handshake
IFC’s quarterly journal on public-private partnerships

In this issue

DONORS: Aid vs. trade
INVESTMENT: Seeking strong partners
POWER: Hydro heats up
WATER: Sanitation solutions
FIRST PERSON: African Development Bank President

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Disclaimer
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Cover photo © Eric Kidwell, Lagos, Nigeria
The problem with stereotypes isn’t that they aren’t true,” Nigerian author Chimamanda Ngozi Adichie told the audience at a TED talk in Oxford, England several years ago. “It’s that they are incomplete.” Throughout the lecture, and in her award-winning books set in Africa, she warns of what she calls “the danger of a single story”—the risk of critically misunderstanding entire cultures by ignoring the more nuanced, complicated elements that may not fit into a straightforward narrative.

Many have been lured into the trap of the single African story. But this issue of Handshake presents readers with a more accurate—and more exciting—narrative of African progress. This is the progress that attracts investors by emphasizing partnerships between the private sector and African governments committed to the best for their citizens.

The stories in this issue show how public-private partnerships (PPPs) are already lighting roads, powering homes, and keeping people healthy. As important as these existing PPPs are, the promise of PPPs in Africa is even greater, and it’s tied to changes in aid and investment structures that are already taking place. “The time is ripe for ‘smart aid,’” writes Donald Kaberuka, President of the African Development Bank, as he calls on the world to “rise above the tendency to answer modern problems by asking old questions and using old tools.”

As these articles and interviews demonstrate, when governments and investors forge partnerships to advance progress, they erase Africa’s “single story.” The stories that take its place—and the improvements introduced to people’s lives—will be told for generations.

Laurence Carter, Director
Tanya Scobie Oliveira, Editor
IFC Advisory Services in Public-Private Partnerships
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the hopeful CONTINENT

By Jean Philippe Prosper, IFC & Emmanuel Nyirinkindi, IFC

Photo © Andrew Ashton
More than a decade ago, *The Economist* christened Africa “the hopeless continent,” lamenting its prospects for growth and change. Today, the tide has turned. In 2013, the very same magazine lauded the improvement in lives in Africa over the past decade, and declared that the next decade will be even better.

Many of Africa’s economies are among the world’s fastest growing. At least a dozen have grown by more than 6.0 percent annually for six or more years. But success gives rise to new challenges. Although private investment is no longer novel in Africa, it does not yet meet growing needs. A younger population and expanding middle class have new demands. Infrastructure bottlenecks threaten sustained development.

Public-private partnerships (PPPs) are an important vehicle to help Africa confront these challenges.

A widely cited World Bank Group study from 2009, “Africa’s Infrastructure: A Time for Transformation,” found that infrastructure has been responsible for more than half of Africa’s recent growth and has the potential to contribute more—but at a cost. Africa’s conventional infrastructure, which includes roads, electricity, and water, requires $93 billion in new investment annually. Some of this can be financed domestically, but the report estimates that the annual infrastructure funding gap is likely to reach over $30 billion.

**THE INFRASTRUCTURE FUNDING GAP**

Private investors have a growing interest in Africa, and enormous financial capacity relative to Africa’s needs. By creating PPP structures, public service needs can be met through incentives to private investors that need to receive fair and attractive risk-adjusted returns on investments.
PPPs are already familiar to Africa and gaining traction. From just $1 million in PPP activity in 1993, private investment of $13 billion was being channeled into infrastructure by 2008. The global financial crisis slowed the flow, but a recovering global economy, coupled with Africa's bright growth prospects, positions PPP models to be the wave of the future.

The potential for PPPs in Africa is seemingly limitless relative to its current level. New opportunities will arise as PPPs expand further into new sectors such as social services, tailor themselves to small and large projects, and appeal to local or regional investors alongside larger, international players.

The range and size of PPP projects has been changing as new countries and types of investors have become involved. Until recently, infrastructure PPP projects were concentrated in sectors such as power and telecoms and usually involved large investments with foreign sponsors taking the lead. More recently, the range of sectors in which PPPs have been implemented has expanded, more innovative projects have been undertaken, and local and regional investors have become involved across a wider range of countries.

**HEALTH**

Healthcare is a sector where a new PPP model is attracting more attention. Support services have been contracted out and new buildings delivered by private investors, while clinical services have remained in hands of government providers.

As a previous issue of Handshake described in detail, a groundbreaking healthcare PPP in Lesotho paved the way for further successful partnerships in Africa. In 2006, the government of Lesotho launched a project to ensure the long-term improvement in healthcare with a PPP to build a state-of-the-art 425-bed National Referral Hospital. The Queen Mamohato Memorial Hospital, as it is known, now serves a wide population.

The Queen Mamohato Memorial Hospital project is only the beginning for healthcare PPPs in Africa. Following a tour by officials of Cross River State in Nigeria, officials engaged IFC to advise on structuring a PPP for the design, construction, equipping, and operation of a 105-bed greenfield hospital in the state capital of Calabar. In June 2013, an agreement was signed for the development of a new hospital on a design-build-operate-transfer basis with an estimated capital cost of $37 million.

More on this groundbreaking PPP, including an interview with the governor of Cross River State, can be found in the following pages. These and other examples demonstrate how PPPs can assist in efficiently delivering better healthcare services to Africa's people.
WATER

Water has traditionally been a sector where PPPs have been used to deliver services. Previous projects have tended to be large-scale investments aimed at providing bulk water supplies to urban centers. More recently, the focus of PPPs in the water sector has turned toward encouraging the private sector to provide water to smaller rural centers.

In 2007, IFC signed a mandate with Uganda’s government to implement the Small Scale Infrastructure Provider Program. The program helped local investors provide water in some towns while also helping municipalities to manage these contracts and improve access to finance for the service providers. The first five-year contract was awarded to a local company in 2010 to provide services in Busembatia. In its first two years it added 400 new connections, double the previous number, and added 17 standpipes where none existed before. All the improvements added no increase to the tariff. The operator was funded by a $100,000 loan from a local bank. As with Lesotho’s Queen Mamohato Memorial Hospital, the example of Busembatia is now being used as a model. South Sudan is looking to roll out a similar program in several of its smaller urban centers.

INFRASTRUCTURE

Wars and civil conflict have had a devastating impact on African infrastructure, and increasingly private investment has become part of the solution.

The rebuilding of the electricity system in Liberia is a good example of PPPs’ potential. In 2008, just five years after a civil war destroyed the power infrastructure, the government engaged IFC to attract a private operator. With the assistance of donors, they worked toward reconstructing the power system in the capital, Monrovia. In 2010, Manitoba Hydro International commenced a five-year management contract. By 2012, over 12,000 new connections had been made, revenue increased by 160 percent, and losses decreased by 21 percent. Earlier this year, the contract was extended and its scope increased.

Liberia is not the only country considering PPPs to support the rebuilding of critical infrastructure. Burundi, Democratic Republic of Congo, Sierra Leone, and South Sudan are all actively considering or pursuing PPP programs.

If Africa is to continue to grow—and maintain its promise as “the hopeful continent”—it must leap forward in developing its infrastructure. Resources from governments and donors are insufficient to meet this challenge. Smart, well-designed PPPs can make a significant contribution to fill this gap.

The potential for PPPs in Africa is seemingly limitless relative to its current level. New opportunities will arise as PPPs expand further into new sectors such as social services, tailor themselves to small and large projects, and appeal to local or regional investors alongside larger, international players. In Africa, as in the rest of the world, PPPs can step in to help where the need is greatest.
Every infrastructure development project has its Casablanca moment, when the authority shows up and asks his men to "round up the usual suspects."

Instead of launching into a murder investigation, project managers are identifying and pricing risks—those dramatic complications that range from mildly annoying construction delays to the kind of catastrophic financial disasters that can destroy companies and ruin reputations. These unsavory characters keep managers, financiers, and consultants up at night, because they know that their entire careers might rest on seeing the unforeseen and managing it appropriately.

THE NEWEST GENRE

Mitigating risk is a key challenge in any country, but across the African continent—with several rapidly emerging markets for infrastructure investment among its countries—it requires a heightened sense of awareness. Private investment in Africa’s public infrastructure is growing, but it still has significant maturing to do. Currently a large share of Africa’s infrastructure is domestically financed, with the central government budget being the main driver of investment. However, governments in the region are increasingly seeing the need to bring new sources of funding to the table, and they understand the wider benefits private capital might deliver in its public services.

Following the resource boom of the past decade, there should be sufficient capital in Africa to support commercial infrastructure investments. Many countries in the region have seen this potential increase and offer investors an attractive pipeline of growth opportunities for developing public-private partnerships (PPPs).

Critically, however, most countries also lack a significant track record. More countries operating privately-owned projects and concessions are needed to instill confidence and ultimately attract cheaper, more conservative international capital.

All things being equal, African PPPs have to work harder to reach financial close than similar projects in other parts of the world. While the gap between the more mature markets in Aus-
tralia, Europe, and North America and those of emerging markets is narrowing—and probably is not as great as people might think—it clearly still exists for many investors seeking long-term certainty.

**POLITICAL RISK IS THE VILLAIN**

This is where development finance institutions and foreign export credit agencies have a huge role to play in progressing African infrastructure. In a line-up of the usual suspects, the more sinister looking character is always political risk. While Development Finance Institutions (DFIs) and Export Credit Agencies (ECAs) offer a variety of wider benefits (and often cheaper capital), no product or aspect of their involvement is perhaps more important to foreign private investors than their ability to mitigate political risk. Investors do not want to be left on their own if things go wrong. They want to know that these important political institutions will stand behind them and facilitate a reasonable resolution with the local government or authority should a challenge need to be overcome.

This increased emphasis on having DFIs and ECAs involved in international projects is important in the current banking climate. DFIs and ECAs have been supporting infrastructure investment for decades, but they’ve not always been seen as essential. Eight years ago, international project finance banks aggressively operated in a competitive and liquid market where it was widely believed that if a deal could be done, it could be sold on. However, as the market tightened and syndication slowed, banks became far more conservative.

Suddenly ECAs and DFIs were in the spotlight again, and developers hoped they could help fill the finance gap left by the collapse of commercial debt markets. This trend, along with the emergence of more local capital funding, is at the core of new research *Infrastructure Journal* and the international law firm Baker & McKenzie have just published.

**THE PLOT THICKENS**

At the heart of the story is Africa. No longer plunged in Joseph Conrad’s darkness, the continent is evolving so fast that external finance professionals can’t keep up. According to IFC, PPPs in Sub-Saharan Africa have increased from a half a project a year between 1992-2001 to two projects a year from 2002-2010; around seven to nine in 2011; and more than 30 in 2012.

Perhaps equally as telling is the migration of professionals. Traditionally, Africa’s indigenous talent might have left the continent seeking attractive opportunities in the more mature financial markets of Europe and North America. However, people interviewed for *Infrastructure Journal*’s report have commented on a reversal that sees not only African executives returning to the continent, but also native European and North American professionals attracted to the wide variety of development opportunities and the region’s long-term growth potential.

What is unfolding in Africa is dramatic. Although it is still not without turbulence, never has the continent’s future seemed so bright and optimistic. Private investment is happening in infrastructure, and it looks like the beginning of a beautiful friendship.

Just keep those usual suspects in check.
Investment in African infrastructure was up 33 percent in 2012 compared to 2011, reversing a trend of decreasing investments. In 2006, the continent attracted almost $25 billion of investment, dwindling to $13.6 billion in 2011. Last year’s rebound brought investment back up to the ten-year average of about $18 billion, caused by a hike in the energy sector.
INVESTMENT IN AFRICAN INFRASTRUCTURE (1990-2012)

ENERGY

Private investment in the energy sector reached $8.3 billion in 2012, reflecting financial close of 25 new projects, including those in Côte d’Ivoire, Ghana, Kenya (2), Morocco, South Africa (18), Uganda, and Zambia. Together they added a total of 3312 MW to the African energy grid (1076 MW in South Africa alone), at an average cost of $2.5 million per megawatt.

