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Infrastructure is key to progress

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20 years after genocide

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Cover photo: ***A cargo train in Klerksdorp, South Africa.***
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Former President Alhaji Ahmad Tejan Kabbah of Sierra Leone passed away in March 2014.
UN Photo/Joshua Kristal

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Basins and bowls with spices and food ingredients on display at market stalls in Foumban, Cameroon.
Arterra Picture Library/Alamy

Food crisis in Cameroon

By Pavithra Rao

With rising food prices and so many mouths to feed, Cameroon is grappling with a serious crisis. The International Monetary Fund (IMF) reports that prices of main food items have skyrocketed this year, some by up to 20% from last year. The price of sorghum, for example, rose by 4%, maize by 5% and rice by a whopping 22%, according to the Food and Agriculture Organization.

For Cameroonians, the recent spike has come as a surprise because prices were relatively stable last year. Economists blame inflationary trends that began in 2007. Since then, the country's rate of inflation has fluctuated between 1% and 5%. Though not alarming, fluctuations in inflation over the years appear to be having a cumulative impact on food prices this time.

Out of Cameroon's 21 million people, eight million live below the poverty line, says the World Food Programme. The country ranks 150 out of 186 countries on the 2013 UNDP Human Development Index, which measures countries based on income, life expectancy and education. There are fears that the sharp increase in food prices will worsen Cameroon's poverty situation.

"Soaring food prices have negative short-run effects on developing countries that depend on imports for their food security and where the vast majority of households, including in rural areas, are net food buyers," says the International Fund for Agricultural Development. Cameroon's food imports, notes the World Bank, comprise about 25% of total imports. In 2008 some Cameroonians vented their anger through street riots and there are fears these may happen again.

An increasing refugee population may also be exacerbating food prices, many believe. Waves of refugees from the politically turbulent countries of Chad, the Central Africa Republic and Nigeria are seeking asylum in the more politically stable Cameroon. The United Nations High Commissioner for Refugees estimates that more than 100,000 refugees have crossed over to Cameroon as of 2013.

In addition, water shortages continue to affect food production. According to the World Health Organization, rainfall lately has been low and irregular, affecting crop yields. In 2012, for example, severe drought followed by flooding throughout the Sahel region worsened Cameroon's water problem.

The country learned some useful lessons from past food crises. In 2008, rising food and fuel prices sparked riots and looting in Yaoundé, Cameroon's capital city and Douala, its major seaport. The government responded by creating an organization to regulate basic food supplies. The agency has had limited success as food prices continue to soar. Government is also providing subsidies for school and work programmes to alleviate suffering.

Cameroon's Consumer Association believes that subsidies have been timely. How far these will go to lower food prices and assuage anger remains to be seen.

In sub-Saharan Africa, primary school teacher shortage on the horizon

By Tsigue Shiferaw

Sub-Saharan Africa is about to face a major shortage of teachers, says the United Nations Educational, Scientific and Cultural Organisation (UNESCO). Its newly released data show that about one third of the countries in the region will face pressure in the coming years

to hire more teachers due to a rising demand for education from an increasing school-age population. As a result, the region will need about 2.1 million new teaching posts while filling another 2.6 million vacant positions, as many will leave the profession due to attrition from retirement or sickness.

Some countries are already making efforts to prevent such an outcome. Ethiopia, for instance, has been expanding its teachers workforce by an average of 11% per annum since 1999.

46%
of the world shortage of secondary school teachers is in sub-Saharan Africa

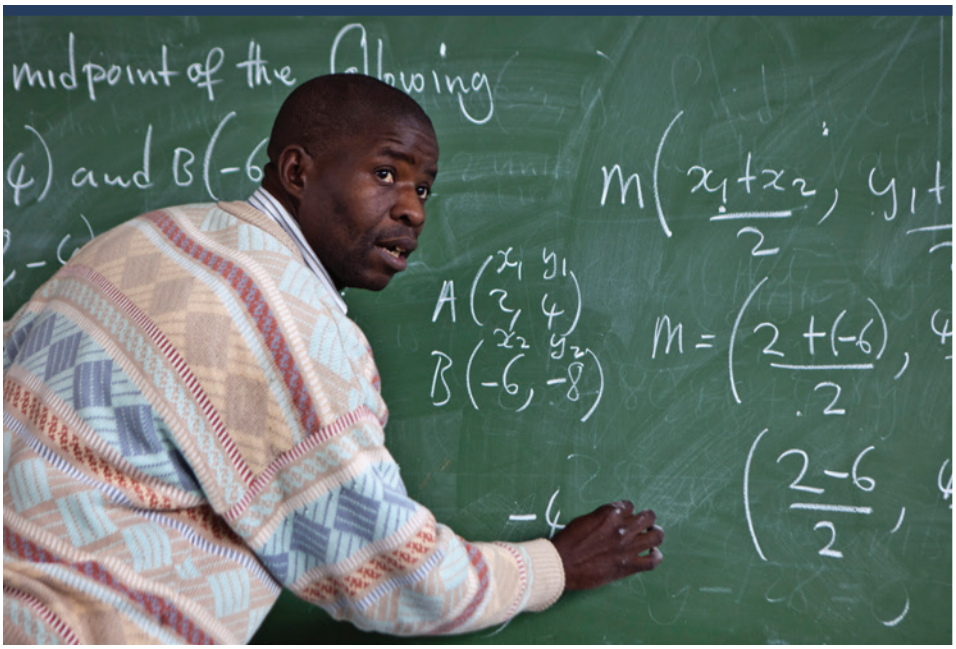
Analysts believe this rate could enable the country to meet the challenges of a future shortage. Cameroon, Namibia and Lesotho have also taken steps to increase the number of teachers, according to the UNESCO Institute for Statistics 2013 study, *"Projecting Global Teacher Needs from 2015 to 2030"*. As a result, these countries should be able to attain the Millennium Development Goal of universal primary education.

Before the recent political unrest, the situation in the Central African Republic was slightly different as the country was recruiting teachers at a rate of 10% per annum. There are now fears that the ongoing fighting, if not stopped, could affect recruitment efforts.

But the trend is worsening in other countries. More children in Côte d'Ivoire, Eritrea, Malawi and Nigeria will need extra primary school teachers by 2030. In Eritrea, for example, for every seven teachers recruited, 10 are expected to leave, notes the UNESCO study. On the other hand, Mauritania is catching up and may close the gap by 2015, while Djibouti faces one of the biggest challenges as only 54% of primary school-age children are enrolled.

To attain the goal of universal primary education, Djibouti will need to recruit about 17% more teachers each year between now and 2030. Many believe this is unlikely to happen because the country doesn't have the resources to hugely expand its workforce, which means it will inevitably face an acute teacher shortage by then.

While sub-Saharan Africa accounts for 46% of the global shortage of lower secondary school teachers, the data also show that governments that have started to make serious efforts to confront the problem will be in a better position to assure quality and universal education by 2030. ●



A school teacher in Cape Town, South Africa. *Andrew Aitchison/In Pictures/Corbis/APImages*

QUOTABLES

UN Photo/Cia Pak

"The existing means of financing infrastructure cannot take Africa to the scale that is needed. It is time for greater mobilisation of internal resources."

Donald Kaberuka, President, African Development Bank

"I don't fear losing an election. There is only one thing I fear - living in a society that has no room for minorities. I will not live in a society that doesn't respect and protect people who are different from the majority."

Fox Odoi, a Ugandan MP on the anti-homosexuality law

"It would be very easy for me to sit at the World Bank and earn a nice salary and criticise. I gave up a comfortable career to come here and do my bit because I recognise that nobody but us Nigerians can clean it up."

Ngozi Okonjo-Iweala, Nigeria's finance minister

"The Central African Republic is falling through the cracks ... it needs the same focus that is being put on Syria and South Sudan."

António Guterres, the UN High Commissioner for Refugees, at the end of his visit to the Central African Republic

Children studying math in Harare, Zimbabwe. Panos/Mikkel Ostergaard

As it plans its own future, Africa engages with the world

By **Tim Wall**

30

out of 54 African countries are classified as LDCs

This year's summit of the African Union (AU), which turned 50 in 2013, followed an intensive round of planning for the next 50 years. The summit, in Addis Ababa, Ethiopia, was just opening as Ms. Amina Mohammed, the UN Secretary-General's point person on development, spoke with *Africa Renewal* at her office on the 37th floor of the UN Secretariat building in New York.

Remarking on the 2015 end of the Millennium Development Goals, Ms. Mohammed observed that the UN's post-2015 drive, with sustainable development as its hallmark and applicable to the whole world and not just poor countries, was raising many questions on the continent. "First is the suspicion that 'sustainable development' is an excuse to escape from commitments to Africa," she said, "and then whether the issue of poverty would remain central," as it was for the MDGs.

Poverty certainly remains a dominant issue in Africa more than in any other region. But it is also true that Africa is exiting the MDGs era in a very different position than when it entered. Economies have grown steadily since 2000 and UN economists estimate average African growth in 2014 and 2015 to exceed that of any region in the world, except for China. The continent arguably has weathered financial crises of the new century better than any other, and investors prize its growing class of consumers and its natural resources. High population growth rates pose their own set of problems, but one consequence is that Africa gains influence by recently becoming the world's second most populous region.

National leaders can therefore be forgiven for believing they are now in a position to turn the tables in terms of lending advice. Among the key issues facing Africa today are those that can only be addressed in global terms: climate change, immigration, financial system stability and development models. So when the AU approved a "common position" on the post-2015 development agenda at this year's summit, "it came at exactly the right moment," said Ibrahim Mayaki, head of the New Partnership for Africa's Development (NEPAD), the development arm of the AU.

The common position embodies a shifting of the development model from socially-oriented planning to one focused on value addition and properly taking advantage of resources, he said. Via a committee chaired by Liberian President Ellen Johnson Sirleaf, the AU document went through a number of drafts, gathered views of business and civil society, and was reviewed at the head-of-state level.

On the UN side of post-2015 talks, the continent is already well-represented. Civil society, business, political and academic representatives sit on the high-level panel set up by the Secretary-General, and President Johnson Sirleaf was one of three heads of state who were co-chairs (Prime Minister David Cameron of the UK and President Susilo Bambang Yudyohono of Indonesia being the others). Kenyan Permanent Representative to the UN Macharia Kamau co-chairs an Open Working Group tasked with recommending a set of Sustainable Development Goals (SDGs) by this year.

Along with Africa's newfound strengths, however, are worries, some new and some left over from the past. These concerns clearly impinge on how Africa regards world priorities in its common position, and not only in its own development agenda.

Climate change is bearing down on the world. With its climatic zones ranging from warm to tropical, Africa is likely to bear the brunt of this change. Agriculture is especially threatened. Thirty of the 54 African countries are classified by the UN as among the world's least developed, and in these nations 70% of the population lives in rural, farm-oriented regions but adds only 30% to economic growth. Food must be imported, rendering people and countries vulnerable to price volatility, global financial jolts and extreme weather patterns.

High birth rates have worked to give Africans a median age that is two-thirds that of Latin America and half of much of the rest of the world. The demographic bulge of those in their teens and twenties can become a ticking time bomb of social discontent rather than a

see page 32

The Special Court for Sierra Leone rests – for good

By **Lansana Gberie**

The Special Court for Sierra Leone in Freetown. *SCSL (Special Court for Sierra Leone)*

The Special Court for Sierra Leone made its final major decision on 26 September 2013 when its Appeals Chamber upheld the 50-year sentence handed down to former Liberian President Charles Taylor. The court ruling in April 2012 found Mr. Taylor guilty of five counts of crimes against humanity, five counts of war crimes and one count of other serious violations of international humanitarian law perpetrated by Sierra Leone's Revolutionary United Front (RUF) rebels, who he supported.

2,493

number of pages in Charles Taylor's judgment

Taylor was tried in The Hague under a special arrangement with the Special Court, and convicted for his role in the murders, rapes and acts of terrorism against the civilian population of Sierra Leone during a vicious civil war from 1991 to 2002. He was also found guilty of recruiting children under 15 years as soldiers. The 2,493-page judgment found that Mr. Taylor was the main backer of the RUF, and was aware of its atrocities at the time.

Mr. Taylor was transferred to a prison in the UK in October 2013 to serve the remainder of his sentence – the result of an agreement between the court and the UK government. By the rules of the UK judicial system, Mr. Taylor, 65, has 43 years left to serve and will only be eligible for early release after serving two-thirds of his sentence, at which point he will be more than 90 years old.

The former Liberian leader is the first head of state, after Germany's Admiral Karl Doenitz (who was convicted by the Nuremburg court after the Second World War) to be convicted by an international court for war crimes and crimes against humanity. Many have hailed Mr. Taylor's conviction as a landmark achievement by the Special Court.

The court's other important achievements include first-ever convictions for attacks against UN peacekeepers, convictions for forced marriage as a crime against humanity, and for the recruitment of children for combat. They are testimonies to the determination of the court's prosecutors and judges, but also to the rather protean nature of the court's mandate. Some of the court's creators initially fretted about its apparent overreaching, and none was pleased that it lasted three times longer than planned and cost more than anticipated.

UN Secretary-General Ban Ki-moon in December hailed the court's "impressive legacy" and its role in advancing the global quest for accountability. Still, many Sierra Leoneans see the court as a result, not the cause of the country's peace and stability.

Money and control

The Special Court for Sierra Leone was established by an agreement between the UN and the Sierra Leonean government on 16 January 2002, the month that the country's civil war officially ended. Meant to last for only three years with an initial budget of $75 million, the court formally closed in December 2013 after spending about $300 million.

The Court's custom-made compound in Freetown is a massive fortification of high walls topped with barbed wire, and its own prison house. The premises cost $3.5 million, minus the land. In his letter in June 2000 to the UN Secretary-General, the late president Ahmad Tejan Kabbah, a lawyer, conceptualised the court as "a symbol of the rule of international law, especially at a time when some State and non-State actors are increasingly displaying, shamelessly, contempt for the principles of international law."

Mr. Kabbah would, in his memoirs, *Coming from the Brink*, profess to be "stunned and upset" by some of the court's activities. The president's "buyer's remorse" can, of course, be dismissed as an example of a parable of wishes granted—like King Midas, he merely got it in excess.

The point is that once David Crane, an energetic—not to say theatrical—American defence department lawyer, was appointed as prosecutor, all pretence that Mr. Kabbah was even marginally in control of the court disappeared. David Scheffer, in his book, *All the Missing Souls*, says that the US and the UK were the main backers of the court. Mr. Scheffer, the first US ambassador for war crimes throughout President Bill Clinton's second term, decided that the court was to be *sui generis,* meaning that it was to be very different from all other tribunals. It was to be wholly limited

to the Sierra Leonean context. It wasn't to have any overarching ambition.

Particular effort was made to present the Special Court as UN-backed to distinguish it from the International Criminal Court (ICC) and the tribunals for the former Yugoslavia and Rwanda. It wasn't given the status of Article VII of the Rome Statute that established the ICC, which would have made its funding and compliance with its rulings mandatory as a UN Security Council instrument. Funding was to be by voluntary contributions from member states, which meant that those with the most geopolitical interests in the sub-region, the US and UK, would be the key funders. The court was to be governed by a management committee comprising these countries as well as Nigeria, which, as the key peace-enforcer in Sierra Leone, also had an important interest. The statute of the court ruled out prosecution of peacekeeping troops, to Nigeria's relief.

The involvement of the government of Sierra Leone was limited to a provision in the court's statute for the government to appoint the deputy prosecutor and two of its six judges. Yet the statute stated that the Special Court "shall have primacy over the national courts."

Critics soon began to note that a judge at the court—paid $240,000 tax free per annum plus huge allowances—was earning several times more than the President of Sierra Leone. The office of the prosecutor's annual budget of more than $4 million was more than the budget of the Sierra Leone Supreme Court. The Court's permanent staff of 422, many of them foreign nationals, meant that about 70% of its entire budget was used up as salaries and bonuses.

Reflecting on this awkward imbalance, Stephen Rapp, a former chief prosecutor of the court, said in an interview with *Time* magazine in 2009, shortly after he left to take a job in the administration of US President Barack Obama, that they were "conducting justice in a comfortable courtroom with long trials and well-paid attorneys. Prisoners had single cells, and they had committed the worst crimes. A mile away in the local prison there were simply no resources. [If I were] to do it over, I would try to develop a court within the national system...Maybe not a court that costs $30 million a year."

