa is expected to fall, or be delayed as international investors and development partners redirect capital to their local economies and into stimulus packages to combat COVID-19. But Africa is coming up with its own solutions for these challenges, with the African Development Bank involved. To address the threat of food security, several short-term

measures are being taken: creation of a "green channel" for the free flow of food and agricultural inputs; creation of strong demand for agricultural inputs of fertiliser, seeds and agro-chemicals through smart input famer subsidies; measures to prevent food price hikes by releasing food from government grain reserves and implementing antihoarding policy; rapid scale up of food production technologies, including high-yielding, earlymaturing, drought-tolerant, diseaseand pest-resistant staple crops, livestock and fish through programmes such as AfDB's Technologies for African Agricultural Transformation initiative; and feeding programmes for the worstaffected and most vulnerable zones.

Medium-to-longer-term food security interventions include: recovery strategy support to major supply chain players; strengthening food supply chain resilience via efficient production, processing and value addition; enforcing food safety, improved food quality and traceability policies in the postcoronavirus period; promoting digitalisation and e-commerce in markets hit by COVID-19.

Guided by lessons learned from previous health crises, including the Ebola epidemic, the Bank has responded to the pandemic by putting together a package of support for the public and private sector. To rebound from the pandemic, Africa must maintain adequate food reserves, avoid protectionist policies and promote value chains that link domestic and international markets.

Dr Martin Fregene is AfDB's director of agriculture and agro-industry. Atsuko Toda is director of agricultural finance and rural development at AfDB.

Scaling up the global policy response to Covid-19

The global economy is being hit by a series of unparalleled, simultaneous shocks to health systems and economies. COVID-19 is a global challenge which needs a coordinated response. Analysis by Moin Siddigi.



he human costs of the coronavirus pandemic are already immeasurable, and all countries need to work together to protect people and limit the economic damage. This is a moment for solidarity," said International Monetary Fund (IMF) managing director Kristalina Georgieva. "These are testing times for policymakers: they must rise to the occasion by acting quickly, decisively, and in collaboration," the World Bank Group (WBG) echoed.

The pandemic could cost the global economy up to US\$1 trillion, according to the African Export-Import Bank (Afreximbank). although its impact will vary due to regional and country-specific characteristics. The Organisation for **Economic Co-operation and** Development (OECD) expects 2020 world growth to slow sharply, even if the outbreak is contained. In such harsh times - worse than the 2009 global financial crisis - around 30-40 per cent of economic losses are 'direct' from workplace closures, rising fatalities and quarantines. The

remainder are 'indirect' due to worsening consumer/business sentiment, which, in turn, leads firms to anticipate lower demand, thus curtailing spending and investment.

Manufacturers linked to global supply chains, which constitute almost half of world's trade, are affected by disruptions and delayed resumption of operations. China is a strategic supplier of intermediate goods to global businesses, particularly in electronics, automobiles, and machinery/ equipment. Emerging markets are impacted by record high capital outflows (US\$83bn) since last February and acute shortages of

forex liquidity. While many lowincome countries entered this crisis with higher debt burden, faltering growth and depleted fiscal buffers.

The continent of more than 1bn people was hit later than other regions from the pandemic. 49 countries have reported Covid-19 cases, although infection rates are low compared to Europe and the Western Hemisphere. These are challenging times for the 'least developed countries' (the majority African), which lack contingency funds to boost spending on stimulus programmes and safety nets. The impact on tourism, hospitality, transport, aviation, construction and manufacturing is severe, although

defensive sectors such as consumer staples, utilities, pharmaceuticals and healthcare are more resilient to the downturn.

Local economies are exposed to outbreak through several channels:

- 1. Reduction in export volumes to major trade partners (China and Europe) - 60 and 40 per cent, respectively, of Angola and Congo (DRC) exports go to China.
- 2. Commodity shocks hitting oil and metal producers. The IMF estimates that each 10 per cent drop in oil prices, on average, reduces growth in oil exporters by 0.6 per cent and increases fiscal deficits by 0.8 per cent of GDP.
- 3. Lower remittances to sub-Sahran Africa, which in 2019 totalled US\$47bn (World Bank) exceeding official development assistance. Nigeria was top recipient (US\$24.4bn), followed by Ghana (US\$3.5bn); Kenya (US\$2.7bn); Senegal (US\$2.4bn); DRC (US\$1.8bn); and Zimbabwe (US\$1.7bn).
- 4. Tourism, a major earner for some countries (especially Kenya,

These are testing times for policymakers and they must rise to the occasion by acting quickly, decisively, and in collaboration."

WORLD BANK GROUP

- Mauritius and South Africa), is shrinking with falling demand and travel restrictions.
- 5. Risk aversion (flight to safety) by institutional investors and tighter global banking conditions will affect Angola, Cote d'Ivoire, Ghana, Kenya, Nigeria, Senegal and South Africa, which rely on private inflows. Some could see delays in final investment decisions (FIDs) on important projects.
- 6. Closure of factories and borders affects vital supplies (including food), while social isolation and lockdowns cost daily wages of street traders and informal workers, which constitute a large part of Africa's labour force. Working from home is feasible only for white-collar workers.

Africa's hospital infrastructure lacks the capacity to contain this deadly virus. National health systems need protective equipment, screening, diagnostic tests, more intensive-care wards and portable ventilators. "Our greatest concern is the potential for the virus to spread to countries with weaker health systems," said World Health Organization (WHO) chief Tedros Adhanom Ghebreyesus. The pandemic could hinder the fight against poverty in LDCs.

Richer, more developed nations possess the means to mitigate the economic fallout of Covid-19, but African countries require sizeable

external support to avert a humanitarian crisis. "The international community needs to do its utmost to help ease these constraints and ensure that peoples' lives and livelihoods are not destroyed," said the IMF head.

The Fund is making available around US\$50bn in rapid-disbursing emergency facilities, of which US\$10bn is accessible to the poorest members at zero interest rates without a fully-fledged IMF programme. Moreover, the Fund's Catastrophe Containment and Relief Trust (CCRT) provides eligible countries with grants for relief on IMF debt service falling due, thus freeing up vital resources for health spending as during the 2014-15 Ebola outbreak.

The International Finance Corp; (IFC) has unveiled a US\$8bn lifeline for private businesses as part of WBG's US\$14bn package to soften financial damage. The bulk of IFC funds are targeted at client banks in emerging and developing nations so they can continue to offer trade financing, working capital and medium-term loans to large firms and small and medium-sized enterprises (SMEs) struggling with disruptions in supply chains. The package will also assist healthcare and related industries, which are facing increased demand for services, medical equipment and pharmaceuticals



It makes no sense for African countries to transfer much-needed resources to foreign banks, developed nations or international institutions."

OXFAM

Ethiopia has proposed a US\$150bn emergency health financing and budgetary support (including debt relief) from the World Bank for African countries to tackle the crisis more effectively. The cost of SSA's debts exceeds annual health budgets of most countries. British charity Oxfam argued: "It makes no sense for African countries to transfer muchneeded resources to foreign banks, developed nations with the capacity to cope with the pandemic, or international institutions."

Around 69 LDCs are due to pay nearly US\$20bn to rich governments and multilateral organisations, plus US\$6bn to external private lenders this year.

Targeted policies are crucial in the present situation to support financial relationships between workers and employers, lenders and borrowers, and suppliers and end-users. Many advanced economies have taken bold monetary/ fiscal stimulus measures to boost domestic demand

and confidence in the broader economy. Central banks in the USA, UK, Japan, the Eurozone, Canada and Switzerland have cut policy rates to almost zero and pumped money directly into the markets by buying government and corporate bonds (i.e. quantitative easing) – in order to prevent a credit crunch. Such actions have generated favourable spillovers for developing countries, where funding costs have also fallen.

The authorities in Africa should prioritise health spending and improve the social 'safety net' in the form of cash transfers and free food for poor citizens. Where feasible, they should provide tax relief and subsidised credit to affected businesses - thus addressing their cash-flow shortfalls. Some have already introduced targeted measures, for example, Namibia (wage subsidies); Ghana (paying three months of water bills); and Nigeria (welfare payments).

The IMF advised "Easing monetary policy can complement fiscal efforts, especially with inflation in single digits in the vast majority of sub-Saharan African countries." Besides reducing borrowing costs, regulators could encourage banks on a temporary basis, to grant moratoriums on debt repayment and interest-free overdraft facilities for SMEs - the engine of job creation and poverty reduction in Africa. Channelling credit through fintech firms is a good option, as China has done.

Regrettably, under any scenario, SSA's growth in 2020 will drop below last year's 3.2 per cent. The region has survived past global hardships - it will succeed again with concerted health and economic policies in place.



Building site closures will affect employees and economies as construction is an industry where people cannot work from home.

Turning the COVID-19 tragedy into an opportunity

Godwin I. Emefiele, governor of the Central Bank of Nigeria (CBN), explains how Nigeria has the potential to emerge from the COVID-19 pandemic with a robust economy and significant progress across multiple industries.

or a country of more than 200 million people, and projected to be around 450 million in a few decades, we can no longer ignore repeated warnings about the dangers that lie ahead, postpandemic, if we do not depend largely on what we produce locally. Our security and wellbeing are contingent on building a diversified, inclusive, productive economy.

When I became CBN governor in 2014, imports of rice, fish, wheat and sugar consumed around N1.3tn worth of foreign exchange from the CBN. The immediate question was: can we not grow these ourselves? Only a few decades ago, Nigeria was one of the world's largest producers and exporters of palm oil, cocoa and groundnuts. Today, we import nearly 600,000 tonnes of palm oil, while Indonesia and Malaysia export more than 90 per cent of global demand. This pandemic and the response of many of our trading partners suggest it is more critical than ever that we take back control over our economy and our destiny. The CBN has created lending programmes and provided hundreds of billions to smallholder farmers and industrial processors. These policies aim to position Nigeria to become a self-sufficient food producer, creating millions of jobs, supplying markets across the country and dampening the effects of exchange rate movements on local prices.

At the 2016 Annual Bankers' Dinner, I challenged the bankers to take decisive action to transform the structure of our economy. I talked about the damaging effects of Nigeria's unsustainable propensity to import, and opined that it was high time we looked inwards and stopped using hard-earned foreign exchange (FX) to import items that



we could produce locally. This determination formed the bedrock of CBN policy, which restricts access to FX for importers of many items. These sentiments were re-echoed at the 2017 edition of the same Bankers' Dinner, with examples of several companies that have benefitted significantly from this policy of self-sufficiency.

CBN has been accused of protectionism. My answer has always been that leaders are first and foremost accountable to their own citizens. And if the vagaries of international trade threaten their wellbeing, leaders have to react by compelling some change in patterns of trade to the greater good of their citizens. That is why in response to COVID-19, we are strengthening the Nigerian economy by providing a combined stimulus package of around N3.5tn in to households, businesses, manufacturers and healthcare providers. These measures are designed to support the Federal Government's immediate fight against COVID-19, and build a more resilient, more

self-reliant Nigerian economy. We do not know what the world will look like after this pandemic. Countries may continue to look inwards. Globalisation as we know it today may be dead for a generation.

As a nation, we cannot afford to continue relying on the world for our food, education and healthcare. The time has come to fully transform Nigeria into a modern, sophisticated and inclusive economy that is self-sufficient, rewards the hardworking, but protects the poor and vulnerable, and can compete internationally across sectors.

To achieve this goal, we must support the Federal Government to:

1) Build a base of high quality infrastructure, including reliable power, that can engender industrial activity; 2) Support both smallholder and large scale agriculture production in select staple and cash crops; 3) Create an ecosystem of factories, storage and logistics companies that move raw materials to factories and finished goods to markets; 4) Use our fiscal priorities to create a robust educational

system that enables critical thinking and creativity, which would better prepare our children for the world of tomorrow; 5) Develop a healthcare system that is trusted to keep all Nigerians healthy, irrespective of social class; 6) Facilitate access to cheap and longterm credit for SMEs and large corporates; 7) Develop and strengthen pro-poor policies that bring financial services and security to the poor and the vulnerable; and 8) Expedite the development of venture capitalists for nurturing new ideas and engendering Nigerian businesses to compete globally.

Nigerians are already one of the most sought after immigrant groups in the USA. But now is the time to seize this opportunity and create an environment that empowers our people to thrive within our own shores. To this end, CBN has developed a Policy Response Timeline to guide our crisis management and the orderly reboot of the Nigerian economy.

Immediate-Term Policies (0-3 Months): Although global cases are

heading towards 2mn as of 14 April 2020, we now have 343 cases, of which 10 deaths and 91 recoveries have been recorded. With President Buhari's continuing leadership, Nigeria can now test 1,500 persons per day in 12 Molecular Test Laboratories. We believe that this strong leadership in travel restrictions, lockdown, social distancing, and other measures have been greatly effective in curbing the spread of the disease. The Presidential Task Force and Nigeria Centre for Disease Control (NCDC) have helped the country stay ahead of the curve with increased testing capacity, provision of isolation centres, and effective contact tracing. The CBN has responded, first by supporting hospitals and the pharmaceutical industry with low interest loans to immediately deal with the public health crises; then by working with the private sector Coalition Against COVID (CACOVID) to support the Presidential Task Force across its response, while mobilising palliatives for the poor and vulnerable. We have activated the following: 1) Ensuring financial system stability by granting regulatory forbearance to banks to restructure terms of facilities in affected sectors; 2) Triggering banks and other financial institutions to roll out business continuity processes to ensure that banking services are delivered in a safe social-distance regime for all customers and bankers; 3) Granting an additional moratorium of one

year on CBN intervention facilities; 4) Reducing interest rates on intervention facilities from nine per cent to five per cent; 5) Creation of a N50bn targeted credit facility for affected households and SMEs: 6) Strengthening the Loan-Deposit Ratio (LDR) policy, which is encouraging significant extra lending from banks; 7) Improving FX supply to the CBN by directing all oil companies (international and domestic) and all related companies (oil service) to sell FX to CBN and no longer to the NNPC: 8) Providing additional N100bn in healthcare loans to pharmaceutical companies and healthcare practitioners intending to raise capacity; 9) Providing N1tn in loans for local manufacturing and production across critical sectors; and 10) Engendering financial inclusion by ensuring the poor and vulnerable are able, by all means necessary, to access financial services to meet their basic needs.

