Bridging the Gap:
Ensuring Execution on Large Infrastructure Projects in Africa
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Introduction

Nearly three quarters of infrastructure projects in Africa are simply not getting off the ground. We explore why insufficient funding is not the primary reason that Africa still has such a large infrastructure backlog. Looking at successful projects and those that have stalled or failed altogether, can help to understand how Africa can more successfully bridge its infrastructure gap.

Africa has seen great economic growth over recent years and is expected to continue growing at an average rate of 6% annually, between 2013 and 2023.\(^1\) However, one thing that may hinder Africa’s growth prospects is its lack of infrastructure. The absence of adequate infrastructure is said to cost Africa approximately 2 percentage points off GDP growth per year.\(^2\)

In order to better understand Africa’s infrastructure deficit, EY has built a database of active large infrastructure projects in Africa, using information sourced from Africa Project Access. Of 196 active projects in our database, 141 or 72% are still in the conceptual, planning or pre-implementation phase. In other words, only 28% of projects are being implemented.

Despite being recognised as being essential for the growth and competitiveness of a country, many large infrastructure projects are simply not getting off the ground. Lack of funding is often cited as the biggest reason behind Africa’s infrastructure gap. According to the World Bank, Africa needs to spend about $93bn annually until 2020 to bridge its infrastructure gap.\(^3\) As daunting as that sounds, half of this amount is already being financed by African governments, multilateral and bilateral sources of finance and official development assistance (ODA). Europe is the biggest ODA financier in Africa, funding more than $4bn annually to the continent.\(^4\)

At the same time, new sources of financing are surfacing. For one, African governments have increased their own investments in infrastructure. In addition, regional development banks are playing an increasingly important role. For example, the African Development Bank recently signed a co-financing deal with China worth $2bn for infrastructure and industrial development. There has also been an increase in intra-African investment showing an improvement in regional integration. Crucially, as the second most attractive investment destination in the world,\(^5\) the continent has become an attractive market to private investors. In 2012, $12.8bn was invested by the private sector into new or expanded infrastructure projects in Africa.\(^6\)

All 196 infrastructure projects in the EY database have some form of financing.

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1. World Bank, Africa Overview, 2013
5. EY Africa Attractiveness Survey 2014
All of this suggests that it is not simply a lack of resources that is preventing African governments from plugging their infrastructure gaps. To give just one example, Mozambique currently has more than $32bn worth of active infrastructure projects. There is also significant evidence that many large infrastructure projects are being planned and initiated across the continent. For instance, one World Bank database records 27 new large infrastructure projects with private involvement to a total value of $4.5bn reaching financial or contractual closure in 2012, thus allowing work to begin. However, many of these never get off the ground or take far longer than expected to be completed. Uncertain timeframes and unreliable execution are bound to further discourage potential investors, making it harder to secure finance in the future. Delayed projects also mean that planned infrastructure upgrades and maintenance fail to keep up with growing demand over time.

"Africa is facing a critical development phase and is on the eve of an economic explosion. The need for skilled project managers to successfully complete various types of projects, ranging from small projects and partnership projects to mega government projects, in diverse business sectors will only continue to grow in the foreseeable future."

- World Bank

The answer to bridging the infrastructure gap in Africa does not therefore lie in identifying new sources of funding but rather in ensuring that planned projects are completed within reasonable timeframes. This will ensure that projects can start to deliver returns to their investors, helping to attract further investment in the future. Learning from challenges being experienced on current large infrastructure projects on the continent can help to identify the key areas to focus on to ensure success. These major challenges include a lack of policy frameworks for infrastructure projects, poor financing structures, weak contract and project management, as well as a lack of the necessary monitoring and evaluation throughout projects.
Develop Policy Frameworks

Governments can use a framework for their infrastructure goals to plan and prioritise potential projects.

Before entering into infrastructure projects, governments should begin by defining a suitable and appropriate policy framework that will guide both them and potential investors. These frameworks ensure good governance, due process and diligent planning. It is important for governments to evaluate their current situation in order for them to understand where they stand and in turn help define their infrastructure needs now and in the future. Governments should ensure that clear infrastructure policy goals and objectives are set. These goals need to reflect the long-term infrastructure vision of the country. This can help determine the short-term infrastructure investments that should be prioritised.

Factoring in how demand for infrastructure is likely to grow in the short to mid-term is also important. As populations expand rapidly and economies grow, more and more people are becoming urbanised and the rate at which demand for infrastructure is increasing. For example, South Africa signed its Infrastructure Development Act in June 2014. The act is aimed at fast-tracking regulatory decision-making and speeding up the implementation of strategic infrastructure projects.

In addition, strong governance institutions can help to ensure that longer term infrastructure projects stay on track even when political power in a country changes hands. All too often politicians favour short term projects which will show immediate results over longer-term, more complex, but more essential infrastructure projects, because the electoral rewards for their success may be reaped by their successors. Strong government institutions, including parliament, government departments and state-owned enterprises can help to ensure that infrastructure policy, funding and implementation follows a longer term strategy driven by critical need rather than political imperative.