"Most responsible"

Ralph Zacklin, the UN's lawyer who negotiated the set-up of the court with the Sierra Leone government, contrived the notion of "most responsible" for war crimes to be the focus of the court's prosecutorial efforts. In a report to the Security Council in October 2000, he defined those "most responsible" as "obviously including the political or military leadership," as well as "others in command authority down the chain of command... judging by the severity of the crime or its massive scale."

Though the Sierra Leonean war started in 1991, the court decided that prosecution would address only those crimes committed after the signing of the first (failed) peace agreement, the Abidjan Accord of November 1996. On 7 March 2003, Mr. Crane announced the first set of indictments, which included members of the RUF, the Sierra Leone Army and the Civil Defence Force (CDF), which resisted the RUF. In all, the court would indict 14 persons, of which two—the RUF leader Foday Sankoh and his former commander Sam Bockarie—died before their trial began. A third, Hinga Norman, the putative leader of the CDF and cabinet minister in President Kabbah's government, died during his trial.

Clearly the indictment of persons from all armed groups was meant to create an impression of even-handedness. But it puzzled many in Sierra Leone who considered the CDF as a heroic civil militia which battled to protect civilians and helped reinstate Mr. Kabbah's government after it was overthrown in 1997.

The proceedings of the court as well as its judgments benchmarked a new legal contrivance: "Joint Criminal Enterprise" or JCE. This concept was first used by the International Criminal Tribunal for the former Yugoslavia (1991-1999). It considers each member of an organized group individually responsible for crimes committed by that group within the "common plan or purpose". It is an ingenious way of de-legitimising leaders of violent groups and critics note that it can easily translate into guilt by association. The court entered convictions in all the cases it tried – an extraordinary achievement indeed!

Legacy

At the formal closing ceremony of the court, UN Under-Secretary-General for Legal Affairs and UN Legal Counsel Miguel de Serpa Soares hailed this achievement as "a landmark, not only for the Special Court, but also for international criminal justice in general." However, as important as Mr. Taylor's conviction and sentencing are, as well as those of others, it is unclear what impact these would have on other powerful politicians in the region.

Mr. Taylor was tried for supporting a foreign war, not for the crimes he committed in his own country. Liberia's civil war killed far more people (about 200,000) than Sierra Leone's (75,000). But no one has faced justice for the atrocities committed in Liberia, which have been documented by the country's Truth and Reconciliation Commission in a 2009 report. Still, an important argument for the Special Court's legacy is that it demonstrated that no one is above the law.

Former President of Liberia Charles Taylor (back, centre) awaiting verdict.

UN Photo/SCSL/AP Pool/Peter DeJong

Slow but steady walk to democracy

Despite challenges, Mauritania's democracy spreads

By **Kaci Racelma**

Mauritania has been in the news lately over the hot-button issue of slavery. Last year the American satellite news channel CNN broadcast a documentary titled *Mauritania, Slavery's Last Stronghold*, a searing indictment of the country's weak efforts to end modern forms of slavery such as forced labour, child labour and human trafficking. Also last year, the Global Slavery Index, an organization that tracks the phenomenon, named Mauritania as having proportionally the highest prevalence of slaves in the world. With up to 140,000 persons said to be enslaved in the country, the UN Security Council established a tribunal last February to prosecute those responsible for the practice.

Alongside slavery have been stories of political instability—six coups since independence in 1960. Gen. Mohamed Ould Abdel Aziz staged the latest coup in 2008. In 2009 he handed power over to himself after claiming victory in a controversial election.

But along with the continuing problem of slavery, a subdued economy and past political upheavals, Mauritania has another side that has been under the radar since 2009, when President Abdel Aziz became a civilian leader. It is the country's growing democracy and, by extension, its improvements in freedom, human rights and accountability.

"We no longer need to go to Paris to express openly our concerns," said Abdellahi Ould Hourmatallah, director of Mauritania's Ministry of Communications, in an interview with *Africa Renewal*. "At least we can now stay here and demand accountability from our rulers." He's right, because just last year about 10 prominent members of the African Liberation Forces of Mauritania (ALFM), who had been in exile since the group was outlawed in 1986 for planning to overthrow the government, returned home. They have been going about their business without arrest.

The return of these exiles coincided with the government's establishment of the Forum for the Preservation of Democratic Process (MFPDP), a group comprising key members of civil society groups. The MFPDP will assist the government in promoting social harmony, encouraging women's participation in governance and promoting media freedom, among other endeavours.

Mauritanian women increased participation in governance. *Paul Kingsley/Alamy*

Mohamed Lemjad Salem, head of the MFPDP, told *Africa Renewal* that by educating the population about democratic values, the group would create an atmosphere in which the government and the opposition could play their traditional democratic roles. "We want to strive to consolidate democratic values ... to achieve the democracy we aspire to." At the moment there is a growing recognition among Mauritanians that civil society "can play a primary role in shaping public opinion and help to consolidate democracy," says Mr. Hourmatallah.

Improvements in Mauritania's human rights situation correspond to increasing press freedom. The media watchdog Reporters Without Borders says the country has a relatively open media environment. It was not this way a few years ago, when editors were obliged to obtain government approval before publishing stories. Then, unlike now, they were expected to reveal their sources—including confidential ones—if asked to do so by the government. The government owned the media houses, and it created a board, without any media representation, that nominated heads of media institutions and regulated journalistic practices.

But the situation has improved in recent years. Amendments to media laws, though coming slowly, have been decisive. In 2010 the government opened up the broadcast media to private-sector ownership, and the following year it amended parts of the law under which journalists could be jailed for slandering the head of state.

There has been a notable response to the changes in the media laws. Mauritania

currently has two independent television stations and several independent radio stations, finally ending government's monopoly of the broadcast media. Although the government still controls two newspapers, 28 others are privately owned. Two internet-television stations, Shinquiti and Murabitun, are also privately owned. Reporters Without Borders says that Mauritania has some of the best media laws in the sub-region.

As with the media, a positive change is happening in women's participation in governance. The country is one of only 34 with a quota system that ensures participation for women in government. Mauritania reserves 31 seats out of the 147 in the lower house of parliament for women. (This is about 21%, which is the global average for women in parliament.) As a result, 31 women won parliamentary seats in the November 2013 elections. Abdellahi Ould Zoubeir, a journalist and member of the MFPDP, told *Africa Renewal* that "there is a long way to go, but we are striving to make Mauritania a more open society."

Mauritania may be making progress on many fronts, but there are also real concerns about democracy dividends on the economic front. Knowing the connection between citizens' well-being and their political participation, President Abdel Aziz is confronting poverty. Although the country ran a 32% budget deficit in 2013, the International Monetary Fund (IMF) appears to be satisfied with its 6.4% economic growth rate. The Fund wrote, "For 2014, economic growth will maintain its momentum, in spite of global demand that remains subdued. Accordingly, the rate of growth in real GDP is expected to turn out at about 6.5%, driven by strong performance in the mining sector, agriculture, services, and construction and public works."

These achievements are "not reflected in the social situation, still characterized by high poverty and high unemployment," notes a 2013 report, African Economic Outlook (AEO), jointly published by the African Development Bank, the Organisation for Economic Cooperation and Development, the UN Economic Commission for Africa and the UN Development Programme. The report says that up to 21% of the population lives in absolute poverty, and while overall unemployment is at 30%, that number rises to 60% in the rural areas.

"Mauritanian women suffer discrimination in access to employment and land resulting in low levels of economic participation," adds the AEO report. Aminettou Mint Ely, who heads the non-governmental organization Association of Women, told IRIN, a humanitarian news service, that men don't give women a chance to fight against discriminatory laws "such as those barring working women from claiming a pension, or [those that permit] paying elected women less than men for the same posts." Mahnaz Afkhami, president of the Women's Learning Partnership, another advocacy group, adds, "We also need to break down cultural stigmas and train these women to become good leaders."

Some male politicians make matters worse for women. Aslamo Ould Sidi al-Mustafa, a presidential advisor, controversially issued a fatwa (an Islamic decree) in 2012 banning women from contesting presidential elections. They may enter the race, Mr. al-Mustafa said, but it must be "just for fun." This effectively means that no woman can be president of Mauritania. Women's advocacy groups are fighting back and are unsettled by President Abdel Aziz's silence on the matter.

> **"Improvements in Mauritania's human rights situation correspond to increasing press freedom.**

Although the media enjoy relative freedom, they are not stable enough financially to play their watchdog role effectively. The privately owned television stations broadcast only via the internet. With internet penetration of just 4.5% in the country, these stations have limited reach. The newspapers don't fare any better, due to insufficient advertising and poor distribution systems, notes the BBC. And without a freedom of information law, journalists often hit a brick wall when requesting information that the government considers embarrassing.

Plaudits for Mauritania's democracy are justified only when the present circumstance is compared to previous situations, many believe—particularly periods of military rule. The government remains sensitive to harsh media reports. In August 2011, for example, security operatives detained a Senegalese media crew that was in Mauritania to interview opposition leaders and anti-slavery activists. That same year Abdelhafiz al-Baqali, a Moroccan journalist, was deported for no official reason. And there are allegations of discrimination against blacks, torture as a tactic in detention and a judicial system that is not fully independent of the executive branch. Without any explanation, President Abdel Aziz appointed three different Supreme Court chief justices between 2007 and 2010, although each chief justice is supposed to serve for at least five years.

To be fair, the government is facing a lot of challenges. Mauritania is a multiracial society sandwiched between countries with which it has strained relationships. It is still squabbling at one end with Morocco and Algeria over Western Sahara, and at the other with Senegal over the use of the Senegal River, which divides the two countries. In addition, thousands of Malian refugees are moving to Mauritania, putting a strain on limited social infrastructure such as water and energy. Security is also a major concern as the government constantly tries to suppress any lurking terrorist networks.

Mauritania has been making efforts to stamp out slavery. It passed an anti-slavery law in 2007, making it a crime punishable by up to 10 years in prison. A judicial committee headed by President Abdel Aziz announced a decision to create a special tribunal to prosecute those responsible for the practice last December. Gulnara Shahinian, the UN's special rapporteur on contemporary slavery, has praised "the political will displayed by the [Mauritanian] authorities" in fighting slavery.

With so much on President Abdel Aziz's plate, analysts believe that recent steps toward deepening democracy are significant. The perception of Mauritania as a place only of political instability and slavery could soon begin to change. Many now expect that this country of 3.6 million people, located in the Sahara desert, may soon emerge as a stable democracy.

A World Food Programme cargo plane arrives at the airport in Bangui where a camp for internally displaced persons has been set up. UNHCR/ B.Ntwari

Central African Republic: killings in the time of transition

Peace eludes a nation in a rocky political transition

By **André-Michel Essoungou, in Bangui**

For a few weeks earlier this year, no one needed an alarm clock to wake up in Bangui. The sound of gunfire, sometimes sustained and heavy, was a morning ritual in the Central African Republic's capital city. To most people here, identifying where the shots came from was a survival skill.

Worse still, since early December 2013, Christians, but more so members of the Muslim minority, risk their lives each time they venture out of their now segregated neighbourhoods—a troubling sign of a deepening religious divide. Killings happen daily. On occasion, cheering crowds have participated in chilling acts of lynching, only to return to normal life thereafter, as if nothing had happened.

On 5 February, not far from downtown Bangui, soldiers from the regular army lynched a suspected militia combatant. It did not seem to matter to them that journalists were filming the scene. "It is as if the whole country has lost its senses," Gen. Babacar Gaye, the UN Secretary-General's Special Representative to the country, noted at a press conference a day after the incident. "We have experienced instability before, but nothing like this," Julien Bela, the editor of *Centrafrique Matin*, a daily, remarked.

Indeed, since March 2013, violence in the Central African Republic (CAR) has reached unprecedented levels. Killings, acts of looting and other violations of human rights have increased as a political transition that started in January 2012 has progressed. By February 2014, a growing number of analysts and officials, including from the UN, were expressing serious concerns over the degree of human rights violations and had taken to describing the situation in chilling terms.

Since early 2013, thousands of Muslims (they represent around 15% of CAR's over 4 million inhabitants) have been forced out of the country, in a mass exodus reminiscent of some of humanity's darkest hours. On 20 February, UN Secretary-General Ban Ki-moon submitted a six-point plan to the Security Council, urging the world to act now. "Today's emergency is of another, more disturbing magnitude," he told the 15-member body. "It's a calamity with a strong claim on the conscience of humankind."

1mn

the number of people who have fled their homes to live in camps since the conflict in CAR erupted

Coalition of the unwilling

Events started spiralling out of control after a coup last March led by a loose coalition of armed groups calling themselves "Seleka" – meaning "alliance" in the Sango language. Founded in 2012 by rebel leaders from the mostly Muslim north, Seleka's main grievance was the government's failure to improve people's lives, especially those from the outlying areas in the north. The rebels were able to recruit fighters from the mainly Muslim neighboring countries of Chad and Sudan.

A power-sharing agreement signed in Libreville, Gabon, in January 2013 between the Seleka, then President François Bozizé and the local political opposition ended on 24 March when the Seleka, frustrated by Bozizé's refusal to effectively share power, took control of the government. This ended the first episode of what was to become a rocky political transition. "From the beginning, it was obvious that many of the actors of the transition were unwilling to be part of it. It was more of a coalition of the unwilling," an analyst in Bangui remarked.

Once in power, the Seleka proceeded to loot private properties, ransack public offices and randomly kill those who resisted their rule. "At first we thought this would last for a week or two," Julien Bela, a journalist, recalls. "But it soon became clear that they would not stop looting, raping and killing." A December 2013 report by the International Crisis Group (ICG), an organization that works to help prevent and resolve conflicts, noted that the coalition was mainly occupied with carrying out "a country-wide, criminal operation that has no other motive than personal gain."

In August, Michel Djotodia, the coalition and country's new leader, officially disbanded the Seleka in an attempt to restore order. He even set up institutions for the transition, including a parliament and an electoral commission. But as the political transition stalled, and with the regular army on the run, the police, the public administration and the justice system no longer or barely functioning, CAR became a "phantom state," according to the ICG, where formal institutions were empty shells and insecurity a daily threat.

Seleka combatants, mainly Muslims, continued to loot and kill, particularly the Christian majority. "They would arrive in a village and publicly kill all the men, targeting the Christians in particular, as if to make a point," a journalist with Radio Centrafrique, the public broadcaster, recalled. By the end of last year, in response to these targeted and systematic abuses, self-defence militia groups, known as the anti-Balaka, emerged, first from the rural areas and then the cities.

A religious divide emerges

Much like the Seleka Alliance, anti-Balaka groups are a loose coalition of minimally structured entities without a clear political agenda beyond fighting a common enemy. Anti-Balaka fighters wield machetes and sometimes firearms. Similar to Mai Mai militia of the eastern part of neighbouring Democratic Republic of the Congo, anti-Balaka fighters wear amulets that they believe provide them with protection against bullets. Initially, they reacted in desperation, in defence of Christians and other non-Muslims. Their avowed enemies were combatants of the Seleka coalition.

On 5 December, the anti-Balaka launched an all-out assault on Bangui, killing not only Seleka fighters, but also a number Muslims suspected of siding with the Seleka. The fighting left at least 1,000 dead in just three weeks, the Red Cross reported soon after. The apparent religious undercurrent of the crisis became a troubling reality. Muslims in Bangui were forced out of entire neighbourhoods. The trend was to be followed in the countryside.

"Muslims and Christians have lived in harmony in this country for generations," a number of public officials in Bangui remarked. In private, however, others disputed such a rosy picture. A civil servant pointed to one of the grievances long-held by the Muslim minority: "How many Christian holidays are national holidays in this country? Many. How many Muslims holidays have the same status? None."

By early January 2014, the CAR had become a battle field between the anti-Balaka (Christian militias) and the former Seleka (mainly Muslim combatants). Around 5,000 African forces, now operating under the African-led Support Mission to the Central African Republic (MISCA), supported by some

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Diamonds are forever... a problem

"Nature scattered diamonds liberally over the CAR, but since colonial times foreign entrepreneurs and grasping regimes have benefited from the precious stone more than the Central African people," writes the International Crisis Group (ICG) in a 2010 report, adding that "The French ransacked their colony of its natural resources, and successive rulers have treated power as licence to loot."

Indeed, over the years before the current CAR crisis, illegal exploitation of natural resources fuelled corruption and deprived the state of much-needed resources. In 1983 for example, notes the ICG, "records showed that importing countries had received from the CAR 495,000 carats more than the total official exports." In 1993, the official diamond exports from the CAR stood at some 494,000 carats.