Short-Term Policy Priorities (0-12 months): As soon as President Muhammadu Buhari and the health authorities determine our virus transmission curve is flattening and many restrictions are eased, this will be the phase for repositioning the Nigerian economic space. As part of the lessons from this pandemic, we must ensure that that our valueadded sector, the manufacturing industry, is strengthened. Accordingly, the CBN will pursue the following policies: 1) Reinvigorate

our financial support for the manufacturing sector by expanding the intervention all through its value-chain. In most cases, we will ensure that primary products sourced locally provide essential raw material for the manufacturing sector except where they are only available overseas; 2) With the support of the Federal Government, the CBN will embark on a project to get banks and private equity firms to finance homegrown and sustainable healthcare services to help reverse medical tourism out of Nigeria. By offering long-term financing for the entire healthcare value-chain, banks will work with healthcare providers to consolidate efforts to rebuild our medical facilities; 3) The CBN will promote the establishment of InfraCo PLC, an infrastructure development vehicle, wholly focused on Nigeria, with combined debt and equity take-off capital of N15tn, and managed by an independent infrastructure fund manager. This fund will be supported by the Federal Government in building the transport infrastructure required to move agriculture products to processors, raw materials to factories, and finished goods to markets, as envisaged at the CBN Going for Growth Roundtable in March 2020; and 4) Provision of FX for the importation of machinery and raw materials needed for a selfsufficient Nigerian economy.

Medium-Term Policy Priorities (0-3

years): Once the world returns to some new normal and the Nigerian economy reopens fully for business, we will enable faster recovery by targeted measures towards sectors that support mass employment and wealth creation - light manufacturing, affordable housing, renewable energy and research.

In manufacturing, Nigeria's gross fixed capital formation is estimated at N24.55tn - residential and nonresidential properties, machinery and equipment, transport equipment, land improvement, research and development, and breeding stocks. Of this, machinery and equipment are valued at only N2.61tn. To pursue economic renewal, we estimate at least N662bn worth of investment to acquire hi-tech machinery and equipment. The CBN will consider an initial intervention of N500bn over the medium term, targeted at firms to procure state-of-the-art machinery and equipment and automated manufacturing models to fast-track local production and economic rejuvenation, as well as support increased patronage of locally processed products. To boost jobs, household income and economic growth, we will focus on bridging the housing deficit by facilitating government intervention in housing development, mortgage finance and institutional capacity.

We will pursue the creation of a fund that will target housing construction for developers that provide evidence of profiled offtakers with financial capacity to repay. We will support eco-friendly energy productions. We will look to drive innovation and research in every sector. We must work toward a Nigeria with cutting edge medical facilities to provide world class care; enable our universities and research institutions to provide the education and training required to keep these ecosystems functioning sustainably; and keep millions of Nigerians employed in meaningful jobs.

COVID-19 may have plunged us into a crisis. But, as Winston Churchill admonished, we must never let a crisis go to waste. ■



The importance of data for Africa during COVID-19

The COVID-19 pandemic has disrupted billions of lives and endangered the global economy. It is essential for Africa to boost its data ecosystems so the continent is resilient in the coming weeks, months and years.

he United Nations Economic Commission for Africa (ECA) and the Global Partnership for Sustainable Development Data (GPSDD) have unveiled an initiative to strengthen Africa's data ecosystems in the face of COVID-19.

"Tackling the pandemic requires data and information to ensure that policies, resources and technology are deployed in the right place and time to make the biggest possible impact," said Vera Songwe, ECA executive secretary.

Ms Songwe noted, however, that data systems for health and other areas of policy in Africa are often fragile and frequently inadequate.

"Critical gaps in coverage and timeliness can leave governments uncertain of where the risks of infection are highest and how to deploy resources in the most effective way, as well as where food aid is needed the most, in particular for women and children" she added.

The COVID-19 pandemic has caused untold suffering, disrupted billions of lives, and endangered the global economy. Wealthy countries have been worst affected thus far, but as the Global Partnership for Sustainable Development Data's CEO, Claire Melamed, explains, the vulnerability of low-income countries is more alarming.

"The lack of adequate shelter, sanitation, and health systems in low and lower-middle-income countries puts us at the precipice of the worst humanitarian crisis in 100 years. Getting timely, accurate data to get the pandemic under control in Africa is critical for the success of global efforts, and will help build strong data systems for the long term," said Ms Melamed.

Over the past few years, development partners have helped to build the foundations of robust data ecosystems that can respond to crises like this. As a result, there are multitudes of tested, scalable solutions that can be deployed, and a range of institutions contributing to datadriven decision-making that can expedite the fight against COVID-19.

Areas where better data can save lives during COVID-19 include: population - understanding who is most at risk, to allocate resources effectively; health infrastructure and staffing; virus monitoring; and tracking the economic impacts, including business closures, the impact on agricultural production, and on trade and



public spending, to put in place the right support and avoid long-term devastation.

The ECA-GPSDD partnership will receive capacity support from Data for Now, a coalition of partners that includes UN Department of Economic and Social Affairs, the Sustainable **Development Solutions Network and the World** Bank, along with GPSDD.

The group will work in a coordinated and coherent manner with partners from the private sector, civil society, academia, donors, governments, the UN, and multilateral agencies, to:

- · Put tested solutions to work, bringing together the right partners to understand what data and solutions are needed, make them available, and ensure they are used to save lives.
- · Strengthen systems by ensuring new solutions are sustainable and can be maintained for the long-term by increasing interoperability between data sets and developing capacity among users to understand and work with data for policymaking.
- · Increase the effective use of resources by targeting areas where data gaps are most acute and minimise duplication.
- · Share learning and information among partners and countries for quick adoption and replication of effective solutions.

The initiative, which was announced in a virtual press briefing on 20 April 2020, is seeking more

collaboration in the areas of access to relevant data, analytics and visualisation, training and capacity development, technology and connectivity, and financial resources.

The private sector has become involved in a range of data-related programmes since the outbreak of COVID-19, particularly in regard to testing and tracking of virus cases and disseminating information efficiently for clients, as well as the wider public. The African Legal Network members have joined forces to establish a data hub on confirmed cases across Africa.

CcHub, an innovation incubator, is offering funding up to US\$100,000 to African tech companies developing initiatives in relation to COVID-19. Zindi, a Cape Town-based tech start-up, has been building a database of scientists who use AI and machine learning across Africa and now has 12.000 registered on its platform. As well as creating a useful database, Zindi is offering cash prizes to acientists who come up with solutions for curbing the spread of COVID-19.

In Nigeria, where an aggressive approach to lockdown has been implemented to try and reduce the spread of the disease, Wellvis has created the COVID-19 Triage Tool, a free online tool to help users self-assess their coronavirus risk profile based on symptoms and exposure history. This has helped to reduce unnecessary calls to hotlines and ensured that those who do need urgent medical attention are empowered to seek it out.

Technology to stay connected in a crisis

Jeremy Potgieter, regional director - Africa, Eseve, shares his thoughts on how emerging technology and data can reduce the impact of a pandemic, keep people communicating and even save lives.

he world is facing a once-in-ageneration crisis, its scale matched only by the Spanish Flu pandemic of 1918 to 1920. Citizens face huge restrictions, cut off from loved ones, livelihoods threatened. Governments battle with huge challenges trying to project and plan for the scale of the crisis, hoping to save lives.

COVID-19 has focused the world's attention on how we're using technology to overcome social isolation, reduce the scale of the tragedy and save lives. From apps allowing us to work remotely and online shopping, to robots treating critically ill patients and cleaning the streets, the world, and people, are having to adapt fast in multiple ways - both big and small.

But what specific benefits can IoT have on mitigating the impact of global pandemics, and what innovation needs to be adopted to ensure the world is prepared, should it happen again? It's important to look at the pain points during a pandemic where human contact needs to be limited, and that IoT and emerging technology may be able to address, such as: A lack of real-time data on the number of those infected, the rate the virus is spreading and how it's being transmitted; inability to remotely monitor and service equipment; economic impact of leisure, hospitality and retail businesses having to close and other industries ensuring staff can work remotely; overburdened medical systems and the need to monitor patients remotely to balance care with the availability of beds; and the spread of the virus via physical contact and in public.

While IoT devices may not be able to test potential carriers, they can help to spot symptoms. By gathering



data on a micro and macro level. governments can identify trends and generate more accurate modelling. This can range from smart city cameras that detect patients with high temperatures, to a smart ring that can identify symptoms from a wearer. This could help to identify hotspots where resources need to be focused. Thanks to cloud computing, data from remote devices across the world can be managed, interpreted quickly, then made accessible to scientists, to identify patterns and develop learnings.

Much of the world's critical infrastructure is unconnected or provides little in the way of remote diagnostics and status updates, let alone the ability to remotely fix these issues. In a pandemic, when physical contact needs to be limited and workforces are depleted, it's vital that the requirement of having engineers on-site is at a minimum. IoT connected devices enable fewer visits and a better ability to solve technical issues remotely, boosting uptime and safeguarding staff.

Non-essential businesses that rely on customers entering their outlets

have to rethink their business models to generate revenue. There are several ways IoT can help.

Smart lockers and pick, pack and delivery methods can ease the burden on eCommerce operations which are struggling to cope with the increased demand and create a safer 'zero-touch' approach. Smart vending machines can be placed in critical stores which are still open. These companies are futureproofing their devices with voice ordering and NFC payments to ensure the process is touchless.

IoT can help healthcare services too. Remote tech means that patients can be monitored from their homes by doctors. One such innovation is Philips Motiva, an interactive telehealth platform designed to allow people with chronic conditions to be monitored from home. This frees up beds and reduces the risk of spreading the virus, and ensures that if their condition deteriorates, they can quickly be brought into hospital.

Reducing the need to touch is essential for reducing the spread of viruses. From mobile ordering and contactless payments, to MachineSense's low-cost, infrared

temperature scanning system that negates the need for a human to hold a temperature gun.

The more data we gather on what happens when a pandemic occurs, the better we become at modelling the outcome. It's essential that those with connected devices operating during the coronavirus outbreak make their data available to researchers, while governments need to look at ways in which existing data can be leveraged to create a centralised dashboard to inform their decisions.

For governments and businesses that are managing unconnected devices, this should serve as a wakeup call that knowledge and insight come through the joined-up approach of connecting devices remotely and analysing data in a safe, meaningful way to protect the most vulnerable. By doing this, governments will be able to get a grip on this and future crises and ease the burden on healthcare workers. Businesses can adapt and protect employees and the public, even creating opportunities. Data is one of the most powerful tools we have for defeating and adapting to pandemics. Let's use it.

1958 New York Convention a boost for Ethiopia

Ethiopia's ratification of the 1958 New York Convention is a game changer in the enforcement of arbitral awards in Ethiopia and abroad, even as the country deals with the impact of the COVD-19 pandemic.

n ratifying the 1958 New York Convention, Ethiopia has joined 161 countries, thereby granting assurance to contracting parties from any of the 161 countries that their awards and agreements will also be enforced there. With more than 80 per cent of the world's countries adhering to the convention, it is one of the most successful international treaties ever. Ethiopia is the 33rd African country to ratify it.

The convention's two main features are: All contracting states must recognise the validity of written arbitration agreements, to support international arbitration as a method to resolve disputes (Art. II); and arbitral awards issued in one contracting state can be easily recognised and enforced in the others (Art. III).

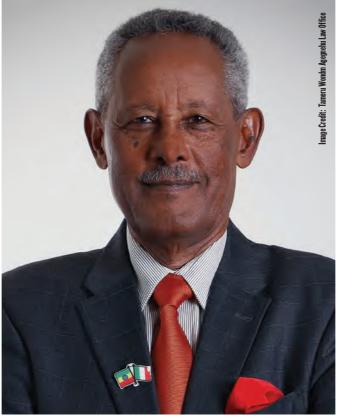
To seek recognition and enforcement of foreign awards, applicants simply need to supply the original (or a certified copy) of the award and the arbitration agreement, together with a certified translation if not in an official language of the country where recognition is sought.

After which, the enforcement proceedings follow those of the country of enforcement.

Another essential element is that only on the very limited grounds in Art. V may recognition and enforcement be refused: domestic courts cannot refuse to recognise foreign awards on other grounds under domestic arbitration law.

This removes the discretion of local courts to assert jurisdiction over arbitration disputes in relation to contracts in which arbitration is the method of dispute settlement.

This is an essential legal safeguard for parties that may need to enforce arbitral awards abroad.



Tameru Wondm Agegnehu, founding partner of Tameru Wondm Agegnehu Law Office.

Indeed, contracting parties can rely on being able to enforce awards in any of the 162 contracting countries where the losing party owns assets.

Ethiopia will benefit from its accession in terms of attracting foreign investors: Ethiopian parties can reassure foreign counterparties during negotiations that the local courts will not be able to prevent international arbitration proceedings from being conducted in Ethiopia.

Nor can they veto the enforcement of foreign awards; for example, awards issued in Paris can be recognised and enforced in Ethiopia under the convention.

