

2017 AFRICA EMERGING MARKETS FORUM

Background Papers

Executive Summaries



Foreword

It is with great pleasure that we bring this volume to publication, containing summaries of the chapters of our report. The volume discusses the long-term development prospects and challenges of Africa through 2060. It is a culmination of a cooperation project between the Japan International Cooperation Agency (JICA) and Centennial Group International, who started to work together on Africa five years ago.

The initial outcome of the cooperation was presented at the fifth Tokyo International Conference on African Development (TICAD V) in 2013, as a volume titled *Africa 2050: Realizing the Continent's Full Potential*. In it, we argued that it is possible that Africa can catch up-or converge-with the rest of the world in terms of income and productivity by 2050. Its updated version was presented at TICAD VI in Nairobi, Kenya in August 2016. And the current version is a *further* revised and expanded version of the previous reports, including updated analyses as well as some new chapters. It has also extended the scope of analysis to 2060, some forty years from today. It presents two alternative scenarios on how the continent may look like two generations from now, depending on how its leaders tackle the main challenges outlined in the volume.

Behind these continuous revisions and updating of the various chapters are the changes in global economic environment in which Africa has been placed, as well as internal developments in different countries since 2013. True, Africa is still growing in nominal terms, but it is no longer converging with the rest of the world. For it to resume its convergence scenario, it seems necessary that African countries strengthen policy responses to the changing circumstances in various domains, in demographics, domestic resource mobilization, human development (education quality), inclusive growth, agriculture, infrastructure, and many others.

The current volume is a summary of the reports that discuss such possible policy options for consideration by African leaders and their development partners. I hope you will find this volume useful and interesting.

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Shinichi Kitaoka President Japan International Cooperation Agency (JICA)

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Imagining Africa 40 Years from Now

Theodore Ahlers

Africa faces both big opportunities and worrisome threats, and which Africa emerges over the next 40 years—a dynamic continent with a growing influence in the world or an economic backwater that exports its people and capital—depends on what countries do now. This paper presents two indicative scenarios to 2060, looks at actual performance in the current decade, highlights the differences in performance among countries, and identifies the biggest policy issues to be addressed if Africa is to converge with the rest of the world.

The pace of population growth, productivity growth, and level of investment have staggering implications for people's lives over the next 40 years. Africa is growing and many socio-economic indicators are improving, but it is no longer catching up with the rest of the world—converging. Policy reforms are urgent if Africa is to converge with the rest of the world and thus be able to meet the aspirations of its people. If Africa is to catch up with the rest of the world it needs annual per capita GDP growth of 3½ percent or more between now and 2060. Convergence means millions fewer poor and half a billion more middle-class Africans.

Country performance, of course, remains highly variable, and 13 countries have averaged per capita income growth above 3 percent for the last decade. But, in the aggregate, Africa is slipping—its per capita GDP growth has been below the world average since 2010. The progress of these high performers shows that convergence is possible in Africa. It is what countries do—the policies of their governments, the responsiveness of their entrepreneurs, the integrity of their institutions, and the political will of their leaders—that makes the difference, not their resource endowments. The challenge is to extend African best practice to more of the continent's countries.

Africa's growth and convergence in the first decade of the century was real and built on solid reforms in many countries. It was also greatly facilitated by exceptional external circumstances: ever-increasing commodity prices, strong global growth, and highly liquid global capital markets. These three exceptional external circumstances have now ended—and are very unlikely to return soon. This is neither unexpected nor necessarily the end to Africa's quest for convergence. Restarting convergence does, however, mean a return to the fundamentals--more investment and more reform to enhance productivity growth with a focus on inclusion.

Action on seven fronts is particularly important to enable a return to a convergence path: accelerating the demographic transition, reducing commodity dependence, increasing savings and investment and unleashing the private sector, accelerating productivity growth, reducing conflict and fragility, adapting to climate change, and reducing disparities. The demographic transition is proceeding even more slowly than envisioned three years ago and requires both urgent attention to fertility trends and measures to address the implications for job creation. Commodity exports contributed to fast growth of African countries through 2011 but, as commodity prices have declined, urgent adjustment to macro policy frameworks is now required. Both savings and investment levels remain too low to sustain convergence with the rest of the world. Ultimately, convergence will depend on faster productivity growth, which will require aggressive action to build human and institutional capital. Conflict, fragility, and inequalities could undermine progress elsewhere if not addressed aggressively. In the medium and long term, Africa must adapt to a changing climate that threatens both its agriculture and its cities. Finally, continental inequality is rising and will only decline if African best practice policies spread to the weak performers. If countries do not respond rapidly to these challenges, the gains of the last decade will be lost.

