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Editorial

Africa needs more and better infrastructure. About 600 million Africans, almost two-thirds of the continent's population, have no access to electricity. They continue to rely on biomass for fuel, which poses both health and environmental risks. Roads offer the main mode of transport, yet 53 percent of the road network is unpaved, which hinders people's access to basic education, healthcare and economic opportunities. Nearly half of all Africans still don't have access to clean water, and two-thirds lack access to sewerage infrastructure. With the world's second-highest growth rate, and a rapidly urbanising population, the projected demands in the region are equally daunting. Improvements have been achieved over the last decade, with infrastructure-related expenditure on an upward trend and China's emergence as a major investor in the transport and energy sectors. But according to the World Bank, sub-Saharan Africa alone needs infrastructure investment of about USD93 billion per year. With just over half that amount currently being spent, a financing gap of USD45 billion or more remains.

The good news is that, after decades of neglect, infrastructure is back at the top of the international development agenda. Infrastructure development is a top priority in the Multi-Year Action Plan released in 2010 by the Development Working Group of the G20 forum of industrialised and emerging economies. Since then, the G20 and multilateral development banks such as the World Bank and the African Development Bank have launched numerous initiatives to increase infrastructure investment in the African continent and elsewhere. These include, among others, the G20 Global Infrastructure Hub, the World Bank's Global Infrastructure Facility and, most recently, Germany's G20 proposal for "Compacts with Africa". The initiatives generally follow the same thought process: 1) Africa's infrastructure deficit is hampering the continent's economic development and long-term stability; 2) increased infrastructure investment will lead to higher economic growth and prosperity; 3) as public resources and capacities are insufficient to fill the financing gap, the private sector needs to come on board both as a financier and project developer; and 4) more funds need to be invested in project preparation and "de-risking" projects in order to attract private investment in so-called "bankable" projects.

In tandem with these initiatives, African governments and institutions have developed ambitious national, regional and continental infrastructure master plans and instruments for which they hope to attract international public and private support. Prominent among them is the Programme for Infrastructure Development in Africa (PIDA), a pipeline of regional mega-projects in four sectors (energy, transportation, water, and information and communications technology) that seeks to boost regional integration and trade.

Progress on many of these projects has been slow, due in part to a lack of committed resources and investment readiness. Yet they will move forward, and critical questions need to be asked and answered from the start. Who decides, and who should decide, about which projects are selected to go ahead? If infrastructure development is to serve both economic growth and people's needs for services, how will those two objectives be weighted? What social, environmental and climate safeguards need to be in place? Do mega-projects indeed offer appropriate solutions to the prevailing infrastructure challenges? How have different models of public-private partnership (PPP) worked in various sectors and countries? And how, and by whom, are the regulatory and legislative frameworks for PPPs to be negotiated and enforced?

This edition of Perspectives contributes to the ongoing debate by sharing snapshots of experience from around the continent, exploring questions about democratic participation, the role of human and environmental rights, and economic transformation. The collective tenor of the articles is clear. If the current big push for infrastructure development is to make a positive impact on the lives of ordinary Africans, their priorities and concerns have to be front and centre when the decisions are being made.

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Public-Private Partnerships for Infrastructure Development in Africa:

The Need for Human Rights-Focused Regulation

Josua Loots

In When China Met Africa¹, a 2010

documentary film about China's interests in Zambia, a Chinese interviewee highlighted the importance of infrastructure by comparing a country's roads to the veins of a body, and the need for the transportation of goods across a region to the need for blood to be carried to different organs. His comment (perhaps unknowingly) reflected concerns that were being expressed at a higher level that year, when the G20 summit in Seoul placed infrastructure development squarely on the international agenda, acknowledging that gaps in infrastructure had to be addressed in order to increase and maintain growth in developing countries.²

Africa's rapid economic growth between 2011 and 2015 brought relatively small improvements in human development³, and one of the identified barriers to development has been a lack of enabling infrastructure.⁴ Africa's current infrastructure deficit is estimated at approximately USD90 billion for the next decade, with only half of that amount currently being funded.⁵

One obvious potential solution to the shortage of public funds for infrastructure development would be to harness private investment through the use of public-private partnerships (PPPs). While governments and multilateral development-finance institutions such as the World Bank have indeed earmarked PPPs for this purpose, they are not without their problems.⁶ These include the prioritisation of private commercial interests over public interests, lack of public consultation and participation, lack of access for the poor, and an overarching concern that PPPs offer no real economic benefits.⁷

Proponents argue that the model has two advantages: funding and efficiency. Although a PPP would not necessarily cost less than its public alternative, private partners have immediate access to funds, which may not be the case with public budget cycles. Private involvement has also been credited with efficiency gains in such sectors as transport, energy and water distribution – although it should be added that these were mainly in developed countries like the US and the UK, with well-developed programmes and capacity.⁸

In less developed regions, the success rate of PPPs remains unclear. Their ability to address infrastructure gaps that affect the poor has been particularly criticised. A recent evaluation of PPPs supported by the International Finance Corporation (IFC) states that, while general access to infrastructure and social services was improved by PPPs from 2002 to 2012, "the extent to which PPPs benefited the poor cannot be assessed in a systemic manner, as large data gaps exist"⁹. The lack of concrete evidence. combined with the fact that most African countries are in relatively early phases of setting up formalised PPP programmes¹⁰, makes it very difficult to assess whether or not PPPs are the right way to go to improve infrastructure and access to social services in Africa.

African Regional Initiatives for PPPs

Negative reports of PPPs in developing regions did not deter African leaders from



Josua Loots holds LLB and LLM degrees from the University of Pretoria. He is currently pursuing a PhD and serves as the programme manager for business and human rights projects at the university's Centre for Human Rights as well as doing research at the International Development Law Unit. His current research areas include infrastructure, public-private partnerships, international human rights law, public international law, and foreign policy. prioritising infrastructure spending, particularly through the development of PPP programmes. The Programme for Infrastructure Development in Africa (PIDA), probably the region's most comprehensive infrastructure vision to date, was a collaborative effort of the African Development Bank (AfDB), the African Union Commission (AUC), the New Partnership for Africa's Development (NEPAD) and the UN Economic Commission for Africa (UNECA). PIDA is a successor to the NEPAD Medium to Long Term Strategic Framework, and serves as a strategic framework for the development of regional and continental infrastructure.11 PIDA aims to develop cross-border infrastructure that would increase regional infrastructure integration, promote socio-economic development, and reduce poverty and inequality.12 The 51 programmes identified under the PIDA Priority Action Plan are spread across four sectors - energy, transport, information and communication technology, and cross-border water.13 In addition, the PIDA Infrastructure Project Preparation Facility (IPPF) was set up in 2005 to mobilise public and private funds for PIDA programmes.14

Of course, a plan doesn't mean much without an appropriate implementation mechanism. As with most other regional or international initiatives, success relies very heavily on the cooperation and leadership of national governments. With this in mind, the Presidential Infrastructure Champions Initiative (PICI) was created to push African leaders to champion and accelerate infrastructure development under PIDA. The role of the infrastructure champions is to bring visibility to the projects, unblock bottlenecks, coordinate resource mobilisation, and ensure project implementation. The initial aim of PICI was to implement priority projects within five years (by 2015),15 although the benchmark for progress was set very low: "implementation" is defined as "the advancement of the project from pre-feasibility to feasibility phase, or from feasibility to construction, or simply that demonstrable evidence of progress is available"¹⁶.

A number of additional efforts to facilitate the implementation of PIDA programmes have emerged in recent years.¹⁷ The PIDA Service Delivery Mechanism was established in 2014, with the aim to address early-stage project preparation at the national and regional levels through the provision of technical assistance. The NEPAD Renewable Energy Initiative was set up to drive projects focusing on renewable energy to viability and financial close. The

Private investment in infrastructure in Sub-Sahara Africa in USD billions (current)





Source: Jeffrey Gutman et. al. (2015): Financing African Infrastructure: Can the World Deliver?, Brookings.

Continental Business Network and Move-Africa were launched by NEPAD to increase the involvement of the private sector in infrastructure development in Africa. The Dakar Financing Summit also identified the need for better harmonisation among all the different initiatives, which eventually led to the conceptualisation of the African Centre of Excellence for Infrastructure Regulation (ACEIR). The ACEIR will function as an interdisciplinary regional body focused on infrastructure development and management, drawing expertise from researchers in engineering, economics, political science, public administration, and law across the globe.

Social Concerns with PPPs

The social implications of PPPs, and perhaps infrastructure development more broadly, are mainly considered in the contexts of access and affordability.¹⁸ These two considerations are particularly relevant in Africa, due to the high rates of poverty and inequality. Access to infrastructure is directly linked to the access and enjoyment of human rights – for example, roads and transportation provide access to schools, medical clinics, and a number of other basic

The low level of transparency associated with PPPs, which leads to limited public scrutiny and participation, is another source of criticism pertinent to social impact.

> needs and services that underpin human rights, human dignity, and development.¹⁹ Similarly, access to quality water plays an important role in the fulfilment of a number of other rights, including the right to a safe environment. Private investment, although relatively small compared to the rest of the world, has played a significant role in reducing the infrastructure access gap in sub-Saharan Africa.²⁰ Nonetheless, access means very little if it is not affordable, and there are often concerns about pricing levels and structures in PPPs. Commercial project developers are not always trained to think about access in the context of high levels of poverty and inequality.