Foreign investors will be able to easily obtain recognition and

enforcement in Ethiopia of arbitral awards issued abroad.

Furthermore, when negotiating an arbitration agreement or the seat of arbitration, the link between possible future arbitration and Ethiopia should no longer be considered a risk.

Ethiopia's ratification may also serve it well also during the worldwide Covid-19 crisis, given that disputes are likely to recur concerning the impact of Covid-19 on parties' ability to duly perform international commercial contracts.

If the contract contains an arbitration clause, the arbitrators (not the local courts) will rule on whether the given obligation could have been performed based on

applicable law (e.g., Ethiopian law) or the non-performance was excused by a type of force majeure, with the coronavirus pandemic being a good example of this.

If the requirements for the applicability of the New York Convention are met, the resulting award can easily be recognised under the treaty, and this supports the argument that resolving international disputes through arbitration is more efficient than going through the local courts, even for matters arising due to Covid-19.

The ratification is a step forward in Ethiopia's path to a becoming a more arbitration-friendly environment, as is the proposal to adopt a new arbitration law based on the UNCITRAL Model Law. The government has drafted legislation to establish the Addis Ababa International Arbitration Center.

These advances are certainly helping Ethiopia in its economic journey - and thanks to the fact that the countrt is the home of the ECA and African Union to becoming the hub for international conferences, another revenue opportunity.

Ethiopia will see the beneficial effects of these measures in the long term, but some may be felt even in this time of crisis, in terms of increased interest of local and foreign investors, making it a space that is worth keeping a close eye on.

This analysis was compiled by: Tameru Wondm Agegnehu, founding partner of Tameru Wondm Agegnehu Law Office in cooperation with BonelliErede (Addis Ababa) and Giovanni Minuto, managing associate and member of the International Arbitration Focus Team of BonelliErede (Milan).



Global leaders through Innovation

Many businesses around the world become successful by identifying a market trend and selling accordingly. But only a handful of companies make it and dare to go beyond and create an unprecedented niche for themselves. They become pioneers and go on to build, along with a strong company, a robust business culture that lasts for generations.

With more than 25 accomplished years of global leading presence in the off-highway tyres segment of world business, Balkrishna Industries (BKT) is undoubtedly one such company. Back in the early 1990s when the other tyre companies in India were busy producing highway tyres mostly for mass use, the leaders at BKT foresaw a unique opportunity in international business and initiated production in the off-highway segment. BKT's products, owing to their state-of-the-art make and unmatched performance, found immediate recognition in world markets, and there began an unending story of BKT's triumph and innovation.

Today BKT is present in 160 countries across five continents around the world. It is the preferred supplier to international OEMs in industrial, construction and agricultural tyre segments. It has grown since it began in 1988 into a diversified industrial conglomerate exporting its expansive range of off-highway solutions to the world.

Customer Tim Morrisey, quarry manager of Mountain View Quarries, said, "When the going gets tough, it's important that the fleet of Komastu HD465, HD605 and CAT 775F are up to the task of meeting our demanding production schedule. That is why we rely on BKT tyres. They have been proven to provide better levels of grip than some of the more well-known brands and helps my team stay safe and provide high levels of utilisation for our moving equipment. And I am able to keep production costs efficient and under control and ensure the safety of my team as well."

Another customer Marty Bezbatchenko, president of Tyres International (Stow, OH), said, "We have represented BKT products since 2002 and during our long association find BKT an excellent supplier. BKT manufactures quality products and is constantly developing new products for every agriculture and off-road application. BKT provides an extensive range of products that reaches all the offhighway categories and provides technical support as needed in meeting customers' requirements. In addition to the quality and range of products, BKT's management team is accessible and supportive in growing our BKT business. It is a great relationship."

Creating a green industry

Ever since its inception, BKT has been very conscious about protecting the environment. Today, BKT's efforts to reduce its carbon footprint have been recognised by the businesses they deal with and even the government of India, where it operates.

Adding to that, Arvind Poddar, chairman and managing director of BKT says, "We keep our plants pollution free, for example for mixing of carbon black powder, we

have an highly sophisticated Auto Carbon Charging unit, which eliminated manual loading – thus minimising air pollution.

"We have windmills set up in Jaisalmer, Rajasthan for generating green power which fulfil almost 40 per cent of all our energy needs in the northern manufacturing units," added Poddar.

Energy conservation is at the top of the agenda at BKT. As mentioned, a sizable part of its energy requirement is fulfilled through non conventional and renewable energy sources, where BKT has invested heavily.

BKT's Bhuj Plant – a greenfield project

The manufacturing plant at Bhuj, Gujarat, India is the fourth manufacturing unit set up by BKT in India. The project complex comprises of around 300 acres of land in the Gujarat region, just a few kilometres away from the Mundra port, offering logistical benefits in transporting raw materials, which are mainly imported, and the export of containerised tyres.

The site foresees a large warehouse and a specific area of about 15 acres dedicated exclusively to research and development. The testing facility at the plant is equipped with indoor and outdoor testing areas for the products, and there is a special testing track constructed to provide for test runs and field tests for the tyres.

Rajiv Poddar, executive director BKT, says, "We have invested more than US\$375mn in this plant. This is a huge plant spread across 300 acres and with the most modern machinery ever used in production

in India. The plant will enhance our total capacity by 75 per cent."

But its business remit is only part of the story. The real advantage is the social relevance of the plant. BKT has established a completely self-sustaining village around the 300 acres plant site, where its employees and their families are living with facilities and requirements of modern living. Vital amenities such as schools, hospitals, and fire stations to name a few.

What's more beautiful is that these facilities serve the neighbouring communities which have never had access to these opportunities. Environmentally, in sync with BKT's green initiatives, the entire area is self-sustaining, it has its own water treatment plant, a rain water harvesting system, and has eco-friendly living embedded in its culture.

For BKT, the Bhuj plant means an extraordinary 75 per cent increase in production, which will add around 120 thousand tonnes per year in addition to its 180 thousand tonnes obtained from the other three plants.

"There are plans being made to modify the Bhuj plant and extend its production capacity to the level of 2,80,000 metric tonnes," added Rajiv Poddar, executive director at BKT. This is made possible by the use of the most advanced machinery to date in the industry and R&D by the BKT engineers.

This greenfield project focuses on developing a wide range of BKT's Radial and Bias tyres. "This facility will also produce Ultra large and Giant OTR tyres up to 51" rim diameter," said Dilip Vaidya, president and head of technology at BKT.

Freight won't wait

Ports and shippers are struggling with the coronavirus outbreak, but Africa's sea freight lanes remain open for business, says Martin Clark.



t is hard to find any aspect of society that has not been touched in some way by the COVID-19 outbreak.

That's certainly true for the maritime sector, despite its critical role in hauling cargo and goods from one end of the globe to the other. Maritime transport carries around 90 per cent of the world's trade. Early on in the pandemic, the International Maritime Organisation (IMO) pledged to keep shipping and freight lines open as best as possible.

"In these difficult times, the ability for shipping services and seafarers to deliver vital goods, including medical supplies and

foodstuffs, will be central to responding to, and eventually overcoming, this pandemic," said IMO secretary general Kitack Lim.

But despite the best intentions the crisis has caused uncertainty and uneven practices across Africa. North, a maritime insurance service provider, highlightedthe vast differences in tactics among Africa's ports in handling vessels and sea freight in the current climate. It has spawned a host of different rules and regulations up and down the continent, from mandatory fumigation of vessels to a complete ban on shore leave.

While cargo movements are still permitted, passenger ships have

been barred completely across many states, such as Madagascar. Lockdown rules and social distancing measures are also taking their toll on how things are done.

"The ports of Warri and Port Harcourt continue to operate normally ... but activity is challenged by the restrictions imposed by the state on 'social distancing', logistical challenges to move around, and 'stay home' directives," North reported on 14 April. "There is no lack of stevedores for the time being. However the situation involves manpower and other challenges."

Nonetheless, sea freight is still getting through, and not only in West Africa's big oil and gas ports, which provide vital supply lifelines for Nigeria's offshore rigs. The Ghana Ports & Harbours Authority (GPHA) reported on 9 April that it is facilitating the clearance of all goods, not just essential items, through its ports. But again, there is extra strain on importers, cargo owners, freight forwarders and other port users.

GPHA is issuing special permits to individuals eligible to conduct business at the ports and implementing social distancing

The IMO has taken the lead in promoting electronic exchanges to reduce human contact, encouraging digital solutions for ship-shore,

The ability for shipping services to deliver vital goods will be central to responding to, and eventually overcoming, this pandemic"

KITACK LIM. IMO SECRETARY GENERAL

administrative and commercial interactions between all entities.

Some countries have halted trade in certain items though, with the Kenyan government banning the importation of used clothes and shoes.

In the region's biggest economy, South Africa, a lockdown in March meant strategic industries such as mining had to look for alternative shipping arrangements. Mining giants First Quantum and Barrick have been exporting copper from mines in Zambia through Dar es Salaam in Tanzania and Walvis Bay in Namibia, instead of the usual Durban route.

Although South Africa's ports are once more open again to nonessential cargo, capacity has been affected, according to local logistics players.

"The port [of Durban] is open, but there are restrictions. The process has been hampered due to the unavailability of people working," said a port authority source cited by Reuters at the start of April. Durban is usually the main African gateway for copper and cobalt exports.

At the same time, the erosion of demand globally - with many economies effectively frozen during the lockdown period - has impacted freight volumes, which could yield a longer-lasting impact. The COVID-19 pandemic represents an "unprecedented disruption" to the global economy and world trade, as production and consumption are scaled back across the globe, the World Trade Organisation (WTO) noted.

World merchandise trade is set to plummet by between 13 and 32 per cent in 2020 alone, it stated in an 8 April briefing. This has

inevitably had a knock-on effect on sea freight companies and suppliers. Shipping giant Maersk is among those to have adjusted its schedule to reflect overall reduced market demand on many of its Africa routes, for example.

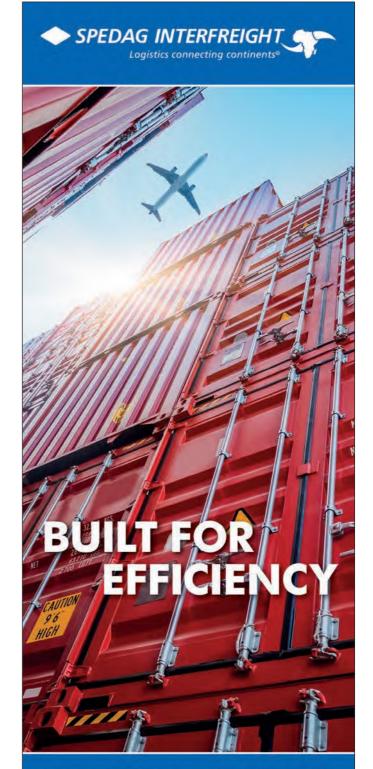
But there is a sliver of hope for Africa, perhaps, given its unique position in world trade. While the WTO forecasts double-digit declines in exports and imports in 2020 for pretty much everywhere, Africa (as well as the Middle East and Commonwealth of Independent States) may experience relatively smaller declines.

"This relatively small estimated decline in exports stems from the fact that countries from these regions rely heavily on exports of energy products, demand for which is relatively unaffected by fluctuating prices," it notes.

Still, lower global growth and commodity prices may yet hurt Africa's prospects, although DHL states in its April 2020 Ocean Freight Market Update that the region still holds the highest growth promise over the next five years.

The update says the combined Africa and Middle East market should see average growth of more than 4 per cent per year through to 2025, more than double the outlook for Europe and the Americas. That may yet prove optimistic given all the uncertainties surrounding the pandemic, but there is a clear intention to keep Africa's sea freight moving as seamlessly as possible, despite the complexities.

These remain challenging times for all, but the maritime industry is one without which the world economy would not survive.



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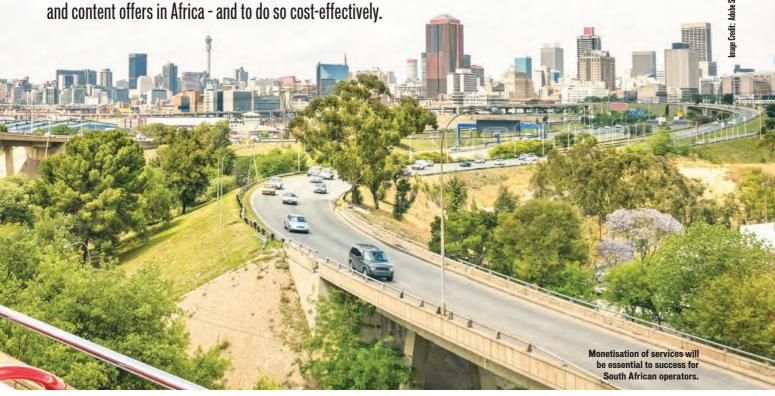
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How BSS can support new service provision in Africa

Traditional business support systems (BSS) - systems designed to bill voice calls and SMS - have long been the norm in Africa. But that's changing. As Paul Saunders, GVP sales and services, Openet, tells Vaughan O'Grady, increasingly business support systems need to be able to quickly develop, support and monetise new value add



usiness support systems (BSS) help an operator to run its business operations relating to customers - that can include managing things like rating, orders, billing, fraud and customer relations as well as revenue assurance and business intelligence.

However, as Paul Saunders, GVP sales and services with Openet, a leading digital BSS company that provides charging, policy and data management solutions, points out, many mobile operators in Africa are still preoccupied with maintaining their 3G assets and rolling out 4G services.