Some 100,000 people are active in the mining sector but the most involved have always been the country's presidents themselves, starting with Jean-Bedel Bokassa, the former self-anointed emperor. President Ange-Felix Patasse even ran his own diamond mining company from the presidential palace, while François Bozizé, deposed in March 2013, kept a tight personal control over the sector.

"In our country," laments Julien Bela, the editor of *Centrafrique Matin*, a daily newspaper, "our leaders have their minds only on the business of diamonds and nothing else. No one has a plan on how to develop agriculture or what to do with our youth." Jean-Paul Ngoupande, a former prime minister, concurred: "In the Central African Republic, heads of state are first and foremost diamond merchants."

Happy schoolboys, beneficiaries of Rwanda's high primary school enrollment. *PYMCA/Alamy/Mischa Haller*

Rising from the ashes

Twenty years after genocide, Rwanda makes huge development strides

By **Wadzanai Mhute**

For the survivors of the 1994 genocide in Rwanda, it feels like only yesterday that machete-wielding Hutu militias embarked on a mission to annihilate Tutsis. Marie Claude Mukamabano, a Tutsi aged 15 at the time, was one of such targets. She remembers vividly how scarily close she was to losing her life when the militias grabbed her and threatened to cut off her head.

A few days earlier, she had witnessed her sister gruesomely murdered just for being a Tutsi, and it appeared her fate was now sealed. But she had fake identification papers showing she was a Hutu. She showed them to the militias who expressed disbelief. Trembling, she said a prayer in her mind. Miraculously, the militias spared her life. Now living in New York, Ms. Mukamabano told *Africa Renewal* she was not sure why the militias changed their minds about killing her. It could have been the fake identification papers or the prayer or both.

The Hutu militias were revenging the deaths of two prominent Hutus: Presidents Juvénal Habyarimana of Rwanda and Cyprien Ntaryamira of Burundi, whose plane was shot down while about to land in Kigali, Rwanda's capital city. The tragic incident blew open years of animosity and struggle for political power between the two ethnic groups.

For about 100 apocalyptic days, a bloody campaign unfolded while the rest of the world silently looked on. About 800,000 people were killed during this period. Former UN Secretary-General Kofi Annan said in 2004: "The genocide in Rwanda should never, ever have happened. But it did. The international community failed Rwanda, and that must leave us always with a sense of bitter regret and abiding sorrow."

As the world marks the 20th anniversary of the genocide this year, Rwanda has moved on, economically, socially and politically. It has one of the world's fastest-growing economies, averaging 8% per year over the past decade, according to the International Monetary Fund. The World Bank says Rwanda is the third best place to start a business in Africa, behind Mauritius and South Africa.

Many consider Rwanda one of Africa's leading lights on information communication and technology. Nicknamed "the Singapore of Africa" for its technological advances, the World Bank lists the country "among the ten most improved economies in 2013." Rwanda's goal is to be the technological hub of East Africa. It has an impressive e-government system,

which ensures that most of the government's financial transactions and other tasks are done electronically.

In 2012, Rwanda launched the One Laptop per Child Programme, which aims to saturate its primary schools with 500,000 laptop computers. Over 100,000 have so far been distributed. Last December, it completed the laying of fibre-optic cables across the country that will provide affordable and reliable internet service. And in February this year, it partnered with Facebook, the social media company, to launch a pilot project to provide Rwandan students with access to online education.

Unlike many other countries in sub-Saharan Africa where economic growth has so far not translated into visible signs of development, Rwanda has an impressive record. For example in 1994, 78% of Rwandans lived below the poverty line (less than $1.25 a day). By 2011 that figure had dropped to 45%. In addition, Rwanda has a 99% primary school enrolment, the highest in Africa, according to the World Bank.

Access to affordable health services has expanded through the introduction of community-based health insurance. The country is on track to reach the Millennium Development Goal on maternal health. Kigali, the capital, is a thriving city. "Life is orderly, pavements are clean and roads are free from potholes that curse much of Africa. Kigali is nurturing a reputation as the safest city on the continent," says the *Guardian*, a UK newspaper.

A lot of the changes for Rwanda's transformation were initiated by President Paul Kagame, who is credited for ending the 1994 genocide and establishing political stability. In 2000, Mr. Kagame's government crafted a development programme dubbed "Vision 2020" whose goal is to "transform Rwanda from a low-income agriculture-based economy to a knowledge-based, service-oriented economy by 2020." The plan is to make Rwanda a middle-income country by shifting "from a humanitarian assistance phase associated with the 1994 genocide into one of sustainable development."

Economists consider Vision 2020 plan credible, noting that Rwanda's over-reliance on agriculture could be problematic in the long term. While agriculture continues to be the economic mainstay, providing jobs for 73% of the population, it accounts for only 36% of national output, according to the African Development Bank (AfDB). Rwanda must therefore reduce its reliance on agriculture and ramp up economic diversification.

Despite the current emphasis on developing a service-based economy, there are also strong efforts to boost agriculture's share of the gross domestic product. In 2007, Rwanda became the first country in Africa to sign the Comprehensive Africa Agriculture Development Programme, an African Union initiative to increase investments in agriculture. The programme requires member states to commit at least 10% of their national budgets to agriculture. Agnes Matilda Kalibata, Rwanda's agriculture minister, says that her government's investment of 10% of the national budget in agriculture has resulted in 6% growth in the sector. The government supplies farmers with cows, links them to the markets, has increased irrigation programmes and is focusing on crops such as coffee that grow well in the country.

Analysts say Rwanda's impressive socioeconomic development is partly due to its focus on women's empowerment. The country leads the world in the number of women represented in parliament, holding 56% of the seats in the lower house.

In an article for *Solutions Journal*, an online publication that showcases innovative ideas for dealing with, among others, the world's socioeconomic problems, researcher Roxane Wilber advises nations looking to improve governance to learn from Rwanda's experience. "Women bring instructive perspectives and innovative approaches to governance," she explains, adding that Rwanda's achievement is not an accident. The government "prioritized women, introduced structures and processes designed to advance them at all levels of leadership."

The country's economic management has now caught the attention of the world's marketplace. *Forbes*, a US business publication, writes that the "impartial voice of the marketplace has spoken, with a ringing endorsement of its economic turnaround and prospects for continued growth." That was after the country debuted on the global bond market in April last year, raking in $400 million after an offering that was eight times oversubscribed.

President Kagame's leadership with its impact on the lives of 12 million Rwandans has made him a rising star among his peers. Former British Prime Minister Tony Blair once called him "a visionary leader." Former US President Bill Clinton was even more effusive, referring him as "one of the greatest leaders of our time." Nigerian Nobel laureate Wole Soyinka said of Mr. Kagame: "Given the scale of trauma caused by the genocide, Rwanda has indicated that however thin the hope of a community can be, a hero always emerges."

Despite such comments from supporters, Mr. Kagame's geopolitical

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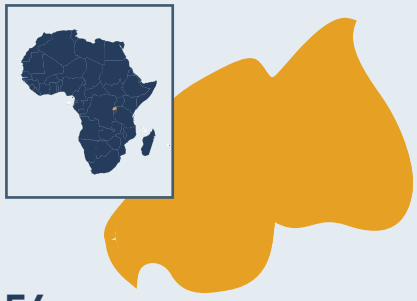
Rwanda in numbers



56
Percent of lawmakers in the Rwandan parliament who are women

99
Percent of primary school age children in Rwanda who are enrolled

4,700
Number of kilometres of paved roads

100,000
Number of laptops distributed in primary schools

1,200,000
Number of internet users

Sources: OLPC, World Bank, Rwanda government. Rwanda Utilities Regulatory Authority

African leaders face tough challenges in developing, upgrading and maintaining the continent's infrastructure for transport, energy, water and information and communication technology. Despite efforts by governments and the private sector to pump money into building a reliable infrastructure, there is still a huge financial gap.

INFRASTRUCTURE

Aircraft on runway. *Arne Hoel/The World Bank*

Africa flies on a wing and a prayer

Air transport reforms needed to unlock full potential

By **Masimba Tafirenyika**

Until recently, it was not uncommon for passengers flying between two African cities to transit through Europe. It was cheaper and faster, for instance, for passengers travelling to Ethiopia from Côte d'Ivoire to fly first to Paris with Air France and then catch a connecting flight to Addis Ababa. With no direct flights linking their capitals, most African countries had to rely on flights from their former colonial powers to connect to each other. It still happens today but on a smaller scale; flying in Africa is improving, albeit slowly.

Yet poor safety records continue to bedevil its aviation industry, thanks to low standards, inert supervision and old and poorly maintained planes. The airports too suffer from poor maintenance and offer shoddy and expensive service, says the International Air Transport Association (IATA), the global airlines group. While revenue from airports and air traffic is probably adequate to finance essential investments, politics and weak management are interfering with how the money is used.

Still, a major study* by a consortium of organizations led by the World Bank concluded that generally the capacity of air transport infrastructure "is not a serious problem." The 2009 study, *Africa's Infrastructure: A Time for Transformation*, said the number of airports was adequate and there were enough runways to handle traffic. It noted, however, that while African carriers are upgrading their fleets, progress with air traffic controls remains sluggish.

Poor infrastructure undoubtedly adds to huge running costs. Airports are often stuffed with high-charging monopoly suppliers, in addition to other government taxes, says IATA. For example, Senegal increased its landing charges by 13% in 2012 on top of an airport development fee of about $68 per passenger—the highest in Africa. Critics say some African countries are less transparent with how they use the money from these charges. Several other countries have development charges of up to $50 per passenger.

Brain drain amid growing staffing needs

There is little relief from airport operating costs: fuel taxes are high, so are landing and take-off charges. For example, fuel prices in Africa are on average 21% higher than the global average. Worse still, Africa has the highest airfare costs in the world per kilometre, pushed up partly by high taxes and partly by lack of competition or relatively low air traffic volumes on many routes.

Because of poor safety records, African airlines often face higher leasing costs than other carriers. According to *The Economist*, a European airline, for example, could be charged $180,000 a month to lease a five-year-old Boeing 737, but a Nigerian carrier could be slapped with a bill of up to $400,000.

The continent's aviation industry further suffers from lack of skilled personnel, worsened by a brain drain that has seen pilots and technicians joining airlines with better bottom lines. Boeing, a US aircraft manufacturer, estimates that Africa will need 14,500 new pilots and 16,200 technicians through 2031, according to IATA.

"African airlines have to raise their game and their remuneration packages to retain pilots, engineers, cabin crew, and airline managers," says Mike Higgins, IATA Regional Vice President for Africa. Ethiopian Airlines, for instance, is handling

it creatively. "Instead of complaining, why don't we train enough people not only for our airline but also for the region?" Tewolde Gebremariam, the airline's chief executive officer told *Airlines International*, an IATA publication. His airline has expanded intake at the Ethiopian Aviation Academy in Addis Ababa from 200 to 1,000 students per year.

Notwithstanding the litany of problems it is confronting, Africa's aviation industry is beginning to pick up, boosted by the continent's economic growth. "Nowhere is the potential for aviation greater than on the African continent," Tony Tyler, head of IATA, told participants at the group's annual meeting last year in Cape Town, South Africa. The aviation industry supports some 6.7 million jobs in Africa and generates $67.8 billion in economic activity, says the World Bank-led report.

Growing middle class

By 2030, more than half of Africa's population will be living in the cities and, according to the African Development Bank, about 700 million will join the middle class over the next decades. This burgeoning middle class will produce more customers who will find it more convenient and affordable to fly than use alternative transport. More competition among low-cost airlines and increased traffic should also result in affordable airfare.

Established airlines are also making profits and flying to more destinations. Kenya Airways, Royal Air Maroc, South African Airways, Ethiopian Airlines and EgyptAir stand out among the pack. Ethiopian Airlines, Africa's fastest growing carrier, is consistently exceeding its profit targets. In August 2012, the state-owned but privately managed airline became the second carrier outside Japan to operate the Boeing 787 Dreamliner, a state-of-the-art passenger jet. It bought ten new 787s with a $1 billion loan guarantee from the Export-Import Bank, a US export credit agency.

Africa's economic powerhouse, South Africa, has the most developed air transport infrastructure network and aviation market in the region. Its three major airports in Johannesburg, Cape Town and Durban got face-lifts ahead of the World Cup in 2010 and its national airline, the South African Airways, is the largest in Africa, with connections to over 50 cities across the continent.

To realise their full potential, African governments have adopted a Common African Civil Aviation Policy. It aims to establish a well-integrated transport system that would link air travel to other means of transport so that passengers and cargo can move seamlessly—and avoid connecting trips outside the continent just to travel within the same region.

African seaports: upgrade or drown

If the aviation industry has been a significant player in Africa's economy, the shipping industry has been indispensable to its development. But relatively little has changed over the past decade in Africa's seaport infrastructure and administration. A World Bank study* grimly noted that while many ports can handle the increasing traffic from the booming commodity trade, only a few are world class.

None of the five main transhipment centres (Abidjan, Côte d'Ivoire; Dar es Salaam, Tanzania; Port of Djibouti, Djibouti Republic; Durban, South Africa; and Mombasa, Kenya) is a major hub on the main international routes, says the study. Several ports suffer from low capacity, particularly in terminal storage and maintenance. Hubs attract big shipping lines and help lower transport costs. Ghana, Kenya, Namibia, Nigeria and South Africa are among the few African countries to show progress in developing their ports.

In addition to capacity constraints, the most commonly cited reasons for bottlenecks at African ports are old and inefficient port infrastructure and administrative blockages. Port dwelling time is also a growing concern. A 2012 World Bank report found that, with the exception of Durban, cargo spent an average of 20 days in African ports, compared with three to four days at most other international ports. Other weaknesses include poor equipment, inefficient operations, weak security standards and substantially higher port charges for containers and general cargo.

Integrated rail and road links

One of the major shortcomings of shipping in Africa is the lack of integrated rail and road networks with links to service seaports. *The Economist* reported that it costs $4,000 to ship a car from China to Tanzania on the Indian Ocean coast, but getting it from there to nearby Uganda can cost another $5,000. "To transport one container from China to Ethiopia is almost triple the cost of sending a container from China to Brazil," Liu Jiang, a general manager with Lifan, a Chinese automobile manufacturer, told *Africa in Fact*, a publication of Good Governance Africa, an advocacy group. In general, shipping goods to Africa is not expensive; it's the inland transport costs that send the bill skyrocketing.

This lack of integrated links means that there is still relatively little containerized traffic into the hinterland, especially into the landlocked countries where most imports are transported as general cargo. Although still relatively low, container transport in sub-Saharan Africa is expanding, says the World Bank-led report.

Africa's busiest port

Most ports in Africa are run by governments; they own and operate the infrastructure. However, some countries like Ghana and Nigeria are opting for the "landlord" model, which is the preferred option, under which governments own and maintain the port infrastructure and the private sector is left to handle cargo operations.

Africa will need huge investments in building new infrastructure, upgrading existing ones and maintaining them. The World Bank calculates the region needs an estimated $93 billion per year, or about 15% of its gross domestic product. Actual investment is currently running at $45 billion.

**Africa's Infrastructure: A Time for Transformation by World Bank, World Bank Publications, Washington, D.C., 2009.*

INFRASTRUCTURE

The Braamfontein train yards in Johannnesburg, South Africa. Graeme Williams

On bumpy roads and rails

Unprecedented investments in Africa's ground transportation are hardly enough

By **Nirit Ben-Ari**

The Democratic Republic of the Congo (DRC), which sprawls over 905,000 square miles, is the second largest country in Africa. Fifty-four years after independence, the DRC has few roads connecting one end of the country to the other. In fact, the only way to travel between two distant points is by air and canoes. Many Congolese cannot afford air travel, and most feel as if their country is made up of different countries.

But imagine multi-lane tarred roads linking Kinshasa in western DRC to Goma in the east, or roads and railway lines from Cape Town in South Africa to Cairo in Egypt, and from Dakar, Senegal to Nairobi, Kenya. Just imagine the endless possibilities that would bring.

Improving road and rail systems in Africa will boost the transportation of goods and raw materials, facilitate transactions and negotiations, especially when face-to-face meetings are required, boost tourism and positively impact ordinary lives in diverse ways such as ensuring that people get to the hospital quickly during emergencies, for example. Countless other activities depend on reliable roads and rails.