> The low level of transparency associated with PPPs, which leads to limited public scrutiny and participation, is another source of criticism pertinent to social impact.²¹ The Organisation for Economic Cooperation

and Development (OECD), in its principles for governance of PPP projects, acknowledges the need to consult with stakeholders and end-users.²² Experience also shows that principles that are well known in the human rights community, such as free, prior and informed consent (FPIC), are not adequately applied in PPP engagements with indigenous peoples.23 Finally, because the need for access to information goes hand in hand with transparency and public participation, it is crucial that governments enact access to information legislation and procedures that are responsive to complex blended-finance projects. Masses of information that could be of interest to the public is produced and should be accessible.

Applying a Human Rights Lens

Against this backdrop, and considering all the developments of recent years, the fundamental question is this: Do these African initiatives adequately consider the social implications of using PPPs to drive infrastructure development? While the answer to this question will not be straightforward, including some basic human rights principles could make a significant difference in how we think about PPPs and how they could be used to reach the overarching goal of alleviating poverty. As stated by the United Nations Office of the High Commissioner for Human Rights (OHCHR), "no social phenomenon is as comprehensive in its assault on human rights as poverty", and that this understanding "leads to more adequate responses to the many facets of poverty, responses that do not trample on rights in the pursuit of growth and development"24.

Including an explicit human rights approach in regional and domestic regulatory frameworks for PPPs in Africa could benefit project conceptualisation and implementation in three important ways. Firstly, by avoiding harmful impacts that large-scale infrastructure may have on surrounding communities; secondly, by making sure that projects with a direct link to human rights fulfilment (for example, access to water and access to education) are indeed designed and implemented with this goal in mind; and thirdly, by inculcating key human rights principles such as free, prior and informed consent (FPIC) in different phases of the project lifecycle.

Since the political dynamics of a country also play an important role, it should

be noted that PPP regulation is concerned not only with private industry and service providers, but also with the political environment. A recent evaluation of PPP environments in 15 African countries identified several barriers to successful implementation at the national level.²⁵ This study by the Economist came up with several key findings, including the vital necessity of harmonising PPP strategies and practices between ministries and between national and sub-national levels. Another identified problem is that, while the rationale behind PPPs is to harness the potential of private money, most African countries rely on external financing due to insufficient local financial markets. The study also highlighted the need for broader stakeholder engagement and education, as there are negative perceptions of privatisation that date back to the colonial era. Other issues include the need to understand the pros and cons of centralised PPP units, the need to expedite PPP process development, and the importance of understanding the implications for public finances. Each of these barriers also needs to be evaluated from a human rights perspective.

A Multi-Pronged Human Rights Approach

The regulation of PPPs has been described as "a molten mass of public and private, domestic, foreign and international law" ²⁶, and an effective regulatory framework needs to provide guidance at all these different levels of authority. It is highly recommended that initiatives like the ones being driven by the AfDB, NEPAD, the AUC and the World The regulation of PPPs has been described as "a molten mass of public and private, domestic, foreign and international law", and an effective regulatory framework needs to provide guidance at all these different levels of authority.

Bank include an explicit human rights focus when creating regulatory frameworks at the regional, national and sub-national levels for Africa. Currently, this does not seem to be the case.²⁷ Stakeholder engagement should include civil society groups working on the human rights aspects and implications of infrastructure, as well as practitioners who are sensitive to and knowledgeable about human rights. It is only with these considerations that PPP-driven infrastructure development in Africa will be inclusive, sustainable, and meet the needs of the people, bringing us one step closer to poverty alleviation.

In December 2016, when it officially took over the G20 presidency, Germany announced the "Compact with Africa", a framework to promote private investment, economic growth and sustainability, and investment in infrastructure. While this announcement was met with a broad range of reactions, it remains unclear to what extent this commitment will consider and integrate regional initiatives, as well as the social and human rights impacts of such development. It is crucial to adopt an approach that takes account of the implications of each proposed project, to ensure that Africa gets the veins it so desperately needs to supply the lifeblood of trade throughout the organs of the continent.

- 2 'Multi-year action plan on development', G20 Seoul Summit, https://www.oecd.org/g20/topics/development/ Annex2-Multi-Year-Action-Plan-Development.pdf (accessed 3 April 2017).
- 3 Apart from Mauritius, there is still not a single Sub-Saharan African country in the 'High Human Development' category of the United Nations Human Development Index.'UN Human Development Index 2016', http://hdr.undp. org/sites/default/files/HDR2016_EN_Overview_Web.pdf (accessed 2 April 2017).
- 4 'Evaluating the Environment for Public-Private Partnerships in Africa: The 2015 Infrascope', The Economist Intelligence Unit.
- 5 The AfDB estimates it at D93bn, see The Economist Intelligence Unit publication above (n4); See also the 'Planning to Deliver' report published by Ernst&Young in December 2013, http://www.ey.com/Publication/vwLUAssets/ EY_-_Planning_to_deliver/\$FILE/EY-Dynamics-Issue8-v8-Planning.pdf (accessed 3 April 2017).
- 6 'Why public-private partnerships don't work: The many advantages of the public alternative' by David Hall, PSI, http://www.world-psi.org/sites/default/files/rapport_eng_56pages_a4_Ir.pdf (accessed 31 March 2017); See also 'What lies beneath? A critical assessment of PPPs and their impact on sustainable development' by Maria Romero, Eurodad, http://www.eurodad.org/whatliesbeneath (accessed 31 March 2017).
- 7 See the PSI report by David Hall above (n6).
- 8 See 'The Economics of Public-Private Partnerships: A Basic Guide' by Eduardo Engel, Ronald D. Fischer, and Alexander Galetovic, 23 60, and 154 161.
- 9 World Bank Group Support to Public-Private Partnerships: Lessons from experiences in client countries, FY02-12, p 68, https://ieg.worldbankgroup.org/Data/reports/ppp_eval_updated2_0.pdf (accessed 31 March 2017).
- 10 See The Economist Intelligence Unit publication above (n4).
- 11 AfDB Website https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/programme-for-infrastructure-development-in-africa-pida/
- 12 AfDB Website https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/programme-for-infrastructuredevelopment-in-africa-pida/
- 13 NEPAD website http://www.nepad.org/programme/programme-infrastructure-development-africa-pida
- 14 PIDA Progress Report 2016 file:///Users/josualoots/Downloads/PIDA%20Progress%20Report%202016.pdf
- 15 PICI was set up in 2011. See NEPAD website http://www.nepad.org/programme/presidential-infrastructure-champion-initiative-pici?qt-programme_page=1
- 16 PICI website http://www.nepad.org/programme/presidential-infrastructure-champion-initiative-pici?qt-programme_page=1
- 17 PIDA Progress Report 2016 http://www.thepresidency.gov.za/content/president-update-work-nepad-presidentialinfrastructure-championing-initiative-pici-chaired
- 18 'Social Aspects', Body of Knowledge on Infrastructure Regulation, http://regulationbodyofknowledge.org/qualitysocial-environmental/social-aspects/ (accessed 2 April 2017).
- 19 'The Impact of Private Participation in Infrastructure in developing countries: Taking stock of about 20 years of experience', Antonio Estache and Caroline Philippe, November 2012.
- 20 See Estache above (n19).
- 21 'What lies beneath? A critical assessment of PPPs and their impact on sustainable development' (n6).
- 22 'Public-Private Partnerships In Pursuit of Risk-Sharing and Value For Money', OECD, 2008.
- 23 'What lies beneath? A critical assessment of PPPs and their impact on sustainable development' (n6).
- 24 'Human rights dimensions of poverty', OHCHR Website, http://www.ohchr.org/EN/Issues/Poverty/DimensionOfPoverty/Pages/Index.aspx (accessed 31 March 2017).
- 25 See The Economist Intelligence Unit report above (n4).
- 26 Michael Likosky 'The privatisation of violence' in Simon Chesterman & Angelina Fisher 'Private Security, Public Order: The Outsourcing of Public Services and Its Limits', Oxford, 2009, 16.
- 27 In 2016, the World Bank released the Framework for Disclosure in PPP projects, and the Open Contracting Data Standard (OCDS). A follow-up tool, called the OCDS PPP Extension will be launched mid-2017. With transparency and accountability as its objectives, these tools and frameworks describe enabling environments for PPP disclosure, and what data should be disclosed during the lifecycle of a PPP.

¹ For more information about this documentary, see the official 'When China met Africa' website, http://whenchinametafrica.com/ (accessed 31 March 2017).

The African Renewable Energy Initiative: Promoting People-Centred Energy Solutions Interview

According to the African Development Bank, about 600 million Africans live without electricity. This translates to an access rate of just over 40 percent, the lowest in world. The entire continent's installed power-generation capacity of 160 gigawatts (GW) is less than what Germany generates alone. The insufficient access to electricity not only has negative impacts on the population's health and education outcomes but also increases the cost of doing business and hampers economic growth.

As a result, the energy sector has become a key priority in the discourse about the infrastructure gap on the continent. Several international policy initiatives have been launched to boost Africa's energy production. One of them, the African Renewable Energy Initiative (AREI), aims to increase renewable power generation capacity to 300 GW by 2030. This ambitious initiative was launched at the UN Climate Change Conference in Paris in December 2015 to make a tangible contribution to climate protection, to help shift energy production away from fossil fuels, and to support a people-centred development path led by African and community priorities.

Tasneem Essop, a civil society activist who has been engaged with AREI since before its official launch, took some time out to speak about the initiative, its prospects, and budding threats to its success.

HBF: What makes this different from the many other initiatives in the energy sector?

Essop: There are a number of important aspects that make the African Renewable Energy Initiative different from other energy initiatives in its original intentions. Firstly, its conceptualisation was largely "homegrown". Emanating from the work of the Africa Group in the United Nations Framework Convention on Climate Change, with support from other African and non-African stakeholders, and then its passage through decision-making bodies like the African Ministerial Conference on the Environment, and finally its adoption by the heads of states in the African Union – this initiative is led and owned by Africans.