"This means," he says, "that up until recently, traditional BSS - the systems designed to bill voice calls and SMS - have been somewhat 'fit for purpose'. But that's changing. Many African operators are hedging their bets on being able to roll out new services quickly, and so we're

seeing a lot of operators review their existing BSS offering."

The BSS market in Africa has also been quite disrupted of late. As Saunders points out, many Chinese equipment vendors installed legacy BSS platforms when deploying infrastructure in the region, and have since decided to pull out of the BSS space altogether. "That's left many operators with traditional systems that are no longer fit for purpose and that aren't being supported by the vendor who installed the technology.

"So," he continues, "clearly further BSS investment needs to be made, particularly if we are to see

African mobile operators keep up with increasing subscriber demand for new services."

It's true that the needs of African operators are certainly different from operators in developed markets. Many are still rolling out 4G services, and few have 5G high on their priority list. "But," says Saunders, "that will change - and quickly."

While mobile coverage only reaches around a quarter of the total population in Africa. smartphone adoption has doubled over the last three years. That means that there are more subscribers to cater for, all with their own needs and demands. This will require African operators to think carefully about their BSS solutions.

As Saunders puts it: "Do they have the right systems to be able to launch and deploy new services quickly? Are legacy systems holding them back from exploring new 4G, and eventually 5G, revenue opportunities? Can their existing BSS stack support the complexity that 5G will bring? Ultimately, for African operators, it's about being prepared for what's to come while still being able to serve their subscribers today."

How African operators launch new services will also play an important role in their adoption. Most African subscribers are extremely cost-conscious, and so will be unwilling - or unable - to spend money on a lot of data. The answer? "If operators are to reach wider audiences and entice subscribers to consume more content and data."



Further BSS investment needs to be made if we are to see African operators keep up with subscriber demand for new services"

says Saunders, "they must do so in innovative and creative ways - for example, through ad-funded or zero-rated services."

He offers the example of South Africa, where Vodacom has launched the Vodacom Flex service, which allows subscribers to 'snack' on limited internet services when they run out of data. He explains: "Flex is backdropped by advertisements, which in turn generate advertising revenue for the operator and increase brand engagement. Monetising these new services will be key as African operators seek to grow their subscriber base and extend their 4G offering."

Of course, in many countries margins on voice and data are tight and they're going to get tighter. How can operators deal with this? Firstly, Saunders suggests, by looking at what customers are buying and at what they want to buy. "The option of having additional valueadd and content services as part of a mobile bundle helps increase ARPU and customer loyalty," he points out. "BSS must quickly develop, support and monetise new valueadd and content offers - and do so cost-effectively."

This is where another challenge needs to be faced - managing and controlling costs. In some legacy BSS every time an operator wants a change, such as a new plan supported, this can mean a change request, which means time and cost. "Operators with legacy BSS need to examine the total cost of ownership and look at newer, more agile alternatives that will enable them to drive new revenues from digital services, but will also be much more cost-effective."

Openet itself is helping this to happen in a number of countries like South Africa, where digital services like media streaming and online banking are markedly growing in popularity. How is the Openet digital BSS portfolio helping operators to roll out and monetise such services?

"Monetisation is key to any operator's success," Saunders says. "In South Africa, the rapidly growing

economy has created a market perfectly primed for new digital services, but these often come at a cost - a cost which not all can afford."

Operators in South Africa must therefore think of new ways to monetise services - ways that don't interfere with their margins and still allow subscribers to consume digital content and access digital services.

For Openet, enabling all of this is about giving operators the agility and flexibility to launch and 'trial' new services quickly, and in response to subscriber trends and demands. Saunders explains: "That flexibility comes by offering different ways to deploy BSS capabilities - for example, operators can choose to plug in and add on services, rather than complete a full BSS replacement. Flexibility and agility also come by placing control back in the hands of operators, allowing them to self-configure and have real-time insights that will be key when upselling, cross-selling and creating new sources of revenue."

He continues: "We also believe it is important to offer solutions that work today, and that will continue to work in the future. We offer solutions that are API and microservices-based and that are developed using DevOps approaches. This ensures we are always innovating and keeping pace with the latest technology advances. This also gives operators the reassurance that our BSS portfolio will meet their 3G and 4G - and soon 5G - needs."

Openet also has a presence in Egypt. Saunders says: "When we began working with Orange Egypt the operator had an established base of over 30 million mobile customers. The company wanted to expand its services to provide a full convergent service offering, including fixed and mobile (3G/4G) broadband services. In order to provide optimal fixed



Paul Saunders: "We're seeing a lot of operators review their existing BSS offering.

customer experience, Orange Egypt wanted to deliver broadband controls, real-time notifications and quota management."

Orange Egypt deployed Openet's Policy Manager product for both its fixed and mobile broadband services, which gave the operator centralised control and management for all its services. "Our Policy Manager acted as the foundation on which to deliver convergent bundling and hybrid broadband services, as well as offer management to enable upsell and revenue creation from convergent service offers," says Saunders.

Policy Manager is also deployed with Moroccan operator inwi, supporting offers across its primary brand and its new digital-first brand 'win'. Saunders explains: "inwi was able to use our existing policy and control solution without the need to procure a new digital platform to quickly launch the new digital-first brand."

The provision of real-time software solutions and services is another part of the Openet offering. Saunders explains that real-time data can help operators improve subscriber engagement and is also key to creating upsell opportunities. By using both historical and realtime data, operators can gain insights into specific subscriber activity - such as how they are using their data and how often they are in touch with customer care centres.

"This then allows the operator to provide context-sensitive 'solutions' or offers, in accordance with what the subscriber has just experienced," says Saunders. "For example, if a customer has gone over their allowance on previous trips abroad. the operator can use this opportunity to offer complimentary data roaming passes." He sums up: "Real-time insights increase relevance and personalisation, and in turn, improve how subscribers perceive their operator."

Of course, real-time software solutions and services in particular are increasingly using and benefiting from AI, ML and advanced data analytics. How are such technological advances helping BSS?

"Some operators are taking realtime BSS data and using AI, ML and advanced analytics to enable context-sensitive offers and automated care services. As the upsell offers are personalised and context-sensitive they get a higher uptake rate than traditional marketing of offers."

But thats's not all. "Also some operators are starting to look at using real-time BSS data to deliver personalised advertising in their TV services. This is opening up a new revenue source from advertising and as it's contextual and personalised the operators can get a higher response rate and therefore charge a higher premium to advertisers." ■

Openet is a leading digital BSS company that provides charging, policy and data management solutions. It works with many of the world's most innovative service providers to enable insight. monetisation and control of data services, www.openet.com



For African operators, it's about being prepared for what's to come while still being able to serve their subscribers today"

Weathering the storm: progress in Angola

Despite tough times globally, particularly in the wake of another oil price drop, projects in Angola are going ahead, representing long-term investments in the future of the hydrocarbons industry. Georgia Lewis reports.

ngola has undergone radical political change in recent years with a new president and petroleum minister taking over. The new leadership, steered by President Laurenço, sparked plans to revive the country's once-lucrative oil and gas industry, and companies with a presence in Angola have stepped up. With oil prices again slumping following a price war between Saudi Arabia and Russia and a massive storage glut created by oil prices veering into negative territory for the first time, as well as economic challenges presented by COVD-19, it is hoped that there is enough investment as well as production to sustain Angolan oil through this challenging period. The encouraging news is that at the time of publication, Angola had a low rate of COVID-19 cases at 25, with two deaths and six recoveries.

Baker Hughes has big plans for a multimodal oil and gas facility to operate as a hub to support projects in Angola and neighbouring countries, as well as delivering a range of their own products and services along the value chain.

Total, a long-term player in Angola, is ambitious - the plan is to boost production by 2023 to add more than 100,000 bpd from Block 17, keeping production north of 400,000 bpd. Eni is another big operator reporting positive news from Angola with its offshore Agogo oilfield, located in Block 15/06 starting production in January this year, nine months after discovery.

Eni reports the start-up of its offshore Agogo oilfield, situated in the 15/06 Block in the Angolan waters. The start-up takes place just nine months after its discovery thanks to the operational synergies facilitated by the Floating **Production Storage Offloading**

President Laurenço has big ambitions for Angolan oil after making sweeping changes in ministries

(FPSO) Ngoma, West Hub production centre, 15km from the oilfield.

loint ventures are expected to continue to play a role such as

Equinor, which is working with Sonangol, particularly in exploration in the Lower Congo Basin, Total, meanwhile, has completed a project

Diversifying Angola's economic structure away from oil dependence is key to boosting competitiveness."

> PAUL AKIWUMI. DIRECTOR OF UNCTAD'S DIVISION FOR AFRICA AND LEAST DEVELOPED COUNTRIES

with Ocean Infinity, a subsea technology and data company. It was the first time that geophysical, geotechnical, and seismic data was gathered at the same time. This was achieved through simultaneous operations of Ocean Infinity's autonomous underwater vehicles (AUVs) with geotechnical and seismic equipment based from one surface vessel over 28 days.

It is no surprise with Africa experiencing transformation in multiple markets with the Belt and Road project that Angola is receiving investment from China. Huawei has invested US\$60mn into Angola's telecommunications industry with the Huawei Technological Research Center, which is based in Luanda. The technology developed here is expected to be utilised in multiple industries, including oil and gas.

China Sonangol, meanwhile, has a joint venture with Sinopec with Sonangol Sinopec International, which holds a 50 per cent participating interest in Block 18. This block is operated by BP and covers an area of more than 5,000km2 with water depths between 500-1,600m. It contains the Greater Plutinio development which was the first BP-operated asset in Angol, a and it is made up of five fields discovered between 1999 and 2001.

Ultimately, however, economic diversification is essential for Angola's long-term survival.

"Diversifying Angola's economic structure away from its heavy dependence on oil is key to boosting competitiveness and will help the country reduce its vulnerability to external shocks," said Paul Akiwumi, director of UNCTAD's division for Africa and least developed countries, adding that COVID-19 brings this into sharp focus.

Somalia turns to seismic for industry lift-off

Seismic specialist TGS is supporting Somalia as it pushes ahead with its debut licensing round, in a bid to become the next emerging market for Africa. Martin Clark reports.



ne of the world's last remaining exploration frontiers, Somalia is drawing on a bank of seismic data from TGS to underpin its oil search ambitions. The strife-torn country has missed out as many of its near neighbours - the likes of Kenya, Tanzania and Sudan - have enjoyed success with the drill bit through recent years. But Somalia is positioned close to the oil-rich Middle East, facing out to the Gulf of Aden and the Arabian Sea, offering huge offshore potential - estimated at potentially up to 30 billion barrels of oil across the 15 shallow and deepwater blocks on offer in a long-delayed licensing round.

Somalia's president Mohamed Abdullahi Farmajo ratified the country's Petroleum Law in February, paving the way for exploration efforts to move forward.

as well as the creation of a new national oil company. While that may be impacted time-wise because of recent global events, it opens the door for drillers keen to test new, frontier waters.

"Somalia has the potential to become one of the most significant plays offshore East Africa," TGS commented after the presidential decree. The company offers 20,000 km of long-offset 2D seismic data offshore, which has already been used to de-risk source rock presence, distribution and maturity. This data complements an additional 20,000 km 2D survey, also offered by TGS. It is the only data available covering the blocks proposed by the country's first offshore bid round, which has a closing date at the end of the third quarter, although this may well be reviewed in light of current events. TGS holds an exclusive agreement

with the Somali authorities to market its data to interested parties.

"Offshore Somalia remains one of the last truly frontier margins in the world," said TGS executive, Rune Eng, describing the area as having "outstanding exploration opportunities".

So far, only two exploration wells offshore along the 1,000 km-long margin have been drilled.

A part of its work, common in the development of all frontier basins, was to integrate newly-acquired long offset seismic with these wells and all other existing information resources, such as regional satellite gravity and magnetic data.

The survey design, which covers water depths from 30 metres to 4,000 metres, has allowed for seismic coverage over the shelf, slope and basin floor with dip, strike and recording time intervals

suitable for defining a range of leads and prospects. Modern processing algorithms were also applied to the raw data to achieve optimal subsurface imaging. It is an exciting time for one of Africa's lesser known oil territories, with interest already evident among some very large players. In March, Somalia's Ministry of Petroleum and Mineral Resources said it had agreed an "initial roadmap" with a Shell-Exxon joint venture "to further explore any offshore hydrocarbon potential", though it is unclear how this affects the 2020 licensing round, if at all.

Last October, Shell and Mobil (now part of Exxon), which had a joint venture on five offshore blocks in Somalia prior to the toppling of dictator Mohamed Siad Barre in the early 1990s, agreed to pay the government US\$1.7 million for historic leasing of the blocks.

AUC and IRENA to act together to boost Africa's response to COVID-19

The African Union Commission (AUC) and the International Renewable Energy Agency (IRENA) have agreed to work closely to advance renewable energy across the continent to bolster Africa's response to COVID-19. The two organisations will focus on innovative solutions to drive the development of renewable energy including decentralised systems, and to increase access to energy across the continent.

supply critical power needed in Africa's rural areas.

The cooperation aims to improve the

ability of rural health centres and communities to deal with the health challenge, using renewable energy to power critical services such as medical equipment and water pumping for improved hygiene.

Dr Amani Abou-Zeid, commissioner for Infrastructure and Energy of the African Union Commission said "The COVID-19 pandemic has shown that energy is critical for all spheres of life and is now proving to be a matter of survival. It is time to use Africa's enormous renewable energy resources for the benefit of the African people in response to the coronavirus pandemic."

She called upon IRENA and AU to work together to mobilise international support, including the private sector, to provide electricity to health facilities and associated services for fighting the pandemic in Africa, especially the rural and periurban areas. "It is critical that the vulnerable in society, especially women and girls, are specifically targeted in these efforts," she added.