TELECOM

Telecom has seen huge growth across Africa. More than $50 billion was privately invested between 1990 and 2012 through fixed, mobile, and multi-service providers. The average telecom provider in Africa has 4.4 million subscribers—providers receiving investment in 2012 had over 700 million subscribers. Three new mobile providers emerged in 2012: Haatif Telecom (Somalia), Smile Communications (Uganda), and Africell (Democratic Republic of Congo [DRC]).

TRANSPORT

Close to $20 billion of private investment flowed into Africa’s transport sector since 1990: $14.5 billion in seaport projects, $3.3 billion in railroad projects, and the rest split between airports ($1.5 billion) and roads ($0.7 billion). Reflecting a decrease since 2006, only one transport deal closed in 2012: the Blaise Diagne International Airport, a management contract in Dakar, Senegal.
WATER & SEWERAGE

Water and sewerage in Africa has received $3.3 billion in investments since 1990. Activity was slow in the early 1990s, at its peak during the boom years 2007-2008, but then slowed as the global financial crisis settled in. Two large concessions closed in Egypt in 2010 and Algeria in 2009, worth $475 million and $468 million in investments respectively. Of the total 44 projects, there were 28 management and lease contracts, 13 greenfield projects, and two concessions.

TOP DEALS BY COUNTRY
(1990-2012)

The largest African countries, measured by their gross domestic output, have attracted the lion’s share of investments in private participation in infrastructure. South Africa, Egypt, Nigeria, and Algeria attracted 65 percent of investments in infrastructure since 1990—a combined total of $158 billion.

It is useful to note that population does not drive investment: Population-rich countries such as Ethiopia (87 million people), DRC (75 million), and Tanzania (46 million) have received little investment—$4 million, $2.6 billion, and $5.1 billion respectively.

SPLITTING THE SPOILS

Africa’s investment levels have remained fairly stable since the global financial crisis, although investment in energy projects has picked up in recent years. Investments are largely concentrated in a handful of countries, namely South Africa, Nigeria, and the large North African countries. The other 48 countries received the remaining 35 percent of investment.
BY SUBREGION (1990-2012)

North Africa:
- Total investments: 35%
- Number of projects: 9%

Central Africa:
- Total investments: 23%
- Number of projects: 32%

Southern Africa:
- Total investments: 4%
- Number of projects: 12%

West Africa:
- Total investments: 24%
- Number of projects: 16%

East Africa:
- Total investments: 14%
- Number of projects: 31%
Africa is an obvious public-private partnership (PPP) opportunity-in-waiting—the continent boasts high demand, global goodwill, and strong government support. Money seems freely available. The facts speak for themselves:

**SO MUCH NEED.**

Africa boasts 12 percent of the world population and staggering riches in natural resources, yet produces only 1 percent of global GDP and 2 percent of global trade. The lack of good infrastructure hurts, increasing the cost of imports by 40 percent and reducing business productivity by 40 percent. Of the $93 billion needed annually for infrastructure investment in Sub-Saharan Africa, only about $25 billion is being spent, leaving a lot of opportunity. Public finance will resolve only a small part of this need. PPPs must play their part.

**SO MUCH GOOD WILL.**

While aid budgets are contracting globally, there is increasing support to Sub-Saharan Africa. The G20, G8, World Economic Forum, and others cry out for more investment in Africa generally and more PPP initiatives specifically.

**SO MUCH RHETORIC.**

Every development conference and private investment forum seems to focus on Africa as the
place aid money should be spent and the next
dollar can be made. Heads of state and develop-
ment institutions give lip service to the role of
PPPs in solving every woe: lagging growth, insuf-
ficient jobs, and poor infrastructure.

SO MUCH CAPITAL.

Aid money isn’t the only asset being drawn to
the continent. As one of the world’s fastest grow-
ing economic hubs, as money flees from Europe
and continues to stagnate in the U.S., Africa is
getting more and more attention.

Each of the elements listed above, which should
spell success for PPP in Africa, also work against
it. Here’s the flip side:

SO MUCH NEED.

The investment requirements are massive. This
leads governments to expect too much from
PPPs and at the same time to seek something fast
and easy. But PPPs are neither. A good PPP proj-
ect, like a good marriage, takes time and effort;
trying to do things quickly and easily tends to
lead to failure.

SO MUCH GOOD WILL.

Donors and companies both chase projects,
tripping over each other to “support” promising
initiatives, as each vow to show (often unrealis-
tic) results. Government officials tend to buy the
pitch, but the high sticker price, or the demands
for a blanket guarantee, lack of financing, or just
inability to deliver overwhelms those hopes. And
in chasing the smoke and mirrors, governments
often sow confusion—contracting agencies don’t
know whether to develop projects or wait for
the illusory promises to bear fruit. Real oppor-
tunities are left to wither on the vine, and good
investors watch in dismay, unwilling to enter the
fray, or frustrated by real projects taken away at
a late hour by governments wanting to go faster.
The lure of “standard gauge railways” in East
Africa is a case in point. Somehow governments
were convinced that the meter-gauge rail that they currently have is backwards, even though Japan, most of India, and much of Australia run on meter gauge. Instead of investing in improving and expanding their existing rail system, and investing in standard gauge only down the line (pun intended), these governments are looking to invest many times the amount in developing new standard gauge rail for questionable benefits to the detriment of other solutions. Real investors and government staff dare not propose anything else.

But governments should know better, as these fanciful promises rarely work out; and the private sector should know better, for a project obtained in such a manner is intrinsically vulnerable to claims of bias or corruption, to questions of legitimacy.

**SO MUCH RHETORIC.**

Governments love to talk big about PPPs, but without much willingness to spend. Rarely do they take the time to do it well, and as a result, misunderstandings about the mechanics of PPPs persist.

**SO MUCH CAPITAL.**

The money spent chasing investments in Africa, and the capital chasing commodities, is a vicious distraction. This promise of easy money (in particular in new oil and gas countries like Ghana, Mozambique, Tanzania, and Uganda), and the temptation to spend future revenues, undermines the good work done to focus on efficiency through PPPs.

But this “disappointment” should be seen relative to the circumstances. PPPs have been used in different countries to do some good things: to attract investment and efficiencies, for example, and to help guide public sector reforms. Where PPP solutions have flourished, governments have invested time and effort. It has never been a quick fix or an easy solution. Chile spent 30 years developing its PPP program; the U.K. took a decade just to get things moving; and India struggled through a number of failures, overpriced projects, and frustrations before gaining momentum in PPPs.

And yet we look to Sub-Saharan Africa, where resources and skills are most limited, and expect PPPs to blossom overnight. Maybe our expectations need to be realigned. The shoots of progress emerging in Ghana, Ivory Coast, Kenya, Nigeria, Senegal, and Tanzania should give us hope for the future. We should quit looking backwards at unrealized and unrealistic expectations, and put our hands back to the plow. There is work to be done.
NOTES FROM NGOZI

“Look at what is happening to Africa in the midst of global uncertainty. It’s not a fluke. For almost a decade, the continent’s economy has been growing at close to 5 percent at a time of real global fragility. African policymakers, finally, are putting in place good economic policies and sound macroeconomic management. And throughout the crisis, they did not roll back these policies. The lessons have been learned.”

Excerpted from Foreign Policy’s “Epiphanies from Ngozi Okonjo-Iweala,” March/April 2013.

NIGERIA’S PLAN FOR POWER

In this CNN interview, Ngozi Okonjo-Iweala, Nigeria’s Minister of Finance, outlines what the government must do to support expansion of the power sector and make access to power achievable for all Nigerians.

Photo © Jori Klein/Acumen Fund
Michael Elliott is the President and Chief Executive Officer of ONE. He also serves as Vice Chair of the World Economic Forum’s Global Agenda Council on Poverty and Sustainable Development. Prior to joining ONE, Elliott served as Editor of TIME International and was on staff at The Economist, where he served as Political Editor, Washington Bureau Chief, and founding author of both the “Bagehot” and “Lexington” columns. Here, he talks to Handshake about how open budgets in Africa shape social progress and can transform civil and business engagement.

Interview by Alison Buckholtz
For African citizens who are not following their government’s activities, what can be gained by greater engagement with their country’s budget? What form should this engagement take?

A country’s budget not only accounts for its resources, but also outlines its priorities. When citizens engage with their country’s budget process, their participation can ensure that country budgets are aligned with their preferences.

Citizens’ budgets—a budget document created specifically for the public—simplify the complex bureaucratic process, and make it easier for citizens to understand how much money is going to, for example, healthcare in their district. This naturally brings the conversation around to the results the government achieves. What are citizens getting for the money their government invests on their behalf?

Which fiscal transparency reforms in Africa do you find the most promising in the short-term? Which longer-term reforms do you hold out hope for?

There is a very simple way to make African budgets more transparent, quickly and cheaply. Many of the key budget documents that countries produce are not made public. Making public eight key budget documents, including the Executive’s Budget Proposal, the Enacted Budget, an audit report, and a citizen’s budget, would provide a solid base for increasing budget transparency, and allow citizens to get involved.

In the longer term, making budget information available online in open, accessible databases will not only provide data about what governments are spending, but will enable citizens’ groups to track what resources are available, how they are spent, and what results they contribute to.

Armed with that data, citizens will be able to follow the money and hold governments to account for the results they see (or don’t see) in their communities.

What sort of business opportunities may come to Africa if there is an enhanced degree of budget transparency?

The availability of basic budget information is important not only to citizens, but also to companies that want to conduct business.
Opening up the budget process is an important part of improving governance and making countries more attractive to business, and increasing investor confidence.

What are citizens getting for the money their government invests on their behalf?

Businesses are more likely to invest in countries they know to be financially stable, and their investment can provide countries with necessary tax revenue, increasing investment in key sectors including health, agriculture, and poverty alleviation.

How will wider access to mobile technology push budget transparency forward in Africa in the coming years?

We all know access to mobile technology is growing in Africa at an exponential rate. The resulting innovations are changing the way we think about participation. For example, in South Kivu, a province in the Democratic Republic of Congo, a pilot participatory budgeting program is giving citizens a voice in government, resulting in increased tax revenues and compliance.

Citizens are notified via SMS about upcoming budget meetings, and the results of the meeting afterward. In Lbanda, this increase in civic participation resulted in a 16-fold increase in tax compliance. South Kivu is also experimenting with voting via mobile, which is preferred by 100 percent of citizens to in-person voting.

Mobile access is not a silver bullet. More broadly, while technology can boost transparency, and transparency can empower people with information, political change is often slow and unpredictable.

How do the priorities outlined in a government budget shape a country’s social progress? Can you give an example of this interplay?

The budget is the document through which a government’s priorities are funded and implemented, and should take into account the needs of citizens. However, sometimes the priorities of citizens are ignored. In these cases, citizens need data to advocate for change and ensure that their government’s budget reflects their needs.

An example is South Africa’s HIV/AIDS budget. When the South African government refused to increase funding for HIV/AIDS treatment, the Treatment Action Campaign took them to court and proved that health departments had under-spent their budgets. Courts ruled that based on budget documents, resources were available
for the programs and changes were made to the budget. South Africa now has the world’s most comprehensive HIV/AIDS treatment and prevention program, providing free anti-retroviral drugs to over 2 million people.

An informed citizenry is the most important tool for social progress. Opening budget processes gives citizens the information they need to hold their governments to account for the decisions that are made on their behalf.