Secondly, unlike other initiatives, AREI's aim is to be truly transformational. As such, the initiative promotes the concept of peoplecentred energy – energy that is clean, appropriate and affordable. This means that every effort will be made to reach poor people who are off the national grids, giving them the opportunity to improve their livelihoods and overall welfare. Therefore, unlike other initiatives, AREI supports a very diverse range of renewable energy technology options as well as applications. This includes solar; wind; pico-, micro-, smalland medium-scale hydro; modern biomass; geothermal; and marine



Tasneem Essop is the founding director of the Energy Democracy Initiative in South Africa. Prior to this, she headed the climate work in WWF International. She is also a commissioner in the National Planning Commission of South Africa. Before joining WWF in 2008, she held the positions of provincial minister of the environment, planning and economic development and provincial minister of transport. public works and property management in the Western Cape province of South Africa.



– provided they are socially and environmentally appropriate and gender-sensitive. AREI has adopted criteria for safeguards that will form part of its screening process when making decisions about support for any projects or programmes.

However, the developmental approach that AREI adopts does not only deal with access to energy by households and families, but also includes the need to drive productive sectors at all levels to promote job creation, enterprise development and economic development.

As a last observation, AREI developed its framework through the active engagement of other key stakeholders in Africa, including civil society, the private sector, youth and women.

Ultimately, the aim is to benefit all countries in Africa, supporting projects that are country-driven while also adopting a programmatic approach, rather than purely a project-based approach, to implementation.

What are some of its milestones and what has been achieved so far?

AREI is currently still in the establishment phase of its work plan, which will last till the end of this year. During this year, Phase 2 of the work plan will also start being implemented. Lasting up to 2020,

this involves the screening and funding of projects and programmes that will contribute towards 10 GW of new and additional renewable energy-generation capacity. Phase 3, which is planned for 2020 to 2030, will see the full scaled-up implementation of transformative projects and programmes at national levels contributing to the achievement of the 300 GW target by 2030.

Since the launch of the AREI in December 2015, the following key milestones, amongst others, have already been achieved: a group of ten donor countries committed to mobilise 10 billion Euros towards the implementation of the targets set for the AREI; an independent delivery unit was established and has been operational since August 2016 with the appointment of a head of the unit as well as a number of technical experts; and the development of AREI criteria for project approval and funding has been finalised.

National initiatives have often proven to be more effective to get actual projects off the ground – South Africa's Renewable Energy Independent Power Producer Procurement Programme is a good example. What is the added value of AREI's multilateral approach?

> There is no contradiction between the AREI and national renewable energy plans and programmes. National country-driven and -owned programmes form the basis of AREI support, depending on whether these are in line with the principles, precepts and criteria adopted by AREI. Country initiatives can certainly benefit from the conceptual framework and model of AREI. South Africa's Renewable Energy Independent Power Producer Procurement Programme, while successful, is merely one approach to the delivery of renewable energy. It is private-sector-driven, with mainly foreign ownership, and at this point, grid connected. AREI presents other options for the delivery of renewable energy that South Africa can benefit from. Decentralised, off-grid and community-owned is certainly an important model for South Africa since this presents much more opportunity for local economic development, poverty reduction and livelihood creation, and real community empowerment.



What will the initiative's future success depend on?

From the inception of the AREI, one of the main concerns of African civil society representatives involved in the conceptualisation and consultations was that this initiative remain in the hands of Africans, to be led and owned by Africa. This was based on our experiences of other initiatives, which were either donor-driven or controlled by multilateral development banks. The power relations in many of these initiatives were unequal and, in most cases, the donors themselves determined projects with little or no engagement or agreement from recipient countries or communities. This is the history of aid in Africa. With the AREI, we saw a break from this model.

Unfortunately, at the time of this interview, this threat has already become a reality. At the last meeting of the AREI board in March, France and the EU Commission managed to "hijack" the initiative with the support of two African heads of state. They tabled a list of 19 projects (many of which were already on the cards) and this list was adopted by the Board without going through the necessary screening process of AREI or meeting the important principle of being countryowned and -led or African-owned and -led. Adding fuel to fire, the EU Commission also seconded two European technical experts to join the independent delivery unit and to drive the work plan and delivery of these projects. This was a de facto vote of no confidence in the African head of the unit and the African technical experts already appointed.

How does African civil society plan to respond?

As we speak, there is a concerted campaign by African civil society against this pernicious move by the European donor countries. A petition has been circulated at national and regional levels, with over two hundred African civil society organisations having signed on already, and the plan is to deliver these to African heads of state and relevant ministers. In addition, a similar initiative is being implemented amongst European civil society organisations.

How could such a situation be avoided in future?

This latest move by the EU is scandalous – and this at a time when there has been massive pushback by governments and civil society about donor-recipient relationships and the model of development linked to this. At a recent Think Tank 20 Conference for Africa, in preparation for the G20 meeting under the German presidency, one key outcome was the call for a code of conduct between donor countries and Africa. The African voices in that conference were strong in their call for respect for Africa's ability to lead and own its development. AREI should have been such a flagship for Africa's development. With this move by the EU, this could all be lost.

I, for one, join the call of African civil society for the EU to take its hands off AREI and for African heads of state to once again assert their control over the initiative in the spirit of its principles. Providing financial support to this initiative is not an act of charity by donor countries. It is an obligation as captured in the United Nations Framework Convention on Climate Change and further agreed to in the COP 21 Paris Agreement.

AREI, if implemented in the manner defined in the framework document, is truly inspirational. This initiative is far too important to be derailed now. African civil society, the private sector and all those committed to Africa's development need to rise up against this and any future attempts to control the agenda. Africa's time has come.

Without Direction: Nigeria's Cross River State Superhighway

Pamela Braide

In January 2016, three months after the ground-breaking ceremony for a superhighway in Nigeria's Cross River State, fewer than 50 men and women of the Ekuri community, carrying handmade placards, stopped bulldozers from encroaching on their lands where a wide slope had already been cut into the forest. Since then, protests, petitions with over 200 000 signatures, and a stop-work order from the federal government have put a temporary halt to what was supposed to be Governor Ben Ayade's legacy project: a wifi-enabled superhighway described as "a digital road for the 21st century".

What went wrong? Why would there be any opposition to a road that the governor proposed as a mega-development for the people of the state? By all means, road development should be welcomed by infrastructure-thirsty Nigerians, and all the more so in the remote communities of Cross River State where the last remaining rainforests of Nigeria offer rich agricultural resources but there is no infrastructure to process, package or sell their products.

The governor's dream for a superhighway starts at the yet to be built deep sea port in the state's capital, Calabar, right in the Bay of Bonny between Lagos and Douala, Cameroon. From the deep sea port, the 260 kilometre road is planned to go straight north to link up with a not-so-super national and international road network, taking goods to northern Nigeria and neighbouring Niger and Chad. The major downside: the superhighway cuts through forests – some of which are protected under Nigerian law, are parts of a national park, or are inhabited areas. The initial plan envisaged a 20.4 kilometre-wide land corridor with 10 kilometres on each side of the highway. No official explanation was given for this humongous land seizure, despite the national highway code stipulation of a maximum 50-metre width for a buffer next to a tarred road. When pressed for answers, various government spokespersons gave vague and inconsistent responses about building new cities on the highway's margins.

Clearing and logging began even before the state government published a notice of land confiscation in January 2016. By the time the people of Ekuri confronted the bulldozers, some communities had already seen their farms destroyed without notice or valuation. Learning about the potential loss of land and livelihood, more and more people started to ask questions and rethink their initial excitement about infrastructure development.

Some want a highway if it does not take too much, or all, of their land. Even the Ekuri people, having mounted the most visible and vocal opposition to the project, desperately need roads in parts of their communities. However, they want a simple two-lane road, a few kilometres long, which can be completed in six months with minimal impact to its forest.

Some are wary of not being compensated. Women are especially vulnerable to big infrastructure projects where having a voice at the planning table or in compensation schemes depends on land ownership. Although women are responsible for most of the farming activity and for the sustainable use of forest plants for food, medicine and related trading, they are less likely to inherit or own land. As a result, the first round of



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Women of the Ekuri community protest against the superhighway. © HBS Nigeria

bulldozing cleared many farms belonging to women who tend smaller crops and have little clout.

Who would even ensure that the road would actually be built, and not abandoned like a string of other infrastructure projects all across Nigeria? The possible scenario of logged forests and an unfinished road made waves in social media and community conversations.

> Some do not need a new road at all: they have access roads but need electricity, water, health centres, business support, or their broken bridges fixed.

> In any case, the cost estimate of USD3.5 billion that Governor Ayade announced seemed high for an already financially challenged state, and the scale of the project is immense – occupying a quarter of the state's land surface and affecting more than 180 communities. Who would even ensure that the road would actually be built, and not abandoned like a string of other infrastructure projects all across Nigeria? The possible scenario of logged forests and an unfinished road made waves in social media and community conversations.

> Why not fix the existing federal highway that traverses the state in the same direction

and repair the feeder roads that serve local communities, which could boost the local economy? Or consider options that leverage and link to regional and national infrastructure projects like the Calabar–Lagos railway to make Cross River the transport and economic hub it desires to be?

In March 2017, the government of Cross River State annulled the 20.4 kilometre-wide land corridor, reducing it to 70 metres, but kept the plans for the superhighway alive. It even issued an angry ultimatum to the federal government to approve the twice-failed environmental impact assessment (EIA) – a constitutional requirement for large-scale infrastructure projects – declaring that the state would otherwise go ahead without one.

