

Friday@Noon on Infrastructure in Africa: 2018

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The NTU-SBF Centre for African Studies publishes a weekly newsletter on issues relevant to Africa. This paper is based on issues addressed in the newsletter.

General

Africa has vast infrastructure needs. According to the AfDB, Africa's infrastructure requirements are estimated to be between US\$130 billion and US\$170 billion, far higher than the previous estimation of US\$93 billion a year. The AfDB's 2018 Annual Report said the new estimates left a financing gap of US\$108 billion. Given this, and urgent needs in health, education, administrative capacity, and security, Africa has to attract private capital to accelerate the building of critical infrastructure needed to unleash its potential. African countries do not need to wait until all financing gaps are filled before they transform their economic structures. They have a wide variety of options. Africa collects about US\$500 billion in tax revenue annually, US\$50 billion in foreign aid, US\$60 billion in remittances, and US\$60 billion in FDI inflows. Effective institutional arrangements are required to exploit the potential for infrastructure development; this is necessary to manage the complex tasks of project planning, design, co-ordination, implementation, and regulation. This includes a focus on the soft side of infrastructure development: policy and regulatory issues, training the teams assembling the financing packages, and conducting constant research to keep up with the knowledge frontier.¹

Over the last decade, Africa's infrastructure needs remain huge with an annual financing gap between US\$130 and US\$170 billion. To close this gap, the AfDB is working with leading global development finance institutions to set up a mutualized co-guarantee platform to de-risk investments and facilitate projects that have the capacity of transforming Africa under the Africa Investment Forum (AIF). The AfDB is positioning the AIF as a platform to improve the ease of doing business in Africa by advancing and promoting investment-friendly regulations, whilst championing ethical business practices. The AfDB stressed the need to change the current funding mix and create partnerships to finance infrastructure and other projects in Africa. Nigeria's infrastructure cumulative financing needs are estimated to reach US\$3 trillion by 2044 or about US\$100 billion annually.²

Africa's inability to implement, in spite of adopting many policies, is a source of serious concern. Hopefully this initiative will streamline the process of obtaining investors and enabling them to get things done. As the one stakeholder said, "it is time Africa stops talking and starts doing!" It is not the first initiative to support African decisionmakers with this objective. A few years ago, the AfDB created the Programme for Infrastructure Development in Africa (PIDA) to develop a vision and strategic framework for the development of regional and continental infrastructure (Energy, Transport, Information and Communication Technologies (ICT) and Trans-boundary Water Resources). The PIDA initiative is being led by the African Union Commission (AUC), the NEPAD Secretariat and the AfDB. Hopefully there are clear role definitions so that no confusion is created.

¹ <https://www.iol.co.za/business-report/international/african-infrastructure-is-lagging-behind-12781338>

² https://www.cnbc.com/insights/african-development-bank/2018/07/11/how-the-africa-investment-forum-is-going-to-help-businesses-mobilize-financial-resources-to-catalyze-private-sector-development/?utm_source=CNBC+Daily+Newsletter&utm_campaign=44a45b19dd-development/?utm_source=CNBC+Daily+Newsletter&utm_campaign=44a45b19dd-RSS_EMAIL_CAMPAIGN_Daily&utm_medium=email&utm_term=0_37ea1a8e5e-44a45b19dd-216204589

The needs in the fields of infrastructure, health, education, administrative capacity and security have been highlighted frequently over the past number of years. It needs to be highlighted frequently to ensure that political and business leaders do not move their focus from the imperative to address these needs. These needs also create opportunities for all investors interested in developing and contributing to Africa's infrastructure development. The increasing requirement for infrastructure development and the increasing financing gap is becoming increasingly difficult for Africa to address, even with the participation of its private sector. Hence the phenomenon of Africa embracing the participation and involvement of countries such as China. It has been reported that Chinese companies involved in infrastructure development have been making very good profits. That on its own should be an incentive for private sector companies from all over to get involved.

East Africa

In East Africa, we have seen Kenya and Ethiopia reconsidering major infrastructure projects between their countries following an MoU signed 2 years ago. They announced they would focus on the development of the Lamu Port-South Sudan-Ethiopia Transport (Lapsset) corridor. They have committed to the development of Lapsset, the Northern Corridor, including the road network between Isiolo, Moyale through to Addis Ababa and the railway from Addis Ababa to Nairobi. The project was repeatedly delayed since 2016 due to financial constraints experienced by both countries. The seven portions of the Lapsset project require an estimated US\$24.5 billion, with a US\$3.1 billion bill for Lamu Port.³

The Lapsset project is heavily financed by the Chinese. Having a number of countries in the region collaborating, would hopefully create a more stable region, better integrated with newer transport infrastructure and subsequently higher levels of intra-regional trade.