5 QUESTIONS IN 5 MINUTES:

Open budgets can expose corruption and lead to more efficient and effective government spending.

Open budgets help match national resources with national priorities.

Open budgets support government efforts to manage debt.

Open budgets help governments secure cheaper international credit.

Open budgets can help governments build trust with their citizens and give citizens voice and dignity.
Mo Ibrahim’s Index redefines leadership in Africa

Established in 2007, the Ibrahim Index of African Governance (IIAG) assesses governance performance in Africa. Consisting of 94 indicators calculated using data from 32 independent sources, the annual IIAG is the most comprehensive collection of data on African governance.

The IIAG aims to provide:
- A framework for stakeholders to assess the delivery of public goods and services, and policy outcomes, in every African country.
- A tool with which to govern, highlighting continental, regional, national, and thematic governance results.

"We are looking not just for a job done... we are looking for people changing the course of the country."

—Mo Ibrahim, founder of the Ibrahim Index of African Governance
IBRAHIM INDEX OF AFRICAN GOVERNANCE

THE DATA ARE CLASSIFIED WITHIN FOUR CATEGORIES:
(NUMBER OF COUNTRIES WITH IMPROVED SCORES 2006-2013)

SAFETY & RULE OF LAW
Includes rule of law, accountability, personal safety, and national security.

19 countries improved

SUSTAINABLE ECONOMIC OPPORTUNITY
Includes public management, business environment, infrastructure, and rural sector.

38 countries improved

HUMAN DEVELOPMENT
Includes welfare, education, and health.

47 countries improved

PARTICIPATION & HUMAN RIGHTS
Includes participation, rights, and gender equity.

28 countries improved

2013 IIAG, COUNTRY & RANK | SCORES /100

MAURITIUS | 1st/52
82.9
Safety & Rule of Law | 86.8
Participation & Human Rights | 76.7
Sustainable Economic Opportunity | 79.7
Human Development | 88.5

SWAZILAND | 26th/52
50.8
Safety & Rule of Law | 59.5
Participation & Human Rights | 30.1
Sustainable Economic Opportunity | 49.3
Human Development | 64.3

SOMALIA | 52nd/52
8
Safety & Rule of Law | 4.9
Participation & Human Rights | 11.5
Sustainable Economic Opportunity | 2.3
Human Development | 13.1

WATCH THE BBC HARDTALK
Mo Ibrahim on the dearth of African leadership, the prize for achievement, and how to attract political innovators.

Since its creation, the prize has been awarded three times: in 2007, 2008, and 2011. The 2013 prize was not awarded.
SMART INVESTING in Africa

By Andrew Alli, Africa Finance Corporation

Photo © Cedric Favero Azito Power Plant, Côte d’Ivoire
Investors worldwide recognize the potential for investments in Africa, especially through public-private partnership (PPP) structures. But taking advantage of these opportunities requires a proper understanding of the risks—and how they can be mitigated—to optimize the project’s investment return and development impact. The Africa Finance Corporation (AFC), through its active involvement on the continent as a project investor, financier, and developer, has participated in a number of notable PPP projects and learned valuable lessons along the way.

“TOO GOOD TO BE TRUE” PROBABLY IS

For many investors, especially those new to the dynamics of working in Africa, political risk remains a big cause for concern. With many politically fragile states on the continent, the apprehension is often justified. But the reality is that the most worrisome political risks do not relate to political violence or forced expropriation, which concern many people, but rather to unfavorable renegotiation of contract terms (“creeping expropriation”).

For example, during the decade of civil unrest in Côte d’Ivoire, well balanced and structured projects such as the Azito power project continued to perform well. In contrast, many mining contracts all across the continent have been renegotiated. These “creeping expropriations” often arise because governments are not as skilled or as experienced in negotiating such agreements as their counterparts and cannot afford the advisors that will best assist them. Corruption is also the culprit in some cases.

Investors can mitigate this risk by avoiding projects with concessions that are too good to be true—especially those that have either emerged from less than transparent processes, or were awarded on a discretionary basis. The downside to such one-sided concessions is that they are often scrutinized after the fact, and withdrawn or renegotiated by new governments or administrations.
IMMATURE MARKETS REQUIRE STRONG PARTNERS

Pairing a young country with mature advisors and experienced private sector partners makes all the difference to a successful project. Côte d’Ivoire’s Henri Konan Bedie Bridge reached financial close in 2012 after 14 years under development, surviving two periods of civil unrest. In this case, the government partnered with Bouygues S.A., funded by international financiers and partly arranged by AFC. Having a strong sponsor to navigate the local environment was crucial to the project’s success.

Strong partners and financiers can also withstand the financial ups and downs that sometimes occur in the African business environment, and experience gives them a nuanced understanding of real project risks. Lacking this understanding, projects may be over-engineered to protect against risks that are very unlikely to crystallize. This makes them more expensive than they need to be, while not properly accounting for real risks that could affect the project’s outcome.

RISK PROFILES ARE AS VARIED AS BORDERS

New investors and analysts outside the continent often see Africa as one country, making the mistake of thinking that the same risk profile applies throughout the continent and across projects. This is not the case.

Risks differ from one country to another and from one project to another, given the differences in policies, structure of government, level of reforms and development, and physical and human capacity. It is important to develop different structures and solutions to mitigate the specific risks identified in each market and for every project.

There is also often a temptation to adopt foreign templates and assumptions that are not realistic in the local environment and to apply those templates across all African markets and projects. For example, while it may be acceptable to apply higher leverage ratios (80:20/90:10) in more mature and advanced countries, this may not necessarily be sensible in the local environment, where larger equity cushions may improve project outcomes.

In evaluating project assumptions, it is important to ensure that project fundamentals are clear to all. For example, in a power project, the off-taker and fuel supplier should be known in

Avoid projects with concessions that are too good to be true—especially those that have either emerged from less than transparent processes, or those awarded on a discretionary basis.
advance and their ability to meet their obligations under the agreements be well established. Valuation and cost competitiveness is also critical, as overpaying for an asset is a painful and usually irreversible error.

KEE INNOVATING

The uniqueness of the challenges and risks on the continent requires innovation in approaching and evaluating PPP projects. This is particularly true with respect to financial products. For example, while AFC is focused on a few key sectors (natural resources, transport infrastructure, telecoms, power, and heavy industries), it offers a broad range of financial products and services that allows participation across the spectrum of the capital structure. Other financiers with a more limited set of offerings can find it difficult to meet the needs of these varied projects.

STAY FLEXIBLE

There are over 20 development finance institutions (DFIs) operating in Africa, and the evolution of the banking sector and financial markets has made debt financing relatively easily accessible. However, two things are lacking. There is a paucity of well-structured projects that are bankable, and too little access to long tenored financing.

Sponsors very often underestimate the resources required to develop their projects, which can be as high as five to ten percent of the total project cost. In addressing this problem, AFC and the Dutch DFI, FMO, recently launched a $15 million project development facility aimed at providing early stage capital to projects in order for them to become bankable.

In addition, AFC provides tenor extension facilities aimed at providing longer tenored financing for projects that most domestic banking institutions are unable to provide due to statutory and regulatory requirements. These products—in addition to other key services like technical and financial advisory, mezzanine, and acquisition finance—have been central to AFC’s success on the continent.
I still remember my first break-up. Flash back to eighth grade, where Katie, a cute strawberry blonde with dimples, utters the classic break-up line in the school hallway: “It's not you, it's me”—followed by some explanation about how she is not ready for a relationship, blah, blah, blah. How is this supposed to help me?

Flash forward thirty years (give or take a decade) as I attend meetings where lenders to infrastructure in Sub-Saharan Africa insist that the money is there, the capital is available, but the projects are not. The government is not doing its part. They say, “It’s not me, it's you!” Ouch, that is an even worse break-up line.

But is it true? Is the capital really there?

First, to agree with the lenders, the projects are there, but they are not well prepared. There are a number of reasons for this, which are discussed in more detail in the article “Africa demands transparency” on page 16. Basically, governments around the world tend to look for the fast, cheap way to bring projects to market, which means doing as much as possible in-house. Sub-Saharan Africa suffers from a distinct lack of understanding about what it takes to bring a good public-private partnership (PPP) project to market.

A-COURTING WE WILL GO

To complicate matters, Sub-Saharan African government officials receive a constant stream of visits from foreign governments and company delegations promising fast, cheap results if they could only have an exclusivity agreement for some large infrastructure project. These rarely work out, but they seem to be far too tempting for Sub-Saharan African governments short on time and cash. To add to the misery, new recent natural resource finds in various countries (in particular Ghana, Mozambique, Tanzania, and Uganda) distract even further from the economy and efficiency sought from PPP.

Now to the question of available capital. There seem to be a number of challenges remaining, and it may be a little early to declare a job well
done. Local currency markets are anemic and
distracted by property development at the riskier
e nd of the spectrum, and treasuries at the safe
end. The interest rates on local debt tend to be
high, tenors short, grace periods elusive, and
capacity limited. Except in a few key countries
(for example, Kenya and Nigeria), attracting
local finance for PPP can be an arduous affair.

But then when lenders claim that capital is avail-
able, they are probably not talking about local
currency. Capital in the global currencies has
many of the characteristics needed for financing
PPPs: long tenors (12 years plus), grace periods,
high liquidity, and bankers thoroughly experi-
enced in PPP and limited recourse financing.

TYING THE KNOT

There are also significant challenges to making
this match, such as:

Risk aversity. Like it or not, global capital
marches to a different tune. Compared with
local financial markets, it is generally more
familiar with investment grade lending into
countries with reliable legal systems and rela-
tively robust secondary markets for those assets.

In Sub-Saharan Africa, government credit
ratings are low (below investment grade), and
subsovereign, public utilities that act as project
counterparts are often insolvent. Credit concerns
can be addressed through financial engineering
(including escrow accounts, letters of credit,
stand-by capital, and natural resource rights),
lending from development financiers (like IFC,
FMO, and DBSA), and credit enhancement
from IFIs (like the World Bank and MIGA) and
export credit agencies (like US Exim and China
Exim). The need for heavy structuring is not
specific to Sub-Saharan Africa, nor is it a critical
problem. But it translates into greater time, cost,
and complexity invested in mobilizing capital. It
also imposes a major caveat on the claim that the
“capital is available.”

Foreign exchange risk. This is a problem in any
country where local financial markets or hedg-
ing markets cannot convert the local currency
revenues into foreign capital to repay debt. The
debt exposure and extensive fiscal constraints in
much of Sub-Saharan Africa impedes the ability
to manage foreign exchange risk exposure. (West
Africa, with its common currency pegged to the
Euro, escapes much of this complexity.)

Global banks lack experience in infrastructure
in Africa outside of commodities deals with
higher profits, forex revenues, and lower risk.
This is for the very good reason that few such
deals have been done in Sub-Saharan Africa. But
flying bankers in from Europe and the U.S.—
bankers with experience in developed countries,
rather than in Africa itself—creates its own
challenges.

My point is simple: the statement “the capital
is available, but the projects are not,” while
displaying an impressive bravado, is not entirely
accurate, and not at all helpful. We all have a lot
of work to do to get African PPPs moving, from
both public and private sides. There will be time
for pointing fingers later, once the job is done.

And Katie, if you are out there, you were wrong.
It was me. h
From an investor’s point of view, the biggest risk in PPP bid participation is often not competing bidders, but rather the process failing to reach a conclusion. For this reason, investment committees sometimes regard PPP bid participation as a form of venture capital investing. With sovereign wealth funds now investing directly in infrastructure as cornerstone investors, co-investors, and lenders, these funds play a key role in mitigating risk, and can provide a major boost to future PPP programs in Africa.