Deep Sea Dreams

However, serious doubts about the feasibility of the superhighway project remain. Its business plan relies on transporting goods directly from the planned deep-sea port and generating income via tolls along the road. The catch: experts believe that proposed site for the port, which has a depth of 7 metres (falling to only 1 metre during low tide), is unsuitable for even modestly sized cargo ships. The competitiveness of a port there is also uncertain. The state already has an underutilised federal sea port, which is in need of an upgrade, whilst neighbouring Akwa Ibom State has approval to build a new port in a less shallow and more viable location, very close to Calabar. A transfer hub may be more feasible, but even here, competition from Cameroon is a deterring factor as the port in Douala already supplies Chad and Niger, and international funding has been directed to develop two additional Cameroonian ports in Kribi and Limbe.

The project's opacity, in terms of financing, project partners and even scope of design, is a big problem. Open data and a viable business plan are needed to reassure the public. The most basic questions have never been debated, nor answered. Who is supposed to fund this superhighway? What income would it generate to cover its USD3.5 billion construction cost and the cost of losing forests and dispossessing people? How many trees are being logged to make way for it? What do communities really want? How much would it cost to build and refurbish feeder roads and the existing highway in the whole state instead? What is the current state of the existing eco-assets? How will the investment be recouped? And how many tollgates will there be?

Cross River State is in dire need of revenue. Having lost part of its territory to Cameroon, following the 2002 judgment by the International Court of Justice on Bakassi, and oil revenues to the neighbouring Nigerian state, Akwa Ibom, the superhighway and deep sea port have been pitched as its comeback plan. Given that the state ranks 4th and 8th in external and internal debts respectively in Nigeria¹, there seems to be no room for government financing. The governor has therefore already pointed out that this initiative needs to be led by the private sector.

There are those who describe the superhighway project as a "logging scheme", calculating how much remote and hitherto unreachable exotic timber it could make accessible. But even taking the superhighway at face value, big infrastructure does not necessarily provide development solutions that are beneficial to the population.

However, a back-of-the-envelope calculation shows that, for the superhighway to break even, 1000 vehicles, paying an average USD50 toll per trip, would have to trawl the road every day in both directions for at least a hundred years – and this is only possible after the deep sea port is functional. These are optimistic numbers, bearing in mind that, according to the National Association

Why not upgrade the existing federal highway that traverses Cross River State already? © HBS Nigeria



of Road Transport Owners, about 400 container trucks travel each day from Nigeria's busiest ports in the west to the north of the country.² The Douala port in Cameroon, which offers major sea access to Chad, receives 700 containers daily. Compounded by the secrecy around funding, implementation and project partners, the business case for this project seems extremely hard to make.

A Need for Real Solutions

There are those who describe the superhighway project as a "logging scheme", calculating how much remote and hitherto unreachable exotic timber it could make accessible. But even taking the superhighway at face value, big infrastructure does not necessarily provide development solutions that are beneficial to the population. Much of the lack of trust arises from the state's approach to procedural matters. The authenticity of the proposed "techno fix" is thrown into question when EIAs are done without consultations, when communities are not aware of the pros and cons of largescale projects, and when intimidation is used to try to silence critics. As a result, the rush to bulldoze - without a completed EIA, without consultations or even valuations for compensation - sparked off serious advocacy efforts and increased opposition to the

superhighway. The curious inability of the state-commissioned consultants to correct procedural lapses before the third EIA hearing drew even more scrutiny from a public that is conscious that the governor's current term expires in two years' time, and that the highway would take six years to build.

The current stalemate, after three unsuccessful attempts to get federal clearance for the project, presents an opportunity to consider alternative development options that would balance economic, environmental and socio-economic needs. US\$3.5 billion is a lot of money in these parts, and is greater than Nigeria's 2017 budget for the ministries of works, power and housing, transport, health, and education combined.³

The state should aspire to develop in a far more inclusive and comprehensive manner, addressing power, transportation, and the needs of agriculture and other businesses while conserving the eco-assets of its mangrove and rainforests. The federal government recently launched guidelines for a "green bond" to "enable capital-raising and investment for new and existing projects with environmental benefits"⁴. Considering that 70 percent of Nigeria's remaining forests are in Cross River State, the incentives to make sustainable development choices appear to be strong.

¹ Nigeria Bureau of Statistics 2016: Nigerian Domestic and Foreign Debt Report. Available at: http://www.nigerianstat.gov.ng/report/547

² Babalola Y. 2017: Importers Pay N100b Freight Charges From Lagos Ports Yearly, Leadership Newspaper, 11 March 2017. Available at: https://web.archive.org/web/20170311070022/http://leadership.ng/news/576647/ importers-pay-n100b-freight-charges-from-lagos-ports-yearly

³ BudgIT 2016: 2017 Proposed FG Budget. Available at: http://yourbudgit.com/ infographics/2017-proposed-fgbudget/

Federal Ministry of Environment Nigeria: Green Bonds. Available at: http://environment.gov.ng/green-bonds.html.

Nigeria: Small Infrastructure to Solve Big Problems Interview

Nigerians like to think big in their quest to tackle their enormous infrastructure deficits: large-scale coal-fired power plants to deliver "massive megawatts", superhighways to connect the interior to the sea, and "centenary cities" with Dubai-like skylines have all been pitched to grab the imagination of ordinary citizens. And although Nigerians have seen little real impact from these promises over the years, politicians and voters still have little confidence in less showy proposals such as off-grid electricity for small and medium businesses or rural road-development for the millions of small-scale farmers.

Against this background, the Heinrich Böll Foundation spoke to Uzoamaka Egbuche, a strong advocate for appropriate infrastructure choices and increased participation by the private sector in Nigeria's development.

HBF: What infrastructure choices would you propose to support development in Nigeria?

Egbuche: If we are looking for inclusive development, then the infrastructure of choice will have to bridge the gap in exactly those areas where the need is greatest. And if you agree that inclusive development starts with the needs of people, you will agree that food security needs to be tackled by new infrastructure investments. This won't be "big infrastructure", but infrastructure that is specific to the needs of people – road, energy and water infrastructure in farming communities, for example. Eighty percent of Nigeria's rural population are farmers, yet primary production is currently cut off from even the local markets. We urgently have to curb post-harvest losses, which currently run up to USD750 billion per year. That's about 40 percent of the fruit and vegetable harvest. And we know that the reason these losses are occurring is that there is no power, and no infrastructure for first-stage processing or for chilling and cooling between the farm and the market.

Let's take an agricultural cluster with substantial primary output in Kaduna State for an example. We need to identify the needs of that cluster and come up with an investment plan for, say, water and irrigation, 50 to100 kilometres of road, and maybe one or two megawatts of solar power. That is what we are talking about. It is not a large-scale problem that is located in one place. The situation is similar around the whole country. So we will have to map needs, scope market potentials, and then break down the interventions into smaller bits and pieces. It is not just building one road from Kano to Lagos that will bring development. It is building many stretches of 10 kilometres, 20 kilometres, in clusters and appropriate to local contexts.



Uzoamaka Egbuche is a sustainability consultant for the Nigerian Economic Summit Group. She is interested in driving new approaches to inclusive growth in response to Nigeria's rapidly declining natural environment, deep poverty and widening inequality. She is also chair of the International Union for Conservation of Nature (IUCN) Niger Delta Panel that has developed new approaches to remediation and rehabilitation of oil spill sites in the Niger Delta through the inclusion of communities in these processes.



Women selling fufu made from cassava in the marketplace. © IFPRI/Milo Mitchell Why do you think the private sector would be in a better position than the state to deliver this kind of infrastructure?

It is important to note that, in Nigeria, you are faced with a largely dysfunctional state apparatus. Successive incoherent and fragmented government policies have led us to a deficit of about USD100 billion for power infrastructure alone that would take about 25 years to build. Once the government is involved, you have to deal with a lot of bureaucracy. All the different ministries and related government agencies have their own approaches. No matter what the experience of private sector actors tells them, the various arms of government would always want to impose their own programmes and ways of doing things. Huge government budgets are drawn up but funds are not released, corruption creeps in and money doesn't flow to where it should. Projects are "in progress" for years without any actual outcomes.

All the while, private sector players – whether in the informal or in the formal sector – are in a sense delivering much of the infrastructure needed. Less than 1 percent of Nigerians have access to pipe-borne water and more than 93 million people have no power access at all. In order to cover their needs, many Nigerians buy diesel generators, for example. Unlike government, the private sector is forced to get things done and work efficiently down to the last penny in order to survive. Government's primary role should be to create enabling polices for the private sector and to regulate the market. Nigeria is generally perceived to be a risky place for doing business. One consequence is that private sector developers find it difficult to attract finance. How do you suggest obstacles in this regards could be overcome?

First of all, it is important to note that there is no shortage of money. In 2015 alone, Nigeria had about USD21 billion in direct inflows from Nigerians in the diaspora. There are also billions of dollars owned by local Nigerians that are locked in low-performing assets because people are unsure of the invest-

ment environment.

In order to unlock some of this money for infrastructure development, different types of mechanisms are needed. This could include guarantees to lower the risk of investment, such as from

First of all, it is important to note that there is no shortage of money. In 2015 alone, Nigeria had about USD21 billion in direct inflows from Nigerians in the diaspora.

the Multilateral Investment Guarantee Agency (MIGA), which offers credit enhancement guarantees. Also, confidence building is key and this is why we are collaborating with government to improve perceptions about the investment climate and market entry to encourage more investments. Recently, the government signed executive orders to support the ease of doing business as a way to encourage foreign and local investors.

Partnerships between local companies and foreign investors offer another important approach to boost confidence. Grants from international development finance institutions or development agencies would also be crucial for non-commercial-related work, such as feasibility studies by small research advisory units spread out nationwide to provide data and market information supporting the success of private sector investments.