The policy implications are clear. Some countries are managing the above challenges well. Urgent action is needed to generalize these African best practices across the continent. The policy implications may be clear, but success in implementation is not. Capable states and strong, pragmatic leadership will determine the outcome. Results depend more on politics than technical economics. The stalled performance of recent years is an urgent call to action for all who want a prosperous, rather than marginalized, Africa in 40 years.

The biggest threats to success are complacency and a lack of political will to tackle the big problems. A societal consensus on the reform agenda, and the political leadership to forge it, while present in a few countries, is missing in most. The stalled performance of recent years is an urgent call to action for all who want a prosperous, rather than marginalized, Africa in 40 years.

Demographics and Urbanization: Planning Cities That Work

Greogry K. Ingram

Africa is a large and heterogeneous continent comprising two global regions, Sub-Saharan Africa with 53 countries, and North Africa with five. Of the 30 countries in the world ranked as low income by the World Bank, 25 are in Sub-Saharan Africa, and they currently contain about 40 percent of the region's population. All North African countries are middle income. From 2010 to 2050, Sub-Saharan Africa is projected to have the largest absolute (1.3 billion) and percentage (150 percent) increase in total population across all global regions. North Africa's population growth is the second largest in percentage terms with a projected increase of 60 percent.

The good news for Sub-Saharan Africa is that its dependency ratio is projected to fall continuously from 2010 to 2050, potentially creating a demographic dividend that can enhance economic growth. North Africa shows virtually no net change in dependency over this period. A changing demographic composition can magnify social challenges if economic growth is inadequate to provide jobs and incomes for the growing population. For example, unemployment is typically concentrated among young adults-who have higher propensities to be restive and to engage in illegal, antisocial, and risky behavior. Sub-Saharan Africa's projected population share aged from 15 through 29 is consistently high (and the highest among global regions from 2015 on). For North Africa, this age group's share is the second highest from 2030 on. This high population share of young adults could increase social instability across Africa if economic growth is low and unemployment is high.

Sub-Saharan Africa is projected to experience the largest absolute increase in urban population across all regions, but even more remarkable are the percentage increases: By 2050, Sub-Saharan Africa's urban population is projected to quadruple and North Africa's to double. The large increase in urban population projected for Sub-Saharan Africa is driven mainly by the rapid growth of its total population. A growing concern among African urban scholars is the unprecedented disconnect in recent years between increased urbanization and economic growth in many African countries.

In a random sample of 25 African cities, average urban population densities have declined by nearly 2 percent annually from 1990 to 2014—similar to the global average. If urban densities continue to decline at this rate and urban populations grow as projected, by 2050 urbanized land areas in Sub-Saharan Africa and North Africa will grow to 7.5 and 4.5 times their size, respectively, in 2000.

Expanding urbanized areas often encroach on cultivated land. Based on satellite data, the undirected expansion of urbanized land will reduce cultivated land area by 5 percent in Sub-Saharan Africa and by 9 percent in North Africa. The Food and Agricultural Organization has forecast that global cultivated land area will need to increase by 10 percent to meet food requirements in 2050—and this forecast does not take into account any loss of cultivated land to urban expansion. Undirected business-as-usual urban expansion is a potential threat to food security in Africa and elsewhere.

Metropolitan-wide planning for urban expansion and installing key infrastructure before development are critical—both to reduce development's impact on cultivated land and to avoid future retrofitting of urban infrastructure in developed areas, which typically costs three times more than installation before development. Most important is to lay out a one kilometer grid of arterial roads in areas to be developed. The lack of arterial road grids slows transport within cities, impedes the efficient operation of urban labor markets, and hinders the installation of other trunk infrastructure. Guiding urban expansion by installing infrastructure before development is a challenging priority for many countries. In 15 of 24 cities in the African sample, urban areas newly developed since 1990 lack arterial grids.