Most of Africa's railway lines and roads are in bad condition and need huge investments, according to the African Development Bank (AfDB). The proportion of paved roads on the continent today is five times less than those in developed countries, notes the Bank. As a result, transport costs alone are 63% higher in Africa than in developed countries, hampering its competitiveness in the international and local markets.

The AfDB further points out that transport costs represent between 30% and 50% of total export value in Africa. These costs are even higher in 16 landlocked countries, including Zimbabwe, South Sudan, Mali, and Niger, and constitute up to three-quarters of their total export value.

Poor roads and railways also have a negative impact on intra-African trade, which is currently just 11% of total trade. Development experts believe this figure might have been higher with better roads and railway lines. Trade among Southeast Asia's 10 countries, at 37%, is much higher than in Africa, for example.

Railway lines in most African countries were built during colonial times to connect mines and other natural resources to ports. In fact, most of the lines were constructed by mining companies. Even now, passenger services account for no more than 20% of rail traffic, says the AfDB. Over the years, passenger business has been shrinking steadily, viable only when road networks are inadequate or non-existent, it says. According to the bank, the costs of maintaining rail tracks and signalling systems, and the level of spending needed to reach passenger speeds, run into billions of dollars and, if not subsidized, passengers would be unable to afford to pay for operating costs alone.

Programme for infrastructure development

With Africa's economy growing at 5% a year on average, African leaders worry that without a good road and rail network, such impressive economic growth may not translate into real socioeconomic development for Africans. In order to turn the situation around, they established the Programme for Infrastructure Development in Africa (PIDA) in July 2010. An initiative of the AfDB, New Partnership for Africa's Development (NEPAD), and the African Union, PIDA is an ambitious effort to boost African infrastructure, including rails and roads.

Ibrahim Mayaki, the chief executive officer of NEPAD, says PIDA was designed to transform Africa and bridge its massive infrastructure gap. "At the moment," he noted, "Africa is the least integrated continent in the world, with low levels of intra-regional economic exchange and the smallest share of global trade."

One of PIDA's remarkable projects is the construction of the 4,500 km Algiers-Lagos highway. Also known as the Trans-Sahara highway, the project is already 85% finished and the remainder is expected

to be completed this year, according to PIDA. Upon completion, the highway will create a corridor through the desert that will facilitate trade between North Africa and sub-Saharan Africa. This means countries such as Nigeria, Algeria and Niger will be able to conduct trade by road transport easily. Historically, the Sahara Desert has hindered trade between the two sub-regions.

Many other rail and road construction projects are underway across Africa. In Kenya, a $25 billion infrastructure development plan, including a road construction that links Kenya to South Sudan and Ethiopia, was recently launched by the governments of the three countries. In addition, the AfDB is financing several roads projects in Central Africa.

State of rail transport

Today, only South Africa has a fairly good railway system, according to the World Bank. Before the FIFA World Cup in 2010, South Africa revamped its railway system, including the new underground commuter train between Pretoria and Johannesburg. Some mining companies in Africa also have dedicated railway lines for transporting their goods. For example, African Minerals, a company mining iron ore in Tonkolili Province in northern Sierra Leone, has invested up to $2 billion in mining and rail infrastructure, according to *Africa Review*, a Kenyan publication.

Most rail networks in Africa are as old as 100 years and have not been upgraded since they were first constructed in colonial days due to lack of funds. These networks cannot meet the demands of modern times, says the AfDB. "Most lines are low-speed, small-scale, undercapitalized networks carrying low axle loads."

Big projects and China

China is throwing a lifeline for Africa's railway infrastructure. Some 2,000 Chinese companies are in Africa and many of them are heavily involved in roads and rail construction, reports *Der Spiegel*, a German newspaper. A study by PricewaterhouseCoopers (PwC), a global finance company, says that China's goal is to take advantage of the increasing growth of African markets. In the DRC, two Chinese construction companies and a copper company, all state-owned, have signed a $9 billion contract for the construction of a rail and road network, which is more than the DRC's entire national budget.

Rail infrastructure in Angola, one of China's top oil suppliers, is rapidly expanding as part of an 'infrastructure-for-oil' trade agreement between the two countries. Kenya recently signed a $5 billion deal with China to construct a 952-km rail link from the city port of Mombasa to Malaba, a town near its border with Uganda. This is expected to be extended to Rwanda, Uganda and Tanzania by 2018. And that is not all. In September 2012, the China Railway Construction Corp. (CRC) signed a $1.5 billion contract to rehabilitate a railway system in Nigeria. The CRC has ongoing projects in Djibouti, Ethiopia and Nigeria worth about $1.5 billion in total.

China South Locomotive and Rolling Stock Corporation, a major train manufacturer in China, is bringing $400 million worth of locomotives to South Africa. And China's Export-Import Bank is financing the Mombasa-Nairobi railroad line with $4 billion, while the Addis Ababa-Djibouti line is being rehabilitated at a cost of $3 billion.

Investing in infrastructure

Raising enough finance for infrastructure development is one of the key challenges facing Africa's expanding economies. Although most state-owned railroads have been privatized in recent times, and many conceded to programmes funded by international financial institutions, leading to increased traffic volumes, only a few railway systems are able to generate sufficient revenues to fund significant track maintenance. The AfDB recently announced plans to launch a pan-African infrastructure bond totalling about $22 billion. Part of this money will be ploughed into rail and roads projects, most of them in East and Central Africa.

There have been suggestions that governments and the private sector could develop infrastructure in partnership. Examples of successful public-private partnerships are the Citadel Capital of Egypt, the largest investment company in Africa and the Transcentury of Kenya, a company that is involved in infrastructure projects. These efforts are supported by African banks, which are coming up with innovative products, such as syndicated loans, that provide the necessary financial support. The banks are also bringing on board development finance institutions such as the German Investment Corporation, Netherland Development Finance Company, Industrial Development Corporation of South Africa, as well as transnational finance institutions such as European Investment Bank, the International Finance Corporation and the AfDB.

Ongoing rail and road projects will help accelerate Africa's industrialization efforts, says Dr. Mayaki. Experts add that there has to be a transfer of knowledge to local managers, local experts and local workers. This means that when the expatriates leave, locals can continue to maintain the infrastructure. The urgent task now is to commit more resources to improving Africa's rail and roads networks. Without good roads and railways, industrialization is impossible.

A newly tarred road in Abuja, Nigeria. Panos/Marcus Rose

Internet access is no longer a luxury

Fibre-optics could leap-frog Africa into the future

By **Joel Macharia**

INFRASTRUCTURE

Students doing homework at home in Cape Town, South Afr

It is early morning in Nairobi, the Kenyan capital. The traffic jam along Ngong Road, one of the city's main feeder roads, stretches for kilometres as *matatus* (taxis), buses and cars try to make their way into the central business district. At the top floor of Bishop Magua Centre complex, sitting just off Ngong Road, Antony Njoroge is already at work, typing away at his computer, a mug of freshly brewed coffee beside him. He is the founder of RevWeb, a local software development company.

Njoroge works out of iHub, a working space that hosts developers, designers and others working with technology software. It is one of the most well-known tech hubs in Africa. In just four years since its founding, the iHub has over 13,000 members in its online and off-line community, held close to 500 events and had over 50 companies calling it home.

The growth of iHub represents how information and communication technology (ICT) in Kenya has advanced over the past 15 years. This digital revolution started in 1999 with the entry into market of KenCell (later Zain, and now Bharti Airtel) and Safaricom mobile network operators. In 2001, the Communication Commission of Kenya reported that the number of mobile phone subscribers had "increased to a staggering 330,000." Looking back, that figure seems laughable; in 2013 the same commission reported 30 million subscribers.

The scene is no different across Africa; mobile phone penetration has grown from 1% in 2000 to 54% in 2012. Today there are more than 754 million connections in sub-Saharan Africa and over 35 mobile network operators in Africa. Several countries, such as Seychelles, Tunisia, Morocco and Ghana, have mobile subscription penetration rates in excess of 100%. Tunisia, at 120%, has 10.8 million more cell-phone connections than it has citizens.

There is no doubt that mobile infrastructure has become as important to national economies as road or energy infrastructure. Aside from providing voice and internet access, mobile networks in some African countries now facilitate more individual and small business financial transactions than the banking industry. Kenya's M-pesa, a SMS-based money transfer system, moves over $24 million each day, about $8.8 billion annually – or 40% of the country's GDP – within its 17 million strong user network. EcoCash in Zimbabwe, run by Econet Wireless, signed up 2.3 million Zimbabweans in just 18 months after its launch in September 2011, outnumbering all of Zimbabwe's traditional banking accounts combined. Over a million of these accounts are active and push about $200 million of volume over the EcoCash platform every month, according to the Global Strategic Marketing Alliance, a global consulting firm.

The second wave of Africa's digital revolution came in the latter half of the last decade, with the connection of the continent to the rest of the world via undersea fibre-optic cables. These cables have dramatically increased the transmission capacity of data and drastically reduced transmission time and costs. Prior to fibre-optic installation, internet service providers relied on satellite connections, paying up to $2,300 per month for basic satellite connections. Using fibre-optic cables, they can now get the same connection for less than $100. It is on this wave that tech hubs such as Kenya's iHub, Tanzania's Kinu, Nigeria's CcHUb and South Africa's JoziHub in Johannesburg came into existence.

There are now 16 undersea cables connecting Africa to the Americas, Europe and Asia. All but two countries—Eritrea and Western Sahara—with a coastline have a cable landing on their shores, tripling the internet capacity in Africa over the past three years. A single cable can have multiple docks. For example the Seacom cable serves Kenya, Tanzania, Mozambique and South Africa.

The number of internet users on the continent grew at seven times the global average, clocking more than 3,600% growth between 2000 and 2012, to 167 million users, according to data from Internet World Statistics, a website that tracks internet and social media usage. In Kenya, which has been Africa's leader in internet usage growth, the Communication Commission of Kenya reports that internet users grew from 200,000 in 2000 to over 19.6 million at the end of last year, a staggering 9,700% growth.

However, as impressive as the numbers look, it has not been all smooth-sailing. Take the case of South Africa, for example. Over the next few years, South Africa expects an additional four fibre-optic cables to link it to the rest of the world, increasing its capacity significantly. However, players in the market are not convinced the new cables will make a difference due mainly to connectivity problems.

ica. Nikki Rixon

"Whilst some of these new cables will no doubt change the supply situation which will reduce the cost of international capacity, I don't think they'll have a big impact for the vast majority of users in southern Africa; most costs are domestic rather than international," Mark Simpson, the chief executive officer of Seacom, a submarine fibre-optic company, told *Africa in Fact*, a publication of Good Governance Africa, an advocacy group.

The problem in South Africa lies not in capacity but in connectivity. Once docked at the coast, the connections need to make it to homes and businesses. While a national fibre-optic grid is currently under construction, the lines have not reached the "last mile", that is the actual physical connection to homes or businesses.

Telkom, the state telecoms operator, the only company in charge of the last mile, is responsible for the delay, says *Africa in Fact*. Consumers often wait months to get the necessary lines installed. This problem is not unique to South Africa. In Zambia, for instance, most safari lodges, which are a key part of the country's tourism industry, are forced to depend on unreliable satellite internet connectivity, even when they are near metropolitan areas, because there is simply no other option.

Leo Mutuku, head of iHub's Data Science Laboratory, agrees that the biggest challenge has been the last mile connections, especially outside urban areas where there are significant difficulties in accessing broadband internet. "A lot of the people living within 25kms of a fibre-optic cable do so [access the internet] possibly because it passes by their villages headed to the next town," says Mutuku, adding that internet service providers do not find it viable to make significant investments laying cables to each home.

With no private investments to support the laying of the last mile, especially in rural Africa, the government's role in funding fibre-optic deployment is crucial. However, governments across the continent have not created enabling environments by passing appropriate laws.

"Fundamentally, the biggest issue holding back access is the slow pace of the regulatory process," Arthur Goldstuck, a South African ICT industry analyst says. "If the policy directives aren't forthcoming, then regulatory advancement is not forthcoming," he added.

Africa in Fact lists South Africa's policy directives as including the removal of Telkom's monopoly over the fixed-line network, the establishment of a strong regulatory policy to unbundle local loop to give other providers direct access to Telkom's exchanges and better management of the electromagnetic spectrum on which wireless, radio and TV signals are broadcast.

African governments are slow in passing laws that provide guidance on the development and use of ICT infrastructure. Nigeria, for instance, relies on laws of yesteryear. Its ICT is currently administered under three main policy documents: the National Mass Communication Policy of 1990, the National Telecommunications Policy of 2000, and the National Policy for Information Technology of 2000.

On the other hand, Tunisia is one of the leading ICT countries. This was highlighted when Tunisians extensively used social media in ousting former President Zine el-Abidine Ben Ali in 2011. With an internet penetration rate of more than 41% in 2012, Tunisians are among the world's most active users of Twitter and Facebook, according to Internet World Stats. The country's internet infrastructure is also fairly modern, with two ground connections to Libya and Algeria and three undersea cables to Europe. However, internet connectivity and access is limited to Tunisians living along the coast.

As with other regions, Africa also faces the threats posed by internet security and privacy issues. In its attempt to create enabling legislation, the African Union crafted the Convention on Cyber-Security (AUCC) in 2011 to provide legislation and guidance on the "organization of electronic transactions, protection of personal data, promotion of cyber security, e-governance and combatting cybercrime." The continental body is currently seeking ratification of the convention, but has met resistance from civil society organizations who feel the convention infringes on citizens' rights to freedom of expression and privacy. Some of its provisions will also make it difficult for internet service providers and online businesses to operate. A vote to ratify the convention was postponed indefinitely last January.

While Africa's growth in mobile and internet access has been rising faster over the last decade than any other region of the world, the continent is still playing catch-up. It still has the lowest percentage of population accessing the internet, at only 15% in 2012. The continuing investment in infrastructure, dropping costs, rising incomes and demographics, however, will lead to a far greater growth over the next decade.

Speaking to *Africa in Fact* magazine, Steve Song, an advocate for better connectivity in Africa said: "Affordable access is no longer a luxury. It is a tide that raises all ships. It creates efficiencies at every level from the rural farmer to the large corporation. It can facilitate better governance through better communication and increased transparency. It can enable better healthcare, better education, better services all round. And perhaps most importantly, it opens the doors to innovation, to new ideas and new opportunities for everyone."

Joel Macharia is an entrepreneur and consultant in technology and digital media in Nairobi, Kenya.

Light at the end of the tunnel

Much ado over Africa's power sector

By **Kingsley Ighobor**

Powerlines in Johannesburg, South Africa. *StormStudio/Alamy*

Apapa is an industrial hub in Lagos, Nigeria's bustling commercial capital that's home to some 17 million people. Daily, the air in Apapa reverberates with the humming sound of electricity generators. In Apapa, as in most places in Nigeria, electricity generators power big factory plants and air cooling systems, as temperatures often top 30 degrees Celsius.

Nigerians expect the Power Holding Company of Nigeria (PHCN), the entity charged with managing electricity production and distribution, to end decades of erratic energy service delivery. Despite national efforts to tackle the power crisis, half of Nigeria's 170 million people have no access to electricity. Hajiya Zainab Kuchi, a former Nigerian energy minister, once said: "We must resolve to jointly exorcise the evil spirit behind this darkness." And Nigerians derisively refer to PHCN as "Please Have Candles Nearby." Candles can be handy when there is a power outage at night. Before PHCN, there was the National Electric Power Authority (NEPA), which performed so badly that it was itself nicknamed "Never Expect Power Always."

But Nigeria needn't be in a precarious power situation, argues Kandeh Yumkella, the Special Representative of the UN Secretary-General for Sustainable Energy for All, an initiative to mobilize resources for energy especially in the developing world. The country is endowed with 5 trillion cubic meters of gas reserves—the 9th highest in the world—and 37 billion barrels of oil reserves, according to the Organization of Petroleum Exporting Countries. Mr. Yumkella says (see interview on page 22) that Nigeria alone could potentially provide electricity for the whole of Africa. In addition to oil and gas, the country has coal, wind, thermal and sun—all sources of energy.

Energy and industrialization

The Liberian power situation mirrors that of Nigeria. Rebel fighters destroyed Liberia's energy infrastructure in 1990 and it was not until 2006 when streetlights were restored. "For more than 14 years, Liberia has lived in darkness, literally and figuratively," wrote the *New York Times* in 2006. With financial assistance from the US government and the European Union, Liberia purchased a plant to supply power to the main hospitals and to streetlights. "We have brought back what we finally call light at the end of the tunnel," said a visibly enthused President Ellen Johnson Sirleaf, as she switched on the streetlights at an elaborate ceremony in July 2006.