IRENA Director-General Francesco La Camera said, "Renewable energy can cost-effectively supply the critical power needed in Africa's rural communities to supply health centres, facilitate the provision of clean water, support agriculture and facilitate other productive sectors. Such measures are critical to the continent's ability to deal with the pandemic.. Our response to this crisis must also promote long-term sustainable development and support for the achievement of NDCs."

The AU and IRENA will collaborate on IRENA's initiatives in East, West and Southern Africa which are focused on advancing the deployment of renewables through the creation of larger and more robust power markets, encouraging cross-border trade of renewable power.

SENEGAL OIL & POWER POSTPONED

Senegal Oil & Power 2020, originally planned for 27-28 May, has been postponed due to the COVID-19 pandemic. Organiser Africa Oil & Power (AOP) is working with Senegalese government partners to confirm a new date, and will continue to support all stakeholders involved in combating COVID-19 in the country.

Senegal is becoming energy powerhouse, with two large offshore oil and gas projects in development as well as global-scale renewable energy initiatives.

Senegal Oil & Power 2020 creates critical new links between global capital and Senegalese projects; provides a platform for the country's government to explain its vision; defines the narrative on how Senegal's people will benefit from energy and how this will happen; and gives a holistic view of the opportunities of the energy sector in all its diversity, including renewables. For more information, go to www. AfricaOilandPower.com

SUPPORT FOR SMALL RENEWABLE ENERGY **PROJECTS**

The African Development Bank-managed Sustainable Energy Fund for Africa (SEFA) has approved a US\$760,000 grant to Empower New Energy AS (EmNEW), to develop at least eight small renewable energy projects with capacity ranging from 1-10 MW, towards bankability and construction.

The grant will support a broad range of project preparation and development activities, including technical feasibility studies, legal due diligence, environmental and social impact assessment, quality assurance and risk management.

Through its Empower Invest fund, EmNEW invests in small and medium-scale renewable energy projects in Africa, with a focus on solar power, hybrid, and hydro technologies.

Terje Osmundsen, EmNEW's CEO, said, "There is a large number of strong small or medium scale projects across Africa that remain unrealised because they can't access competitive financing. Our approach allows us to bridge this gap and working with SEFA, will help us to accelerate this process and support more high-quality projects. Together, we can bring impactful investment to Africa, while helping the continent to meet its electrification, carbon-reduction, and sustainable development targets."

The Bank's support to EmNEW through SEFA is fully aligned with SEFA's strategy to tackle challenges faced by smaller renewable energy projects in many African countries in accessing financing to cover their initial development costs, the Bank's acting director for Renewable Energy & Energy Efficiency Daniel Schroth noted.

EmNEW has offices in Kenya and Ghana, with projects expected to unlock up to US\$500mn in renewable energy investment, reduce carbon emissions by 320,000 tons, create 20,000 new jobs and eventually produce 585 GWh of clean electricity.

BRIEFS



The new plant will be operational

EAIF appointed **JMDA**

Private Infrastructure Development Group (PIDG) company, EAIF has been appointed joint mandated lead arranger (JMDA) of the US\$3mn debt finance package being raised by Tembo Power to build the Kaptis hydro-electric power plant in Western Kenya. Tembo Power, together with its partners Metier

and WK Power, will inject some US\$14mn in equity. Tembo Power aims to have the new plant operational in late 2022.



Magoro has been instrumental in developing the renewable grid code.

New head of IPPO appointed

The South African Wind Energy Association (SAWEA) has welcomed the appointment of Tshifhiwa Bernard Magoro as the new head of the Independent Power Producers Office (IPPO), . "Mr Magoro brings over 20 years of technical, managerial and leadership experience in the sector, in addition to having played a direct role in the REI4P's development and enforcement of the first renewable grid code in South Africa," said SAWEA CEO Ntombifuthi Ntuli.

Renewable power expanded at Sandvik's **Zimbabwe facility**

Sandvik Mining and Rock Technology is expanding the use of solar power at its facility in Harare, Zimbabwe, which focuses mainly on the remanufacture of Sandvik trucks, loaders, drills and bolters. This is already saving the company more than 400 tonnes of carbon dioxide emissions.

Sandvik initiated an 18-month phase one project in 2017, which included strengthening the roof of the remanufacture facility to accommodate the weight of some 400 solar panels. Using local contractors and expertise, the project was soon generating 50 kW of power to the facility. In phase two, another 50 kW of capacity was added. The



Solar power is driving Sandvik's mining and rock technology

installation now supplies about 75 per cent of requirements, and plans are afoot to provide 100 per cent of demand with another 30 to 50 kW of capacity

"This takes our Harare facility to the next level in terms of technology and sustainability," Ian Bagshaw, territory manager Zimboz - Southern Africa at Sandvik Mining and Rock Technology, says.

The system operates with no battery storage, consuming the energy as it is generated. This substantially reduced the cost outlay for the project, enabling an efficient payback period of just nine years.

Over the past year, it has been extended to the homes of employees. In a pilot project, stand-alone domestic solar power systems were designed, tested and installed. The combined impact so far amounts to around 35 kW of renewable energy.

"We will provide loans to staff members wanting to install solar power at home, empowering them to further reduce climate impact," Bagshaw says. "We will roll out this programme in 2020 through an offer to all staff, and we expect an enthusiastic uptake."

He estimates that the company's domestic solar programme could soon produce a total of around 300 kW of renewable energy.

COLLABORATION TO SUPPORT COVID-19 RESPONSE

In response to the COVID-19 challenge, the United Nations Institute for Training and Research (UNITAR) and solar solutions company Solarkiosk have launched a multi-sectoral, multi-partner collaboration to support preparedness and response of African healthcare systems, at the national level. The project is designed as a public-private partnership and combines the capacity-building and training expertise of UNITAR with the technological know-how of Solarkiosk, which has partnerships with organisations including Siemens Healthineers, Solarworx, Groots, BOS-AG and Nexol.

It is proposed to include the establishment of an early warning/early response platform; solar-powered equipment to rapid response teams for screening of the general population; infrastructure /equipment for mobile, solar-powered laboratories and clinics for testing and treatment; training for medical personnel; and the dissemination of information and guidance.

TELECOM SITE POWER SYSTEM PURCHASED

Energy Vision, a telecom ESCO in Africa has purchased eSite Power Systems' eSite x10 the world's first power system purpose-built for outdoor telecom sites - for rollout at new sites in Nigeria and Gabon.

eSite Power Systems is a Sweden-based technology company specialising in telecom site power management systems.

This is the third time eSite Power Systems and Energy Vision have worked together after earlier successful projects in Gabon and Burkina Faso.

Energy Vision is expanding its African operations into Nigeria and will be deploying eSite x10's across the country. Additional eSite x10's will also be deployed in Gabon due to the ESCO contract expansion. Manufacturing of the eSites is ongoing in Sweden with shipments to Nigeria and Gabon planned before the end of the month.

Pre-equipped to use solar energy, the eSites will be used to provide stable, dependable power at cell sites where the electricity grid supply is unreliable or unavailable.

Remote management system is enabled through eSite Tools, which will monitor, control and report back to Energy Vision's incountry network operations centres on the key performance indicators of each site.

"We aim to lead the telecom ESCO market in Africa, deploying the most innovative and technologically advanced infrastructure in order to offer our customers the highest possible power availability and SLAs at the lowest possible total cost of ownership," said Ofer Ahiraz, CEO, Energy Vision.

"Our ruggedized eSite x10 has proven itself to be the ideal site power solution to cope with Africa's environmental challenges," said Mattias Karlsson, CEO, eSite Power Systems. "Energy as a Service demands the highest levels of performance and reliability from telecom site power systems."

BRIEFS

Solar PV supply chain disrupted



The global solar PV supply chain has been disrupted because of the pandemic.

The COVID-19 pandemic has severely disrupted the global solar PV supply chain. Somik Das, senior power analyst at GlobalData, commented, "Many solar PV developers have experienced prolonged delays in importing solar PV modules as manufacturing capacity is concentrated in a few major markets such as China, the USA, Tajwan and Japan. In addition, many of the developers around the world are dependent on Chinese manufacturers to provide the PV modules."



Renewable capacity additions declined in Africa in 2019.

Decline in Africa renewables

Africa added 2 GW of renewable capacity in 2019. half of the 4 GW it installed in 2018, according to IRENA's annual Renewable Capacity Statistics 2020. Renewables accounted for at least 70 per cent of total capacity expansion in almost all regions in 2019, other than in Africa and the Middle Fast, where they represented 52 per cent and 26 per cent of net additions respectively, The renewable energy sector added 176 gigawatts (GW) of generating capacity globally in 2019.

Boosting rural electrification, boosting economies

A report by the Rocky Mountain Institute links improved agricultural productivity with rural electrification in Ethiopia, with plenty of opportunities for transformation in rural communities, even in times of crisis.



inking agricultural productivity programmes to rural electrification in Ethiopia, as across much of Africa, increases community resilience, according to a Rocky Mountain Institute (RMI) insight brief, Capturing the Productive Use Dividend. In addition to the widespread global economic disruptions caused by COVID-19, territories within the Horn of Africa face the mounting threat of desert locust infestations.

Beyond obvious public health crises, Ethiopia faces threats to food security including disrupted trade and import channels, price spikes, and delayed or compromised harvest yields. Furthermore, water supplies risk being strained as planting cycles are delayed further into the dry season. Efforts to transform agriculture in Ethiopia continue to be critical in the face of imminent systemic pressure tests.

RMI's insight brief explores the

opportunity for mutually assured success among agricultural transformation and rural electrification efforts.

In collaboration with the International Food Policy Research Institute, the Ethiopian Ministry of Water, Irrigation and Energy, and the Agricultural Transformation Agency, the brief outlines synergies between rural electrification and agricultural productivity, processing, and businesses, and the value that can flow from linking the two. By mapping value chains and opportunities, this analysis demonstrates the US\$4bn economic

case for a national programme to promote productive electricity use. This would add US\$22mn in annual revenue streams for utility and minigrid developers, helping justify investment in power systems for rural institutional loads.

While the economic opportunity is huge, the impact of joint agriculture and rural electrification efforts are especially relevant today. Diversifying business activities helps shield rural communities that depend solely on crop yields for income. The increased income would empower these groups to better prepare and protect

themselves in times of emergency. Productive uses of energy also help accelerate universal access goals, especially during crises, for facilities such as clinics. Ultimately, electrifying agricultural business activities should encourage equitable growth by extending entrepreneurial opportunities to women and impoverished groups.

The evolving situation in Ethiopia, and globally, will involve emergency measures to safeguard systems from being overwhelmed. Given that the timeline of this research predated COVID-19, this brief does not directly address ongoing efforts regarding Ethiopia's critical shocks today. But it provides commentary about increasing community resilience in response to today's shocks, and in preparation for tomorrow's.

For more information about the report, go to www.rmi.org

There is a huge opportunity for Ethiopia to capture an economic dividend and accelerate progress towards development goals."

FRANCIS ELISHA. PRINCIPAL. ROCKY MOUNTAIN INSTITUTE

Carmix 3500 TC helps renovate road in **South Africa**

Elevo Group South Africa, the Portuguese reference group in all large and small scale engineering and construction sectors, has chosen Carmix machines for the renovation of an 18 km long stretch of road in Pongola, a small town in the remote province of KwaZulu-Natal Road modernisation included new underground channels, Vshaped drainage canals and piping infrastructure over a long distance.

Elevo contacted Carmix Service Concrete, the Carmix dealer in South Africa, who supplied them with a Carmix 3500 TC. This was able to

Carmix machine was used road in Pongola

produce 40m3 of concrete per day and complete 2 km of V-shaped drainage canals every day.

To further speed up the concrete mixing to unloading stage, Elevo Group arranged several aggregate stocks along the way: thus the operator driving the Carmix 3500 TC, equipped with a 300° rotating drum, could drive straight along the road while unloading the concrete mix laterally. In addition, all 25MPA concrete was produced directly on site, thanks to the machine's electronic weighing system whereby any material can be dosed, weighed and programmed to achieve a perfect mix design. Finally, Concrete-Mate, the digital mix design manager developed by Carmix, enabled the operator to print receipts for each batch directly from the cabin and deliver them to the engineer to monitor concrete quality.

Thanks to the versatility of Carmix 3500 TC and the chance to rent the machine for a short period, the contractor was able to complete the road in less than two weeks, while minimising costs.

SOUTH AFRICA CONSTRUCTION ON THE UP

According to a report from ResearchAndMarkets, the building construction industry in South Africa is expected to record a CAGR of 4.8 per cent to reach ZAR 100bn by 2024. The commercial building construction market is expected to record a CAGR of three per cent over this period in value terms.

The residential construction industry increased at a CAGR of 2.3 per cent during 2015-2019 in value terms. High unemployment and low levels of household income are the major reasons why the residential sector in South Africa has been adversely affected over the years, the report says. However, with the recent government change in the country, along with increased competition between mortgage lenders and low-interest rates offered by the banks, the residential sector is again on the up.

With the new government's efforts to enhance residential, transport and infrastructure projects, further construction sector growth is expected, the report says.



CARMIX MOBILE BATCHING PLANTS, BEST PERFORMANCE ON THE TOUGHEST JOBSITES



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AOP teams up with HOTT3D to build temporary hospitals

Afrika Umoja, an initiative initiated by Cape Town temporary architecture specialists, HOTT3D with pan-African energy event organiser Africa Oil & Power (AOP) (www.AfricaOilAndPower.com), is tackling the COVID-19 threat in its home city and across Africa. Afrika Umoja will aim to build temporary hospitals, clinics and homeless shelters to combat the coronavirus, in partnership with government, the private sector and local entrepreneurs.