Rwanda

In Rwanda, a group of local and international players in the housing sector announced a US\$200 million project on the construction of affordable housing units to address the shortage of accommodation in Kigali. This would benefit nearly 50,000 people in terms of employment and business opportunities. The deal is part of the World Bank's move to encourage commercial investment in the housing sector through its recently created International Development Association. They intend to reduce risk and increase investment in the sector. The deal will also offer alternative financing to homeowners who often rely on expensive commercial bank loans to construct houses. They hope the development can spur the emergence of a viable housing industry in the country. The deal will address challenges that have previously hindered entrance into markets such as Rwanda, as it reduces the risks inherent in the sector and provides cheaper capital. Some developers seek to introduce a cheaper technology in housing, precast concrete manufacturing and construction. The project will develop 1750 housing units in the first phase. The investment is against an estimated demand of 31,000 housing units annually, to ensure city dwellers have access to quality shelter.⁴

The housing sector is a challenge in various African countries, not just in Rwanda. Many venture capital and private equity funds have in the past looked at the housing sectors in African countries, but have been deterred by the lack of a clear revenue model – how would they get their money

³<https://www.iol.co.za/business-report/international/kenya-ethiopia-mulling-joint-infrastructure-projects-14839173>

⁴<https://www.newtimes.co.rw/news/consortium-construct-10000-homes-kigali>

back and how would the individual buyer be able to afford his/her home. Some were also hesitant to work with governments in Africa, given the prevalence of corruption in some countries. This move by the World Bank is therefore a welcome initiative to serve a need that is huge in Africa. There is a massive demand for housing in Africa's cities, which will grow as the rate of urbanization increases. We currently have in Africa a population that is growing. With a projected population size of 2.4 billion people by 2050, and with 50% of the population being urbanized by 2030 and 60% by 2050 (according to the AfDB), the pressure on the provision of housing is just going to increase. All forms of technological innovation will need to be investigated to support African governments in their endeavours to meet the housing needs of their populations.

Rwanda has also addressed energy infrastructure. Government has adopted digital technologies in the power distribution system as it increasingly looks for ways of how to efficiently respond to the country's power demands. Rwanda has started embracing smart grid technology in the energy sector – an electricity supply network that uses digital communication technology to detect and react to local changes in usage.

Rwanda's energy sector continues to face several challenges as many people still don't have access. More than 50% of the population have no access to electricity, but Rwanda has an ambitious target to achieve 100% coverage by 2024. Power lost through the distribution lines in Rwanda is estimated to be well below 20%. Experts believe that integrating smart grid technologies could help countries like Rwanda achieve efficiency in the energy sector, reduce power outages, and reduce energy waste.⁵

Technology is increasingly playing an important role in many African countries in various industries. With Rwanda doing its best to ramp up its manufacturing sector, the availability of abundant low-cost electricity is essential. This is in addition to improving the lives of many of its population who have no access to electricity. Rwanda is slightly better off than the average of the continent, where it is said that 60% of the population do not have access to electricity. Getting the other 50% to also gain access to energy by 2024, is indeed a very ambitious target. However, Rwanda has the political will and drive to make it work. The country's development since 1994 is testament to this.

Kenya

The Kenyan government undertook to construct 100,000 affordable housing units in line with the Big 4 agenda, following an agreement with the UN Office for Project Services (UNOPS) to finance the project. They want to implement interventions that will ensure that developers can produce housing units at scale, home buyers can access affordable financing facilities that allow them to buy homes, and that the enabling environment facilitates innovation, embraces technology, and commercial arrangements that can bring down the cost of construction. UNOPS seeks to attract finance from the private sector as it de-risks infrastructure investment projects. Kenya stands at a 2 million housing deficit, which grows with 200,000 units annually. The cause of the deficit is the high rural-urban migration rate. This is also influenced by the population growth rate versus the annual available housing units.⁶

In addition to housing, Kenya's hospitality industry is on an upward growth trajectory, having been resilient and surmounting numerous challenges over the years to secure a place for itself among the top in Africa. The travel and hospitality sector has contributed immensely to the economy by