Mr. Yumkella and other development experts believe that electricity oils the wheels of industrialization. Compare South Africa, Africa's most industrialized nation, which generates 44,175 megawatts for its 51 million people, to Nigeria, Africa's most populous nation, which generates about 3,200 megawatts. Simply put, per capita, South Africans consume 55 times more electricity than Nigerians.

Reliable Energy

"The cost of alternatives, mainly diesel generation, is at least four times the cost of a reliable power supply," notes the *Guardian*, a UK newspaper. Industries cannot be competitive in the international market if energy is a big chunk of production costs, adds Mr. Yumkella. "It means somebody can buy your raw materials, take them to Asia or Europe, refine them and sell back processed goods to you."

Reliable energy doesn't just pertain to industrialization, says the World Bank; it can be a tool to tackle poverty. With a steady flow of power, hospitals operate efficiently, people will choose gas cookers rather than wood or coal that pollute the environment, students can access the internet and plug into global information trends, railways operate efficiently, water supply is more reliable, bureaucracy runs efficiently—virtually everything relating to socioeconomic development revolves around energy.

An energy insecure continent

Yet, 48 countries in sub-Saharan Africa generate only 68,000 megawatts of electricity, which is what just one country in Europe, Spain, produces, notes the World Bank. And of that figure, South Africa alone generates more than 44,000 megawatts. This means that without South Africa, sub-Saharan Africa's electricity output is 24,000 megawatts, far less than 40,000 megawatts available in New York City. To compound matters, "the low level of power generation is accompanied by correspondingly low rates of electrification. Less than a quarter of the population of sub-Saharan Africa has access to electricity," says the World Bank. In brief, "Africa is the world's most energy insecure continent," says Mr. Yumkella.

There is definitely no shortage of energy sources in Africa. More than 90% of the continent's hydropower, according to the bank, is not even exploited. Nigeria has oil and gas and South Africa has coal. Sudan has 6.4 billion barrels of gas reserves, Angola has 9 billion with smaller deposits in a few other countries. What then is the problem? Mr. Yumkella, a Sierra Leonean, explains: "In the past we have not considered energy as part of poverty reduction." For a long time, he said, African states monopolized and mismanaged the energy sector. Emergency interventions in energy supply such as in Liberia—also emulated by neighbouring Sierra Leone—have been more impulsive than based on sound economics. Such an emergency approach "represents a planning and procurement failure on a colossal scale," according to a World Bank's assessment, adding that the costs of procuring and running power plants in these countries "could rise up to 3% to 5% of GDP."

Power trade

Furthermore, there are huge unexploited energy resources in countries that are far from centres of demand. For example, the Democratic Republic of the Congo and Ethiopia have huge hydroelectric potential but are "far from the main economic centres in southern, western and northern Africa," the World Bank points out. And these countries' economies are not robust enough to invest billions of dollars in hydroelectricity just for their own consumption. "Some African countries have water, Guinea, for example. Some have gas [Nigeria, Angola] ... there is a need to transmit from high production areas to places where they don't have it but the demand is high," says Mr. Yumkella.

To resolve such a problem, African leaders recommend an integrated regional power strategy —meaning that countries with better economics of scale in energy resources should consider investing in the sector and then sell to others. Countries spending huge amounts to purchase diesel oil or fuel for power plants are better off negotiating with a neighboring country for hydropower. Along this line, the Programme for the Infrastructure Development of Africa (PIDA), an African Union initiative, is backing a $22 billion project to develop a pan-African electricity highway by 2020.

Ethiopia's strategy

Ethiopia wants to be an energy superpower and is crafting a 25-year master plan to potentially generate 60,000 megawatts from hydro, geothermal, wind and solar. That's almost what all of sub-Saharan Africa currently generates. The country is building the Grand Renaissance Dam, the biggest ever on the continent which, on completion within the next three years, could produce 6,000 megawatts. In addition, a US-Icelandic company, Reykjavik Geothermal, is set to build a $4 billion geothermal plant that will generate 1,000 megawatts. Ethiopia has Africa's largest wind farm from which it is generating 120 megawatts.

> **"Africa is the world's most energy insecure continent.**

The country's ambitious energy plan is like a magnet that is pulling in neigbouring countries. Djibouti, Kenya, Sudan, South Sudan, Rwanda, Tanzania and even Yemen, a non-African country, have signed power supply contracts with Ethiopia. At the same time, the World Bank and the African Development Bank (AfDB) are financing a transmission line capable of transporting 2,000 megawatts of electricity from Ethiopia to Kenya. Ethiopia is looking "at energy as an export sector the way you export gold," notes Donald Kaberuka, head of the AfDB.

There is good news in other countries as well. For example, with support from the World Bank, Rwanda successfully completed its Electricity Rollout Access Programme in 2012, connecting one million homes to the national power grid. Ongoing reforms in Sierra Leone will soon brighten hopes for improved power for its six million people, according to the World Bank. South Africa is the world's most attractive emerging solar energy country, reports Global Information Service, an organization that monitors evolution in energy transmission. The country could produce up to 8,500 megawatts from solar by 2030.

Nothing is impossible

Africa's private sector is also jumping on the energy bandwagon. The *Financial Times* calls Nigeria's energy privatization programme Africa's most ambitious. Hopefully, this should eliminate mismanagement "while delivering cheap electricity." In July last year, US President Barack Obama announced in South Africa a "Power Africa" initiative that will raise $16 billion from private and public sectors to generate 10,000 megawatts of electricity for communities in sub-Saharan Africa. African philanthropists have pledged various amounts to this effort.

There is currently a sense of urgency about energy on the continent. Africa can leap-frog obsolete technologies to focus on those for exploiting low-carbon energy sources. "Africa has to be positioned to develop its renewable energy assets," writes Carlos Lopes, executive secretary of the Economic Commission for Africa, in a blog post. While the goal, says Mr. Yumkella, is to concentrate on renewable low-carbon sources such as wind, solar, geothermal, for now, "it's all energy sources... we can be like Brazil. They have proven technology on ethanol. They have just discovered huge deposits of oil off their coast. Still they are pushing renewables heavily."

With all the efforts underway, how soon could Africa see sufficient light at the end of the dimly-lit energy tunnel? Mr. Yumkella believes that can happen within two decades. "Nothing is impossible," he quips.

Photo: UN Photo/Maria Elisa Franco

There is energy momentum in Africa

— Kandeh Yumkella

Under-Secretary-General Kandeh Yumkella is the special representative of the UN secretary-general and chief executive for the Sustainable Energy for All initiative. His job is to mobilize global commitments and partnerships to, among others, promote clean energy economy and generate jobs. Prior to his appointment, Mr. Yumkella had served as director-general of the UN Industrial Development Organization. In an interview with Africa Renewal's Kingsley Ighobor, Mr. Yumkella discusses a range of issues on Africa's energy challenges.

Why should Africa pay attention to energy?

First, Africa is the most energy-poor continent. The energy capacity of 40 sub-Saharan African countries combined is less than the capacity for the 20 million people in New York. Also, some African countries such as Mali, Burkina Faso and others, because they are Sahelian and landlocked, pay more for a kilowatt hour of energy than the rest of the world. In some African countries, it is between 30 and 50 cents for a kilowatt hour compared to 4 to 17 cents in most countries in the world. Also, without access to energy, our whole industrialization and transformation agenda is in jeopardy. If you take Nigeria, Sierra Leone and many other African countries, for example, every factory or restaurant has a generator. It's already adding 20% to 30% to their cost of operation. Their factories cannot be internationally competitive.

How does Africa tackle its energy challenges?

First of all, we have to consider energy as a major input to development. Second, we have to include it in our planning processes, particularly now that we are planning 20 to 30 years ahead. Third, we must mobilize domestic and international resources to invest in the energy sector.

So what has changed so far?

Fortunately, I hear African leaders saying the right things about energy now. From the prime minister of Ethiopia to the president of Ghana, it's same message. If you take West Africa, for instance, most countries are discovering oil and gas. They must not do what Nigeria has done: flare gas — burning it for 50 years now, almost $2 billion to $3 billion burnt every year. Meanwhile, Nigeria cannot generate even 4,000 megawatts for its 170 million people. That should not happen anymore in Africa. One of the initiatives we are promoting now is zero flaring. But it's not just zero flaring for its own sake; it's how you use that gas to generate energy for your people. Ghana is one of the most electrified countries in West Africa—about 72%. But almost 80% of the population still use charcoal and firewood for cooking.

How receptive are African governments to your ideas?

They are very receptive now. Tanzania and Mozambique have as much gas as Kuwait. President Kikwete is very clear: they will use part of their gas to generate power. He is going to sell some of it. He will do downstream processing for fertilizers and for LPG [liquefied petroleum gas] for cooking solutions. He will also invest in solar and wind because he has those resources. Kenya wants to invest heavily in geothermal—heat from underground. The whole of East Africa—Rwanda, Ethiopia, Kenya—is sitting on geothermal, which is what has transformed Iceland. I have met with President Blaise Compaore of Burkina Faso. His country depends on Côte d'Ivoire for 40% of its electricity. President Macky Sall of Senegal is an energy engineer. They all see the need for what we are talking about.

But what practical steps are they taking?

This is part of my job. How do I then motivate these leaders and help them organize an integrated energy market? To get the investments we need, governments need to formulate energy plans of at least 20 years, not ad hoc. We don't plan as they do in other countries, which is to project energy needs over 20 to 30 years. You need a plan, an energy policy that gives confidence for investors to say, 'I will go and borrow and invest, the laws will not change in the next five years.' The good news is that a number of banks are beginning to look at the energy sector. Aliko Dangote [Nigerian businessman] and others just raised $3 billion for a refinery in Nigeria.

Ethiopia is collaborating with donors to construct a huge energy infrastructure. Is that an example for others?

Yes. The late President Meles Zenawi took a decision to build the Renaissance Dam. Let me tell you why I like the Ethiopian drive for the dam. They are raising money through internal taxes. They are looking to China and others to come as partners. They are saying 'we are going to sell half of the energy to Kenya and other neighbours, like Sudan.' You need larger markets for such big projects, and you need the transmission lines that run across countries.

President Barack Obama's energy initiative is expected to plug into the African Development Bank's sustainable energy fund, which is now a multi-donor fund. How far can this go?

Very far. It's a $16 billion project. What's interesting is that it's the model for my initiative—how you use public money to leverage private capital. If you see President Obama's formula, it's $7 billion from government and $9 billion from the private sector. The good news is: some African players are ready to invest. The European Union has also given $400 million.

But Africa needs about $300 billion for its energy sector.

We need a whole lot.

So the figures we are talking about are comparatively small?

Those big investments you see are not charity. That is where the governments come in, to create those stable markets—bigger markets of economics of scale, where an investor says: 'Fine, I can borrow a billion [dollars] for 200 megawatts. I come in, I build the dam. The transmission lines are there, the public policy is in place, the power purchase agreement is there, I know the pricing, and I know that in 20 years I can get the money back and I can repay the banks.' The amount of aid money that is going to the energy sector is about $9 billion. To achieve universal access to energy for the 1.4 billion people in the world who currently have no access, we need $50 billion a year. To go from $9 billion a year to $50 billion a year is a lot of work.

> **"Part of our slogan is: we can do for the energy sector what we did for the mobile phones.**

It looks like the challenges are huge?

The secretary-general [Ban Ki-moon] says that energy is central to any development process. Between 60% and 70% of the greenhouse gases come from energy production and use. If you don't deal with energy, you can't deal with climate change, you can't solve sustainable development.

It looks to me that Africa can actually lead in energy alternatives.

I believe so. We have the advantage to leap-frog. I always give the example of mobile phones. I was in Nigeria when they privatized mobile communications. Before then, there were about 400,000 or less telephone connections. Within one or two years, the people had millions of mobile phones. Part of our slogan is: we can do for the energy sector what we did for the mobile phones. What did we do for the mobile communications? They had clear public policies that all the investors knew would last 20 to 30 years; they had clear investment protection legislations in place; they unbundled the sector —privatised it. Our people can deploy solar, wind, renewable energy, hydro and biomass.

Should the focus be on sustainable green energy?

Our drive is towards low carbon energy sources. But, right now, it's all energy sources. Why should we burn gas? Why shouldn't we use it for power generation? Gas is less polluting than coal—50% less. There is no reason why Nigeria cannot be a gas powerhouse. Norway, the second largest gas supplier in Europe, sixth largest oil producer in the world, wants to go 100% renewables for electricity in a few years. They are already at 80%. Brazil is on its way to being an energy independent country. They have proven ethanol technology. They have just discovered huge deposits of oil off their coast. Still they are pushing renewables heavily.

How soon do you think Africa can get to its energy dreamland?

Nothing is impossible. I see this possible within two decades. Suddenly, Africa is growing faster than ever before. Suddenly, many of us are discovering more minerals than we ever thought we had. It's about governance; it's about vision and management. I am optimistic. I see some momentum now. I see African businesses and banks mobilizing their own cash. This is a positive sign that we have not seen in the last two decades.

INFRASTRUCTURE

Copper mining in Kitwe, Zambia. *Panos/ Sven Torfinn*

No longer a curse?

African leaders take action that could transform the mining sector

By **Kingsley Ighobor**

The Hollywood blockbuster movie, *Blood Diamond*, tells a gripping story of how diamonds fuelled Sierra Leone's 11-year civil war, which erupted in 1991. It depicts kidnappings, use of child soldiers, amputations, rape, killings and destruction of bridges and hospitals, among other atrocities.

The movie, starring American actors Leonardo DiCaprio, Jennifer Connelly and Djimon Hounsou, brought world attention to the campaign against "blood diamonds," described as diamonds used to finance conflicts. Sadly, West and Central Africa have been fertile grounds for blood diamonds, notes the World Diamond Council, a body that represents the diamond traders.

One often hears that mineral resources are a curse rather than a blessing. That may be an exaggeration, but for the people of the Central African Republic, currently caught up in a war fuelled by diamond mercenaries (see page 11), the statement rings true. Conflicts in the Democratic Republic of the Congo (DRC), Sudan and South Sudan have also been linked to the fight over control of mineral resources.

East Africa bureau chief of the *New York Times* Jeffrey Gettleman highlights the curse/blessing dichotomy. The DRC, he points out, has an "embarrassment of diamonds, gold, cobalt, copper, tin ... trillions' worth of natural resources" including deposits of tantalum, an element used in computer microchips. "But because of never-ending war, it is one of the poorest and most traumatized nations in the world."

Other mineral-rich countries like Zambia, Mozambique, Mauritania and Guinea, while not at war, present an unnerving paradox of poverty amid plenty. Guinea has "some of the planet's most coveted mineral stocks," writes the *Financial Times*, including 40 billion tonnes of bauxite, the world's largest reserve, over 20 billion tonnes of iron ore, diamonds, gold and undetermined quantities of uranium. But 55% of Guinea's 11 million people live on less than $1.25 per day, states the African Development Bank (AfDB), while it ranks 178 out of 187 countries on the 2013 UNDP Human Development Index, which measures a country's living standards.

A mining vision

Guinea's mineral wealth and its socioeconomic situation mirror that of the continent. UN Economic Commission for Africa (ECA) data show that the continent has 54% of the world's platinum, 78% of its diamonds, 40% of its chromium, 28% manganese, among others. "Nineteen out of 46 countries in sub-Saharan Africa have important reserves of hydrocarbons, oil, gas, coal or minerals and 13 countries are in the process of exploring additional reserves," notes UNDP. Yet the World Bank says Africa is the world's poorest continent.

Carlos Lopes, ECA executive secretary, insists in a blog post that "Africa's natural resource is a blessing and not a curse," but wonders why "the continent continues to struggle with limited economic transformation, low or no resource rent and scarce employment." It should be a blessing, says AfDB—a rather polite way of saying the blessing has been slow in coming.

In 2009, African Union (AU) leaders adopted the African Mining Vision (AMV), a framework for developing mineral resources. The AMV makes a number of recommendations, including better negotiations of mining deals, more attention to the environment, value addition to natural resources and capacity training for Africans. Its goal is to ensure countries earn more from mineral resources to stimulate socioeconomic growth. Mining earnings should be invested in roads, rails, ports, energy, water and telecoms and there should be more resource-processing local industries, a knowledge economy and an active service sector. The AMV envisages institutions strong enough to stem illicit financial flows.