According to the Nigerian Bureau of Statistics about 60 percent of Nigerians live in poverty. How do you ensure the affordability of infrastructure services provided by the private sector?

Let me start by saying that current "affordable" tariffs are heavily subsidised and have created huge imbalances in the market. For example, electricity tariffs from government are currently about 200 percent lower than what one would need to charge for renewable energy. But the heavy subsidisation has put in motion a vicious circle that is driving government's inability to raise funds to expand the national grid.

However, as infrastructure development drives additional economic growth, I believe that higher private-sector tariffs would make economic sense and become more affordable. For example, small agro-businesses that are currently without electricity would be able to add value to their products and to engage in e-commerce to increase their profits. People who currently rely on dirty diesel generators would have to pay less for renewable power solutions.

Innovation on the financing as well as on the technology side of things is also an important driver of affordability. Some investors will have to consider long-term single digit returns.

What is the role for international investors and development partners in this?

Their role is to understand the type of investment we want and do funding directly through the private sector to the kind of clusters that I mentioned. Both commercial and non-commercial finance should not flow through government but be spent through direct partnerships with the private sector. What they have been doing for the past decades has never worked because government is not in a position to drive this kind of development.

Non-commercial finance is crucial for bringing projects up to a bankable stage. It is crucial to set up research-based advisory centres that would provide invaluable and much needed data to back up bankable proposals, i.e. demographic information about the community structure and their ability to pay tariffs, potential for new businesses, power and other infrastructure needs etc.

International financing partners are also crucial because Nigerian commercial banks only provide short-term loans at high interest rates that are not suitable for development projects such as these infrastructure projects.

At the same time, there is a need to forge technology and commercial partnerships in the area of renewable energy. We need new approaches to our systemic problems, and renewable energy should be a particular area of focus for a genuine international collaboration.

The African Development Bank: Between Financial Success and Sustainable Development Outcomes Interview

The increase in infrastructure investment in the global South is led in part by multilateral development banks (MDBs) such as the African Development Bank, the Asian Development Bank, the European Bank for Reconstruction and Development, the European Investment Bank, the Inter-American Development Bank, the World Bank Group and the International Monetary Fund. In 2015, these banks committed themselves to massive increases in financial flows – from billions to trillions of dollars – which are needed to achieve the Sustainable Development Goals. Although MDBs have to make profits in order to remain viable, this is not the overall goal of their activities. Their core mandate is to provide financing, advice and research to developing nations to support their economic development, fight poverty and protect the planet.

What sounds like a noble approach in theory has, in practice, often come under criticism from some stakeholders. To learn more, the Heinrich Böll Foundation asked civil society activist Aly Sagne to shed light on the track record of the African Development Bank.

HBF: In May 2017, the African Development Bank turned 52 years old. Is this a reason to celebrate?

Sagne: As a Pan-Africanist, the African Development Bank brings up mixed feelings in me: firstly pride and hope, as our bank has reached maturity and is performing well – and then anxiety, considering the tremendous challenges with which the bank and continent are faced.

In what respects do you think the bank is performing well?

First of all, we have to acknowledge that the bank is the first multilateral regional institution dedicated to the financing of development in Africa. Today, it comprises 80 shareholders, including 54 regional member countries and 26 non-regional member countries, and has established itself as one of the leading development finance institutions on the continent. The institution has national or liaison offices in 38 African countries and two regional resource centres in Nairobi and Pretoria. Between 1967 and 2015, 4 974 operations worth about USD135 billion have been approved. The bank is currently credited with a triple-A rating by major international rating agencies, attesting its financial health.

Its five programmatic priorities – namely, to power, feed, industrialise and integrate Africa and to improve African people's quality of life – are in the right place.



Aly Sagne is the president and founder of Lumière Synergie pour le Développement, an advocacy organisation based in Senegal. He is also member of the African Civil Society Coalition on the African Development Bank and a member of the steering committee of the Coalition for Human Rights in Development.

Where do the challenges come in?

As the former president of the bank, Donald Kaberuka, stated during his 2015 farewell speech in Abidjan, it is not money that delivers development – but policy does! And this is where African civil society has sought to intervene. African civil society put a lot of effort into the bank's public review of its operational and safeguards policies between 2009 and 2013.

Important outcomes of this process include the disclosure and information-access policy through which the bank confirmed its commitment to openness, transparency, accountability and information-sharing concerning its operations, and the Integrated Safeguards System (ISS), which is a set of social and environmental standards that the bank's clients must respect during preparation and project implementation. In 2014, the bank updated its Independent Review

> Mechanism for the second time through a public consultation process, with progress such as the lifting of limitations regarding the handling of requests related to private sector projects.

Although much has been achieved, there is still a long way to go. Effective implementation of these policies is often lacking due to the bank's lack of good will. Also, apart from meetings organised by the bank with civil society, we rarely have had high-level

Considering that more than 600 million Africans live without access to electricity, water, an adequate sanitation system and the like, the bank's focus on infrastructure is pertinent. The question, however, is not the "if" but the "how".

> interactions. At the bank's 51st annual meeting in Lusaka, Zambia in May 2016, I even had to threaten to block Bank President Akinwumi Adesina's access to the meeting room of the Civil Society Forum in order for the bank's management to agree to an urgent meeting with me as a member of the Civil Society Coalition on the African Development Bank. We are still far away from a situation based on trust and mutual respect.

The bank's ten-year strategy for 2013–2022, entitled "At the centre of Africa's transformation", puts infrastructure development at the heart of the bank's objectives. In 2015 alone, 48.6 percent of approved operations were in infrastructure. Do you agree with this prioritisation?

> Considering that more than 600 million Africans live without access to electricity, water, an adequate sanitation system and the like, the bank's focus on infrastructure is pertinent. The question, however, is not the "if" but the "how". For example, the bank leads on programmes such as the Programme for Infrastructure Development in Africa (PIDA), a vision and strategic framework for the development of regional and continental infrastructure endorsed by African heads of state in 2012. Unfortunately, there is no specific participation mechanism to take account of civil society perspectives in the project selection process. All projects are guided by country strategy papers, which are supposed to be developed through a participative process, including consultation with civil society organisations. In reality, governments are the only ones consulted by the bank and the ones who make the final decision. In rare cases, they invite their friendly civilsociety partners to have a say and that's that.

> Furthermore, civil society remains very critical of the bank's strategy in the energy sector, which plays a central role in the continent's infrastructure development agenda. Its policy on renewable energy is solely limited to the removal of obstacles to financing, rather than considering it as a preferred technological option. Instead, the bank

continues to support large-scale hydro dams and coal-fired power stations without due consideration to their local environmental and social impacts.

Can you provide a specific example of this?

The bank has invested in the Sendou coal-fired power plant in Senegal. The plant is located on one of Senegal's coastal sites most vulnerable to climate change, opposite a fishing port with a community of more than 70 000 people that provides the means of subsistence for more than a thousand women who process fish. All of which is at odds with the bank's own social and environmental policies.

Our organisation, *Lumière Synergie pour le Développement* (LSD), has sought access to project documents and to the implementation team at the bank in Dakar but this has not been easy. After several years of monitoring the Sendou project, we finally lodged a complaint on 9 May 2016 with the bank's Independent Review Mechanism for non-compliance with its social and environmental policies. The complaint was registered and is being processed. However, they are taking their time. We have been waiting a year for the eligibility report, which is not yet on the table of the bank's board – irrespective of the impacts currently being experienced by the local population.

What is your vision for the bank?

The challenges linked to the development of Africa are immense, but I think that the African Development Bank is a technical and financial The Sendou coal-fired power plant would be located only a few meters from the traditional fishing village of Bargny. © Waterkeepers



instrument capable of rising to these challenges. From this point of view, the bank's so-called "high five" priorities that I referred to earlier epitomise the continent's development vision. Nevertheless, I would like the bank to support member states in developing pro-poor policies and to invest in projects in favour of the poor and rural areas, especially in the agricultural and infrastructure sectors. The bank should also encourage member states to prioritise projects that focus on the transfer of knowledge and technology. And lastly, it should effectively implement its own social and environmental protection policies and encourage member states to apply them, instead of favouring national systems that for the most part are obsolete, weak or limited, especially with regard to resettlement caused by large infrastructure projects.

I would like the bank to be a successful African institution, not only from a financial but also a social, environmental and transparency point of view, a bank in the service of Africa and accountable to African citizens. In this regard, collaboration with civil society organisations is essential. But the bank must still make more of an effort to create and secure spaces of participation and dialogue between its managers, member states and civil society throughout the continent.

When Clean Energy Gets Dirty: Experiences from Kenya

Ikal Ang'elei

Renewable energy has become an important part of the global energy mix. This can be celebrated as a great achievement in the fight against climate change, but difficult questions still need to be asked about its squeaky-clean image. The current discourse on renewable energy tends to centre on the positive reduction of greenhouse gas emissions and improved energy security, while the risks of social and environmental injustice are largely ignored. As with any development, it is important that the introduction and use of new low-carbon and renewable energy technologies avoids such negative impacts and creates meaningful economic opportunities for the communities around them.

Thanks to large-scale investments in geothermal and wind projects, Kenya has become an important renewable-energy hub on the continent. The country has a cautionary tale to tell.

A Controversial Landscape: The Lake Turkana Wind Power Project

Wind energy is widely cited as the fastest growing source of energy in the world today, but its development has also proven controversial. It is of course true that wind turbines do not emit carbon dioxide or other greenhouse gases, but this should not excuse a lack of community engagement and inclusion in the development process. For most people, wind turbines have been sprouting up on the horizon, but others have them right in their backyard.