By nature, sovereign wealth funds (SWFs) are trusted partners of sponsor governments and international investors, have top-level political support, and employ private equity and industry specialists. State agencies are increasingly looking to new capital structures to meet needs best suited for long-term investors—especially in areas such as transport, healthcare, and education. This is part of a growing trend in emerging markets to expand social benefits, as there is a recognition that these benefits are vital to support economic growth. Some SWFs are taking leadership roles in the development of these new capital structures.

In Russia, this trend is supported by the Russian Direct Investment Fund (RDIF), and is capitalized with $10 billion. RDIF was established in June 2011 to make investments, primarily in the Russian Federation, and act as a catalyst for direct investment into the Russian economy. The fund invests alongside qualified foreign investors.

EXPERIENCE & EXPERTISE

In developing PPPs and private infrastructure, Russia has the advantage of being among the top emerging markets for private infrastructure
ownership/investment. Russia has a successful track record in privatizations and sector reform, along with several significant PPPs that reached financial close. However, Russia’s PPP program has had growing pains, in part due to the 2008 financial crisis.

Having gained experience, the Russian government is now embarking on a new wave of PPPs for major roadways, bridges, rail, ports, and other vital infrastructure. The need for such assets is acute. Russia’s per capita road density is one-fourth that of some developed markets, and Russia’s rail sector carries over 80 percent of industrial production.

APPLYING SOLUTIONS

Unsuccessful PPP programs in emerging markets often follow a similar pattern: an initial PPP program is attempted, the project does not reach financial close for a variety of reasons, and the PPP program needs to be restarted. The restarted program is then considered a risk among investors. This uncertainty is priced into the revived program or results in lack of bidder interest.

In the upcoming Russia PPPs, RDIF will play a key role as an investor. RDIF’s participation in a PPP bid is intended to signal to the market that:

- the project is vital to the Russian economy and has strong support;
- uncertainty in the process is greatly mitigated; and
- the PPP bid process, preferred bidder selection, and project implementation all follow best practices.

In Africa, Nigeria is supporting infrastructure development through the newly established Nigeria Sovereign Investment Authority (NSIA). Nigeria’s GDP is growing at 8 percent, and is successfully diversifying its economy through industrialization, agriculture, and a rapidly developing consumer sector. Having recently privatized its power industry, Nigeria attracted strong interest from regional and international infrastructure investors.

And, while the recent focus by investors has been electricity, Nigeria is in urgent need of expanded infrastructure for highways, rail, water, healthcare, and agriculture supply chain infrastructure. NSIA will play a major role in supporting PPP development by providing investment platforms to promote investment, economic growth, and help the government fulfill its vital social responsibilities.

The potential for African governments to utilize State-sponsored investment funds to support PPP programs is great, especially in markets in which investors may attach a high risk premium. There is also the potential for SWFs in different regions to cooperate, co-invest, and help bring global expertise. For the African infrastructure market, SWFs have the benefit of being able to reduce project risk, lower financing cost, and enhance the overall project structure for investors and the public.
Foreign aid has been a part of the African landscape for as long as most of us can remember. While these donor funds have saved lives during and after crises and funded critical infrastructure, many would argue that aid has also skewed incentives and created a crutch of dependence. But this seemingly entrenched paradigm has begun a slow shift.

This change can in part be linked to the Paris Declaration on Aid Effectiveness (2005), which called for national ownership of policies and programs supported through aid, and better coordination of the jumbled maze of external assistance. Supporting this, the United Nations Development Programme recommended aligning donor programs with national priorities and strengthening local implementation capacity. Better donor coordination seems to have followed, led by the creation of various multi-donor facilities.

In addition to better coordination, new approaches in aid are emerging. Donors are increasingly responding to the growth of the private sector by offering programs to enhance the private sector business environment, and also through more innovative funding mechanisms such as:

- the provision of seed funding for early-stage private sector companies;
- direct lending or equity investment to infrastructure projects; and
- leveraging local financial institution participation by taking first loss positions in guarantee structures.
CHINA’S EMERGENCE

The change in the role of traditional donors is also a result of China’s emergence as a significant player in Africa.

As a result of drastically increased bilateral funding, Chinese companies are now involved in infrastructure projects across the continent that until recently were the preserve of Western countries and companies. But Western countries, recognizing the need to stay agile to safeguard their long-term interests and share of trade in Africa, are now offering more tailored and innovative funding mechanisms and focusing on somewhat neglected areas such as climate change and gender reform.

In 2010, China committed $9 billion to Africa’s infrastructure growth (up from $7 billion in 2006). This includes:

- non-concessional development finance from China Development Bank;
- equity finance to ventures launched or backed by Chinese enterprises from the China-Africa Development Fund; and
- export credits, concessional loans, and guarantees from China Exim Bank.

As the donor paradigm evolves to fit the times, foreign aid—and trade—will reshape itself accordingly. With the desire to affect change comes the certainty that approaches, too, will continue to change.
Despite the unique challenges that make up Africa, views vary on where Africa is headed, what is changing, and what is driving change. But we agree on one thing: Africa is changing, and with it, what we do as development partners needs to change too. The U.K.’s Department for International Development, or DFID, is looking at a renewed focus on economic development, refocusing its development program to help create more jobs and strengthen governance and international institutions, while working with new partners and in new ways.

DFID is also rebalancing its investments toward inclusive economic development, strengthening institutions and governance, unlocking the potential of girls and women, and mainstreaming climate and conflict programming. It is looking at what its offering to developing countries should be, and how best it can reflect countries’ ability to self-finance out of poverty. It will also look at instruments to unlock U.K. expertise and continue to invest in the multilateral system—with a strong link to performance. DFID will continue to strengthen its commercial expertise—and use innovative delivery mechanisms such as results-based financing and public-private partnerships. Working in new ways includes continued work to improve the transparency of aid spending and a focus on impact.

**CHANGING DEMOGRAPHICS**

The emergence of the African middle class is becoming a force for positive social and economic change. Many of the world’s poor no lon-
ger live in the poorest countries. China and India have already shown us how difficult it can be to eradicate poverty despite economic growth—Ghana and Nigeria face the same challenge.

By 2030 more Africans will live in urban than in rural areas, and in the next 30 years there will be an unprecedented level of working age people. The spread of mobile phones has revolutionized information access and is transforming what people know, who they know, what they do, and how they do it. Accompanying these demographic changes, new stakeholders, such as private investors, foundations, philanthropists, and most importantly emerging donors like Brazil, China, and India, have changed the map of Africa’s development relationships.

There are also new threats. Climate change is perhaps the biggest one, and threatens to reverse the development gains in many countries by making infrastructure unusable, established agriculture unsuitable, and exposing populations to increased threats of droughts and famines.

Traditional partners, such as DFID, must take account of the new demographics and new threats. This will allow the development community to make a lasting difference in Africa.

SCALING UP

In response to the new landscape, DFID has an increased focus on Africa’s “development frontier”—the less developed and fragile countries as well as the poorer populations in more developed countries. We are also scaling up work on economic development for poverty reduction.

This is built around supporting labor-intensive activities and sectors that will generate the most productive jobs, promoting diversification of economies to create inclusive growth, and strengthening export sectors to create deep and durable long-term markets.

DFID also supports the institutional and political arrangements that facilitate growth. A continued focus on transparency, rule of law, and a political settlement that can deliver long-term growth will help ensure that African citizens benefit from growth and the country’s wealth is not appropriated by a few.

PLUS ÇA CHANGE

It is important to stress that a new role doesn’t mean everything changes. Many donor interventions have been fantastically successful at reducing poverty and saving lives and much of this work will continue. This includes humanitarian interventions in conflict and natural disasters. But here too, we are stepping up our game: new innovation and technology is helping us target, manage, and deliver assistance better.

There is an increased focus on building resilience to shocks, consolidating peace, and supporting recovery to reduce the likelihood of slipping back into conflict.

Traditional development partners have many decades of development efforts to learn from as we tailor our offerings in response to the changing needs of Africa. We will continue to learn from the past, even as the new role for donors in Africa changes with the times.
THE DONOR

KfW, a German government-owned development bank, is active throughout the power sector in Uganda, focusing mostly on putting together a renewable energy fit in tariff program. As part of this program, KfW has made funding available to potential private sector players to top up the tariff at which they sell power to UETCL, Uganda's national transmission company and the buyer of all power in the country. Depending on technology, this amounts to about $0.02 per kilowatt hour (KWh) in addition to what it receives from UETCL, which is supposed to incentivize private sector power players to come and develop renewable energy projects in Uganda.

THE APPROACH

KfW is undertaking additional activities in the sector—some with the potential to change the paradigm for donor support throughout the region. In one case, KfW is providing assistance to one of the isolated power grids in the West Nile Region and helping UEGCL, the national power generation company, launch several other projects in remote areas. IFC and KfW are working together to meet this goal. Specifically, KfW has provided funding to buy down the capital cost of a mini hydro scheme in the West Nile region; with KfW funds, UEGCL hired IFC to advise on how to structure the mini hydro transaction and attract private sector partners. Given that the hydro power scheme is located in an area that is not served by the national grid,
the commercial aspects of the project on its own would not be likely to attract private sector financing. However, the capital buy down makes the opportunity viable and serves as a way to incentivize the private sector to address the critical power situation in an underserved area of the country.

THE RESULTS

Ultimately, the Government of Uganda, the Electricity Regulatory Agency, KfW, and Deutsche Bank developed GET FiT to support 15 new generation projects with a total installed capacity of roughly 125 megawatts. The GET FiT initiative will increase generation capacity in Uganda by 20 percent, giving an additional 1.2 million people access to electric power.
The Liberian conflict, which lasted nearly 14 years and ended in 2003, left the country in economic ruin and its infrastructure devastated. The country’s prior generation capacity of approximately 180 megawatts (MW) and accompanying distribution network were totally lost, and as a result commercial electricity services in the country were non-existent. LEC, the state power company, had no infrastructure, no fuel source, and no customers.

**THE APPROACH**
In July 2006, an international donor group formulated an Emergency Power Program to restore power to some parts of Monrovia. In 2007, with 2 MW of imported generators, LEC was revived and started commercial operation with 450 customers and a row of street lights for the first time since the war. Since then, the generation capacity has been increased to 10 MW and the transmission and distribution network has been expanded. But differing donor objectives and procurement procedures were hampering progress. The government was becoming increasingly eager to speed up the process by introducing private sector investment and expertise.

**THE RESULTS**
Led by the Government of Norway, donors used a highly innovative approach to support this
THE DETAILS

The management contract acts as a framework agreement among the operator, the government, LEC, and donors by:

- referencing bilateral agreements between the donors and the government;
- requiring donors to define the annual funding amounts;
- defining procedures to manage the flow of donor funds to investments by the operator; and
- requiring the operator to prepare a master plan and an annual investment plan that describes how they intend to use the donor funding.

project. By pooling funds, and tying their use to performance parameters already established in the management contract, donors gave the flexibility to the management contract operator to use the funds when and how it felt most effective.

This contrasts with a typical bilateral approach, whereby donors engage in discrete investments (usually purchasing equipment or construction), without coordination or integration with other donors. This approach often leads to suboptimal investments, since decisions are taken absent of considerations related to performance outcomes.
Donald Kaberuka, President of the African Development Bank, was recently in the U.S. for an award ceremony at the U.S. Treasury. In this article for Handshake, he touches on the irony of winning for a project on traditional aid in an environment that celebrates innovative approaches, and expands on the ways aid to Africa has been transformed in an era of private investment.
There is a massive change in outlook across the African continent. The emphasis is on what we can do with Africa, not what we can do for it. Given all the talk about new approaches to aid which mobilize private investment, was it not ironic that the reason for my visit to D.C. was to celebrate traditional aid, as administered by the Multilateral Development Banks through their concessional windows, such as the African Development Fund (ADF) and the International Development Association (IDA)? Indeed, the African Development Bank came to the podium twice at the U.S. Treasury ceremony to receive awards for what the ADF does in fragile states, and for what it does to increase farmers’ productivity and incomes. We are impacting people’s lives in meaningful and lasting ways, and the two winning projects were perfect examples of what was being achieved.