When urban infrastructure is long-lived, it is equitable to spread its cost over time. It can be partially funded from longer term public or private debt or from international aid and other transfers. Municipal development funds have supported local government loan facilities and enhanced New technology embodied in the concept of the smart city has the potential to address many problems faced by African cities that stem from rapid population growth and climate change.

local urban government borrowing capacity. Some middle-income countries, including South Africa, have issued municipal bonds. Private participation in infrastructure has been a growing finance source over the past 25 years and has played a very important role in the rapid expansion of mobile telephone service in Africa. Since 2006, private investment in infrastructure has been four to six times larger than combined overseas development assistance and World Bank funding allocated to infrastructure.

Metropolitan infrastructure investment will require local funds to fund investment directly or to repay debt. Lack of local revenue is a major issue in African metropolitan areas and municipalities. The property tax is inherently attractive local revenue source because real estate benefits from local services and is immovable, making the tax difficult to evade. Moreover, its scope can be extended to include value capture, which taxes increased land value associated with new infrastructure investments. User fees and benefit charges create appropriate incentives for both suppliers and users of services, but the fees must be set at an appropriate level. Fees that are below costs promote overuse of services-a serious problem in electric power and water, where subsidized rates stimulate demand for services and hence for more investment. Recent estimates are that Sub-Saharan Africa governments spent \$4.1 billion annually (0.7 percent of GDP) on power and water subsidies.

Both rural and urban areas will be adversely affected by results of climate change—from increases in average temperatures across the continent, less rainfall in northern and southwestern areas, and increasingly stressed water systems everywhere. Such results are likely to harm the extensive rain fed agriculture that supports much of the rural population, contributing to the growth of urbanization. Projections of more severe weather events will continue the dramatic increase in the frequency of floods in Africa since 1960. Local government capacity to adapt to climate change threats is often weak, data are fragmentary, and infrastructure inadequate. While local governments have been addressing climate change issues, most adaptations remain uncoordinated and reactive to short-term problems. The challenge is to promote urban economic growth and to devote a sufficient share of that growth to investments in infrastructure and in metropolitan-area public goods so that infrastructure service coverage can increase and events associated with climate change become less life-threatening and costly to urban residents.

New technology embodied in the concept of the smart city has the potential to address many problems faced by African cities that stem from rapid population growth and climate change. The relative lack of urban infrastructure and physical assets could be an advantage, allowing cities to leapfrog directly to new technologies unconstrained by legacy stocks of aging and obsolete facilities. Smart city technology involves integrating information technology into the expansion, management, and operation of the city and its infrastructure in order to improve operating efficiency or to transform or replace existing systems. Along with great promise, this technology poses many challenges including loss of privacy, scale economies that could stifle competition, and the risks of systemic failure. One early lesson: cities that have responded to proposals from private vendors in an ad hoc fashion have not done as well as cities that first developed a technology vision or plan.

To handle successfully the projected large increases in total and urban populations and the unprecedented expansion of urbanized areas over the next 40 years, African countries must pursue national policies that promote economic growth, health care, and education within a supportive macroeconomic and regulatory framework. With a sound national framework, the success of cities and metropolitan areas will be determined to a great extent by policies pursued at the metropolitan and municipal level including planning for urban expansion and provision of basic infrastructure services. Sound national policies are necessary, but not sufficient, for success at the metropolitan level. Within a supportive national policy, metropolitan areas can underperform by pursuing poor policies. But with

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poor national policies, even excellent policies at the metropolitan level are unlikely to succeed. National governments and metropolitan areas need to work together to manage an effective transition to an urbanized African society.

Building Human Capital: Improving Education Quality

Kaisa Alavuotunki & Ritva Reinikka

The vision 2050 for Africa—when the continent will be home to 2 billion people—includes a per capita annual income of USD17,500 and a skilled and productive labor force. In this vision, basic education would be universal and free for the first nine years, and enrollment would exceed 80 percent in secondary and 35 percent in tertiary education.