In Kenya's Rift Valley, Africa's largest wind farm is set to provide 310MW to the national grid, but has raised concerns about negative impacts on local communities. The Lake Turkana Wind Power Project is located in Marsabit County, on the eastern shores of Lake Turkana, on land used by Rendille, Turkana and Samburu pastoralists for pasture and water. While the land has not been fenced, security personnel regularly question the herders about their movements. The process by which the land was leased to project developers is also highly controversial. In an area where communities are already grappling with decreased grazing land due to climate change and other developments, no public consultation took place, and neither did anyone receive compensation for the loss of land use. Initially, 40 000 acres were allocated for the project. This expanded to 87 000 acres in 2012 and to 150 000 acres in 2014. The annual lease price? A mere USD3000 per annum. Community members from Marsabit County are now contesting the lease process in court.

The Constitution of Kenya recognises community land rights under Article 63, which states that "community land shall vest in and be held by communities identified on the basis of ethnicity, culture or similar community of interest". The definition of community land includes land that is "lawfully held, managed or used by specific communities as community forests, grazing areas or shrines; ancestral lands and lands traditionally occupied by hunter-gatherer communities; or lawfully held as trust land by the county government". The land in the



Ikal Ang'elei is the director of Friends of Lake Turkana, a community association formed in 2008 in response to threats to the viability of the world's largest permanent desert lake in northwestern Kenya. She was awarded the Goldman Environmental Prize in 2012, in particular for her voicing of environmental implications of the Gilgel Gibe III Dam, speaking on behalf of Kenyan indigenous communities.



Section of the Lake Turkana Wind Power Project. © Becker/Happ ujuzi.media project area is classified as community land that is held in trust by the county government on behalf of the communities. However, it is clear that the county government entered into agreements without adequately consulting those communities.

Of course, there is a real need to reduce carbon emissions quickly to avert planetary disaster, but as the development of renewable energy shifts into top gear, the growing evidence of a lack of social conscience reveals the dark side of "green" development.

> National and international laws and policies, including Principle 18 of the UN Guiding Principles on Business and Human Rights, equally require corporations to pursue meaningful consultations, in good faith, with potentially affected groups and other relevant stakeholders. With indigenous peoples, consultations should lead to the free, prior and informed consent (FPIC) of the communities. The consultations should be undertaken in culturally appropriate ways that include community decision-making

structures, language and gender dynamics. All these concepts were ignored by the wind-farm developers who deny the presence of indigenous communities within proximity of the project.

The local community was not given an early, open and transparent public engagement process to have a real voice in this development. "Benefits" are given out at the discretion of the company in form of corporate social responsibility (CSR) interventions that often comprise social services that should have been provided by government in the first place. Ironically, this does not even include the provision of electricity, as the communities are not connected to the grid that the wind-farm project feeds into. Instead of trying to "bribe" the community with CSR handouts, the company should deliberate with the community for a Community Development Agreement (CDA) as a guide for benefits. Moreover, as if all this was not enough to deal with, Kenyans do not even know the cost of the power that the national government has signed a guarantee for. Public debt is increasing but the entire project is shrouded in controversy and secrecy.

Whose "Sustainable" Development?

Of course, there is a real need to reduce carbon emissions quickly to avert planetary disaster, but as the development of renewable energy shifts into top gear, the growing evidence of a lack of social conscience reveals the dark side of "green" development. These projects, built in the name of the public good, need to deliver tangible benefits to local residents and not just dump externalised costs on them. Development should not leave behind those who are already marginalised. In this context, the decentralisation of green energy-including community ownership and not just handouts - becomes more important than ever. A critical look at the upstream value chain is equally important: renewable-energy technology remains dependent on inputs from mining, a sector known for its grave social and environmental impacts.

On 25 September 2015, the United Nations adopted a set of global sustainabledevelopment goals (SDGs) to end poverty, protect the planet and ensure prosperity for all. For Kenya, which co-chaired the UN Open Working Group for Sustainable Development, the goals are crucial for the wellbeing of the nation as a whole and particularly for its indigenous peoples. In its Vision 2030, it aspires to be "a globally competitive and prosperous nation with a high quality of life by 2030 through transforming itself into a newly industrialising, middleincome country that provides a high quality of life to all its citizens by 2030 in a clean and secure environment". Both the SDGs and Kenya Vision 2030 clearly place humans at the centre of development, in line with Article 2 of the 1986 Declaration on the Right to Development.

Kenya has accordingly scaled up its pursuit of investment in renewable energy. However, it appears questionable for the moment whether these renewable-energy projects will ensure the attainment of economic, social and cultural rights for indigenous peoples in Kenya, as guaranteed and provided by the International Covenant on Economic, Social and Cultural Rights, the African Charter on Human and Peoples' Rights, the UN Declaration on the Rights of Indigenous Peoples and Kenya's own constitution.

But if communities lose lands and livelihoods in the process, who will receive the benefits of "sustainable" development?

Dwellings next to Lake Turkana. © Becker/Happ ujuzi.media



Making the Right Energy Choices: The SDGs in the Context of South Africa's Exclusive Economy

Louise Scholtz and Saliem Fakir

On 25 September 2015, the member states of the United Nations agreed on the 17 Sustainable Development Goals (SDGs) that will be the cornerstone of the Post-2015 Development Agenda.¹ The SDGs are acknowledged as a great achievement that amalgamates the sustainability agenda with the development agenda.² The South African government has unreservedly endorsed the SDGs, noting that the triple challenge of poverty, unemployment and inequality that they address is also the primary focus of the country.³ The SDGs are thus conceptually aligned to South Africa's National Development Plan 2030, published in November 2012, which "aims to eliminate poverty and reduce inequality by 2030".4

Heartening as the South African endorsement might be, there is often a large disconnect between high-level endorsements made on international platforms and the extent to which they are embedded in national actions, supported and aligned with national strategies relating to growth, investment and industrial policy decisions. Leading development economist Frances Stewart cautions that "national ownership might be a problem"5, as global goals and targets will have little impact if they are not linked to the specific problems, challenges and values of countries. Without such a "domestication"⁶ of the SDGs, countries (or leaders) may end up ignoring them.

Macro-economic stability is another important determinant in the possibility of achieving the SDGs.⁷ Implementation will be hampered by the present low economic growth in developing countries due to repressed commodity prices, which restricts the resources that governments can allocate. In addition, external fiscal transfers from OECD countries to South Africa (and developing countries as a whole) are expected to follow a downward trend as these countries turn inward to stimulate their own economic growth.⁸ This means that middle-income countries will have to rely increasingly on domestic funds rather than overseas development assistance to implement the SDGs.

The G20 notes a compelling need to use available public money to leverage private sector investment, and institutional investors in particular, to address the infrastructure deficit in Africa and elsewhere. They see a critical role for G20 financial institutions to support the "building of pipelines of bankable projects" and improved mechanisms to replicate projects.9 As discussed below, South Africa's Renewable Energy Independent Power Producer Procurement Programme (REI4P) offers a positive example of how a transparent procurement process can effectively attract private investment for the rapid scaling-up of renewable energy infrastructure.

Limited resources will require tradeoffs between conflicting objectives and demands. South Africa is a middle-income country with high carbon emissions per capita¹⁰, high unemployment¹¹, endemic poverty, and one of the largest Gini-coefficients in the world¹². Its National Development Plan prioritises both the need to eliminate poverty and eradicate inequality, on the one hand, and the need to address climate change, on the other. This presents a challenge, as addressing climate change will require a dramatic reduction of the coun-



Louise Scholtz is programme manager of the Energy and Urban Futures: Policy and Futures Unit at WWF–South Africa. Apart from her programmatic work on energy-related issues in an urban context, she pursues ongoing research related to energy policy and infrastructure, sustainable strategies and development, and the green economy. try's strong dependence on (historically cheap) electricity generated by coal.

Coal mining remains central to the South African economy, with linkages in finance, manufacturing, services and other sectors.¹³ Any thought of reducing the role of coal raises the spectre of large-scale job losses leading to increased unemployment and poverty. In addition, coal's persistence is a feature of South Africa's particular political economy. While the coal industry was originally structured around white capital and commercial interests, it is today intrinsic to a reorganisation in favour of increased black ownership, with some analysts arguing that the "coal industry is being propped up by the vested interests of big business".¹⁴

Nevertheless, any decisions about the future energy mix of the country should be guided by two principles, over and above considerations of cost. One is to target the cleanest energy mix in order to effectively address the country's high carbon emission profile, and the second is to choose energy pathways that can drive industrialisation and create employment.¹⁵ This raises two burning questions. Is this what South Africa is prioritising in its energy planning? And how are South Africa's national energy policies and strategies shaping up with its international commitments?

This article provides a short country analysis of the existing alignment (or not) of South African national policies and strategies with the two SDGs of primary importance for both climate change and renewable energy: SDG 7, ensure access to affordable, reliable, sustainable and modern energy for all; and SDG 13, take urgent action to combat climate change and its impacts. Given the structure of the South African economy – namely, the strong dependence on fossil-fuel-generated electricity and the importance of coal exports – there is a high

Nevertheless, any decisions about the future energy mix of the country should be guided by two principles, over and above considerations of cost. One is to target the cleanest energy mix in order to effectively address the country's high carbon emission profile, and the second is to choose energy pathways that can drive industrialisation and create employment.

level of overlap between these two goals. Their sustained pursuit could make a meaningful contribution to the National Development Plan objectives to eliminate poverty and reduce inequality through inclusive growth, the provision of cheaper electricity, and the creation of new industries and desperately needed jobs¹⁶ – outcomes that speak directly to SDG 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

National Plans and Strategies

The National Development Plan envisages an energy sector that will promote "economic growth and development through adequate investment in energy infrastructure and the provision of quality energy services that are competitively priced, reli-



Saliem Fakir is head of the Policy Futures Unit at WWF–South Africa. He writes regularly for Engineering News and other media platforms.