Regional integration is essential for delivering infrastructure in Africa.
African leaders have come together to form the Programme for Infrastructure Development in Africa (PIDA) Priority Action Plan which includes a list of 51 infrastructure projects aimed at promoting regional integration.

PIDA provides a common framework for African stakeholders to build the infrastructure necessary for more integrated transport, energy, ICT and water networks to boost trade, spark growth and create jobs. This is an example of how co-operation on the continent can be achieved to ensure that projects that cross borders can be more effectively prioritised, coordinated and implemented.

“Regional economic integration is essential for Africa to realise its full growth potential, to participate in the global economy and to share the benefits of an increasingly connected global marketplace.”
- African Development Bank
Specify Funding Structures

When conceptualising an infrastructure project, there are several different financing structures governments may choose. These include entirely public projects, fully private investments or public-private partnerships (PPPs). The trick here is selecting the correct delivery structure that will yield the highest overall benefits. The decision criteria for governments should include the financing of the project, the type of contract model that will suit the project and the level of participation either the government would like to have or will allow from the private sector. Due to the limits of public funds in many African countries, a common approach is PPPs. Not only can the private sector contribute much needed financing but is increasingly being used to design, build or operate infrastructure facilities.

This is a model that can prove to be particularly successful in filling the infrastructure gap in Africa, whereby private investors invest in commercially viable infrastructure, for instance toll roads, passenger rail networks and smart metering.

This ensures guaranteed returns for investors, as users pay for the use of such infrastructure, and frees governments up to dedicate limited public funds towards freely provided infrastructure such as schools, hospitals, public sewerage facilities or rural road networks.

The Road to Success from SA to Mozambique

The N4 East project linking Gauteng in South Africa to Maputo in Mozambique is the first major PPP project implemented in Africa, although other PPP road projects followed, such as the N3 between Johannesburg and Durban and the N4 West connecting Gauteng in South Africa and Gaborone in Botswana. The N4 toll road is a good example of a successful PPP project using the BOT (build, operate, transfer) model. A 30 year road concession was awarded to the Trans African Concessions (TRAC) consortium and signed with South African National Roads Agency (SANRAL) and Mozambique Roads Agency (ANE). TRAC was responsible for the financing, design, construction, rehabilitation, operation and maintenance of the toll road. This project involved the rehabilitation including construction of 198km of new road. The value of the project was approximately $466m. It was financed through a combination of 20% equity and 80% debt. South Africa and Mozambique jointly and severely guaranteed the debt of TRAC and to a certain extent the equity. The two governments remain the legal owners of the land on which the N4 is built and will reassume responsibility for the road once the concession expires in 2027. Similar agreements have been used to upgrade the ports of Maputo in Mozambique, Dar-es-Salaam in Tanzania and the Lekki expressway in Nigeria.

Be Conscious of Contract Management

A common challenge for governments once they have selected a funding structure for a project is substandard contract management. Contracts can differ from project to project, determined by the structure and nature of the project. Different types of contract include management and operating contracts, leases and concessions or joint ventures. The design of the contracts needs to safeguard the interests of both the government and the private partner(s). All too often African governments enter into contracts that are less than beneficial to them in the long run, as private investors tend to have the capabilities or resources to ensure the terms of any contract meet their own interests.

The example of the Belinga Iron Ore Project (see insert) shows how contractual problems between the parties has ultimately led to the project failing to get off the ground while costing the Gabonese government significantly.
Belinga Iron Ore Project
Belinga is one of the largest untapped reserves of iron ore in the world. The iron ore deposits can be found 500km east of Gabon’s coastal capital, Libreville. Gabon has known of the iron ore deposits for a long time but due to Belinga’s remote location, lack of infrastructure, high cost and ecological and human implications, they have not been exploited. The Belinga project has huge potential but has been through a lot of delays and setbacks.

The project includes building the Belinga iron ore facility, a deep-water port and 560km railroad from Belinga to Santa Clara in order to transport the iron ore, as well as two hydroelectric dams to power the facility. It is estimated that the project will produce 30 million tons of iron ore annually.

In 2006, China Machinery Engineering Corporation (CMEC) signed an agreement with the federal authorities securing the rights to explore Belinga. Just a year later, the contract had to be put on hold after civil society groups raised concerns that CMEC was receiving concessions that were unfavourable to the people of Gabon. It was only in 2009 that CMEC eventually signed a 25-year contract to build and operate the mine. According to the construction timetable, CMEC was scheduled to conduct construction activities from 2008-2011, with the first iron ore shipments leaving for China in 2011.

Progress on the project was very slow due to environmental concerns. The residents of Gabon protested that the deposit was situated right within the Ivindo National Park, a rainforest home to forest elephants, western lowland gorillas and chimpanzees. At the same time, residents expressed concern that the project would fall victim to government corruption. People demanded that the contract between CMEC and the Gabon government be made public and subject to stakeholder input. In 2012, there were unconfirmed rumours that Gabon was close to handing the project to BHP Billiton Ltd. Rumours were put to rest when BHP announced that it was suspending its operations in Gabon.