Education update. This paper is an education update for the vision for 2050 for Africa, with two broad objectives. First, it examines whether the education sector in Africa is on track with the targets set to make this bold vision a reality. Second, it takes a closer look at quality of education, especially in Sub-Saharan Africa (SSA) where education systems continue to expand vastly. We make use of recent data from student learning assessments as well as the Service Delivery Indicators (SDI), which focus on teachers. The analysis clearly shows that a vast improvement in education quality is urgently required.

Why the focus on students and teachers? Because basic skills, such as literacy and numeracy, cannot be leapfrogged; they must be learned by every student before higher and lifelong learning can take place. And because among school-related factors—teachers matter most.

Good progress on public spending targets. To reach the vision 2050 targets, by 2030, SSA must almost double the size of its teaching force in place in 2010 in primary and lower secondary education. Allowing for some reduction in the pupil-teacher ratio and the needs in post-basic education, annual salary budgets should increase between 4 and 6 percent. There are a number forces behind the continued expansion of education systems. First, the population aged 5-14 years will almost double in SSA between 2010 and 2050; in North Africa, the increase is only 6 percent. Second, 24 percent of SSA's school-aged children were out of school in 2010, and they need to go to school. Third, there is a growing pressure for post-primary education arising from the success of rapid primary school enrollment growth over the last two decades. Considerable public resources are already being spent on education in Africa—in many countries, education expenditure is on par with or higher than OECD countries. While real economic growth has been below the 6.6 percent per year of the Africa 2050 convergence scenario—3.9 percent per year in SSA in 2010-16—public spending on education has, since 2010, grown respectably, at around 8 percent annually, on average. This is more than adequate to expand the teaching force as projected in the vision 2050—and leaves substantial additional resources for other expenditure items as well.

But students are not learning. Global and regional learning assessments provide important information on quality of education. Only six African countries have participated in the Trends in International Mathematics and Science Study (TIMSS), an important global learning assessment. The results indicate that, compared to the rest of the world, a large share of pupils in Africa are spending years in school without learning basic math and science. Clearly, this does not bode well for productive youth employment—or for the economic catch-up with the rest of the world as articulated in the vision 2050 for Africa.

Results from regional learning assessments also suggest serious shortcomings. In Southern and Eastern Africa, the average proportion of pupils with a very low score in math—not even basic numeracy after six years in school is 60 percent, ranging from 27 percent in Mauritius to 92 percent in Zambia. In West and Central Africa in 2014, less than 45 percent of students attained the competency level in reading or mathematics deemed "sufficient" to successfully continue their schooling.

In short, these regional assessments confirm that pupils in African primary schools learn far too little. In fact, UNESCO calls the current situation a "learning crisis." This crisis means that prospects of young people are stifled. It means that public education spending yields very low returns.

Teachers teach only half of the scheduled time. To shed light on the "learning crisis," the SDI focuses on Improving quality of education is less about money and more about putting the focus squarely on learning.

schools and teachers. Specifically, it measures teacher effort using three principal indicators: absence from school, absence from classroom, and actual teaching time. On average, the absence rate from school is found to be 20 percent, ranging from 14 percent in Tanzania to 45 percent in Mozambique. At any given time, on average, every fifth teacher is absent from school in SSA.

When examining absence from classroom, we find that, on average, 42 percent of teachers are not teaching. They are either absent from school or, even if at school, absent from classroom. The classroom absence rate ranges from 23 percent in Nigeria to 57 percent in Uganda.

The result of absenteeism is that the actual number of hours that students are being taught is low; on average, 2 hours 53 minutes a day when the average scheduled teaching time is 5 hours 31 minutes. Thus, the time on task is only about a half of what the education policy requires.

Teachers' knowledge and pedagogical skills are weak. The SDI surveys found that only 13 percent of language and math teachers possessed at least what can be considered minimum knowledge to teach the curriculum they were teaching. Only 0.1 percent of Grade 4 teachers in Madagascar scored more than 80 percent on the language and mathematics curriculum test, compared to 40 percent in Kenya.

The average teacher test scores of language, mathematics, and pedagogy combined is 42 percent. The results vary substantially between countries, from 57 percent in Kenya to 27 percent in Mozambique. The weakest area is pedagogical knowledge.