Wind farm in Humansdorp, Eastern Cape Province, South Africa. © jbdodane able and efficient" as well as "environmental sustainability through efforts to reduce pollution and mitigate the effects of climate change"¹⁷.

The REI4P, which was rolled out in 2010, can be seen as a major success. South Africa has already procured 6.35MW of renewable energy, which is in line with the department of energy (DoE)'s interim target of 7GW by 2020 and 17.8 GW by 2030.18 In the government's own words, the programme has won global recognition, and attracted ZAR53.4 billion (USD4 billion) in private investment. Renewable energy is currently the cheapest form of electricity generation. Since the REI4P's inception, the increased procurement of renewable energy from independent producers realised 7 million tons of CO2 equivalent reductions and created 23 000 job opportunities. In 2015 alone, it generated a total net benefit for the economy of up to ZAR4 billion (USD 300 million) in 2015. In 2014, it accounted for 85.8 percent of total foreign direct investment in South Africa.¹⁹

The REI4P has delivered millions of South African rands' worth of socioeconomic development. Producers have committed a percentage of their revenue for investment in the communities where their projects were located. Millions of rands have also been invested in small business development, and equity shares for blacks and communities reached 40 percent and above in bid window four, the 2012–13 tendering process.

The programme has demonstrated that it is scalable and rapidly deployable, which means that projects can be built quickly and completed on schedule, unlike coal-fired mega-plants such as Medupi and Kusile, or the nuclear build proposed in the draft Integrated Resource Plan (IRP) 2016.²⁰ Yet these positive outcomes are under threat. Eskom, the state-owned enterprise that is South Africa's only electricity utility and controls both the generation and distribution of electricity, has been reluctant to sign off on agreements with independent renewable energy producers over and above the agreements signed to date.

The Draft IRP 2016, which was put out for comment on 23 November 2016, has been hit with a range of criticisms, including its use of "erroneous and inconsistent technology costs" for renewable energy in the draft's base case, and "arbitrary and artificial constraints on the delivery of renewable energy, namely 1 000 MW per year for solar PV [photovoltaic] and 1 600 MW per year for wind power".²¹ Critics have pointed out that there is no justification for these constraints, other than the fact that these same constraints were contained in the previous IRP in 2010. At that time, however, "there was no renewable energy industry, utility scale solar PV or wind power plants in South Africa, and ... international solar PV and wind prices were significantly different to what they are now"22. Eskom claims that the constraints are due to the national grid's inability to accommodate more than a fixed amount of renewable energy capacity per year, although the utility has not commissioned a large study of renewables integration to support this contention.23 Further limiting the potential of increased renewable energy to address climate change concerns is the inclusion of "a carbon emission constraint for the years ahead to 2050, this being the 'moderate peak plateau decline' carbon emission trajectory"24.

All of this directly goes against the formal recommendation of the Ministerial Advisory Council on Energy (MACE)²⁵ that "the correct planning approach would be to start with an unconstrained, least-cost, base-case scenario, using correct and up-todate technology costs, to establish the associated least-cost, unconstrained, base-case technology mix to 2050, and the associated cost of this base-case scenario"²⁶.

The Centre for Scientific and Industrial Research (CSIR) later conducted a study to re-optimise the South African power mix until 2050. Like MACE, it recommended that the base-case scenario used for the IRP 2016 be least-cost and free of any artificial constraints; that new-build limits for renewables should be lifted; that the relative costs of wind and solar PV be updated. They reran this unconstrained scenario on the software platform originally used by the DoE. In April 2017, their formal response to the Draft IRP 2016 concluded that "solar PV, wind and flexible power generators (e.g. gas, CSP [concentrated solar power], hydro, biogas) are the cheapest new-build mix" for the South African power system"27. The most cost-optimal expansion is a renewable energy share of more than 70 percent by 2050 – which will also be cheaper than the current base-case scenario by ZAR80 billion (USD6 billion) per year by 2050. It also reduces CO₂ emissions by 65 percent (to less than 130 metric tons per year) compared to the base-case scenario. This means that there is no longer a trade-off between de-carbonising the electricity sector and cost.28,29

The research "indicates that it would be much cheaper to simply unlock the bottlenecks on grid access, and to upgrade the grid backbone, rather than to use highercost and less-flexible generation technologies"³⁰. Instead, Eskom's preferred scenario constrains renewable energy and makes the case for a 9.6GW new nuclear build programme with a projected cost of USD50 billion (ZAR776 billion). Irrespective of how the finance is structured, crippling principal and interest payments could lead to a re-allocation of public budgets away from the critical spending needed to make the aspirations of the National Development Plan a reality.31

Eskom's resistance to renewable energy is clearly in breach of its developmental mandate, which is "to provide sustainable power for a better future", "assist the economy to grow" and "improve the qual-

Although Eskom will still be actively involved in generation, its dominance in the sector will decline and over time it will act primarily as a wires business – as a distributor of other people's product. By including large-scale nuclear power in all its scenarios, it ensures that it remains relevant.

ity of life of people in South Africa and the region".³² Many argue that we are witnessing Eskom's (read: the state's) attempt to entrench its dominance in the energy sector. Should the DoE proceed with "the leastcost unconstrained scenario, the bulk of new-build renewable energy and gas will be built by Independent Power Producers (IPPs). Although Eskom will still be actively involved in generation, its dominance in the sector will decline and over time it will act primarily as a wires business – as a distributor of other people's product".³³ By including large-scale nuclear power in all its scenarios, it ensures that it remains relevant.

All electricity that is generated has to be delivered into the South African grid – and that grid is owned and operated by Eskom.³⁴ As long as Eskom has this monopoly, the country can be held hostage to its agenda and interests. Finance consultant Dirk de Vos notes that "[b]ig mega-projects like Medupi and Kusile, but even more so in the case of nuclear, lock out private investment and because they are invariably delivered well over-budget and over-time, only governments have the funding and are able to shift the risks of having these mega-projects inevitably go wrong onto the current and future taxpayers."³⁵

Quo Vadis?

The Sustainable Development Goals offer an important opportunity to harness the advantages of a global agenda and international partnerships to drive appropriate development through the equitable and sustainable use of the country's resources. South Africa's Gini coefficient belies the promise of our natural resource wealth. In this rich country, the high levels of inequality show that, while democratic rights and the rule of law prevail, the economy is still exclusive and controlled by elites.

If one considers both the private and public sector, the foregoing discussion shows that it is within South Africa's means to deliver on the SDGs, in particular Goals 7 and 13. However, this will take more than statements of endorsement at high-level gatherings. As demonstrated by responses to the draft IRP, vested interests and flawed or biased research indicators can lead to suboptimal decision-making and hobble the country's plans for inclusive and democratic development.

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Large Hydropower Dams Are Not the Answer: Time to Rethink Africa's Energy Infrastructure

Rudo A. Sanyanga

The electrification rates of Africa are appalling: the lowest in the world, with as little as 1 percent access in some rural areas. The average electrification rates in sub-Saharan Africa range from 16 percent in rural areas to about 59 percent in urban areas. Out of a continental population of 1.25 billion, more than 600 million people - almost twice the population of the United States of America - have no access to modern energy. This is a major cause for concern. If one accepts the oft-quoted mantras that "energy is an enabler" and "infrastructure equals prosperity", it follows that the lack of infrastructure and access to electricity are major contributors to poverty on the continent.

Over the past half-century, successive African governments have been aware of the need to improve infrastructure and to extend access to electricity, and have made numerous efforts to address these deficiencies. One major effort occurred in 2012, when African heads of states adopted the Programme of Infrastructure Development for Africa (PIDA), an initiative to address infrastructure services gaps in energy, transport, water, and information and communication technology. After a priority action plan (PAP) was developed to prioritise projects and speed up implementation, 52 projects were selected, among them 13 large hydro projects. The prioritised hydro projects would increase installed generation capacity by a combined 15 000MW, at a cost of USD30 billion. The PAP intended to deliver the prioritised projects by 2020.

Today, with three years left, it is unlikely that this goal will be met.

In light of the controversy and scepticism surrounding large hydro dams, International Rivers carried out an analysis of eleven of the PIDA hydro projects. "Right Priorities for Africa's Power Sector: An Evaluation of Dams Under the PIDA" assessed how the projects are structured and their potential for alleviating the energy crisis in Africa at a reasonable economic and financial cost, while promoting social welfare and environmental sustainability.¹ This article shares some of the report's findings, and outlines important considerations about the role of large hydro dams in Africa's energy future.

Climate Change and Large Hydropower Dams

International Rivers found that the PIDA hydropower projects ignore the risks posed by climate change. With the latest climatechange models predicting increased temperatures and more frequent prolonged droughts and extreme weather events, the reliability of hydropower is significantly reduced. The 2014-2016 drought spell in eastern and southern Africa resulted in a decline in the water volumes held in many large dams, leading to reduced power generation. Many hydropower plants failed to produce their firm capacities (a measure of their ability to contribute effectively to system reliability) and some in Tanzania had to be shut down because of lack of adequate water. The Zambezi basin was particularly affected. Usable water levels in the Kariba Dam, on the Zambezi between Zambia and



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Zimbabwe, dropped to 14 percent. Both Zambia and Zimbabwe experienced low power generation, to the extent that industry outputs and jobs were lost in Zambia.