**EQUAL OPPORTUNITIES**

The first project, in Côte d’Ivoire, represented our commitment to gender equality, to inclusion, and to fragile states. The transformation of Africa requires that no one is left behind, and that men and women receive equal opportunities so that each can play their part in building the prosperity of their nations. We know that in places where there is conflict, women and girls suffer disproportionately, so the issue of gender is central to inclusive development.

The emphasis is on what we can do with Africa, not what we can do for it.

The second project, in Uganda, represented our commitment to empower rural farmers by enabling them to increase their incomes. We do this by providing public goods and opportunities to help them move up the value chains, however modestly, and to lessen the dependence on aid and handouts.

The results were plain for all to see. Across 26 districts of eastern and central Uganda, thousands of kilometers of roads were built, rural
Markets were established, and units of agro-processing production were built, from coffee and rice hullers, to maize mills and milk coolers. The rise in farm-gate prices was as astounding as it was quantifiable: the price for cassava went up two-and-a-half times, maize 20 times, milk four times, bananas two times. Travel costs and times involved in taking produce to market were cut in half, and post-harvest losses were cut by a fifth.

The rise in farm-gate prices was as astounding as it was quantifiable: the price for cassava went up two-and-a-half times, maize 20 times, milk four times, bananas two times. Travel costs and times involved in taking produce to market were cut in half, and post-harvest losses were cut by a fifth.

The time is ripe for “smart aid.” The concept of aid as a closed envelope has come to a close.

This project strengthened my belief in several things. First, in how relatively small investments can generate very large returns. Second, in how international institutions working together (in this case we worked with the International Fund for Agricultural Development), each in their field of comparative strength, yields a superior result. Third, in how infrastructure is critically important for agricultural development.

AID AND TRADE

Was it ironic that we were celebrating the work of the ADF (an aid instrument) and seeking to mobilize additional resources for it, while saying that we should be focusing on trade and investments? My answer is simple. We are proud of what we are achieving. The two projects show that aid money can be very effective, especially (as in the Uganda project) when it frees the recipient from aid dependence. It enables people to step up and step out, or to “graduate.”

This ties in with my fundamental belief that the time is ripe for what we should call “smart aid,” which leverages further resources from the private sector, remedying social ills but also paving the way for graduation. The concept of aid as a closed envelope has come to a close. We need to be less doctrinaire, and to rise above the tendency to answer modern problems by asking old questions and using old tools. If we can do that, Africa will continue to “graduate” from being part of the global challenge to being part of the global solution.

Photo © Benedikt von Loebell

Donald Kaberuka, President, African Development Bank
SMART AID: THE SPECIFICS

We know the financing gap for African infrastructure, put at about $50 billion a year, cannot be funded purely through public resources. The first task is to take advantage of the strong cycle of commodity prices, and to manage natural resources wisely to fund infrastructure. That is why the G8’s trade, tax, and transparency agenda is so important.

Second, we must bring in the private sector. The African telecommunications revolution of the 1990s was largely driven by private funding, after sector deregulation showed what was possible. In the energy sector, the reforms are in place, and it awaits private capital. Our challenge is to make that possible.

For each dollar we loan, we are able to leverage up to six more. I was in Dakar recently to see a cluster of infrastructure projects—a toll road, an airport, a power plant, and the expansion of the port—which, with $245 million of African Development Bank funding and $132 million from the Senegalese government, drew a further $1.3 billion from commercial banks and international private investors.

This is smart aid in action—leveraging private capital, crowding in investment, and fighting poverty through trade, investment, and the private sector.

Adapted from “We need to rethink how we provide aid to Africa,” Donald Kaberuka, The Guardian, September 25, 2013.
The need for investment in Sub-Saharan Africa electric power is urgent. To meet suppressed demand and provide additional capacity for electrification expansion in the region, approximately 7,000 megawatts (MW) was required to be added each year between 2005-2015. This expansion would have required upwards of $27 billion per year. However, actual funding to the electricity sector (for capital expenditure) does not exceed $4.6 billion a year—leaving an annual funding gap of more than $20 billion. Since public sources (utility income and fiscal transfers) contribute only about one-half of current capital investment requirements, there is a clear imperative for increased private investment, including through public-private partnerships (PPPs).

The outlook is ELECTRIC

By Anton Eberhard, University of Cape Town & Katharine Gratwick, Independent Energy Consultant
Between 1990 and 2011, approximately $9 billion of Sub-Saharan Africa’s private investment was made through management and lease contracts, concessions, divestitures, and greenfield investments, or independent power projects (IPPs). Seventy percent of the investments were in IPPs with a capacity of over 40 MW and long-term power purchase agreements with the primarily state-run utilities. There are approximately 25 such projects across a dozen African countries, and several more in the pipeline.

Originally, the expectation was that IPPs—with their risk-limiting project finance structures—would attract private investment into otherwise under-funded state-run electricity sectors. While private investment has increased, the public sector has also continued to invest.

Over 30 percent of projects during the last two decades have received equity investments from state agencies. And nearly every project over the same period has required foreign public debt, generally through multilateral or bilateral concessionary loans. Are we looking at the future, or just a blip on the screen?

THE ROLE OF GUARANTEE PRODUCTS

Many projects trace elements of success to the availability of partial risk guarantees (PRGs) and various levels of political risk insurance. These products have evolved considerably since the first IPPs took root. Kenya—one of the most popular IPP spots in the region—is an interesting case. In 1996, at the dawn of its first private power investment, sovereign guarantees were not extended because IPPs were supposed to free government balance sheets from contingent liabilities. However, approximately 15 years later, as governments recognized that the value of the guarantee outweighs the balance sheet concerns, PRGs are finally part of the deal for most new power plants.

As a result, four new plants in Kenya will benefit from a PRG. The government is required to counter guarantee less because the liability is small—less than five percent of the total project cost. Other projects benefitting from PRGs include Cameroon’s Kribi (216 MW), Côte d’Ivoire’s Azito (288 MW), and Uganda’s Bujagali (250 MW).

There’s a good reason for the success of PRGs: they insure against the risk of government (or a government-owned entity) failing to perform against its contractual obligations. PRGs are typically used where the project is large (or in the case of Kenya, when projects have been grouped

The push toward private investment in electrical generation in Sub-Saharan Africa dates to the early 1990s. The experience shows:

• seventy percent (about $6 billion) of private investment was by independent power producers (IPPs);
• limited private investment necessitates public equity and debt financing;
• partial risk guarantees (PRGs) play an important role in mobilizing finance; and
• non-traditional investors are playing an increasingly greater role.
together), the country is in an early stage of reform and/or has made clear reform intentions, and where there are commercial lenders.

**While private investment has increased, the public sector has also continued to invest.**

Furthermore, the government of the country must request the PRG; thus, the project must be a priority both for the government and the institution (the World Bank or African Development Bank) providing the PRG. In some cases, the PRG can be further enhanced or replaced by political risk insurance from the Multilateral Investment Guarantee Agency.

**A NEW TYPE OF SPONSOR**

The more traditional investors in African electricity are literally all over the map. Major players, including American firms such as AES and French giant Electricité de France, have made important investments in Cameroon, Côte d’Ivoire, Kenya, and Nigeria. Smaller Malaysian firms like Westmont and Mechmar were among the first in Kenya and Tanzania.

However, the universe of players is expanding. To fulfill future needs, two non-traditional sponsors have already begun making inroads. These include:

**Triple bottom-line companies.** Globeleq (U.K.) and Industrial Promotion Services (IPS-Kenya), with shares in projects in Côte d’Ivoire, Kenya, Tanzania, and Uganda, and Aldwych International (U.K.), involved in Kenya, are driven by commercial interests. However, their work emerged from agencies with strong commitments to social and economic development.

**South-South investors.** Indian and Chinese firms have also become increasingly involved in the power sector in Sub-Saharan Africa. Tata, India’s largest private integrated electricity firm, holds a 50 percent equity stake in Zambia’s Itezhi. Tata has been selected as the preferred bidder for two South African wind farms, and will also be the technical service provider for the recently privatized Benin Distribution Company of Nigeria. Chinese firm Shenzhen is involved in Sunon Asogli (Ghana) and Sinohydro in Kafue Gorge Lower Hydro Project (Zambia) and in Karuma Hydro in Uganda. China-Africa Sunlight Energy has been licensed by the Zimbabwe Energy Regulatory Authority to develop a plant for harnessing coal bed methane.

These are enthusiastic partners laying the groundwork for the future in projects where the traditional players have shown little interest. And with Sub-Saharan Africa’s investment gap at $20 billion annually, there is no shortage of opportunities for all.

This article is based on a larger review of independent power projects across Sub-Saharan Africa, undertaken by Eberhard and Gratwick, part of which was recently featured in “Investment Power in Africa: where from and where to?” published in The Georgetown Journal of International Affairs, “The Future of Energy,” Winter/Spring 2013.
SOUTH AFRICA

At long last, IPPs are emerging in South Africa as an alternative to the state-owned generator, Eskom, and as part of an 18,800 megawatt (MW) renewable energy program. This could radically change the electricity landscape. It represents Africa’s largest renewable energy program, largest IPP development, and potentially, most complex public-private procurement.

The South African IPP program is further distinguished by the fact that it advanced competitive bids for renewable energy (REBIDs) rather than the more commonly adopted feed in tariffs (REFITs), demonstrating that the former could attract investors and bring real competition to a small renewable market. REBID attracted 58 bids in round one, of which 28 qualified, incorporating a total of 1,416 MW; 79 bids were submitted in round two, with 51 qualifying and 19 ultimately accepted, totalling 1044 MW. Prices for wind fell by 20 percent and for solar PV, 40 percent. Credit for this success may be linked to a number of factors, including a well-designed procurement process that engaged 75 local and international transaction advisors to help plug a knowledge and experience gap. The flexibility in the design of subsequent bid rounds has also been cited as a major boon. Specifically, capacity in the first round exceeded the market’s capacity; it was reduced in round two to improve competition, resulting in large bid-price decreases. Not only is there potential for these lessons to apply to neighboring African countries, but investors who have met with success in South Africa could make inroads into other African nations, similar to the Nigerian experience.
hydro HEATS UP

By Ryan T. Ketchum, Hunton & Williams LLP
with contributions from Marie Marconnet & Ananda Covindassamy
In late December of 2012, the General Assembly of the United Nations declared 2014-2024 the decade of sustainable energy for all and launched the Sustainable Energy for All Initiative jointly with the African Development Bank. In passing the resolution, the General Assembly noted that 1.3 billion people live without access to electricity and that 2.6 billion people in developing countries rely on traditional biomass sources for cooking and heating needs. Half a billion of those living without access to electricity live in Africa.

Hydropower is undoubtedly the most common form of sustainable and renewable energy. In 2008, hydropower accounted for 16.3 percent of global electricity production. In Europe and North America, 25 percent and 29 percent, respectively, of the potential hydropower has been developed. In Africa, one of the continents with the greatest need for additional generation capacity, only 5 percent of potential hydropower is in use today. Hydropower has the potential to provide a significant percentage of the energy that is necessary to realize the objectives of the General Assembly’s resolution.