Private schools tend to perform better than public schools. Their teachers exert more effort, demonstrate more knowledge, and exhibit better teaching practices than their public sector counterparts. Yet, private schools are not able to overcome some of the same systemic problems faced by public schools. Close to one third of teachers in private schools are absent from the classroom. The pedagogical knowledge of private school teachers is almost as weak as that of their public school counterparts. Teachers' knowledge and skills matter for student learning. Analysis of the SDI data shows large positive effects of teacher's knowledge and skills on student learning. Specifically, comparing a student of a teacher with little content knowledge and pedagogical knowledge and skills to a student taught by a teacher with good scores on these dimensions, the latter has test scores which are 1.1 standard deviations higher. This is a very large increase and would make a very big difference in results—more or less the quantum leap that is required in quality of education.

Urgent action required to improve education quality. Improving quality of education is less about money and more about putting the focus squarely on learning. How can this be done? First, one must start with measurement. Currently, learning is measured at best sporadically. For example, SACMEQ in Southern and Eastern Africa was last carried out in 2007. Few African countries participate in international learning assessments, such as PISA or TIMSS. This state of affairs should change and regular learning assessments—either international or regional should become the norm. Similarly, in the next update for the vision 2050 for Africa relevant quality targets will need to be developed.

Second, improvement in learning requires systemic reform. Such a reform needs to go well beyond the ministries of education and those reporting to them—it is a project for the whole of society. There is, unfortunately, no silver bullet, technical fix, or education intervention that will do it. Instead, to be successful, such a reform will have to strengthen the relationships of accountability between national and local politicians, education service providers, and parents. It is, therefore, about politics, incentives, and empowering parents and other stakeholders, with a focus on quality of education and learning. It is about "education for all—and all for education."

Student learning assessments and especially the SDI data on teachers provide countries an unprecedented nationally representative diagnosis of the quality problem at the school level. Finding solutions to the quality problem Finding solutions to the quality problem should start with national dialogue, consensus building, and continued monitoring of progress. Just calling for more funding and inputs for education will no longer do.

should start with national dialogue, consensus building, and continued monitoring of progress. Just calling for more funding and inputs for education will no longer do.

Third, the vision 2050 for Africa calls for a broad-based approach in education. Why is it important? One reason is that, without broad-based education, much talent would be lost if poorer children did not get an opportunity to learn basic skills and beyond. The same would be the case if girls were not able to access good education. This large talent pool could not be harnessed for national productivity—and many would be condemned to the cycle of poverty. According to recent research findings, it is not just the average test scores—or the top test scores—that matter for economic growth but also the bottom scores. But to achieve broad-based learning, countries cannot ignore the serious systemic failures in quality of education.

Transforming Rural Africa: Growing a Productive Agriculture Sector

Kevin Cleaver

Agriculture remains vitally important to most African economies, providing 25% of African gross domestic product, with another 20% of African GDP produced by agribusiness. 60% of African employment is in agriculture. Though these high shares of GDP will decline over time, they will remain important for the next several decades. Stimulating agricultural growth is therefore one way to stimulate faster economic growth and more rapid poverty reduction.

African agriculture has not performed well for the past 35 years. Per capita agriculture growth, though positive, has declined in the most recent period. Crop yields in Africa are far below those in other developing countries. The productivity of labor, land, capital, and material used in agriculture has grown more slowly than that of most other developing countries. Much of the growth in agriculture that has occurred has been the result of expansion of cultivated area, and increases in labor use, rather than productivity improvements. The expansion of cultivated area has been at the expense of forest and grazing land. The environmental costs of this expansion are increasingly apparent. There is however considerable variation between African countries, with some countries performing well. The ingredients of better performance provide directions for future action.

The problems confronting African agriculture point to widespread government policy deficiencies often reflected in the net taxation of agriculture through policies affecting prices, marketing and processing, and trade. The anti-agriculture policy bias of most African governments is greater than that of other developing countries. Secondly, most African countries rate poorly on measures of the ease of establishing and doing private business. Farming, marketing, and processing of agriculture products are private businesses, and when it is difficult for business to operate, agriculture suffers. Thirdly, government expenditure in rural areas for infrastructure education, health, water supply, and local administration is frequently very weak. This inhibits agriculture development, as poorly educated farmers, who are also in poor health, do not make good farmers. Where potable water or irrigation water is not available and rural road networks are poor, agriculture is less likely to develop. The problems may be exacerbated in the future as the result of climate change. Nearly all projections of the impact of future climate change show large negative impacts on African agriculture.