In 2012, International Rivers commissioned noted hydrologist Richard Beilfuss to carry out a study on the climate change risks for both existing and planned hydropower projects in southern Africa.² Among other findings, Beilfuss warned that the dams on the Zambezi River would be unable to meet energy needs as the global temperatures increased and rainfall amounts dropped in the basin. While assessments of the potential impact of climate change on dams and water resources had been carried out before, the Beilfuss study was a worthwhile addition to a growing chorus and provided a robust analysis of the issue. He concluded that the Zambezi Basin was extremely vulnerable to climate fluctuations. Under these predictions, the proposed Batoka Gorge Dam would lose as much as 32 percent of firm power during years of drought. The current reliance on hydropower is thus unsustainable and attention needs to be redirected to alternative energy technologies.

Recent studies also provide evidence that tropical dams produce large amounts of methane, thereby contributing to greenhouse gas emissions. In a 2017 study, tropical ecologist Claire Salisbury shows that all dams worldwide do emit some greenhouse gases.³ This work debunks previous justifications for including hydropower dams under climate funding initiatives. There is now irrefutable evidence that methane and other greenhouse gases are unintended byproducts of large dams.

Large Hydro Dams Service Urban Areas and Industry

In order to reach the millions of Africans who do not have access to electricity, the geographical distribution of electricity needs to be increased to the rural areas where they reside. This is where large hydropower projects fail, as they have limited ability to distribute power widely. Their access is restricted to grid-connected consumers, mainly those in urban centres and large industries – most of which are extractive industries. In 2008, mining comInga 1 dam in the Democratic Republic of Congo. © International Rivers



panies consumed more electricity than the whole population of sub-Saharan Africa. In the case of the Inga 3 Dam project that is planned for construction on the Congo River in the Democratic Republic of Congo (DRC), 55 percent of its generation capacity of 4800MW is destined for export to South Africa, 30 percent for the copper mines in Katanga Province, and the rest for the capital of Kinshasa. No provision has been made for rural areas. Out of a national population of 72 million, the 15 percent that is destined for Kinshasa will contribute a mere 480 000 new connections. Thus, the Inga 3 project will have no meaningful impact on increasing access to electricity in the DRC.

By focusing on large dams and hydropower, the continent has missed the opportunity to develop other sources of energy that can improve access to other types of off-grid energy technologies. In its 2015 report "Speaking Truth to Power", Oxfam noted that two-thirds of energy investment in Africa is devoted to producing energy for export, and that tackling the continent's energy poverty will have less to do with the ambitious expansion of electricity generation capacity and more to do with delivering ambitious energy services to the poor.⁴

No One Has Cracked the Resettlement and Compensation Issues

One of the most contentious concerns associated with the construction of large hydropower dams has been the displacement of communities that depend on rivers. This sore issue led to the establishment of the World Commission on Dams (WCD) in the late 1990s. Because poor people pay the price but don't reap the benefits of these investments, the WCD found that dams "can effectively take a resource from one group and allocate it to another"⁵.

As a result of this fundamental finding, lenders and development banks developed mitigation policies, guidelines and safeguards - but to date there is still no proven effective model of a fair and just resettlement and compensation process. In spite of the awareness and recommendations wrought by the WCD, the problems of human displacement and resettlement persist. Communities that were displaced by the Kariba and Inga 1 and 2 dams, and many other dams on the continent, continue to struggle for just compensation, decades after the projects were completed. In addition to those physically displaced by dam construction and reservoirs, many more people living downstream are economically disadvantaged through reduced fishing and other water-based economic activities. A stark example of this is Kenya's Lake Turkana, which gets 90 percent of its water from the Omo River that flows down from Ethiopia. With Ethiopia's construction of the Gibe III Dam and establishment of large irrigated sugarcane plantations, Omo flows into Lake Turkana have been drastically reduced. This has had a devastating effect on the livelihoods of hundreds of thousands of people who rely on it for fishing. In another example, the planned Mphanda Nkuwa Dam on the Zambezi in Mozambique would further jeopardise the country's thriving prawn industry in the Zambezi delta.

Social and Environmental Impact Assessments Are a Scam

Because large dam projects tend to cause significant irreversible impacts extending far beyond the dam footprint, they require careful planning. The implementation of Social and Environmental Impact Assessments (SEIAs) is meant to ensure good governance in project development and operation phases. These assessments should inform the planning process by verifying whether the project is feasible and fully examining real and potential impacts. Various nations have developed regulations to ensure that these assessments are transparent, are inclusive of all stakeholders, and foster accountability. In practice, impact assessment processes have failed dismally to guide sustainable development. Human right standards continue to be violated and communities are not consulted adequately, if at all.

In some cases, including Ethiopia's Gibe III and Grand Renaissance dams, the projects went ahead before the impact assessment studies were done. Following international complaints, superficial ex-post studies were performed after the commencement of construction. By then, it was impossible to abandon the project or to institute mitigation measures. In the DRC, the government went as far as proposing to move ahead with the Inga 3 Dam

In practice, impact assessment processes have failed dismally to guide sustainable development. Human right standards continue to be violated and communities are not consulted adequately, if at all.

with or without a SEIA. At the Batoka Gorge Dam, it is understood that the developers confirmed that the project would go ahead before the impact study had even begun. These examples and many similar ones on the continent are disturbing. Such studies are rendered meaningless when developers undertake impact-assessment processes purely to fulfil regulatory obligations, with no intention of taking up the recommendations.

Economics of Dams: The Numbers Do Not Add Up

Mega-dams have not been the silver bullet for Africa's economic development that they were billed to be. They have instead turned into big albatrosses. Their costs are known to spiral out of control, creating massive debt burdens for poor countries, while their performance does not live up to expectations. A 2014 report by a group of researchers at the University of Oxford's Said Business School assessed the economic performance of 245 dams in 65 countries.⁶ It concluded that large hydro dams are uneconomic, incurring as much as 96-percent cost overruns and 44-percent time overruns. Budgets are systematically underestimated and fail to reflect actual inflation costs. Debt servicing and environmental and social costs are also grossly underestimated. The Inga 1 and 2 hydro projects failed to consider maintenance costs, as well as social and inflation costs. As a result, the DRC went into huge debt and the power stations could not afford maintenance costs for many years. The projects quickly fell into disrepair and power production plummeted. In 2007, the World Bank estimated that these projects would need USD250 million for rehabilitation. This figure skyrocketed to USD1.3 billion in 2012, before the rehabilitation was even half-complete.

PIDA's energy and infrastructure model fails to acknowledge the historically poor performance of large dams in Africa. This is certainly the time to rethink the future of Africa's energy infrastructure.

> An advisory report by the Dutch Sustainability Unit hosted by the Netherlands Commission for Environmental Assessment shows that social and environmental effects of large hydro projects are often underestimated, while the economic and financial benefits are overestimated.7 The report also confirms that governments and business have a bias towards large dams as a way to acquire access to finance. Businesses prefer these large infrastructure projects because the large amounts of capital and length of the projects compel the states to carry the risks, while the private financiers take much less risk. This also makes large hydro projects a magnet for corruption. In the end, citizens are burdened with generational debts and yet they are not involved in the decision-making.

> The establishment of Clean Development Mechanism financing under the Kyoto Protocol, an international agreement linked to the United Nations Framework Convention on Climate Change, has further favoured large dam infrastructure at the expense of alternative energy sources.

> Another aspect of the economics of large hydropower is that the promise of

cheap electricity tends to be an illusion. Once projects are completed, with cost and time overruns, tariffs generally rise above the initially predicted levels as investors seek to recoup their costs. In Uganda, the consumer cost of electricity increased significantly after the Bujugali hydro project came online, with the result that many people could not afford it. They resorted to using electricity only for lighting and continued to use firewood and charcoal for cooking. This is disheartening when so many public resources were expended on the project.

Energy Transformation

Infrastructure strategies can play a significant role in delivering energy to the continent of Africa. To address the energy crisis while promoting inclusive development that takes into account climate change impacts and all the other concerns raised above, African states need to ask several questions. What kind of infrastructure do we need? And does it meet our development goals? Decision-makers need to deliberately target infrastructure for servicing the majority of people who need the energy and to define milestones to assess progress.

The 2016 "Lights Power Action: Electrifying Africa" report by the Africa Progress Panel sums up the issues very well and cautions African nations about over-reliance on grid-connected megaprojects.⁸ Launching the report, Kofi Annan said, "Traditional approaches to extending the grid are no longer viable as the main option for African countries. They (megaprojects) will take too long and will not meet the needs of our growing economies and societies". He went further to urge governments and their partners to seize the opportunity to re-imagine their energy futures.

Worldwide, there is a growing recognition that grid-connected mega-infrastructure such as large hydro dams, while attractive for scaling-up national and regional generation, are slow to come online and far too expensive for most African nations. In a nutshell, the report affirms what International River's study found: PIDA's energy and infrastructure model fails to acknowledge the historically poor performance of large dams in Africa. This is certainly the time to rethink the future of Africa's energy infrastructure.

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About the Cover Artist

Kiluanji Kia Henda (b. 1979 in Luanda, Angola) employs a surprising sense of humour in his work, which often hones in on themes of identity, politics, and perceptions of postcolonialism and modernism in Africa. Practicing in the fields of photography, video, and performance, Kia Henda has tied his multidisciplinary approach to a sharp sense of criticality. A profound springboard into this realm comes from growing up in a household of photography enthusiasts. Furthermore, his conceptual edge has been sharpened by immersing himself in music, avant-garde theatre, and collaborating with a collective of emerging artists in Luanda's art scene.

In complicity with historical legacy, Kia Henda realises the process of appropriation and manipulation of public spaces and structures, and the different representations that form part of collective memory, as a relevant complexion of his aesthetical construction.

Kia Henda currently lives and works between Luanda and Lisbon.