It’s not impossible for nations in conflict to put aside their differences to coordinate the delivery of natural resources, but it’s unusual. For Burundi, Democratic Republic of Congo (DRC), and Rwanda, cooperation is transforming the shared Ruzizi River into a valuable source of hydropower for three peoples.

In Africa, one of the continents with the greatest need for additional generation capacity, only 5 percent of potential hydropower is in use today.

**RUZIZI I & II**

The Ruzizi River forms the border between DRC and Rwanda. The south-flowing river connects Lake Kivu with Lake Tanganyika. Two projects located on the river are currently in operation. The 29.8 megawatt (MW) Ruzizi I, which is owned and operated by SNEL, the parastatal electricity utility of the DRC, is located 3 kilometers downstream of the outlet from Lake Kivu and was commissioned in 1959. The 43.8 MW Ruzizi II is owned and operated by SINELAC, a multi-national organization established by a treaty among Burundi, the DRC, and Rwanda and was commissioned in 1989.

**PRECEDENTS PAVE THE WAY**

The Ruzizi III dam will be the third in a series of four projects on the Ruzizi River. The experiences of the first two initiatives provide the clues to the success of Ruzizi III. The Ruzizi River forms the border between the DRC and...
Rwanda. The south-flowing river connects Lake Kivu with Lake Tanganyika. The 29.8 MW Ruzizi I plant, owned and operated by SNEL, the parastatal electricity utility of the DRC, is located 3 kilometers downstream of the outlet from Lake Kivu and was commissioned in 1959. The 43.8 MW Ruzizi II plant is owned and operated by SINELAC, a multi-national organization established by a treaty among Burundi, the DRC, and Rwanda, and was commissioned in 1989.

SINELAC has been besieged by management and financial challenges since its commissioning—a repeat of that structure for Ruzizi III was not an option. Donors and governments wanted a fully commercial and independent structure protected from interference by any of the three governments, assuring that they are all equal.

**A THIRD WAY**

EGL has been working steadily to promote the third project. In June 2012, EGL launched a request for proposals for the selection of a private investor to develop Ruzizi III on a Build-Operate-Transfer basis. In September, EGL declared the consortium of Sithe Global and Industrial Promotion Services (Kenya) as the preferred bidder for the project. (This is the same consortium that developed the 250 MW, $900 million Bujagali Hydroelectric Dam on the River Nile in Uganda.)

The proposed technical solution for Ruzizi III envisions a run-of-river project comprising:
- a diversion dam;
- a 7 kilometer headrace tunnel;
- penstock and surge chamber;
- surface powerhouse;
- three Francis type turbine-generator units;
- a 220 kilovolts switchyard; and
- a 10 kilometer transmission line to a substation located at Kamanyola in the DRC.

The design also includes a small generating unit at the dam site to produce energy from the ecological flow that will be released to the bypassed reach of the river between the dam and power station. The proposed technical solution has a total installed capacity of 147 MW.

“...It simply is not possible for [Africa] to achieve its development targets with the current state of infrastructure. Energy in particular is a game changer. Access to energy literally changes people’s lives.”

—Makhtar Diop, World Bank Vice President for Africa
AFRICAN DEVELOPMENT BANK
BACKS HYDROPOWER

At the 2012 Summit of the African Union, African heads of state endorsed a set of priority energy projects to be implemented by 2020 as part of the Programme for Infrastructure Development for Africa (PIDA). The energy infrastructure program focuses on major hydroelectric projects and interconnects the power pools among countries to meet the anticipated increase in demand. Nine hydropower projects were identified for this phase, amounting to more than 50 gigawatt potential capacity—representing 40 percent of the actual installed capacity of the continent. To date, the African Development Bank has been involved in five of them:

- The Mphanda-Nkuwa project in Mozambique, which will contribute to supplying energy to Mozambique and South Africa.
- The Inga hydropower projects in the Democratic Republic of Congo (DRC), which will transform Africa by providing electricity to a large part of the continent with transmission lines interconnecting several countries.
- Hydropower components of the Lesotho Highlands water project Phase II, which will supply power to Lesotho and South Africa.
- The Ruzizi III project in Rwanda, which will provide additional electricity capacity in Burundi, DRC, and Rwanda, and is the first regional public-private partnership power project in Africa.
- The Rusumo Falls development, which will supply electricity to Burundi, Rwanda, and Tanzania.

Those multinational large-scale renewable projects will ease regional cooperation in Africa and facilitate universal access to modern, reliable, and affordable energy services on the continent.
With donor funding constrained and domestic capital markets not fully developed, the world is looking toward private sector investment to remedy Africa’s huge infrastructure deficit. The role of multilaterals and development finance institutions is transitioning from financiers to mobilizers and risk “mitigators”—leveraging their involvement by allowing countries to unlock access to private finance.

As a risk mitigator, the Multilateral Investment Guarantee Agency (MIGA) plays a significant and increasingly critical role. MIGA’s exposure in Sub-Saharan Africa more than doubled in the last four years. For the fiscal year ending June 30, 2013, MIGA issued $1.5 billion in coverage for investments throughout Sub-Saharan Africa, and $1.3 billion of this coverage was for projects in the energy sector. Countries such as Côte d’Ivoire, Kenya, and Uganda have experienced significant progress in this sector due in part to MIGA guarantees.

By Jason Zhengrong Lu, MIGA
CÔTE D’IVOIRE

In Côte d’Ivoire, a MIGA guarantee of $116 million is providing breach of contract cover for the conversion of the Azito thermal power plant from simple-cycle to combined-cycle, increasing total capacity from 290 to approximately 430 megawatts. MIGA is also supporting Foxtrot International’s oil and gas production platform, which supplies Azito and other plants in the country, by covering the equity investment by SCDM Energie and debt from HSBC. The World Bank’s International Development Association (IDA) is also providing a partial risk guarantee to back the government’s payment obligations to the company under a gas supply and purchase agreement.

KENYA

In Kenya, the government is implementing its ambitious “least-cost power development plan,” which calls for an increase in the number of independent power producers and a more diversified and reliable energy mix.

This year, MIGA provided $102.5 million in breach of contract cover to the Industrial and Commercial Bank of China and Standard Bank of South Africa for their long-term commercial financing to Triumph Power Generating Company Limited. MIGA’s support for Triumph is complemented by an IDA partial risk guarantee.

MIGA is also providing coverage for Thika Power Limited and Olkaria III, Kenya’s first geothermal independent power producer.

UGANDA

In Uganda, the Bujagali hydropower project is key to the country’s plan to increase access to electricity. The dam, commissioned in 2012, is already meeting almost 50 percent of the country’s electricity needs. The project is sponsored by a consortium of Sithe Global Power of the United States and the Aga Khan Development Network. A partial risk guarantee from IDA is covering commercial lending of $115 million from Standard Chartered and Absa banks, while MIGA is providing 20-year breach of contract cover of $120 million to Sithe subsidiary World Power Holdings.
More than two-thirds of the population of Sub-Saharan Africa is without electricity, and more than 85 percent of those living in rural areas lack access. To help solve this inequity, U.S. President Barack Obama has announced Power Africa, a new initiative to double access to power in Sub-Saharan Africa. Power Africa will build on Africa’s enormous power potential, including new discoveries of vast reserves of oil and gas, and the potential to develop clean geothermal, hydro, wind, and solar energy. It will help countries develop newly-discovered resources responsibly, build out power generation and transmission, and expand the reach of mini-grid and off-grid solutions.

According to the International Energy Agency, Sub-Saharan Africa will require more than $300 billion in investment to achieve universal electricity access by 2030. Only with greater private sector investment can the promise of Power Africa be realized. With an initial set of six partner countries in its first phase, Power Africa will add more than 10,000 megawatts of cleaner, more efficient electricity generation capacity. It will increase electricity access by at least 20 million new households and commercial entities with on-grid, mini-grid, and off-grid solutions.
The United States will commit more than $7 billion in financial support over the next five years to this effort.

- **The U.S. Agency for International Development (USAID)** will provide $285 million to advance private sector energy transactions.
- **The Overseas Private Investment Corporation (OPIC)** will commit up to $1.5 billion in financing and insurance to energy projects.
- **The U.S. Export-Import Bank (Ex-Im)** will commit up to $5 billion in support of U.S. exports for the development of power projects.
- **The Millennium Challenge Corporation (MCC)** will invest up to $1 billion in power systems to increase access and the reliability and sustainability of electricity supply.
- **OPIC and the U.S. Trade and Development Agency (USTDA)** will provide up to $20 million in project preparation, feasibility, and grants to develop renewable energy projects.
- **The U.S. African Development Foundation (USADF)** will launch a $2 million Off-Grid Energy Challenge to provide grants of up to $100,000 to African-owned and operated enterprises to develop or expand the use of proven technologies for off-grid electricity.

Power Africa will also leverage private sector investments, beginning with more than $9 billion in initial commitments from private sector partners to support the development of more than 8,000 megawatts of new electricity generation. These commitments include investments from:
GOOGLE GREEN

Africa is already benefitting from Google Green’s massive investment in solar power. The company has closed its first investment on the continent, a $12 million investment in the Jasper Power Project, a 96 megawatt solar photovoltaic plant in the Northern Cape province of South Africa. Upon completion, Jasper will be one of the largest solar installations on the continent, capable of generating enough electricity to power 30,000 South African homes.

As Rick Needham, Google’s Director, Energy & Sustainability, explained on the Google Green blog:

When we consider investing in a renewable energy project, we focus on two key factors. First, we only pursue investments that we believe make financial sense. South Africa’s strong resources and supportive policies for renewable energy make it an attractive place to invest—which is why it had the highest growth in clean energy investment in the world last year. Second, we look for projects that have transformative potential—that is, projects that will bolster the growth of the renewable energy industry and move the world closer to a clean energy future. The Jasper Power Project is one of those transformative opportunities. To explain why, perhaps some background would be helpful.

Back in 2008, South Africa experienced a severe energy shortage, which resulted in blackouts throughout the country and slowed down economic growth. Since then the South African government has been actively supporting the growth of new sources of electricity to power the nation. While today South Africa is primarily dependent on
fossil fuels, there’s lots of potential for renewable energy—it’s a country blessed with abundant wind and solar resources—and the government has set an ambitious goal of generating 18 gigawatts (GW) of renewable energy by 2030 (as a comparison, the entire South African grid is currently 44 GW).

To meet this goal, the South African government has established the Renewable Energy Independent Power Producer Procurement Program (REIPPPP). Through the program, renewable energy projects compete on the basis of cost and contribution to the local economy to be awarded a contract with Eskom, South Africa’s state-owned energy utility. Jasper and the other projects being developed through the REIPPPP have the potential to transform the South African energy grid. And given South Africa’s position as an economic powerhouse in Africa, a greener grid in South Africa can set an example for the whole continent.

Jasper will create approximately 300 construction and 50 permanent jobs in a region experiencing high rates of unemployment, as well as providing rural development and education programs. It will set aside a portion of total project revenues—amounting to approximately $26 million over the life of the project—for enterprise and socioeconomic development, spreading the green further than it’s ever gone before.

LINKING NATIONAL TREASURIES TO POWER PPPs

In this 15-minute interview hosted by the Africa Energy Forum, Karen Breytenbach, Senior Project Advisor to the National Treasury of the Republic of South Africa, shares her advice on how to jump-start energy PPPs.
OUARZAZATE

The scene: a rocky plateau above the southern city of Ouarzazate, on the edge of the Sahara and often called “the door of the desert.” It’s a Hollywood favorite: Star Wars, Lawrence of Arabia, and Gladiator were all filmed there. A scorching sun hangs overhead, boosting summer temperatures to 40°F (104°F) or more. IFC and its partners are now tasked with harnessing that heat by making it the basis of a feasible power project, advising the Moroccan government on the initial phase of an ambitious 2,000 megawatt plan for solar energy.