The venture applies HOTT3D's design, construction and project management expertise to building medical facilities within days, in potentially any location across Africa. AOP is supporting Afrika Umoja through marketing, communications and outreach to its network of partners.

"The coronavirus pandemic has had a dramatic impact on companies in the events industry globally, but these highly skilled people and organisations can be redeployed. "Instead of designing and building complex exhibition and conference infrastructure, we are now able to very quickly design and build temporary emergency medical infrastructure," says Liam Beattie, managing director of HOTT3D.

Afrika Umoja is in discussions with provincial authorities and is ready to build at short notice in South Africa and internationally.

"It's exciting to be able to work with HOTT3D, as we have done for exhibitions and conferences in Angola, Equatorial Guinea, South Sudan and South Africa for years, on providing national and provincial governments with solutions for the challenge of building high quality medical facilities and accommodation, wherever they are on the continent," commented James Chester, acting CEO of AOP.

Afrika Umoja invites provincial and national governments and firms interested in building or funding temporary medical buildings and shelters to contact the team via Twitter via @AfricaOilPower or email. The organisation is keen to welcome more vendors and suppliers to join the project, whether they are based in Cape Town or further afield.



SAFCEC URGES REOPENING OF CONSTRUCTION SITES

South Africa's Forum of Civil Engineering Contractors (Safcec) has submitted a request on behalf of the whole construction sector to the Public Private Growth Initiative, with the aim of reopening construction sites. "We eagerly await government's response to our impassioned plea to reopen the construction industry and the favourable response to the guidelines that we have submitted to ensure compliance with COVID-19 imperatives," said Webster Mfebe, Safcec's CEO in a message on its website.

Safcec estimates that the country's lockdown, which has been extended to the end of April, will lead to an estimated 68,000 to 108,000 job losses in the formal construction industry over the next 18 months, and that the construction industry in terms of the value of fixed investment will decline by 8.7 per cent this year.

During the lockdown, the entire construction industry is being shut down with the exception of companies offering maintenance and repairs for essential services such as power, water and sanitation infrastructure.

SAIPEM-LED CONSORTIUM WINS EGYPT PROJECT

Saipem, leading a consortium with Egyptbased Petrojet, has been awarded a contract worth around US\$150mn by Egyptian Ethylene & Derivatives Co (Ethydco) for the first polybutadiene-producing facility in Egypt. The plant is expected to have a production capacity of 36,000mn metric tonnes a year.



The Saipem-led consortium will build the first polybutadiene-producing facility in Egypt.

Saipem and Petrojet have a long history of partnership in Egypt and will be jointly responsible for detailed engineering design, procurement and supply of equipment and materials, construction, pre-commissioning, commissioning up to successful start-up and performance testing.

Saipem will contribute its key competencies as a leading solutions provider in the petrochemical sector, specifically in the elastomers segment.

The scope of work of the new rubber plant comprises one production train of Low Cis Butadiene Rubber and related facilities. Polybutadiene is a synthetic rubber with a high resistance to wear and is used in the manufacture of tyres, which consumes around 70 per cent of all global production.

Maurizio Coratella, chief operating officer of the Saipem Onshore E&C Division, commented, "After successful completion of the fast-track Zohr project, this award confirms Saipem as a partner of choice to support the sustainable development of Egypt."

BRIEFS



The complex will include modern

Outpatient unit launched

Governor Lee Kinyanjui, Govenor of Nakuru County in Kenya, has launched construction of the fifth Sh100 million state-of-the-art outpatient unit within the devolved unit at the Molo Level 4 Sub-County Hospital. The stand-alone complex will have a pharmacy, x-ray machines and modern laboratories and is expected to be operational within the next six months. The facility will house an imaging centre and surgical theatres among other essential services.



The contract is for repair. maintenance and construction

KBR wins construction contract

KBR has been awarded a US\$15 million bridge contract by the Naval Facilities Engineering Command Europe, Africa, Southwest Asia for repair, maintenance and construction services at Camp Lemonnier in Djibouti, Africa. Under the contract, KBR will perform engineering, design, new construction, renovation, renairs. maintenance, replacement, alterations, demolition and other construction tasks at Camp Lemonnier and its associated Chabelley Air Field.

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Africa's construction market faces uncertainty

Huge development needs and rising investment had been fuelling Africa's construction project activity nicely. Now, there are plenty of question marks over what the future might hold, says Martin Clark.



t was all going so well. Africa's construction market had been vibrant in 2019, with a multitude of projects, planned or underway, that reflected the continent's longterm growth potential and appeal to investors. The 2019 edition of **Deloitte's Africa Construction** Trends Report included 452 projects valued at US\$50mn or above, that had broken ground by 1 June 2019; in total, these projects were worth US\$497bn.

And then along came the coronavirus pandemic, disrupting daily life and businesses across the globe. How this will impact construction activities in Africa is hard to predict given the uncertainty surrounding the virus, especially how long it will continue to disrupt entire economies. In some vital areas, though, there are hopes that projects may not be too impacted.

"Infrastructure, particularly in the energy, water, telecommunications

and food supply sectors, is essential to the management of the coronavirus crisis," noted the **Emerging Africa Infrastructure Fund** (EAIF) in an early April briefing.

Moreover, there are plenty of African countries which, so far, do not have the large numbers of cases or casualties reported in Europe and elsewhere.

Perhaps, then, Africa can escape the worst of a predicted global construction slump, as other economies around the world slide into recession.

While the EAIF said that it remained "open for business" and is today actively engaged with financing new infrastructure across Africa and evaluating new proposals, it also acknowledged that this remains a "very fast-moving situation".

Lessons learnt

It means assessing any future outlook for the construction industry is fraught with complexity.

Until the pandemic broke, things were in reasonably good shape in some of Africa's bigger economies.

In early March, just before the outbreak really took hold across large swathes of the world, one research report said that South Africa's construction and infrastructure market was poised for "rapid growth" through to 2026.

Orbis Research said heightened government spending would help drive growth by around six per cent a year over the next six years.

"Investment in large-scale infrastructure projects is one of the key strategies of South Africa to fuel economic growth," it noted. But that was before the coronavirus had wreaked havoc on plans and projections.

Again, much depends on the severity and duration of the pandemic before any realistic future assessment can be made as to how this will impact construction work. Profound lessons are being learnt across the region though, and infrastructure seems to be an area

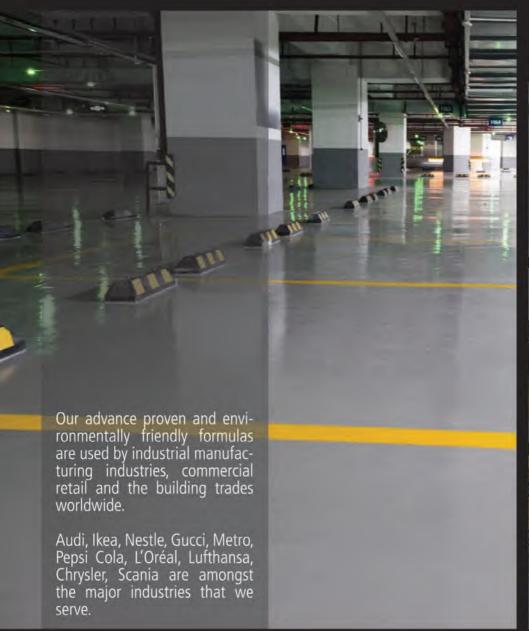


Infrastructure, particularly in the energy, water, telecommunications and food supply sectors, is essential to the management of the coronavirus crisis"

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Indeed, Godwin I Emefiele, governor of the Central Bank of Nigeria, called for his country to use the crisis to look inwards in order to develop greater resilience for the future in terms of food security. healthcare and education, which would require a repurposing of infrastructural needs. In a mid-April speech he said that this meant building "a base of highquality infrastructure, including reliable power, that can engender industrial activity."

How this plays out in Nigeria's future planning and spending remains to be seen.

Threats and opportunities

There are plenty of other challenges to consider too, especially in an environment where all of Africa's main trade and investment partners are facing their own difficulties, including China, Europe and North America.

The International Monetary Fund (IMF) says the impact of the pandemic will be felt for many years to come, although it sees a return to more normal growth rates in Africa perhaps as early next year. Indeed, projects are still being sanctioned, even in the current climate, right across the continent, and in all sectors, giving cause for muted optimism.

In Egypt, Hill International announced on 16 April that it is to provide project management services for the new Cairo headquarters of Arab African International Bank. It follows the handover of several

Projects are still being sanctioned. even in the current climate, right across the continent, and in all sectors"



China has been a major source of finance for construction projects in Africa.

other big bank projects in the city in recent years. Hill International will provide project management and construction management services across all stages of the new development. At the other end of the continent, the African Development Bank recently signed off a US\$34mn grant for the paving of the 35-km Nambungali-Roma stretch of road in Mozambique. The work forms part of the second phase of the Mueda - Negomano road project to improve transport links between Mozambique and Tanzania.

Further up the coast, in Kenya, a state-of-the-art outpatient complex at the Naivasha Sub-County Referral Hospital is expected to be operational within the next 18 months, part of a new focus on healthcare provision.

And in Nigeria, mining group Thor Explorations announced on 15 April that it was ready proceeding full speed ahead with the country's first gold mine after securing financing. It said construction commenced at its Segilola gold project in February this year, with first gold production scheduled for the second quarter of 2021.

AFRICA OUTLOOK

While events of recent months have flipped many things on their head, there were encouraging signs from Africa's construction industry, according to the 2019 edition of Deloitte's Africa Construction Trends Report. While the number of projects qualifying for inclusion in its report had decreased by 6.2 per cent, the total value had increased by 5.6 per cent vear-on-vear.

East Africa was especially significant, with the largest number of projects across the continent (182 projects, representing a 40.3 per cent share), as well as the largest share in terms of value, at US\$146bn or 29.5 per cent.

As well as Kenya and Tanzania, other major territories showing strong project activity on the ground included Egypt and South Africa.

In West Africa, among the most recent recent projects was the 120metre Alemondji Bridge in Togo, which has opened up more trading opportunities.

Most projects in the report were valued in the US\$50-US\$500mn range, with 20 having a value greater than US\$5bn.

Difficulties in structuring, financing, and delivering mega projects on the continent are the reasons behind the low number of multi-billion dollar projects, Deloitte says.

Aside from the uncertainties surrounding the virus itself, much will depend on the capacity of key financiers as to how quickly projects get moving again. While African governments are the number one financier of projects, China is the second largest source of cash, funding one in five ventures, according to the Deloitte survey. But with China hit hard by the Covid-19 outbreak it is hard to see a return to normal imminently, although Chinese construction firms have been proactive in getting essential supplies to Africa during the health crisis, a welcome sign of goodwill.

Yet what hasn't changed is Africa's underlying long-term appeal and vast development needs that should still continue to entice investors when they are ready to resume work.



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Two cities on track for success

A rail connection between the Kenyan cities of Nairobi and Mombasa is already transforming the lives of business operators and leisure passengers alike, with more projects to come for East Africa. Mwangi Mumero reports.



n the past three years, Kenyans have witnessed reduced travel costs, efficient freight transport and speedy connectivity between Nairobi and Mombasa. This has been occasioned by the construction of the US\$3.8bn Standard Gauge Railway (SGR) that has linked the two cities which are 490km apart. In the past year, an extension of the SGR has connected Nairobi to Naivasha at a cost of US\$1.5bn. Eased cargo haulage from Mombasa to Nairobi has boosted businesses in Kenya as well as the larger East African region and especially nations served by the Northern Corridor.

As more cargo is transported by rail, businesses in Uganda, Rwanda and South Sudan have witnessed reduced costs. The project was built by the China Road and Bridge Corporation with 90 per cent financing from the China Exim Bank and the rest from the

Kenyan government.

According to Musembi Mumo, the director of Kenya Railways, which owns the project, the SGR has transported more than 2mn passengers along the line in the past two years. Operations are contracted to the China Communications Construction Company for the first five years with most employees being Kenyan. According to the contract between Exim Bank, Kenya Railways and Kenya Port Authority (KPA), the latter is obliged

to provide 1mn tonnes of freight, rising to 6mn by 2024.

In 2019, SGR transported 9mn tonnes of cargo and hopes to attain 10mn tonnes annually. The SGR line is designed to carry 22 mn tonnes of cargo annually. The biggest casualty has been the long haul road truckers. Experts say the 609km line has reduced travel time from Kenya's Port of Mombasa to Nairobi by almost eight hours.

The commuter train service operates 15 economy class and three first class coaches. It also has a luggage carrier of 70 tonnes. The four-and-a-half-hour train non-stop journey from Mombasa to Nairobi has cut the use of buses.

"It saves on time and cost to use the train to Mombasa especially for business. It is cheaper than a direct flight and therefore cost-effective for many Kenyans business persons and tourists," observed Fred Keari, a Nairobi-based cargo handling consultancy.

Groups and parties heading to the coast use the twice-daily train service as it is affordable, at Ksh3000 for first class and Ksh1000 for economy. The inter-county train that picks and drops passengers along the 490km route. Forty new stations have been constructed between Nairobi and Mombasa, with stops at Mariakani, Voi, Kibwezi, Emali, Maisenyi and Athi River stations. The project entailed the construction of 609km

The railway saves time and cost, especially for business. It is cheaper than a direct flight and cost-effective for business and tourism."

FRED KEARI. A NAIROBI-BASED BUSINESSMAN

of single track railway including necessary sidings and tracks. The passenger trains have a capacity of 960 and travel at average speed of 120 km/hour. Freight trains have a capacity of 216 twenty-foot equivalent units (teus) and travel at an average speed of 80 km/hour.