Renegotiating mining deals

African leaders approved the AMV's action plan in 2011. Last December, the continent's ministers of mineral resources,

civil society and other experts gathered in Maputo, Mozambique, to launch the African Minerals Development Centre (AMDC) to help implement the AMV plans.

Participants at the Maputo conference spoke with unusual candour. Antonio Pedro, director of the ECA sub-regional office for Eastern Africa, told the ministers: "The continent is impatient, expectations are high and benefits are not equally felt." The buzzword was "reform," which is a word elastic enough to mean renegotiating, if need be, existing mining deals or increasing mining taxes. Fatima Denton, of ECA's Special Initiatives Division, underscored that contract negotiations must "reflect the true worth of our resources," inferring that this hasn't been the case. She is probably right because an expert committee that reviewed 61 mining deals in the DRC announced in 2009 that they were all bad deals. It recommended cancelling 22 of those deals and renegotiating 39.

Renegotiating deals can be problematic even if reasonable because companies want a generous return on their investments. Mr. Lopes argues that the "average net profits for the top 40 mining companies [in the world] grew by 156% in 2010," while earnings for governments "grew by 60%, most of which was accounted for by Australia and Canada."

Zambia's example

Zambia, the world's seventh largest copper producer, until recently had been making half-hearted attempts to amend mining deals. Facing pressure of legal threats from foreign investors for breaching agreements, former President Rupiah Banda decided against a review of existing contracts, to the disappointment of Zambians. In 2009, he removed a 25% windfall tax that had been introduced by his predecessor, Levy Mwanawasa, in 2008.

Current President Michael Sata appears to be taking a different approach. Since 2011, his government has been charging a 30% corporate tax on mining companies, up from 20%. This had the effect of doubling Zambia's mining receipts to $1.36 billion in 2011 compared with 2010, although strong demand for copper from China and an uptick in prices have also been responsible for the higher earnings.

In the case of Mali, by contrast, reforms have been slow and tentative. The government introduced a mining code after the 2012 elections that addressed mainly environmental issues. Guinea's 2011 mining code is even more robust than Mali's, mandating mining companies to sign a code of conduct against corrupt practices and to provide training for local employees. It also sets a 35% government ownership threshold for mining projects. "The code gives a correction to the old one for Guinea's interest," says Guinea's mines minister, Lamine Fofana.

Some experts advise against changing the terms of existing agreements midstream. Ghana's national chamber of mines is fiercely pressuring government to abandon the increase in corporate tax from 25% to 35% and a 10% windfall tax. However, the chamber is at loggerheads with the National Coalition on Mining, a civil society group, which supports the tax hikes. The *African Agenda*, a Ghanaian publication, writes: "The mining companies [in Ghana] are now the only stakeholders ... who maintain that the status quo be maintained to ensure they continue to reap super-normal profits." The publication urged President John Mahama to hold the line against lowering of taxes. "Be resolute... we will be with you every step of the way."

Like Zambia, Ghana's mining receipts rose sharply, from $210 million in 2010 to $500 million by 2011, according to the Extractive Industries Transparency Initiation (EITI), a coalition of governments and civil society working to improve transparency in the management of natural resources.

Helping hand from abroad

Due to special extenuating circumstances in individual countries, the Ghanaian and Zambian examples may not widely apply. Nevertheless, Africa is receiving help from Canada, Australia and Chile—countries that have achieved success in mineral resources management. Canada recently established the Canadian International Institute for Extractive Industries and Development at the University of British Columbia to assist developing countries "to meet their respective needs for governing and managing the extractive industry sector." It plans to offer fellowships and scholarships for government personnel, academics and graduate students.

The Australian government also supports companies operating in Africa and provides capacity building and social infrastructure aid in Africa. China is assisting with rail, hospitals, road and ports in mineral-rich countries such as Angola, Zambia, Sierra Leone and Mali.

The AMV wants "transparency in the collection and use of mining revenues." Although commodity prices have dipped lately following a slowdown in the Chinese economy, according to the *Financial Times*, this could be cushioned by steady demand from India and Brazil. In addition, the European Union is ready for what it terms "raw materials diplomacy" to secure future supplies through an arrangement with the AU. The US National Research Council, a think tank, has advised its government to "understand the non-fuel minerals that are important to the nation's economy and functions."

Last year, Norway agreed to provide the AfDB $4.9 million to assist the bank's Legal Support Facility negotiate better oil, gas and mining deals on behalf of African governments. Heikki Eidsvoll, Norway's minister of international development, says his country wants to "help turn Africa's 'resource curse' into a 'resource blessing.'" And the World Bank, the IMF, the EITI and African civil society are on board the AMV bandwagon.

With 22 African countries (out of 32 worldwide) adopting EITI standards, which require all information on mining to be made available to the public, analysts believe there is more transparency in the sector than before. In Gabon, armed with necessary information, civil society organizations now vigorously debate revenue management, which never used to happen. In Nigeria, there is an improvement in the "monitoring and management capacity of the relevant government agencies," says an EITI statement, adding that Cameroonian government officials and NGOs now understand taxation, accounting and audit.

Nkosazana Dlamini-Zuma, the AU Chairperson, says that Africa's future "will be determined by the manner in which we utilize our natural resources." Such messages should spur African leaders and the mining companies to turn Africa's mineral resources into a blessing.

There's no need for more oil wells in Nigeria

Nnimmo Bassey, an award-winning environmentalist, is one of Africa's leading campaigners, particularly for his work in Nigeria's oil-rich Niger Delta region. Mr. Bassey was a human rights advocate in the 1980s. He was imprisoned many times by late president Sani Abacha's government in the 1990s. He is co-founder and chair of Friends of the Earth International and Environmental Rights Action. In 2009, Time magazine named him one of the Heroes of the Environment. In this interview with Yemisi Akinbobola for Africa Renewal, Mr. Bassey discusses the continuing protests by the Niger Delta people against oil pollution and makes the case for compensation.

Can you provide some historical context to the struggle in the Niger Delta region?

It's really a long history. The first commercial export of oil was in 1958, but before then there had been some very serious encounters with forces whose major interest was to exploit and subjugate the people in the Niger Delta.

You know about the case of the revolution led by Isaac Adaka Boro in the 1960s and a more recent historical landmark was the resistance by the Ogoni people under the leadership of the late Ken Saro Wiwa [Mr. Wiwa was executed by the Sani Abacha's government], which led to the expulsion of Shell Oil from Ogoniland in 1993. In the early 1990s, there was the rise of massive peaceful resistance against the polluting activities of oil corporations abetted by their collaborators in the Nigerian government.

Around 2006, there was a major shift in the power relations in the region. We saw a rise in violence. Two years later, Chevron [a US oil company] promoted the idea of entering into agreement with communities on corporate social responsibility.

What are the kinds of environmental issues that exist as a result of the oil disasters?

The oil sector is by nature a polluting sector. The corporations don't have a complete sense of responsibility. We have spills happening virtually every day, and a lot of it goes into the land and waters and the atmosphere. So the footprints of the corporations are all over the oil fields. To catch a bit of it would be to look at the report of UNEP on Ogoniland. Apart from the oil spill, there is also gas flaring, which is the burning of gas associated with oil extraction. And apart from the economic loss of over $2 billion every year, the smoke that flaring emits can actually cause bronchitis, and equally the nitrogen oxide [also from flaring] can send acid rain down on people, crops and buildings.

Who should be blamed—the government or the oil companies?

It is the Nigerian state primarily, because the Nigerian state allows the corporations to destroy the land. But the physical pollution and degradation are the responsibilities of oil corporations.

How have the government and oil companies responded to the activism in the Niger Delta?

If you check, historically, you will find that the government's response to the people's desire to have dialogue and control over their resources has always been more and more repression. Right now we are still seeing a very sluggish movement towards justice in the region, one of which is the proposed Petroleum Industry Bill that will provide better working conditions. The signal that things may change for good is a proposal by Senator Bukola Saraki that will make laws on oil spills more stringent.

Nnimmo Bassey. *Simon Strumse/Sosialistisk Ungdom*

Where does the Petroleum Bill now stand?

The Petroleum Bill has not been passed—we believe that we need such a deal, and we think that a fund for the community is also necessary.

Are Nigerians joining up to fight the environmental disasters?

People are pretty much aware that they have to oppose impunity in their territory. They've done this over the years. The other thing is that people are living in very desperate situations that actually affect their capacity to offer more resistance to these things [impunity]. So, people are hopeful things will change, that they will suddenly have a more focused attention from government. Playing with the emotions of people by creating the Ministry of Niger Delta Affairs, which is not by any means better than the Nigerian National Petroleum Corporation, is just creating a new bureaucracy that reduces further progress in the region.

In 2009 you submitted a proposal on how to build a post-petroleum Nigeria. How did that go?

We submitted that proposal through the Nigerian Extractive Industry Transparency Initiative. So far we have not received any official response. From the statements we are hearing from government officials, I think it's becoming increasingly clear that they are beginning to agree that we have to move into a post-petroleum phase in Nigeria.

Our proposal says that Nigeria should stop expanding oil exploration and extraction. If the rationale for expanding oil fields is to generate more revenue, Nigeria can actually double its revenue base from oil right now without even drilling one more oil well. We maintain that as much oil as is officially sold is being stolen on a daily basis. So what the government needs to do is to stop oil theft. Oil theft is not being done by local people with drums and small boats and canoes. It's an international mafia with top Nigerians involved.

In May [2013], the minister of finance, speaking with the *Financial Times* of London, estimated that up to 400,000 barrels of crude oil are stolen every day. The country is being robbed by many forces, and when the leaders say we still have 41 years of oil, it's pure fiction because if you don't know how much oil is being taken, you cannot then know how much oil is left. Nigeria could do better if we turn our back on oil.

How did the decision to take Shell to court in The Netherlands come about?

We've had cases against oil corporations like Shell in Nigeria. For example, in 2005 there was a case against them on the gas flaring issue, and there was judgement in the high court in Benin City that gas flaring violates the human rights of the people and the constitution of Nigeria. But Shell has neither appealed that decision nor have they obeyed the ruling of the court. We thought it was necessary to take the case to their own home so that their shareholders would know where they are getting their money from.

What's different this time?

The Nigerian government announced a fine of $5 billion against Shell for the Bonga oil spill that occurred in September 2011. It also announced a $3 billion fine against Chevron for the oil spill disaster that happened in January 2012. Both corporations just laughed it off. So they clearly don't have respect for Nigeria. We think that they will be more responsive if judgement is pronounced over them in their own countries. It's a question of double standards. If they get away with 'murder' in our own country, they need to be held accountable where they will pay attention.

> **"So people are hopeful things will change, that they will have a more focused attention from the government.**

What about militancy in the region?

Militancy has actually subsided in the region.

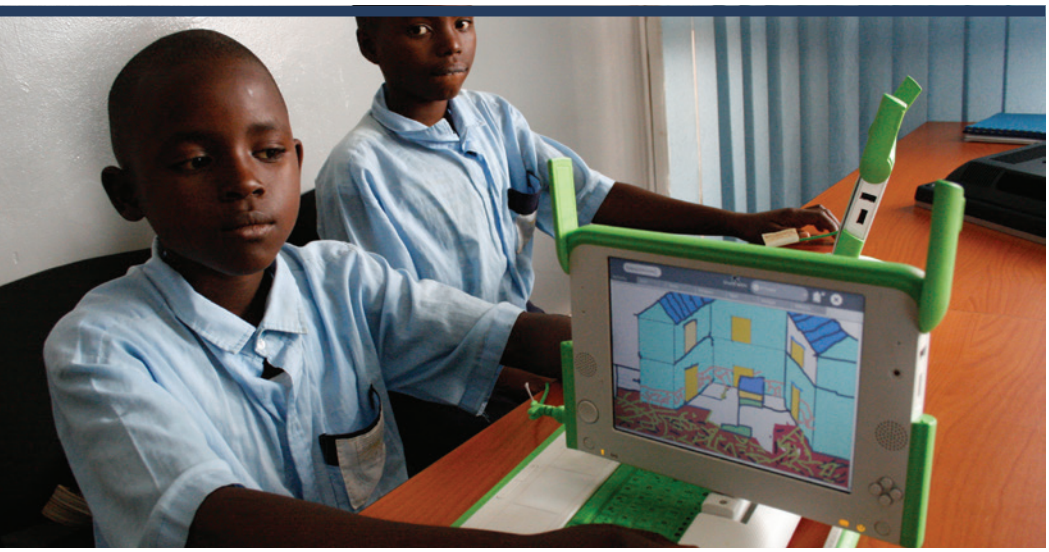
What can other oil-producing African countries learn from the Niger Delta?

In my work as coordinator of Oil Watch International, we try to warn countries just going into this [oil] sector that in Nigeria, 54 years ago, there were a lot of hopes [for prosperity] in communities, and today you have a story of shattered dreams and hopes. So they [countries] should not expect much difference from that. Already we've seen in Ghana, before the first official oil shipment, that there were already three oil spills offshore.

Big dreams for Rwanda's ICT sector

Success story is grabbing global attention

By **Nirit Ben-Ari**



Rwandan children learn computers in class. *One Laptop per Child (OLPC)*

"The internet is a needed public utility as much as water and electricity," declared President Paul Kagame at the Transform Africa summit held in Kigali, Rwanda's capital city, last October to discuss the future of broadband in Africa.

The choice of Kigali as host did not surprise information and communication technology (ICT) experts; Mr. Kagame's government takes ICT so seriously that it aims to create an ICT infrastructure comparable to any in the developed world. The choice was also not surprising since Rwanda hosted the Connect Africa summit in 2007 that championed broadband connectivity for the continent.

Rwanda began to relentlessly develop its ICT in 2000 after it adopted the National Information Communications Infrastructure (NICI) policy and created a long-term plan to achieve full digitization in four five-year stages. The NICI plan was further integrated into Vision 2020, which is the government's comprehensive programme to transform Rwanda into a middle-income country by 2020. In fact, one of the main goals of Vision 2020 is "to transition her agrarian economy to an information-rich, knowledge-based one by 2020."

Digitization and Vision 2020

The NICI's first stage (2000-2005) prepared the groundwork for ICT sector, including establishing institutional, legal and regulatory frameworks, as well as opening up the telecom market by reducing barriers for entry. Currently, there are 10 internet service providers, including MTN, TIGO, Altech Stream, Rwandatel, among others. In 2002 there were just two internet providers with 25,000 users. Today, there are approximately 1.2 million internet users in country of 12 million people, according to a June 2013 report by Rwanda Utilities Regulatory Agency.

The government also enacted laws to govern electronic messages, signatures, transactions, data protection, cyber-security and ICT usage. It established the Rwanda Utilities and Regulatory Agency in 2002, which adopted the International Telecommunications Union (ITU) ICT industry standards.

During the second stage (2005-2010) of the NICI plan, Rwanda concentrated on enhancing ICT infrastructure by establishing a national data centre that centralizes information storage, management and protection, as well as uses cloud computing opportunities. In addition, a national fibre-optic backbone network that connects Rwanda to international sea cables was deployed, increasing internet accessibility and affordability as well as connecting Rwandans to global networks.

The results of these efforts are telling. During this stage, for example, Rwanda registered one of the highest internet user growth rates in Africa, 8,900%, compared with the continent's growth rate of 2,450%, and the world's average rate of 444%. In 2010, almost every one in four public sector entities (ministries, agencies, provinces and districts) and about a third in the private sector had a web presence, according to the Rwanda Development Board, a government agency. In addition, communication, navigation surveillance and air traffic management system has been deployed to support air travel in the region.

Also, the ICT subscriber base has significantly increased. The number of fixed-line customers more than doubled between 2000 and 2010, mobile phone customers increased from 42,000 in 2000 to more than 3.5 million, and internet users increased from 1,200 to 493,900 during the same period.

The third stage, from 2011 to 2015, is focused on improving service delivery. One of the elements of this stage is the One Laptop per Child programme—an ambitious plan launched in 2008 to distribute laptops and electronic tablets in primary schools. By late 2012, about 115,000 laptops had been distributed to primary school children across the country.

In the final stage (2016-2020), the government hopes to focus on skills, private sector and community development, as well as improving and enhancing e-government and cyber-security.