National solar agency MASEN named IFC its financial adviser in developing the first power plant to be built in Ouarzazate. The goal is to have 500 megawatts installed by 2015 at a cost of approximately $3.5 billion. Private investors were asked to submit proposals for the initial phase of at least 150 megawatts by early 2011, with a public bid award expected in the second half of that year. However defined, it will be one of the largest solar plants ever built, selling power in the domestic market first, and later perhaps to Europe as well. Such projects are now growing in number: in June 2010, Abu Dhabi authorities named Spain’s Abengoa Solar and French oil company Total their partners in a new, approximately $700 million, 100 megawatt solar plant called Shams-1, in 2012. The consortium will build, own, and operate the power plant using concentrated solar power (CSP) technology, collecting sunlight in 768 parabolic troughs.

The Morocco project will also use CSP systems. But large-scale commercial financing is far less available in emerging economies than in oil-rich Gulf locales. So IFC and the World Bank will help mobilize concessional financing from development institutions so the Ouarzazate project can sell affordable power to its final consumers without major government subsidies, while also providing private developers a viable business proposition.

SENEGAL

Morocco’s national utility, the Office National de l’Electricité (ONE), has raised the rural electrification rate from 18 percent to 95 percent since 1995. Small-scale solar kits were an important part of its approach to bring power to more than 3,600 villages. This led to a partnership between ONE and IFC in Senegal, whose government is working with the World Bank Group on new public-private partnerships to achieve 50 percent rural electrification.

In one rugged northern area near the Mauritanian border, IFC and ONE are co-investors in a new private utility called Comasel St. Louis, which has a long-term concession from the government. Among its goals: using solar technology to bring more than 5,000 local villagers their first electrical power over the next two years.

The area is poor and dry, using unpaved roads for transport and simple wells for water. But its residents want a reliable source of power and lighting, and are willing to pay for it. Comasel St. Louis’ solar systems will meet those needs for as little as $8.39 a month, costs that are far below those of the kerosene lamps and dry cell batteries currently being used. They will also serve 213 schools and 118 health centers.

Initial subsidies from the International Development Association and the Global Environment Facility, provided under an innovative Output-Based Aid approach where funding is released only as targets are met, and Islamic Development Bank loans will help defray installation costs in the early phases. Villagers will then begin to pay, ramping up commercial viability via a four-tier pricing structure based on consumer demand. The three lowest-level users will pay flat monthly rates, while small businesses and other large users will pay on a variable basis.

Demand for a low-cost, “base of the pyramid” solution to Africa’s rural electrification needs is high. But given the expectations of modest returns, private risk capital is in short supply, and this project sets a “powerful” example for others to follow.
Why are there more people in Africa who own a mobile phone than a toilet when the economic and social value of improved sanitation is so clear? Improved sanitation (in contrast to basic sanitation) provides access to a facility that hygienically separates human excreta from human contact. Six hundred and ten million Africans do not have this access. Just as critically, over 40 percent of Africans also lack access to safe water. This isn’t just about restoring dignity to those who go without: it’s an economic imperative.

Poor sanitation and limited access to water generate massive healthcare costs for developing countries. In Tanzania, the total economic losses due to lack of on-site sanitation have been estimated to be over $200 million a year—an astonishing 1 percent of the country’s gross domestic product.

As country governments and the international development community strive to tackle these issues, there has been a shift in the way governments perceive the delivery of basic services. This is largely because governments in developing
countries with large numbers of people living in poverty do not have the capacity to meet the need for improved water supplies and sanitation services from public resources alone; they recognize an opportunity for domestic enterprises in these growing markets.

Once viewed as “opportunists” and “gap fillers,” the domestic private sector is now seen as a central part of the solution as millions of poor (and non-poor) households already rely on it to meet their needs. In water, private sector enterprises provide water through independent systems or the resale of water. In sanitation, businesses are involved in the installation of latrines and toilets, the manufacture of components, the importation and sale of materials, the provision of emptying services, and the growing business of waste re-use.

**MARKET POTENTIAL**

The scale of the market for piped water supply and on-site sanitation services is large and the nascent demand is far greater than originally thought. In Benin, annual sales of water from privately or community-managed networks in small settlements could reach $22 million by 2025. In sanitation, the current market for improved on-site sanitation services is vast, and untapped households in Tanzania alone represent a huge market of about $240 million.

But this demand belies the fact that poor households are highly discriminating clients: because money is tight and incomes seasonal, they engage in price-value tradeoffs in water and sanitation. Meeting a standard level of water consumption from networks involves cash outlays that are a significant percentage of poor households’ income. In Benin, for example, the cost of a household water connection comprises more than 100 percent of the household’s monthly income. Most households have access to inexpensive alternative sources of water (if only for parts of the year), including wells, springs, and boreholes. Poor people’s purchases are thus limited by cost and by their assessment of the value of network water with respect to alternatives.

Although poor households seem to prefer cheaper water to good-quality water, they also value convenience. If operators can ensure good-quality service, the availability and opportunity cost of alternatives will likely shift incentives in favor of networks.

In Benin, the cost of a household water connection comprises more than 100 percent of the household’s monthly income.

However, sanitation is a relatively low-priority expenditure for poor households, and cost is an
important factor in their decision making. But cost is not necessarily an insurmountable barrier—as the widespread use of other consumer products, such as cellphones, suggests. Poor households are willing to bear a cost to attain improved sanitation that they find attractive and providing value.

The other barrier to safer sanitation practices is that products are literally out of reach. More than three-quarters of sanitation businesses in Tanzania indicate that the poor live in areas that are expensive to service because of transport and infrastructure problems. This increases the cost of products due to transport, and also frustrates the ability of households to build facilities—because too many inputs need to be coordinated.

Poor households are highly discriminating clients: because money is tight and incomes seasonal, they engage in price-value tradeoffs in water and sanitation.

SCALABILITY IS KEY

The base of the pyramid in the water and sanitation sectors is dominated by micro- and small enterprises (72 percent for water and 80 percent for sanitation). An overwhelming number of these enterprises are profit-making, but they face many constraints. For water supply entrepreneurs, expanding is an issue because they are dependent on public funding for capital development. In sanitation, the risk of unsteady demand and the inability of small enterprises to invest in research and development and marketing limit their ability to realize the sizable market potential. Supply is not matching demand.

In addition to market-related risks, water firms face a variety of policy and institutional obstacles, including the bureaucratic hassle of applying for permits and participating in public tenders, the insecurity of licenses, and the lack of effective dispute-resolution mechanisms. In contrast, the impact of policies in the sanitation sector is limited. Enterprises working in the sector would like governments to concentrate on removing risks to entry by providing market intelligence and promoting the entry of enterprises that are able to undertake transformative research and development on new technologies and materials.

Transforming the water and sanitation markets will not happen overnight. Systematic change is required if the potential of this market is to be unlocked. Policy makers have a key role to play to improve affordability and sustain water services by creating a conducive investment climate, right sizing public investment, targeting subsidies, and being more flexible in pricing to the poor and wealthy alike.


Photo credits for page 62, from left to right, top to bottom: Gates Foundation, Heather Arney, Arne Hoel/World Bank, World Bank, Gates Foundation
In Africa and elsewhere, access to safe water, sanitation, and the tools of basic hygiene can mean the difference between life and death, education and illiteracy, decent wages and poverty. Here’s a look at hand washing practices throughout the world.

The very simple act of washing hands with soap and water is one of the most effective methods of preventing disease. In 2012, child mortality figures released by UNICEF showed that almost 2,000 children die each day from diarrheal diseases, 90 percent of which is due to a lack of safe water, sanitation, and basic hygiene. As diarrheal diseases are primarily fecal-oral, one of the simplest and most inexpensive barriers to infection is hand washing with soap at critical times, such as after using the bathroom and before eating.

0%-34% of people worldwide wash their hands with soap at critical moments—before handling food and after using the toilet. Laundry, bathing, and washing dishes are seen as the priorities for soap use, not hand washing.

WITH THE PROMOTION OF HAND WASHING

44% increase in newborn survival rates when birth attendants and mothers washed with soap.

40% reduction in diarrhea episodes.

23% reduction of acute respiratory infections.

50% lower incidence of pneumonia in children under five years old.

54% fewer days of absence among primary school students.

Source: UNICEF
In Burkina Faso, as in much of Africa, access to safe drinking water and sanitation remains scarce. This is especially true in rural and semi-rural areas where villages are dispersed, the population is small, and access to energy is rare.

To remedy this, the Burkina Faso government has involved the private sector in rural water through public-private partnerships (PPPs) in an effort to increase access to water as well as to improve the level of service. The PPP model has been relatively successful, with approximately 20 percent of all villages now covered by private operators. This success is even more pronounced when compared to PPPs in other sectors in the country.

Typically in rural water PPPs, the challenge is to increase coverage and expand the role of the private sector while keeping the price of water low. Lessons from Burkina Faso that have contributed to meeting this challenge—including institutional set up, contractual provisions, and price-setting mechanisms—are instructive for other governments considering the PPP model for rural water delivery.
DECENTRALIZING & DELEGATING

In Burkina Faso, management of water supply differs between urban and rural areas. In the large cities, water is supplied by the state utility, or Office National de l’Eau et de l’Assainissement (ONEA).

Following decentralization, responsibility to supply piped water to rural areas has been transferred to local municipalities. These municipalities may then either delegate the operation (and, as the case may be, the construction, maintenance, and renewal) of their piped water systems to private operators or operate the systems themselves. In any event, delegation to private operators must be preceded by a public call for tenders held by the municipality.

The central government remains responsible for capital expenditures in water infrastructure and setting out national water management policies—and supervising their implementation—but has otherwise removed itself from the delivery of water in rural areas. This decentralized approach has given substantial responsibilities to the rural municipalities. The risk remains that they are not always adequately resourced to negotiate or follow up on the PPP contracts awarded for their water supply networks.

CONTRACTS & CONTEXT

In principle, a rural municipality may look to various forms of partnership contracts for delegating water supply activities: management contract, operation and maintenance contract, affermage (or lease) or concession. The Ministry of Agriculture, Hydraulics, and Fishery Resources has published two model contracts to minimize time and cost in contracting: an operation and maintenance contract and an affermage contract. The use of these model contracts has become the norm in most rural municipalities.

The challenge is to increase coverage and expand the role of the private sector while keeping the price of water low.

Under the model operation and maintenance contract, the operator is responsible for operating and maintaining the piped water system while the municipality is responsible for renewing the assets of the system (the renewal of the long-term assets being subsidized by the State). The initial investment related to the construction of the water piped system infrastructure (well, pump, water tower, pipes, and distribution points) is realized by the State. The remuneration of the operator is derived from the tariffs paid by the consumers. The operation and maintenance contract is usually entered into for a term of three years and is tacitly renewable.
Under the *affermage* contract, the operator is responsible for operating and maintaining the network and renewing the “short term” assets of the networks (those whose lifetime does not exceed 15 years) and the State is responsible for the renewal of long-term assets. The private operator is not liable for any “renewal fees.” As with the operation and maintenance contract, its remuneration is derived from the tariffs levied on the end users. The *affermage* contract is in principle entered into for a term of five years and is tacitly renewable.

Where the PPP for a particular water system is not attracting many bidders, the price of water tends to remain high—to the detriment of the local population.