The Kenya Railways Corporation (KRC) aimed to replace the old line, dubbed 'Lunatic Express' which was constructed by British colonial authorities more than a century ago. Ageing lines, engines and wagons pushed businesses to use trucks.

The benefits of SGR have become apparent as more businesses switch cargo from road to rail.

"Transport by rail is cheaper and reliable compared to road transport. It can reduce costs by over 40 per cent. It also reduces pressure on road repair costs," observed Eutychus Ndeithi, a cement retailer in Nairobi. Transporting a 20-foot container now cost between US\$725 and US\$750, according to SGR guidelines. According to Mr Ndeithi, rail transport improves the business margins since businesses need not worry about vehicle breakdowns.

A study by the East African **Business Council (EABC) indicates** that businesses are hugely affected by expensive cargo transport in Kenya and the region.

"It takes 28 days to move a 40foot container from the port of Shanghai in China to Mombasa at a cost of US\$600, while it takes 40 days for the same container to reach Bujumbura from Mombasa at a cost of US\$8,000," lamented Rosemary Mburu, a consultant with the Institute of Trade Development.

Already freight terminals - one at the Port of Mombasa and two inland - one container depot at Embakasi. near Nairobi's Jomo Kenyatta International Airport and one in Naivasha, in the Rift Valley region are operational. The Port of Mombasa is the main gateway of Kenya and the Northern Corridor nations of Uganda, Rwanda and South Sudan. According to the Kenya Ports Authority (KPA), the port handled 1.425 million teus in 2019.

On transshipment, the port

registered 197,272 teus from 105 teus registered in 2018, representing 87.3 per cent growth over the same period. In 2020, KPA projects over 200,000 teus in transhipments.

The port is expected to handle over 2.5 million teus by 2022 after the completion of the second Container Terminal which is expected to increase the holding capacity by more than 950,000 teus.

The SGR has boosted regional trade by reducing cargo delivery time to and from the Port of Mombasa. At least 10 trains - each pulling 108 wagons are dispatched from Mombasa daily heading Embakasi and Naivasha.

"We support the SGR with the challenges and protests coming from road transporters. More than 80 per cent of transit cargo handled at the Port of Mombasa is destined for Uganda, "observed Mr. Katureebe Tayebwa, Uganda's Consular in Mombasa.



Transport by rail is cheaper and reliable compared to road transport and it reduces pressure on road repair costs."

EUTYCHUS NDEITHI. A NAIROBI-BASED CEMENT RETAILER

Upon delivery of transit cargo to inland ports such as Naivasha and Embakasi, long haul road transporters can ferry it to Uganda and other regional destinations. While Kenva continues to reap benefit accruing from SGR, the government has revived existing lines and especially those serving the hinterlands, far from the new line. Accordingly, the government will spend US\$210mn on linking and upgrading older tracks with the new line. Of this, US\$150mn will fund a revamp of the metre-gauge railway between Naivasha and Malaba, on the Kenya-Uganda border.

Meanwhile, the 240km Nairobi-Nanyuki line which is currently being rehabilitated will spur economic growth in Central Kenya and the Mt Kenya, according to analysts. Currently 30 per cent complete, the line serves a number of towns that include Thika, an industrial hub, Sagana, Karatina, Nyeri and Nanyuki. The region is high potential agricultural area.

The US\$30mn rehabilitation will be undertaken by the Kenya Railways Corporation (KRC) and the Government of Kenya. Among the beneficiaries of the revived line will include the 11mn litres Nanyuki



A map of the rail connection between the cities of Nairobi and Mombasa.

Petroleum Depot operated by Vivo Energy and which serves parts of Eastern and Northern Kenya.

In Nairobi, a US\$25mn upgrade for commuter railway network is underway. The Kenya Railways Corporation (KRC) forecasts passenger numbers will grow tenfold from 13,000 per day after the upgrade. KRC runs daily commuter services from Nairobi estates and neighbouring areas. Taxis, locally known as matatus, account for 80 per cent of all commuter transportation in Nairobi. Experts say that an efficient commuter rail service will ease traffic jams in the city.

Tanzania has embarked on modernising its rail network through the ongoing Dar es Salaam-Morogoro-Dodoma-Singida Standard Gauge Railway project. The first phase of the project, the 300km long section from the



Tanzania's rail sector is not new but plans are underway for a revival.

coastal city of Dar es Salaam to Morogoro, is almost complete. Already US\$1bn has been used in this part of the 1,457km project that will connect Dar es Salaam to the regions of Lake Victoria to the west. Morogoro is a commercial town located on the eastern part of the country which connect various regions of the country.

Another section of the project,

the Dodoma-Singida region is 22 per cent complete, according to Masanja Kadogosa, director-general, Tanzania Railways Corporation. Works such as electrification. culverting, earthworks and bridges are almost complete. Turkish firm, Yapi Merkezi, in partnership with Portuguese firm Mota-Engil Africa are the contractors.

Six new train stations are in place.

Expected to be completed in the next five years, the 1,457km project will cost US\$7.5bn.

The Tanzania Railways Corporation plans to procure 1,430 cargo wagons and 20 locomotives to serve Uganda, Zambia, DR Congo, Rwanda and Burundi. The government has been funding the SGR project from locally generated loans.

Early this year, the government received a syndicated loan of US\$1.46bn from the Standard Chartered Bank of Tanzania to finance the first and second phase of the project. Stanchart is the lead arranger for the loan facility which involves the Export Credit Agency **Covered Facility from Export Credit** Agencies of Denmark and Sweden. Meanwhile, Uganda has submitted a US\$2.3bn loan request to the Export Import Bank of China (Exim) for the 271km SGR that will link Kampala to the Kenyan border.



VOLVO CE INTRODUCES COMPACTOR WITH 4800 VPM

Volvo Construction Equipment has launched the new DD128C compactor, offering higher frequency that can result in greater productivity whatever the job.

The new DD128C compactor can deliver the fast rolling speeds while maintaining proper impact spacing to provide the most productive rolling train available. Featuring a 2,000 mm (79 in) wide

drum with chamfer and radii

drum edges, the DD128C offers the high compaction performance and reliability.

This machine features a large 1400 mm (55 in) diameter drum and auto-reversing eccentrics - an



automatic function that ensures eccentric rotation in the direction the machine is travelling, for smoothness. It is equipped with an automatic drum wetting system that provides speed-dependent water flow to minimise water usage and ensures uniform drum coverage to prevent material pick-up.

The DD128C is powered by an advanced 110 kW(148 hp) Volvo D4 Tier 4 Final engine, which delivers high torque at low rpm, ensuring highquality performance with minimal noise and fuel consumption. Engine operating speed during work mode is a scant 1,850 rpm providing the torque and power needed without the noise and fuel draw. Fuel efficiency is further enhanced with optional auto-idling and

auto-engine shutdown features that deliver premium performance. The engine and hydraulics are designed to work together to provide quick eccentric start times and exceptional drum performance in the most demanding conditions.

The DD128C's intelligently designed swing-up hood allows for unobstructed access to the engine and hydraulic components, enabling easy maintenance, while a single vital accesses all service doors.

The Volvo's CareTrack telematics system allows to remotely access a range of important compactor information, including geolocation, fault codes, and service and maintenance planning.

HITACHI LAUNCHES CONSITE HEALTH CHECK SMARTPHONE APP

Hitachi Construction Machinery has launched the ConSite Health Check app, which enables service technicians to quickly diagnose the condition of construction machinery by using a smartphone. The app was developed as a new solution in the ConSite package of service solutions aimed at reducing lifecycle costs, which is an important customer concern. The app is capable of performing diagnosis and assessing the condition of construction machinery based on its operation sound and measurement data in the construction machinery industry.

The app will initially be made available to service technicians at dealers in Indonesia, the Middle East, and Africa. The full-scale release to the global market will be implemented gradually at a later date. The app is equipped with functions that enable users with a smartphone to diagnose the condition of (1) the fuel injectors in the engine of a construction machinery and (2) the hydraulic pumps, with a ranking of A (normal), B (further monitoring required), C (consider repair), or D (repair required).

Hitachi Construction Machinery is planning to expand the service by increasing the parts that can be diagnosed by the app. With the ability to quickly diagnose the condition of fuel injectors and hydraulic pumps, "health checks" can be performed on construction machinery to identify degraded performance before a major failure occurs and takes the construction machinery out of service. As a result, the app can help decrease the costs of downtime and maintenance, thereby contributing to the reduction of lifecycle costs.



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Olympus' XRD set to provide real-time quantitative mineralogy analysis

Olympus has launched next-gen TERRA II and BTX III mobile X-ray diffraction (XRD) analysers with an aim to provide faster quantitative mineralogy results in the field and lab.

The software is paired with the X-ray detectors on the systems for increased speed, thus enabling the operator to make quick decision which increases productivity.

The XRD instruments feature SwiftMin software, which provides automated mineral/phase ID and quantification in real time directly on the analyser. The intuitive software interface comes with time-saving features, including:



Olympus' TERRA II XRD instrument features a battery life up to six hours and a rugged, weatherproof case.

- One dashboard for data to see results, calibration and analysis information to speed up workflow.
- Wireless capabilities to get real-time results and operate the instrument using wireless-capable device.
- · Automatic data transfer to automatically send data to the network when the operator hits stop or after a preset amount of time.

The TERRA II and BTX III analysers feature a sample holder to provide a portable, lightweight and virtually maintenance-free alternative to conventional XRD.

The patented vibrating sample holder convects all particles within the sample chamber, removing almost all orientation effects. As a result, the instruments require a 15 mg sample, which operators can easily obtain using the supplied sample kit.

Olympus' TERRA II XRD instrument follows the first commercial battery-operated and portable XRD. Featuring a battery life up to six hours and a rugged, weatherproof case, the TERRA II system is set to provide fast in-field analysis. The BTX III offers the same analytical performance in a compact design intended for benchtop laboratory analysis, according to the company.

DUPONT SUSTAINABLE SOLUTIONS ACQUIRES LODESTONE PARTNERS

DuPont Sustainable Solutions (DSS) has acquired the assets of Lodestone Partners, a global consulting firm recognised for helping companies in the resource industry achieve sustainable improvements in operating

The acquisition, which was effective on 29 February, aims to deepen DSS knowledge and capability in the area of operations excellence, particularly in the natural resource and mining industry.

"The aim is to deliver an integrated operations transformation capability that is not currently available in the marketplace," said Johan van der Westhuyzen, regional director for Turkey, the Middle East and Africa at DuPont Sustainable Solutions.

"This acquisition significantly expands DSS' ability to help our clients protect their people and improve operations and is a significant step forward in our strategy to accelerate growth in select geographies and industries since becoming an independent company in September."

SA MONITORING LOCKDOWN REGULATIONS IN MINING AND ENERGY SECTOR

South Africa is working with major stakeholders in the minerals and energy portfolio to monitor and ensure compliance with the lockdown regulations, said mineral resources and energy minister Gwede Mantashe.

"Mining operations will be scaled down significantly, particularly deep-level mining. Essential services supporting the sector including security and related infrastructure, maintenance, water pumping and ventilation, must continue."

"Mines supplying Eskom continue operating. Production of gold, chrome, manganese, iron ore and other sectors will operate at scaled down levels, to allow smelters which cannot be switched on and off abruptly, to remain operational."

"We undertook unannounced visits to three collieries in Mpumalanga - Exxaro's Matla Coal operation, Glencore's Impunzi Colliery and Seriti's Kriel Colliery. These operations are among those supplying coal to Eskom. The purpose of our visits was to assess compliance with the directives and guiding principles issued to mines on how to manage and prevent the spread of COVID-19."

"We found that the mines are not at the same level in terms of their state of readiness to respond to COVID-19. There are some pockets of excellence, while others are lagging behind. We have encouraged mines to work together, in sharing information and best practice."

The department has received information from employees at some mining houses, bringing attention to incidents of nonadherence at their respective operations. The inspectors have been tasked to ensure compliance during this period and will intensify visits - scheduled and unannounced - to those mines still operating.

BRIEFS

Miners diverts copper shipments to Tanzania port

mage credit: Sergey/Adobe Stock

Dar es Salaam in Tanzania.

Due to the strict COVID-19 lockdown in South Africa, miners in Congo and Zambia divert copper shipments to Dar es Salaam, as reported in Reuters.

According to the source, exports of copper cathodes and copper concentrate through Dar have increased by between 20 per cent and 25 per cent. Besides, Mozambique's Beira port and Namibia's Walvis Bay are seeing more copper and cobalt export volumes.

Cummins Zambia completes a coolant plant



The Zambia market is crucial for strategic growth of Cummins in Africa

Cummins Zambia has commissioned a coolant plant project in Kitwe on the

The project received approval from the Zambia Environmental Management Agency (ZEMA) in 2019. As reported in Mining Review Africa, the plant is set to produce two types of coolant

-such as ES compleat Hybrid (Blue) and ES compleat OAT (Red).

High on efficiency

Designed for maximum operating comfort, the new set of fuel-efficient loader machines aims to offer more productivity and performance.

NEW LINE OF CAT BACKHOE LOADERS

Caterpillar has announced four new backhoe loader models that build on the success of the Cat F2 Series backhoe loaders. The new line consists of the Cat 428, 432, 434 and the 444 models, replacing the 428F2, 432F2, 434F2 and the 444F2 machines.

The new Cat backhoe loaders offer similar model platforms throughout the line to deliver component commonality and operating similarities throughout range. These machines will display the new Cat trade dress and nomenclature, which removes model suffixes.

Pilot controls are available on the 428 and 434 as an option and new seat mounted controls that provide the operator with more comfort and control are now standard on the 432 and the 444.