Despite Rwanda's ICT success story, Mr. Jean Philbert Nsengimana, the minister of youth and ICT, says that several key issues are not yet resolved, including: "the role of the private sector, regulation to keep broadband affordable, and distributing the know-how via training." But the minister is upbeat. "In just 15 years, what was once considered as an object of luxury and privilege for rich

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The Genocide Memorial Centre in Kigali, Rwanda. Renato Granieri / Alamy

Rwanda remembers

How private groups and government try to heal the wounds of genocide

By **Noam Shuster-Eliasi**

In Rwanda, every corner hides a memory; in the land of a thousand hills, the memories tell of incredible forgiveness, of stories that unite and heal and encourage all Rwandans to hope.

There's plenty of hope and forgiveness in the clinic of Women's Equity in Access to Care and Treatment (WE-ACTx for Hope) founded in 2013 by a group of Rwandan health care providers to assist children and youth living with HIV. Supported by the government and local philanthropists, WE-ACTx for Hope founders were inspired by an international community-based HIV/AIDS initiative (also called WE-ACTx) founded in 2003 by a group of frontline AIDS physicians, activists and researchers following appeals for AIDS medications and treatment by genocide survivors.

Two clinics in Kigali run by the local WE-ACTx's offer free medical and psychosocial services to more than 2,250 HIV-positive patients. Besides treatment, health education and research, the clinics organize a summer camp for 600 youths and children where they learn music, theater, and how to live healthy with HIV. The camp also serves as an avenue for "peer parents" [older youths] to advise the younger ones to avoid conflict.

Janet (not her real name), a 17-year old peer parent at the clinic, was distraught when she discovered that she was HIV-positive. But today, she goes to the clinic once a week to teach music to a

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Rising from the ashes

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policies, particularly his alleged involvement in the conflict in neighbouring Democratic Republic of the Congo, which he has strongly denied, have prompted closer scrutiny of his treatment of Rwandans who oppose him at home and abroad. The *New York Times* has argued that "if there's any hope of Rwanda winning truly lasting stability, it must change course and stop fuelling conflicts across its borders." Carina Tertsakin, a researcher for the US-based Human Rights Watch, considers Mr. Kagame an enigmatic leader, and accuses Western governments of ignoring Rwanda's human rights violations and abuses against his opponents.

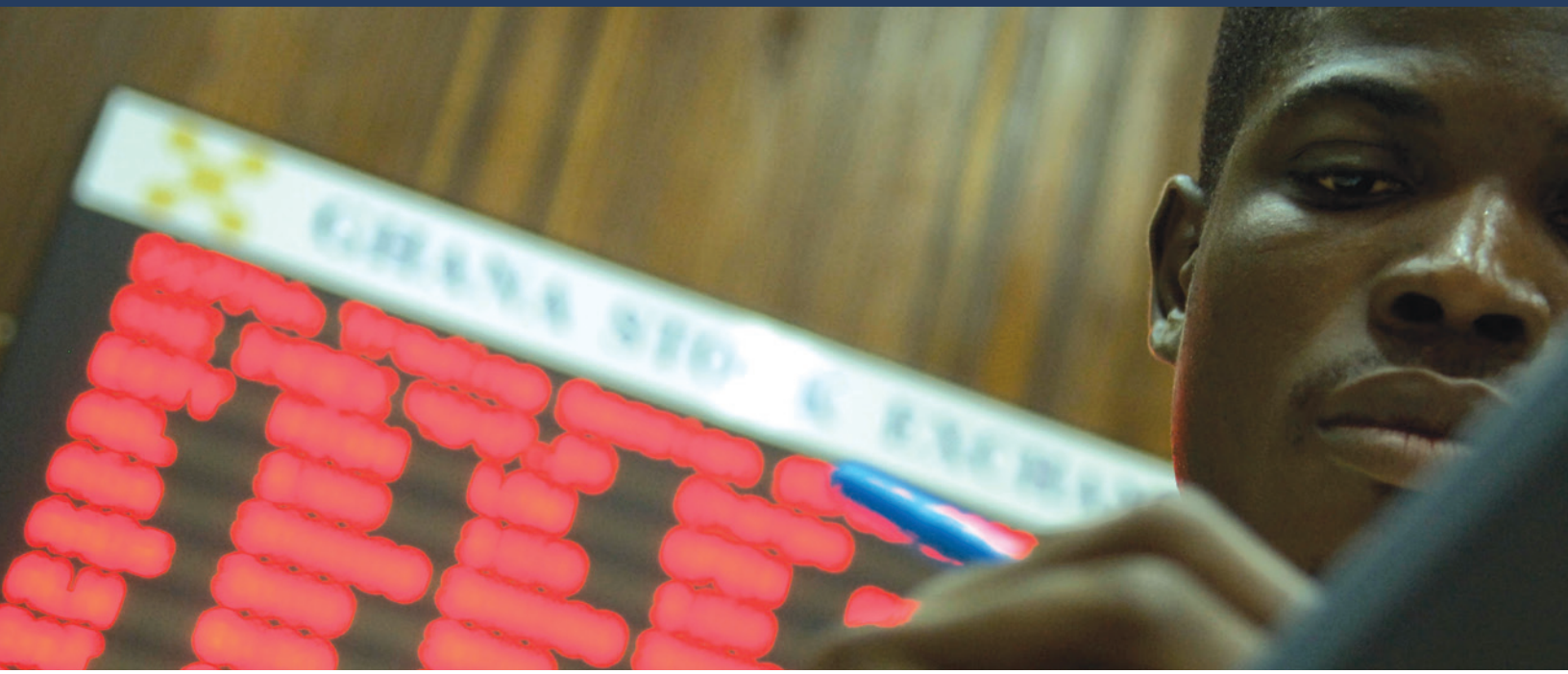
President Kagame's democratic credentials took a hit after he won the 2010 presidential election in which three opposition parties were removed from the ballot. The president was re-elected with 93% of the vote. His current term expires in 2017, but his opponents say he may seek a constitutional amendment to allow him to contest for a third term. Boniface Twagirimana, vice president of the opposition United Democratic Forces, has said he does not believe Mr. Kagame will relinquish power in 2017.

There is no doubt that the president continues to retain a good measure of domestic support. "The president is running the country like a CEO of a company who ensures that every director is accountable for their department... The West tries to use its standards in the developing world and it isn't fair," says Gerald Mpyisi, managing director of Inspire Management Institute, a leadership learning institution in Rwanda. Mr. Kagame's accomplishments complicate the opposition's efforts to drive down his popularity ratings.

But Rwanda faces other headwinds. The country depends on foreign funds for up to 40% of its budget. The AfDB warns that suspension of funds could undercut its economy. Already, calls are getting louder for Britain and the US – the two leading donors – to use their leverage to insist on respect for human rights and democracy.

Reporters Without Borders says there is limited press freedom as media organizations are mostly government-controlled. And the Hutus and the Tutsis are not necessarily bedfellows 20 years after the genocide. Therefore, more needs to be done to foster ethnic harmony.

At the many ceremonies that will be organized to commemorate two decades since the genocide, there's likely to be a focus on the heinous crimes committed during the genocide. Questions will be asked why the world couldn't intervene. There will be discussions whether the International Criminal Tribunal for Rwanda established by the UN in 1994 to judge those responsible for the genocide has played its part effectively. But what must not be lost are the strides that Rwanda is making and how people's lives are getting better. These positive strides are what have truly impressed the world.



Traders work on the floor of the Ghana Stock Exchange. *Jonathan Ernst/World Bank*

Hunting for Eurobonds

Views split on sub-Saharan Africa's debut in the international markets

By **Jocelyne Sambira**

Attracted by the prevailing low interest rates, cash-strapped African countries looking to borrow money on international private markets are increasingly turning to Eurobonds as the instrument of choice. In 2006, Seychelles became the first country in sub-Saharan Africa, other than South Africa, to issue bonds. A year later Ghana followed, raising $750 million in Eurobonds. Since then they have been joined by Gabon, Senegal, Côte d'Ivoire, the Democratic Republic of Congo, Nigeria, Namibia and Zambia.

In September 2012, Zambia made a splash on the international private market, launching a 10-year bond at $750 million. The issue was oversubscribed by $11 million and became a model for other African nations. Rwanda followed suit in 2013 with a $400 million Eurobond issued on the Irish Stock Exchange. Zambia is considering issuing a $1 billion Eurobond this year to finance its budget deficit. It also plans to spend over $600 million on developing power, road and rail infrastructure. Kenya is finalizing plans for its debut entry into the Eurobond market, seeking up to $1.5 billion to finance infrastructure projects.

Sub-Saharan Africa's second-largest economy, Nigeria, first entered the markets in 2011 with a 10-year Eurobond. "We look to come [to the market] regularly, every two years," Finance Minister Ngozi Okonjo-Iweala told the *Financial Times*. In 2012, African countries raised about $8.1 billion from issuing bonds, says Moody's, a global credit rating agency. In total, more than 20% of the 48 countries in sub-Saharan Africa have sold Eurobonds, according to the International Monetary Fund (IMF).

For certain governments in sub-Saharan Africa, Eurobonds are a means of diversifying sources of investment finance and moving away from traditional foreign aid. Not only do these bonds allow such governments to raise money for development projects when domestic resources are wanting, they also help reduce budgetary deficits in an environment in which donors are not willing to increase their overseas development assistance.

Corporate entities in sub-Saharan Africa, like Guaranty Trust Bank in Nigeria and Vodafone Ghana, have also successfully issued Eurobonds. Global investors have been eager to purchase these bonds for higher yields amid low returns in mature markets. It is a sign of the investors' endorsement of the region's buoyant economic prospects, observes Mthuli Ncube, chief economist and vice-president of the African Development Bank (AfDB). The developed world has been rocked by a series of economic and financial crises while Africa has displayed steady growth over recent years, averaging about 5% per annum. Analysts believe the incentive for investors is solely the prospect of higher gains.

Eurobonds have also given African countries an opportunity to integrate into global financial markets. Up until recently, according to the AfDB, access was limited for African countries apart from Morocco, South Africa and Tunisia, which entered the markets in the 1990s. In addition, bond issuances come with fewer strings attached than money from multilateral institutions. Governments also have more control over where they channel the money.

Other reasons behind the recent surge in borrowing by African countries, according to the IMF, are changes in the institutional environment, such as more flexibility for low-income countries with access to non-concessional borrowing, reduced debt burdens, large borrowing needs and historically low borrowing

costs. But there are serious challenges to Africa's future in international markets, analysts warn. Buyers of African bonds raise concerns about the countries' vulnerability to commodity prices, political instability, fiscal irresponsibility, lack of reliable statistics and transparency, and poor histories of debt management. Therefore, sovereign bonds issued by resource-rich African countries are deemed risky assets by some investors.

Recent speculation that the U.S. Federal Reserve bond-buying programme would end in 2014, along with rising U.S. treasury yields, sparked a sell-off in emerging markets, Angus Downie, the head of economic research at Ecobank, a pan-African bank, told *Business Daily* of Kenya. "Investors will want higher yields," he says. Since the beginning of 2014, the Federal Reserve has started cutting back on its bond-buying programme, leading to speculation that this might spark an increase in interest rates. Higher interest rates raise the cost of servicing the national debt. In a recent article, the *Wall Street Journal* showed Nigeria's Eurobond trading at a yield of 6.375%, up from 4% in late April, because of waning investor interest, adding that Rwanda is now trading north of 8%.

On the flip side, these bonds have not been the saving grace that African countries thought they would be. In an article entitled "First Borrow," Amadou Sy, deputy division chief of the IMF's Monetary and Capital Markets Department, points to some recent sovereign defaults in sub-Saharan Africa. The Seychelles defaulted on a $230 million Eurobond in 2008, after a sharp plunge in tourism revenues and years of excessive government spending. Côte d'Ivoire missed a $29 million interest payment after its 2011 election disputes forced it to default on a bond issued in 2010. Ghana and Gabon are struggling to find money for a $750 million and $1 billion bond, respectively, on 10-year Eurobonds that will reach maturity in 2017. But this has not deterred African countries from issuing bonds, although they are borrowing at high interest rates.

Joseph Stiglitz, a Nobel laureate in economics and Columbia University professor, questions in a blog for the *Guardian* this new trend for "private sector borrowing" by developing countries. The sovereign Eurobonds carry significantly higher borrowing costs than concessional debt, Stiglitz notes. He worries about "excessive borrowing" over the long term, which benefits only the banks because they "take their fees up front." African countries, Stiglitz believes, should have in place a "comprehensive debt-management structure"; they should also invest wisely and refrain from borrowing further in order to repay their debts.

Whether the "rash of borrowing by sub-Saharan African governments is sustainable over the medium-to-long term is open to question," echoes IMF's Sy. If the low-interest-rate environment changes, it could reduce investors' appetite for the bonds and "economic growth may not continue, making it harder for countries to service their loans," he adds.

Political instability is something else that could put a wrench in the whole process, lowering economic growth and increasing interest rates. It is no coincidence that countries such as Ghana, Kenya and Nigeria that have had political stability in recent years have been able to—or intend to—sell bonds of at least $1 billion. A change in the political situation in such a country, resulting in bad governance, could drive back potential bonds buyers, says Larry Seruma, chief investment officer of Nile Capital Management, which invests in Africa. And for Sy, developing well-functioning domestic bond markets to attract domestic and foreign savings over time is the way to go.

Rwanda Remembers

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younger group. We suddenly found out we are not alone, and that many kids face the same problems," she says. "We are here to teach them that they can be strong and live a healthy life."

Musicians Without Borders, a global network of musicians that are using their talents to heal and reconcile Rwandans, has joined the camp. The group's motto is: "One good thing about music, when it hits you, you feel no pain," borrowing the words of late Bob Marley, the legendary Jamaican reggae star. Musicians Without Borders organizes regular music workshops for hundreds of children throughout Kigali and surrounding towns and villages. They also provide leadership training for the youths.

Civil society and the government are making considerable efforts to promote healing among the people. In addition to designating April 7 the Genocide Memorial Day, and the week following it as an official week of mourning, the government has also built a Genocide Memorial Centre in Kigali that has so far welcomed over 100,000 visitors.

In the centre, many documents show the testimonies of perpetrators and survivors. On display is an image of a killer and his testimony. The man's face is sad, apparently for his crimes. His testimony says that the Hutu government told him and the rest of his Hutu neighbors that Tutsi soldiers were on their way to kill them, so they had to kill all the Tutsis. He explains that Hutu authorities at the time led ordinary people to kill.

School children and teachers, both Tutsi and Hutu, visit this centre at least twice a year to learn the lesson: "Never Again," which is the term the government is using to raise awareness of the horrors of genocide. And to remind everyone that the Rwanda of 1994 is not the Rwanda of 2014. Surely, today's Rwanda is healing and moving forward.

As it plans its own future

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productive boon unless the problem of high unemployment is solved. "The main challenge will be job creation for youth," said Dr. Mayaki. "If we do not succeed, this will destabilize countries."

In fact, youth discontent is most likely a sub-text in new conflicts spreading across the Sahel and is hobbling the strides toward peace and stability that Africa has taken in the 21st century. The northern rim of the continent, once counted on as a bastion of stability, has been shaken by fallout from the Arab Spring—Mayaki cited the role of disenchanted, disenfranchised youth as well as governance issues in Tunisia. At the continent's southern tip, South Africa is experiencing more turmoil than it has seen in many years.

A young generation, heard at global discussions, declares that its stake in the future is not being recognized and this has become a crosscutting concern. Youth unemployment is felt acutely around the globe.

Protecting economies by protecting nature

The "common position" focus on economic transformation, inclusive economic growth, building productive capacity and installing badly needed infrastructure may obscure the main characteristic of sustainable development, which is the marriage of environmental, economic and social concerns.

The concept of sustainable development has been around since the 1970s, but the marriage in practice has been more like a divorce, especially between economy and environment, observed Betty Maina, Chief Executive of Kenya's Association of Manufacturers and a member of the Secretary-General's High-level Panel on the Post-2015 Agenda.

That environmental conservation seems to run parallel to, rather than in concert with, economic development was suggested by former Indian prime minister Indira Gandhi as early as the first UN conference on the environment and development. People living in desperate poverty, she noted, are not going to worry exceedingly about long-term environmental prospects, or provide a political base for environmental action.

Agriculture and food security – the theme of this year's AU summit – are among the areas that may be able to pull together the sustainable development universe of economic progress, social justice and environmental protection.

As can be seen, the overwhelming majority of the poor in Africa and around the world depend for their livelihoods on the natural world, whether through farming, forestry, fishing or pastoralism. But this access to natural capital is not being adequately transformed into financial capital, points out Elliott Harris, director of the UN Environmental Programme in New York. The population often lacks property rights, and there is an absence of financial intermediation through banks, credit unions or cooperatives. Geographically isolated and working on smallholder plots or vaguely defined common lands, the poor cannot capitalize on the soil and the water without technologically advanced agricultural inputs, food storage facilities and transport infrastructure, while their families' futures are under threat from climate change and degradation of land and water resources.