⁵ <https://www.newtimes.co.rw/news/rwanda-embraces-smart-grid-technology>

⁶ https://constructionreviewonline.com/2018/10/kenya-to-deliver-100-000-affordable-housing-units/?utm_source=Magazine+Offers&utm_campaign=08b5c7a421-newsletter_COPY_165&utm_medium=email&utm_term=0_a89c87e295-08b5c7a421-161700541

driving tourism earnings, providing foreign exchange and creating employment for many Kenyans. In the next 5 years, Kenya is expected to open 13 new hotels, adding 2,400 rooms and increasing hotel capacity by 13%. Kenya's hospitality sector was expected to grow by more than 8% in 2018. By 2022, the growth in the occupancy rate will be 58.1%, up from 47.3% in 2017.⁷

Recent numbers (October 2018) on hotel expansion in East Africa have indicated that 31 hotels are being erected in Ethiopia, which will add 5,747 rooms. This same research puts Kenya at second place with new hotels numbering 20, adding 3,444 rooms, Tanzania at third with 15 hotels and 1,494 rooms, Uganda at fourth with 9 hotels (1,238 rooms) and Rwanda with 7 new hotels and 655 rooms.

We also have the new rail linking Addis Ababa in Ethiopia to Djibouti. There are also various other initiatives in East Africa, linking the ports of East Africa with the landlocked countries of Uganda, Rwanda, Burundi and Zambia, to name but a few. China is playing an active role in these many projects. Projects seem to be dependent on DFI funding, either through concessionaire loans or outright grants, and/or PPP agreements. According to some commentators, the vast majority of projects in East Africa are constructed mainly by international entities, with only Rwandan and Ethiopian firms noted as local key stakeholders.

Namibia

In Southern Africa, the port of Walvis Bay is getting a new container terminal and an oil jetty, both being built by a Chinese company, i.e. the China Harbour Engineering Company (CHEC). Expected to be completed by the end of 2018, the port project lies at the heart of Namibia's ambition to become a logistic hub in the southern African region. The project will more than double the throughput capacity of the port's container terminals to 750,000 TEUs per year. It will also add the first government-controlled oil storage facility in Namibia and a cruise jetty to boost tourism to the country. Upgrading the key port is significant to the entire SADC region, as it will boost imports and exports of mineral-rich landlocked nations like Zimbabwe and Botswana that are using the port as access, and in the meantime increase Namibia's appeal to global investors. The port construction will spur upgrading of nearby roads and railways as well, fuelling Namibia's infrastructure boom that hopefully will create employment.⁸

Walvis Bay is an excellent harbour and has the potential to serve as an entrepôt for various landlocked countries in Southern Africa. The route to Walvis Bay via Botswana is a safe and secure route, with very little security challenges sometimes seen in Mozambique. It also provides the likes of Botswana, Zambia and Zimbabwe with alternatives, which reduces their vulnerability to being beholden to South Africa and Mozambique for their imports and exports.

Zambia

From an energy infrastructure perspective, Zambia and Russia signed the Engineering, Procurement and Construction Contract, which will establish the Centre for Nuclear Sciences and Technology (CNST). This could improve Zambia's economy because of the benefits derived from the establishment of the Centre. The Centre will be used for peaceful purposes such as boosting the energy, health and agriculture sectors. The contract will hopefully translate into Zambia having

⁷ <https://www.nation.co.ke/oped/opinion/hospitality-industry-on-the-rise/440808-4786798-imhl1z/index.html>

⁸ http://www.xinhuanet.com/english/2018-05/21/c_137193454.htm

sufficient cheaper energy, which provides Zambia with the potential to grow its GDP through industrialisation.⁹

Russia has been actively marketing its provision of nuclear energy to African countries. Here we see Zambia as the target of this drive. However, Zambia is by no means the only African country targeted. We have also seen Angola, South Africa and Sudan, as well as Ethiopia as potential clients. Discussions apparently also took place with the governments of Ghana, Nigeria and Tanzania. The reality is that while countries do need a stable source for its base load energy provision, coal seems to be the cheapest source. However, its contribution to global warming is making it increasingly unpopular as a source of energy. Benefits for Zambia, in addition to the provision of sufficient energy, include the creation of highly skilled employment opportunities. For Africa to industrialise in a meaningful manner, it does need a stable source of low cost energy. Renewable energy currently does not seem to be considered as a stable source of base load energy.

The above are by no means an exhaustive list of the infrastructure development projects that were implemented during 2018. Numerous renewable energy projects were announced as well, as was discussed under the Renewable Energy heading.

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⁹ <https://www.daily-mail.co.zm/zambia-russia-nuclear-science-deal/>