The lack of progress caused CMEC’s ability to deliver on the project to be questioned, putting the project into review. The President of Gabon decided to examine from all sides the agreement for the exploitation of Belinga’s mines as a result of the delay in the implementation of the project. Due to these consistent delays, the Gabonese government cancelled the contract with CMEC in December 2013. The Gabonese government had to pay about $34 million to CMEC in order to recover all the mining rights for the Belinga deposit. The government now owns 100% of the Belinga deposit.

Gabon is still looking for a partner to help develop the Belinga iron ore deposit. It has been reported that Gabon has started initial talks with companies to develop the mine and will be launching a formal tender process in 2016.
Having a solid contract in place before a project starts is essential. However, the lengthy and complex nature of most large scale infrastructure projects means that these contracts need to make provisions for unforeseen events and changes down the line. This is also why good relationships need to be maintained between public and private partners, so that a culture of mutual trust is built between the two parties.

**Prioritise Project Management**

Project management can help to ensure that infrastructure projects run on time, within the given budget and quality specifications while meeting the given scope.

Infrastructure projects are almost always large scale and very complex. At the same time governments are usually working on a number of projects simultaneously. Therefore they need good project management in order to successfully execute and deliver projects. Infrastructure projects often cost millions of dollars and any mishaps can have detrimental effects on the costs, timeframe and quality of the project. In addition, the complexity of large infrastructure projects means there will be multiple stakeholders, all of whom can have an impact on the successful and timely delivery of projects. Such stakeholders range from funders and engineers to government officials and labour unions. Sound project management can help ensure that all role players understand their responsibilities in getting the project executed properly.

**Nigeria loses $1.5 billion to project delays**

Currently the Nigerian Government is cited to have lost over $1.5bn due to the consistent delays in reaching a final investment decision for the combined Olokola Liquefied Natural Gas (OKLNG), Brass LNG and Train 7 projects.

The OKLNG project was initiated in 2005 but now that major shareholders including BG Group, Shell and Chevron have withdrawn from the project it has been put on hold. The investors blamed their exit on the lack of progress on the project. Nigeria will continue losing money until new third-party investors come on board.
EY’s approach to project management on large capital projects emphasises a holistic approach. Effective project management on such projects has to start with how financing is structured, and then address the implementation and logistics of the project, all the while managing risks at every stage. Adopting such a broad approach to project management protects and empowers all stakeholders throughout the process, from concept to full operationalisation of the project.

Persist with Monitoring & Evaluation

Once an infrastructure project is underway, regular monitoring and evaluation is required. Reviewing and assessing progress throughout the infrastructure project can help detect possible problems early on so that they can be resolved immediately or possible risks can be mitigated.

Adequate monitoring and evaluation of existing projects also plays an important part in attracting future investment and ensures accountability and transparency for investors and citizens. Monitoring and evaluation throughout the project can also help to reduce wastage and eliminate the scope for corruption, which can plague large projects where such vast sums of money are at play.

“EY’s approach to capital programme assurance uses key lessons learned from challenging programmes that we have assisted clients in and thereby embeds risk management strategies into our methods and approach.”
- Tebogo Mosupi, EY Africa Programme Management Leader

EY is your trusted partner, bringing expertise and proven solutions to your capital project portfolio. We assist you to deliver, improve and protect stakeholder value.
We are seeing a drastic increase in the monitoring and evaluation of projects by donors, as they need to ensure they invest in results-based projects and that funds are utilised effectively. This focus on public financial management will ensure there are proper systems and controls in place so that governments are accountable for the correct and agreed usage of funds.

- Joe Cosma, Africa Advisory Government & Infrastructure Leader

**Conclusion**

Infrastructure is the key to unlocking Africa’s true economic potential. It can make both living and doing business in Africa less challenging. With significant funds dedicated to addressing infrastructure backlogs on the continent, the focus now needs to be on how to execute on the plethora of ambitious planned projects.

By focusing on five key areas identified as being instrumental to success - policy frameworks, funding structures, contract management, programme management, and monitoring and evaluation - the chances of effectively completing planned projects can improve significantly.

This in turn will bring greater confidence to prospective investors, and can help to attract further infrastructure investment to the continent, bringing us one step closer to bridging the infrastructure gap in Africa.

**Key contacts**

Joe Cosma | EY Africa Advisory | Government & Public Sector Leader (excl South Africa)
Joe.cosma@za.ey.com

Xolile Ncame | EY Africa Advisory | Government & Public Sector Leader (acting, South Africa)
Xolile.ncame@za.ey.com

Hennie Human | EY Africa Advisory | Performance Improvement Leader
Hennie.human@za.ey.com

Tebogo Mosupi | EY Africa Advisory | Programme Management Leader
Tebogo.mosupi@za.ey.com

Eduard Stephenson | EY Infrastructure EMEIA Advisory Centre
Eduard.stephenson@za.ey.com
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