Amina J. Mohammed, the UN Secretary-General's Special Adviser on Post-2015 Development Planning.

UN Photo/Devra Berkowitz

Financial resources

As the UN moves toward the post-2015 crossroads, the key topic of implementation is being treated gingerly. Disputes over financial assistance from the North have stalemated numerous UN discussions in recent past. Africa and the UN are insisting that a post-2015 agenda should not be an occasion to walk away from commitments made in the context of the MDGs. But there is also an argument that aid is not the only relevant financial resource, with the implication that it should not become a deal-breaker.

"Without ODA [official development assistance], there will be no development agenda," said Ms. Mohammed, adding: "it's an important part of the mix – but probably a small part. We know that the necessary financial resources are in existence. If there is agreement on the need for planetary solutions, the next step is to find a framework to unlock those resources. We need to build the capacities of tax systems and create suitable environments to access private equity. We need to make better use of aid at the levels that we already have."

Dr. Mayaki, while encouraging donors to abide by the UN target of devoting 0.7% of income to ODA, notes that revenue from domestic resources in Africa has multiplied by a factor of four over the past 20 years. He also cites an Organization for Economic Cooperation and Development (OECD) study finding that out of a billion Africans, less than 60 million live in countries where aid is more important than domestic resources.

Dr. Mayaki aims for intelligent use of private-public partnerships, involving both domestic and international business. In addition, he says that the African drive for industrialization favours a shift of South-South cooperation from political to economic issues. It's not just a matter of resource-for-infrastructure exchanges with China, he says, but it's Brazil looking to Angola and Mozambique for private-public partnerships, Indian entrepreneurs coming to East Africa or South African mining companies doing business in Guinea and Mauritania.

Civil society leaders are worried about the increased privatization of development, while business leaders in Africa, notes the UN Global Compact, have a mixed view on the relative importance of aid versus economic growth to development.

With few exceptions, aid remains at the top of the list of issues that could ignite and combust in the face of negotiators, the issues being market access, pollution controls that may appear to constrain production or consumption, the rights of women and minorities, and the simple fact that the elevation of the priority topic of one interest group can be perceived as a downgrade of another topic. The value added of a sustainable development agenda – its ability to interconnect virtually all issues – poses an implementation challenge. For now, it places explosives along the road to a global agreement.

"There will be many tense moments," predicts Ms. Mohammed.

Tanzania: rural areas to have better telecom services

By **André-Michel Essoungou**

For some 300,000 people leaving in 202 villages in Tanzania, change is coming. The leading fixed network operator in the country, the Tanzania Telecommunications Company (TTCL), recently announced that it will invest over $6 million to upgrade telecom equipment in those villages.

"Our aim is to make sure that every constituency and village that was lacking telecommunication for a long time has that access," Mr. Kamugisha Kazaura, the chief executive officer of TTCL, told reporters recently in Dar es Salaam, as he announced the ambitious plan. He added that, "most of the areas where the project is expected to be carried out are underdeveloped," noting that this was mainly due to the lack of telecommunication links.

According to Mr. Kazaura, the project is expected to commence as soon as possible, and it will cover 16 regions in Tanzania, including Arusha, Tabora, Iringa, Kagera, Manyara, Dodoma, Lindi, Mbeya, Morogoro and Mtwara. Other regions that have been earmarked for future development include Mwanza, Pwani, Ruvuma, Shinyanga, Singida and Tanga.

The project follows an agreement signed between TTCL and Universal Communication Services Access Fund, an institution created in 2006 by the government of Tanzania to, among other objectives, ensure the availability of communication services in rural and urban underserved areas.

Solar panels and telephones. *Trevor Samson/World Bank*

It also comes on the heels of a number of initiatives aimed at improving access to telecommunications service in Tanzania. In recent years, the country's authorities have launched a series of initiatives designed to increase access and the use of information and communications technologies in schools, in research institutions and in various sectors such as healthcare. This latest initiative targeting rural areas is also in line with a government commitment to ensure that the entire country is wired.

Big dreams for Rwanda's ICT

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people has become a basic necessity for Rwandan urban and rural daily lives."

Extending broadband networks

The government reports that since 2011, the national fibre-optic backbone network, which connects to an undersea network, already has links to all 30 districts of the country and nine border posts. The government also negotiated with three fibre-optic submarine cable companies SEACOM, TEAMS and the Eastern Africa Submarine Cable System (EASSy) to finance the extension of fibre-optic cables to every part of the country and to increase fibre bandwidth capacity to benefit schools, health centres and other institutions. The physical laying of the cables was completed last year.

Another project signed last year with South Korea's largest telecom company, Korea Telecom, "will help Rwanda to [deploy] a high-speed (4G) broadband network across the country within three years. Under the deal, Korea Telecom (now called KT Corp) will invest $140 million in infrastructure and expertise, while Rwanda will provide fibre-optic network assets, spectrum, and a wholesale licence," reports the *New Times* newspaper of Rwanda.

e-Health

Rwanda is also implementing ICT initiatives in the health sector, thanks to the open Medical Record System (OpenMRS), an initiative by the Regenstrief Institute, an Indianapolis, Indiana-based research organization and Partners in Health (PIH), a health advocacy and provider with headquarters in Boston, Massachusetts, both in the US. Since it was set up in 2006, OpenMRS has been facilitating nationwide tracking of patients' data, providing support for nutrition and child health, database synchronization tools, pharmacies, among others. OpenMRS is also used by community health workers to collect data for mBuzima, an electronic system that connects urban and rural hospitals, thereby enabling people to receive specialised treatment services remotely.

Another e-health programme in Rwanda is the Treatment and Research AIDS Centre (TRAC), which was established in 2005. TRAC is a digital system that collects, stores, retrieves, displays

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Big dreams for Rwanda's ICT

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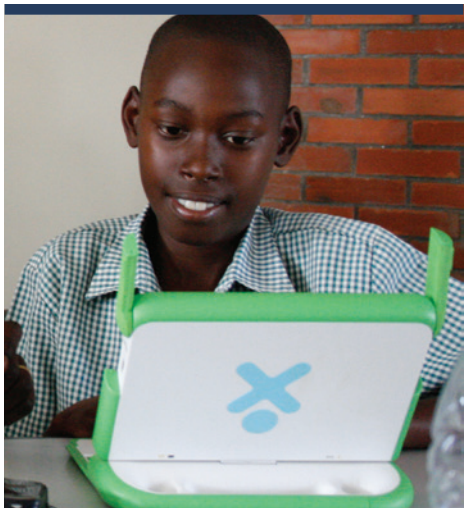
and disseminates critical information about drug distribution and HIV/AIDS patient information. The system enables anti-retroviral treatment programme practitioners to submit reports electronically and have access to information.

By improving interventions, monitoring and reporting, these e-health solutions have increased citizens' access to healthcare. Rwanda is now one of the few countries in Africa that efficiently use ICT in the health sector, and stands a chance of reaching the Millennium Development Goal of improved maternal health by 2015, according to the Rwanda Development Board, a government agency.

ICT improving transparency

Digitization is not just about access and connectivity, it is also about government digitizing its services to create an environment that is less prone to corruption. According to the World Bank, e-government enhances transparency. Rwandan national ID cards and driver's licenses, for example, are now digitized. Individuals can even apply for a visa online.

The Anti-Corruption Unit of the Rwanda Revenue Authority (RRA) monitors taxes and import duty, and ensures public officials are not unduly involved in tender and procurement processes. To archive its goal, the RRA created an efficient online tax calculator to assist small and medium businesses to register their companies and compute their taxes rather than going physically to the RRA office.



A Rwandan schoolboy with a laptop.

One Laptop per Child (OLPC)

Rwanda's goal to create a world-class ICT infrastructure is already attracting considerable attention. A World Bank 2014 report ranks Rwanda second only to Mauritius in Africa in its Doing Business Report. Additionally, the World Economic Forum in 2013 ranked Rwanda 66th out of 148 countries and third in sub-Saharan African region in the Global Competitive Index, which is an assessment of economies based on productivity. Many believe that these achievements are due largely to reforms in its online business registration process.

Rwanda's ICT development has had a huge impact on socioeconomic development. But it also represents a hope shared by many Africans that it is possible to leapfrog into the digital age.

Central African Republic

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1,600 French forces as part of an operation called Sangaris, were deployed over the following weeks. They quickly helped prevent mass killings, but security remained elusive, partly in Bangui but more so in the countryside.

Since the conflict erupted, a million people have fled their homes to live in camps, including some 100,000 camped at the capital's airport. Thousands have sought refuge across the borders. Humanitarian agencies reported that half of the Central African nation was in need of assistance. Thousands of foreigners from neighbouring Cameroon, Chad and the Republic of Congo have been evacuated, including thousands of CAR's Muslims.

Power to a woman

It is against such a dramatic backdrop that countries of the Central African region, at a meeting on 10 January in N'djamena, Chad, forced President Djotodia to resign over his failure to run an effective government and rein in his unruly fighters. He was immediately flown into exile in Benin, West Africa.

Days later, the mayor of Bangui, Catherine Samba-Panza, was elected head of the transitional government by members of the transitional parliament. She is the fourth woman in Africa to hold the highest office. The new President appointed a technocratic government, promised to restore state authority and pledged to lead the transition until elections in early 2015.

After the new President assumed office, there was a lull in fighting; only to start again, prompting many observers in Bangui to ask whether Catherine Samba-Panza's election changed anything on the ground. Under pressure from bolstered anti-Balaka groups and with the political tide against Seleka fighters, the latter retreated to the north and to neighbouring Chad.

But insecurity persisted as the anti-Balaka morphed into vigilante groups around the country. Joined by opportunistic criminals and some youths, they started their own reign of terror, targeting anyone appearing to be a Muslim.

By the end of January, the head of the African Union peacekeeping force, Gen. Martin Tumenta Chomu, announced a crackdown against the lawless anti-Balaka groups. This was followed by a similar warning by Gen. Francisco Soriano, the commander of Sangaris, the French operation. A series of clashes ensued. By early March, after twelve months of political instability and insecurity, there were still daily violent incidents in Bangui and around the country.

Beyond the daily tragedy, there are many questions from the events of the past months: Will the departed Seleka fighters who have left major towns with their weapons, defeated but not disarmed, return? How and when will the thousands of Muslims who left their homes and their country return? How will communities that have been torn apart rebuild their lives? How will justice be carried out for the grave crimes committed in plain sight?

For now, in Bangui, answers to these lingering questions seem to be for the future or at least until the sight of soldiers posted in the city's main streets, is no longer a banal occurrence, and the sounds of gunshots, heard so often at daybreak here, have receded or disappeared.

AFRICA BOOKS

Africa's ICT Infrastructure: Building on the Mobile Revolution (Directions in Development) by Mark D.J. Williams, Rebecca Mayer and Michael Minges (World Bank Publications, Washington, D.C., USA, 2011; 296 pp; pb $30)

Africa's Infrastructure: A Time for Transformation (Africa Development Forum) by World Bank (World Bank Publications, Washington, D.C., 2009; 382 pp; pb $39.95)

Africa's Transport Infrastructure: Mainstreaming Maintenance and Management (Directions in Development) by Ken Gwilliam (World Bank Publications, Washington, D.C., 2011; 574 pp; pb $35)

Africa's Water and Sanitation Infrastructure: Access, Affordability, and Alternatives (Directions in Development) by Sudeshna Ghosh Banerjee and Elvira Morella (World Bank Publications, Washington, D.C., USA, 2011; 432 pp; pb $30)

Good Growth and Governance in Africa: Rethinking Development Strategies (Initiative for Policy Dialogue) by Akbar Noman, Kwesi Botchwey, Howard Stein and Joseph E. Stiglitz (Oxford University Press, USA, 2012; 576 pp; hb $99)

Governing Cotton: Globalization and Poverty in Africa by Adam Sneyd (Palgrave Macmillan, UK, 2011; 256 pp; hb $95)

The African Peer Review Mechanism (APRM) as Africa's Innovative Thinking on Governance: A Decade of Ghana's Experience by S.K.B. Asante (Digibooks Ghana Ltd, Ghana, 2014; pp.267, pb $25)

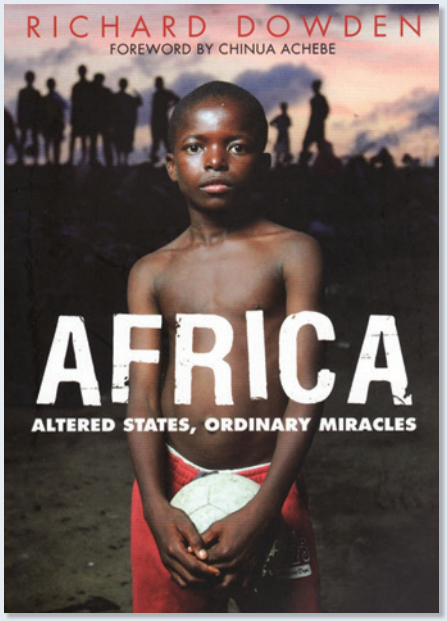
The Industrial Policy Revolution II: Africa in the Twenty-first Century (International Economic Association) by Joseph E. Stiglitz, Justin Lin Yifu, Ebrahim Patel and Joan Esteban (Palgrave Macmillan, UK, 2013; 634 pp; pb $35)

BOOK REVIEW

Africa: Altered States, Ordinary Miracles

by Richard Dowden

PublicAffairs, New York, NY, USA, 2010; 592 pp; pb $19.95



Africa is like a giant tapestry; lots of colourful threads make up a vast and complex continent. However, the Western world often overlooks its many sides. Instead, it sees Africa as one "country" that is plagued with disasters of every kind. To the Western audience, Africa is hopeless and constantly experiencing suffering.

Author Richard Dowden, who moved to Uganda in 1971 to work as a teacher and journalist, seeks to unravel common misconceptions about Africa. He relies on his extensive travel across the continent to do so in his book, *Africa: Altered States, Ordinary Miracles*. He is realistic in his quest – he acknowledges Africa's well-known struggle with poverty and corruption but also paints a different picture – a realistic picture of a land where, along with the struggles and losses, there are victories and triumphs. In short, he showcases an Africa in which there is hope.

The author explains his eagerness to project the "real" Africa: "The ordinary gets ignored in Africa as it does in Asia or South America. Normality is nice but it does not – as they say – sell newspapers … It is the same with most of Africa. Not all Africans are fighting or starving. Millions have never known hunger or war and lead ordinary peaceful lives." But this aspect is not newsworthy and instead the media like to maintain Africa's tarnished image.

To explore Africa's true essence with all its intricacies and nuances, Dowden introduces readers to his personal accounts: he presents vibrant anecdotes from Uganda, Kenya, Rwanda, Sierra Leone and Somalia, among others. Each story portrays Africa in its reality and highlights stories of struggle and tales of survival. For expatriates, natives and other foreigners, the 592-page book is something to relish. But the author warns: "Beware. Africa can be addictive."

— Pavithra Rao

APPOINTMENTS


UN Photo/Paulo Filgueiras

United Nations Secretary-General Ban Ki-moon appointed Ismail Ould Cheikh Ahmed of Mauritania as his deputy special representative and deputy head of the United Nations Support Mission in Libya (UNSMIL). Mr. Ould Cheikh Ahmed will also serve as resident coordinator and resident representative of UN Development Programme. He brings with him 27 years of experience in development and humanitarian issues and served recently as resident coordinator, humanitarian coordinator and UNDP resident representative in Syria and Yemen. He also served as director of change management with UNICEF. Mr. Ould Cheikh Ahmed replaces Georg Charpentier of Finland.


UN Photo/Ryan Brown

The Secretary-General announced the appointment of Philippe Lazzarini of Switzerland as the deputy special representative, resident and humanitarian coordinator in Somalia. Mr. Lazzarini has extensive experience in international coordination in conflict and post-conflict humanitarian areas, including in Somalia. Since March 2013, Mr. Lazzarini has served as the resident and humanitarian coordinator and UNDP resident representative. Prior to this assignment, Mr. Lazzarini held senior positions in the Office for the Coordination of Humanitarian Affairs, including as deputy director (2011 to 2013) and in various field positions in Iraq, Angola, Somalia and the Occupied Palestinian Territory.