The Cat C3.6 engine meets EU Stage V

emission standards. The engine consists of a service-free Selective Catalytic Reduction (SCR) emission solution with diesel exhaust fluid (DEF) and diesel particulate filter (DPF)

The 428 is available with a 55 kW engine. replacing the 427F2, and requires only a DPF to meet the EU Stage V emission standards. The DPF is designed to deliver reliable operation throughout the machine's service life.

Lowering operating costs, the engine delivers up to 10 per cent improved fuel economy compared to the F2 Series engine. All models in the new backhoe loader line feature standard 4wheel drive with rear differential lock for improved traction in poor ground conditions.

The new 428, 432, 434 and 444 are available from May 2020.



KOMATSU'S NEW WA900-8 WHEEL LOADER

Komatsu Europe International NV has announced the launch of the new WA900-8 wheel loader. Designed for maximum operating comfort, the WA900-8 proposes many customer advantages, among which a Modulation Clutch and Variable Traction Control, an Auto Kick Down and an RPM set. Combined with Komatsu's redesigned extra-large 14,5 m³ bucket and its optimised maximum fill factor, the WA900-8 offers the highest productivity of any wheel loader in its class - and up to 17 per cent higher fuel efficiency.



SANDVIK LS312 LOADER

Sandvik is all set to launch its new LS312 flameproof underground loader. The first active units will start rolling off the local production line in the second quarter of 2020, according to Richard Hickson, product support manager at Sandvik Mining and Rock Technologies.

Major South African coal miners have already placed orders for LS312 flameproof underground loader.

"The LS312 loader is an enhanced 12 tonne high-capacity heavy-duty utility vehicle, building on the best features of our 10 tonne LS190 and 12 tonne LS190S models," says Hickson..





BOBCAT BACKHOE LOADERS RANGE

Bobcat offers a range of backhoe loaders for sale in markets in the Middle East and Africa. Comprising four models - the B700, B730, B750 and B780 - the Bobcat backhoe loader range offers a choice of different specifications for diverse applications in construction, utility, rental, roadworks, demolition, excavation, landscaping and agriculture.

All four models are powered by the highly efficient, Perkins 1104C-44T 4.4 I engine with direct fuel injection and a best-in-class output of 74.5 kW (100 HP) of power at 2200 RPM and maximum torque of 408 Nm at 1350

RPM, providing more than enough muscle for the most demanding applications while delivering low operating costs due to low fuel/oil consumption. The Perkins engine features a high-quality filtration system for longer life, and its single-side service components mean that maintenance and daily checks are easy to carry out.

There is a choice of 4-speed synchroshuttle, powershift or auto powershift transmissions in the different models to meet various applications including those requiring a significant amount of directional changes on site. Gear shifts are smooth and precise and help to maximise fuel efficiency.

IWMI and Direct Earth Africa to leverage remote sensing data for water management

The International Water Management Institute (IWMI) has partnered with Digital Earth Africa (DEA) to leverage remotesensing and data management technologies to enhance the ability of African governments, communities and companies to better manage their water.

Water management is vital to Africa's future, but limited water data makes it challenging. Earth observation satellites collect vast amounts of data over Africa every day, some of which can be used to measure and monitor water. The Digital Earth Africa partnership organises decades



The ODC organises data into an analysis-ready format that significantly cuts processing time and therefore costs.

of satellite data, updated daily, into an analysis-ready 'Open Data Cube', and IWMI will work with them to develop tools to translate this data into decision-ready information for water resource management.

This project, part of IWMI's Water Secure Africa Initiative (WASA), is being funded by The Leona M. and Harry B. Helmsley Charitable Trust.

Through WASA, IWMI will work with the DEA Programme to develop applications for the Open Data Cube (ODC) that can generate timely and quality information to better understand water use and availability, water risks, water quality, and water values and efficiency. These applications will be entirely open and free to use.

"Actionable information on water is essential for charting Africa's pathway to a sustainable and prosperous future. Africa is one of the most data-poor regions of the world. IWMI and our partners are working to change that. WASA has the potential to strengthen water security with both the data and the means to turn it into meaningful information for water managers, communities and farmers," said Claudia Sadoff, director general, IWMI.

"The Helmsley Charitable Trust is committed to increasing the resilience of rural African communities, and having the right information in the right hands at the right time is an essential part of achieving that goal," said Walter Panzirer, a trustee at the Helmsley Charitable Trust.

AFDB SUPPORTS NAMIBIA'S WATER SECTOR

The African Development Bank (AfDB) has approved a US\$121.7mn loan and US\$ 3.37mn grant from the Rural Water Supply Sanitation Initiative Trust Fund to support Namibia's "Water Sector Support Programme".

The programme will facilitate sustainable production and transfer of water resources to improve access to potable water and for agricultural and industrial use. It will enhance the sanitation in rural areas and enrich institutional capacity, sustainable management and utilisation. In particular, it seeks to increase access to sustainable water services from the current level of 85 per cent and sanitation services from 54 per cent to the universal 100 per cent target by 2030. The programme, to be implemented over five years, entails the construction and rehabilitation of bulk water infrastructure and associated fixtures, construction of water supply schemes and climate-resilient inclusive sanitation facilities, hygiene interventions and institutional capacity building initiatives.

WATER RESOURCES AN ESSENTIAL PART OF SOLUTION TO CLIMATE CHANGE

Climate change will affect the availability, quality and quantity of water needed for basic human needs, thus undermining enjoyment of the basic rights to safe drinking water and sanitation for billions of people, warns the latest UN World Water Development Report. The authors call on States to make more concrete commitments to address the challenge.

Such a deterioration of the situation would only hinder achievement of Sustainable Development Goal 6 which is part of the 2030 Agenda for Sustainable Development, according to which access to safe drinking water and sanitation must be guaranteed for all within ten years. This will be a considerable challenge - 2.2bn people currently do not have access to safely managed drinking water, and 4.2bn, or 55 per cent of the world's population, are without safely managed sanitation. Water use has increased sixfold over the past century and is rising by about one per cent a year. However, it is estimated that climate change, along with the increasing frequency and intensity of extreme events - storms, floods and droughts, will aggravate the situation in countries already currently experiencing 'water stress' and generate similar problems in areas that have not been severely affected. Furthermore, the report highlights the fact that poor water management tends to exacerbate the impacts of climate change, not only on water resources but on society as a whole.

Gilbert F. Houngbo, the chair of UN-Water, and president of the International Fund for Agricultural Development (IFAD), said, "If we are serious about limiting global temperature increases to below 2°C and achieving the Sustainable Development Goals by 2030, we must act immediately. There are solutions for managing water and climate in a more coordinated manner and every sector of society has a role to play. We simply cannot afford to wait."

BRIEFS

RemixWater project in Durban

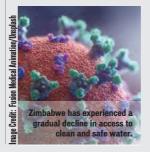
Image Gredit: Danie Bester/Phabay

The four-year project was started back in November 2016

eThekwini Metropolitan Municipality, known as the City of Durban, has been testing the system known as RemixWater and is now moving forward with full operation.

The system was commissioned and delivered by New Energy and Industrial Technology Development Organisation (NEDO) together with Japanese engineering company, Hitachi, as the contractor. Hitachi designed, constructed and has been operating the RemixWater integrated system.

Unsafe water raises COVID-19 risks



Zimbabwe government measures to combat COVID-19 should include urgently providing continuous and affordable access to sufficient safe water to people across the country, Human Rights Watch said. "Enforcing social distancing is critically important to prevent the spread of COVID-19, but people need clean water for drinking, handwashing, and hygiene," said Dewa Mavhinga, southern Africa director at Human Rights Watch.



he UN has set 17 Sustainable Development Goals (SDGs) that it says are 'a universal call to action to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere'. Adopted by all UN members in 2015 as part of the organisation's 2030 Agenda for Sustainable Development, that initial 15-year timeframe to achieve the goals by 2030 means with just 10 years left there's still an awful lot to do.

SDG #6 for example, relevant in the context of water treatment and wastewater management, is entitled 'Clean Water and Sanitation' and has several targets. It's worth looking at these and understanding they will only be achieved through 'team' efforts of UN organisations like UN Water, UNESCO, World Water Assessment Programme and many other NGOs, together with private industry and specialist companies capable of moving fast and delivering infrastructure, ideas and innovations at community level, where solutions are typically needed most, as well as for larger urban populations.

Under SDG #6, particularly with regards to recycling and wastewater management, UN targets include

improving water quality by reducing pollution, eliminating, dumping and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe re-use, globally. They also intend to substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

In addition, this UN SDG intends to protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes. It also aims for expansion of international co-operation and support to developing countries in water/sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and re-use technologies.

The UN cites several global factors as to why these targets must be achieved, including one, which states that rather than being treated and re-used in some way, more than 80 per cent of wastewater resulting from human activities is currently discharged into rivers or seas without any pollution removal.

In light of the COVID-19 pandemic, good water management, access to water and sanitation are more important than ever when it comes to reducing the spread of infection. For example, in South Africa, the country's Water and Sanitation Committee held an urgent virtual meeting on water provision during lockdown.

On the water and sanitation situation for many citizens in South Africa, the committee chairperson, Machwene Semenya commented: "Maintaining a level of hygiene requires access to water and we have noted commendable roll-out of water tanks to communities that were without water. Similarly, we have noted some communities that have complained about lack of water."

In Cameroon, meanwhile,
International Rescue Commitee
(IRC) cited access to water for
sanitation as a major priority for the
country's displaced people who have
arrived from Nigeria and Central
African Republic.

"With the right resources, we can improve access to water and sanitation services, inform the community how best to protect themselves and reinforce proper infection prevention and control," said Hannah Gibbin, IRC's country director for Cameroon.

The good news in relation to what, on the face of it can make for very stark reading, is that many

"

Maintaining a level of hygiene during the COVID-19 pandemic requires access to water and there has been a commendable roll-out of water tanks."

MACHWENE SEMENYA, WATER & SANITATION COMMITTEE CHAIRPERSON, SOUTH AFRICA

private sector companies and NGOs around the world are, indeed, driving forward projects across the continent that are contributing towards all SDGs being achieved, including SDG #6.

One of these players is DuPont Water Solutions, which has partnered with USAID, CARE Ethiopia and Puretec Israel to establish a localised water treatment facility to provide safe and reliable drinking water in Ethiopia by reviving capped and unsafe boreholes. USAID approached DuPont Water Solutions to build a demonstration water treatment site in Serdo in the Afar Region of Ethiopia; it lies within the Great Rift Valley, which is known for underground water reservoirs that contain dangerously high levels of salinity and fluoride.

NGOs have funded the drilling of boreholes in the region as a way to access clean water directly underground, but, on average, only one in five produces safe drinking water and approximately 40 borehole wells throughout the region have been abandoned and sealed after thousands of dollars has been spent on drilling.

The approach involving DuPont was to create an economical model for uncapping local boreholes by reducing the salinity and fluoride content to safe levels, at which point the clean, potable water can be used. With funding from USAID and Water Solutions, the regional DuPont team worked with Israelbased Puretec Water Engineering on the design and installation of a treatment facility. Water Solutions donated sixteen BW30-400 FILMTEC Reverse Osmosis (RO) Elements and



Michael Raynor, US Ambassador to Ethiopia and Awol Arba, President of Afar National Region State, cut a ribbon at the commissioning of the Serdo Water Scheme.

With the right resources, we can improve access to water and sanitation services and reinforce infection control."

HANNAH GIBBIN. INTERNATIONAL RESCUE COMMITTEE COUNTRY DIRECTOR. CAMEROON

provided technical expertise, while CARE Ethiopia and the regional government facilitated the project's process and logistics.

Commissioned in October 2019, the Serdo water scheme is now providing 5,000 litres of safe water per hour to 2,000 pastoral men, women and children, including 100 students at the local school. Water no longer needs to be trucked into the town and residents have stopped traveling hours in search of a water source. It is a clear teamwork success story that is contributing the achieving some of the targets of SDG #6.

In South Africa, the Water Institute

of SA (WISA), is a heavily involved in work on the health of boreholes across the nation, troubleshooting such things as microbial quality, organic pollutants and the physicochemical quality of extracted water in regions such as the North West Province and the Vaal regions.

Its work contributes hugely to the UN's SDG. Its worth noting that its annual WISA event, one of the most important global water events, though impacted by Covid-19, has now been rescheduled for December 5-9, 2020 at the Sandton Convention Centre.

Space precludes mentioning so many important players in providing water and wastewater solutions that will all, in many different ways, contribute to SDGs being achieved. Piping infrastructure, for example, including borehole casings, plays a huge part in many community and business water projects, whether directly SDG-related, or not. Companies like Sizabantu Piping Systems in SA manufacture and distribute PVC piping and ancillary items to agriculture, mining and civil markets, conducting projects of all sizes, including the building of complete pipelines.

Macsteel is another SA piping player (along with other steelrelated products), supplying pipes including borehole casings - and comprehensive fittings, pumps and valves into the water supply, treatment and wastewater management sectors. Another leading wastewater player is Mariswe, whose comprehensive water engineering services span the abstraction, conveyance, storage and drainage of raw, potable, treated and wastewater. The company was involved in a major 7.2-km upgrade to the Zeeoegat pipeline north of the Tshwane Metropolitan Municipality, which involved water treatment works and a network of pipes and reservoirs.

These are just a few of the many private and non-profit companies, other names like SAPPMA (Nonprofit), TT Innovations, Dosatron, Krohne and Watsan Envirotech, whose individual projects and efforts, or those in partnerships with other organisations, are all helping, bit by bit, towards achieving the admirable goals laid down in the UN's SDG #6. ■

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