The operation and maintenance contract seems to be the prevailing arrangement. The *affermage* contract should probably be the preferred choice of the rural municipalities, however, as it shifts to the operator the responsibility for renewal of the assets and consequently relieves the public sector of this obligation. Ideally, a government should try to move towards the concession contract, since the private sector takes maximum risk for construction, financing, operation, maintenance, and tariff collection. This approach is unlikely to succeed in the medium term, however, given limited access to capital markets and the fact that if the private sector is responsible for financing capital expenditures, this will automatically raise tariffs.

**EQUITABLE PRICE SETTING**

In urban areas covered by ONEA, the price of the water is directly set by ONEA based on maximum tariffs capped by decree. ONEA is also able to offer a “social” tariff for its poorest customers, using economies of scale and cross-subsidies from larger volume users.

In rural areas, cross-subsidization is more difficult given relatively uniform low income levels. The price of water is not regulated by decree as in urban areas, but is determined contractually by the municipality and the operator at the stage of the bid process. In other words, the price of the water will depend on the prices proposed by the bidders during the call for tenders.

This system aims at encouraging competition and should put downward pressure on the price of supplied water. The drawback is that the price very much depends on the effectiveness of the competition existing during the call for tenders. Consequently, where the PPP for a particular water system is not attracting many bidders, the price of water tends to remain high—to the detriment of the local population. In order to implement a national equitable price for rural water, the government of Burkina Faso is now considering how to regulate the price of water in rural areas in a manner similar to that in urban areas (a maximum tariff set by decree).
To attract private investors while preserving a price for water that is affordable for the rural poor, Burkina Faso has opted for a significant financial contribution from the state that impacts the price of water. Under the current PPP arrangement (whether operation and maintenance contract or *affermage*), the construction, financing, and to some extent the renewal of the core infrastructure are realized by the state. The related costs are borne by the neither the private sector nor the end users.

Consequently, the construction and to some extent renewal costs are not taken into account by the operator when determining the price of the water. Such a mechanism, which may be regarded as form of capex subsidy, appears to be one of the few ways to preserve an equitable price for rural water. Another possible solution may be to combine projects over a group of municipalities to try to achieve economies of scale and even cross-subsidization among users in the various municipalities.

Since Burkina Faso aims to significantly increase access to piped water in rural areas as part of the millennium goals, it is clear that PPPs form a crucial part of the current rural water delivery system in a country where such partnerships are otherwise rare. The institutional, contractual, and price-setting mechanisms currently in place form a solid legal basis for success, and Burkina Faso’s government continues to look for ways to improve the system and reach more users at an equitable price.

Photo © Cristian Carrara, Mozambique
Lesotho, a mountain kingdom in southern Africa, is known for its hard-working population and challenging geography. Although it is not a wealthy country, the government has worked steadily to develop its own solutions to resource constraints and the increased demand by its citizens for infrastructure and services. One of the government’s guiding principles is to harness private sector capital and expertise to meet its national strategic goals.

Because Lesotho’s people had especially pressing needs in the health sector, the government and IFC’s Advisory Services in Public-Private Partnerships started working together in 2006. The government was committed to providing virtually universal health coverage to all citizens. Together, government officials and IFC worked together to design a public-private partnership (PPP) that would replace the aging national hospital and feeder clinics with a new health network in the capital city, Maseru.

In 2010, a network of three refurbished and expanded clinics opened and provided hundreds of thousands of patients with advanced services in the first year of operations. In 2011, the state-of-the-art Queen Mamohato Memorial Hospital opened and the full health network became operational.

But this was just the beginning of Lesotho’s successful experience with PPPs, as the hospital partnership evolved to serve as a model for others. Lesotho’s officials have continued to design health PPPs, completing a second PPP for healthcare waste management. PPP projects are also underway in facilities management and information technology for clinics, as well as a variant, results-based financing, for primary care in rural areas.

Significantly, PPP principles are being applied to many sectors, with additional projects in preparation for wind energy and tourism. Lesotho’s government has continued its work with the World Bank Group to expand capacity building for contract management and to complete the National PPP Framework, with plans underway for the full legal and regulatory framework for PPPs in 2014. h
Lesotho’s government and the World Bank Group are working together in a variety of sectors, such as:

- health
- power
- tourism
- legislative/regulatory

**A PPP HEALTH NETWORK**
Learn more about the results from Lesotho’s health sector PPP experience in this video.

“To better provide more effective public services... governments everywhere are increasingly turning to some form of public-private partnership.”

**KEY HOSPITAL STATISTICS**

- 51% increase in inpatient admissions
- 126% increase in outpatient visits (including clinics)
- 41% decline in overall mortality
- 45% increase in deliveries
- 10% decline in maternal death rate
- 70% survival for very low birth weight infants (<1,500 grams), virtually all of whom would have died before
- 65% decline in pediatric pneumonia death rate
- 22% increase in patient satisfaction rate (including clinics)
Nigeria’s Cross River State, with just over 0.5 hospital beds per thousand people, has the lowest density of hospital infrastructure in the South-South region of the country. While there is nascent private sector involvement in the health sector, most healthcare delivery is provided by the state; however, the network of public sector hospitals and healthcare centers does not meet the region’s needs. With IFC as transaction advisor, the government of Cross River State is structuring and implementing the first health public-private partnership (PPP) in Nigeria: a new referral hospital in the capital city of Calabar that will deliver an affordable international standard of healthcare for the state.

The hospital facilities in Cross River State are inadequate: in addition to deteriorating infrastructure and a lack of skilled staff, the facilities lack advanced medical equipment. As a result, the quality of public healthcare services is suboptimal. Moreover, the population perceives the quality of healthcare as poor, resulting in a loss of confidence in the facilities, a greater reliance on self-medication, and an exceptionally high rate of medical evacuations to other countries. The lack of advanced diagnostics is a serious problem and patients are often forced to travel to neighboring states for imaging services; there is also limited access to quality high-risk obstetric care, intensive care units, and to emergency/trauma care.

With a population of approximately 3.4 million people, a shortage of doctors exacerbates the
state’s healthcare problem. Apart from the federally-funded teaching hospital, only 36 doctors and 938 nurses employed by the state cover the state’s secondary health facilities. This number translates into an alarming doctor-population ratio of 0.21 doctors per 10,000 patients—one-fifth of the Sub-Saharan African average.

**TAKE ONE PPP AND CALL ME IN 10 YEARS**

To confront these challenges, the Cross River State government proposed the establishment of a 105-bed referral hospital to serve the needs of the capital city, Calabar, and its environs. A new gateway clinic to be attached to the hospital will offer primary healthcare services and a solid referral mechanism for the PPP hospital, ensuring that only patients requiring secondary care are admitted to the hospital. Starting in September 2011, IFC facilitated the participation of qualified private sector firms in the design, construction, equipping, and management of the proposed hospital through a transparent tender process.

The hospital is anticipated to be operational in 2015. The 10-year project term will include up to two years for construction and eight years for operation. The construction and equipping of the hospital, totaling approximately $37 million, will be financed by the state government. The consortium will bear some project development costs, deliver a turnkey hospital, and will then be responsible for running the hospital operations under terms defined in the PPP agreement. At the end of the concession period, the facility will be transferred to the government.

The hospital will be managed as a state referral hospital, providing quality and affordable access to regional level clinical services. The consortium led by UCL Healthcare Services includes Cure Hospital Management Services, a U.S.-based firm which will provide clinical services, and Simed International, a Dutch firm which will deliver the medical equipment.

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**RESULTS**

- The hospital is expected to provide high quality advanced secondary clinical and diagnostic services to the citizens of Cross River State, particularly to the 500,000 citizens of the greater Calabar area.
- The hospital will play a role in the state government’s overall growth strategy by creating jobs.
- Health professionals in the state will build expertise through exposure to international best practice.
- Nigeria and surrounding countries will refer to this model for good practice in concession contracting under international PPP standards.
Why is the hospital specifically, and the healthcare sector generally, a priority for the current administration?

As part of our socioeconomic development agenda, Cross River State has extended its public sector investment beyond infrastructure. We have embarked on a concerted effort to increase our investment in our people. Improvements in education, social welfare, and healthcare are top priorities for this administration. Over the years, we have created an extensive network of primary healthcare facilities, particularly in rural areas across the state. We have also established programs to improve access to these facilities and have recorded significant success. Currently, we are engaged in a program of substantial upgrades for our secondary healthcare facilities, so they will meet the demands of our population. The natural progression in the healthcare sector for us was to investigate the feasibility of a specialist healthcare facility. This hospital will serve as a center of excellence that will drive delivery of first-class, top quality healthcare across the state.

How do you expect the new hospital to improve healthcare delivery in the state?

For a developing economy such as ours, our people are our greatest asset. It is therefore of paramount importance that we invest in our people. The hospital is expected to be the top referral facility in the state, delivering international standard specialist healthcare to our citizens. It will be staffed by medical personnel with extensive international experience in healthcare delivery. We have just recently completed the bidding process working with IFC as advisors for a private-sector concessionaire to ensure efficient operation and management of the hospital.
The new hospital will translate world-class best practices which can be easily adopted by other facilities. As the only specialist tertiary healthcare facility of its kind in the region, the new hospital will attract cases from all over Nigeria. It will help divert the immense annual importation of healthcare from countries in Europe as well as India, South Africa, and the U.S.

What role do you see for the private sector in the development of Cross River State—not just in healthcare, but in other sectors as well?

As the premier destination for business and leisure tourism in Nigeria, Cross River has consolidated its position as the hub of the country’s tourism industry. Nevertheless, we have sought to further establish Cross River as a credible tourist offering on the subcontinent. In this regard, there are substantial opportunities for private sector participation to facilitate the development of various tour sites and attractions that already exist, bringing them up to international standards.

Agriculture is just one example of the viable opportunities here for private sector participation. Wilmar International, the world’s largest oil palm producer and distributor, has invested in developing a 50,000 hectare plantation with a refinery. Other domestic agricultural investors have found Cross River to be a conducive environment for their investments. Just recently, General Electric commissioned a $1 billion investment in a manufacturing plant here in Cross River. This entry shows the huge potential there is for investment in industry and manufacturing.

For a developing economy such as ours, our people are our greatest asset.

What has the government done to encourage private sector participation?

Private sector participation will improve standards and increase quality to the benefit of all the people. This government has made assiduous efforts to institute the processes and mechanisms for the smooth entry of private sector participation in operation and management of public sector assets. We have created an Investment Promotion Bureau as well as a Bureau for Public-Private Partnership in an effort to ease the entry of private sector commercial interests, thus freeing up government resources which can be employed in investments in infrastructure and other social amenities.

Photo courtesy of Cross River State government.
FAST FACTS

LIGHTING AFRICA
Catalyzing markets for modern off-grid lighting

589,000,000
people in Africa live without access to a public electricity facility.

$4,400,000,000
is spent per year on kerosene by off-grid African households.

1/3
of Africa’s on-grid population experiences frequent blackouts and is considered under-electrified.

49%
of off-grid households in Africa (54 million households) could have their lighting needs met by solar portable lanterns.

OVERALL IMPACT: LIGHTING AFRICA

1,386,000
off-grid lighting products that passed Lighting Global quality standards sold in Africa.

138,600
tons of GHG emission avoided; CO₂-equivalent of taking 26,000 cars off the road.

120%
growth in sales of good quality lighting products in 2012 (over 2011).

20
countries now selling products that have passed Lighting Global quality tests.

6,900,000,001
people in Africa with clean lighting and better access to energy due to solar lanterns.

Lighting Africa is a joint IFC and World Bank program that works toward improving access to better lighting in areas not yet connected to the electricity grid.
"When we reject a single story, we regain a kind of paradise."

—Chimamanda Ngozi Adichie, author, *Half of a Yellow Sun*