Aid donors have not helped as much as they think, often providing contradictory policy advice and unsustainable agricultural projects. In addition, rich country governments, which provide aid on the one hand, subsidize their own agriculture, which curtails markets and prices for African agriculture.

Action is urgently required to reform agricultural price, taxation, and trade policy, with the objective of reducing the effective taxation of agriculture in Africa. As a corollary, a further shift away from government control and ownership of agricultural marketing, processing, and input supply companies is needed. An expansion of private investment in these activities, and in farming itself, is required. Moving up on the World Bank's Ease of Doing Business Index would help. Government investment is vital but it should be focused on improving rural roads, rural energy supply, rural water supply and irrigation, rural education, and health. Agricultural education needs improvement in every African country. Governments will need to play an important role in adapting African agriculture to a changed climate. Some African governments have shifted in these directions, reducing the effective taxation of agriculture, improving the ease of doing private business, and/or expanding domestic investment in rural development. Agriculture has responded positively. These reformers show the way.

Aid donors need to rethink their interventions. Greater coordination between donors is needed to avoid contradictory policy advice and to increase the frequency of successful projects. There are good practices that can be scaled up but also many bad practices that need to be abandoned. Reduction of OECD agricultural subsidies would help. This would tend to increase world agriculture African agriculture productivity can be improved rapidly. But the action agenda needed for significant improvement is a difficult one, requiring considerable political will and technical competence of governments, the private sector, and donors.

prices and open OECD agriculture markets and import substituting African markets to African producers.

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Africa's Infrastructure Deficit: Closing the Gap

James Bond

Africa is the least endowed region in the world in terms of infrastructure. It also does not perform well on the quality of infrastructure services delivered to users. Infrastructure is scarce, and its performance is generally poor: costly, erratic, and undependable. Africa's low infrastructure endowment is particularly prevalent in Sub-Saharan Africa (SSA), above all a reflection of this region's low GDP per capita income levels and low population density. Poor guality of infrastructure services results from weak operational and financial management and from chronic financial weakness in the sector, as users do not pay full cost for services they receive and governments often do not pay their share. Spending needs are not met, assets are not well maintained, and the sector suffers from a deficit in management skills. However, it will not be enough simply to increase financing flowing to infrastructure investments. New sources of financing, and systemic changes to the way infrastructure services are delivered to improve their quality, will also be needed to ensure that Africa's infrastructure is operated efficiently and maintained effectively.

Role of infrastructure in development

Getting infrastructure right is essential; it underpins development of the domestic economy, contributes to inclusive growth, and enables regional integration. Low cost infrastructure services are key for export competitiveness and economic diversification. Africa's combination of low infrastructure endowment and poor quality of infrastructure services relative to other developing regions holds back the continent economically and explains in part Africa's lag in regional integration.

Electricity

Sub-Saharan Africa is starved for electricity. Both access to electricity and per capita power consumption are lower in Africa than in other regions. Yet the paradox is that Sub-Saharan Africa is rich in energy resources, and huge renewable resources remain untapped. North Africa has made better progress, and its electricity sector is broadly on par with the rest of the world. But much of Sub-Saharan Africa (with a few notable exceptions) is a "continent in the dark."

Transport

Transport infrastructure (roads, rail, airports, and ports) is significantly less developed than in other regions of the world, and transport costs are twice the level of other developing countries (up to four times as high in land-locked countries). Road densities are low; rail networks (except for South Africa) are underdeveloped and poorly maintained; and although air transport is growing strongly, it is expensive, connections are patchy, and safety is a problem. African ports are small, port services are costly, and shipments are often delayed. Poor transport links contribute to the balkanization of the continent.

Information and communications technologies

Mobile telephony is an African success story. Africa has undergone a revolution in mobile telephony due to the introduction of new technologies and private provision of these services. The number of subscribers in Africa has grown at a rate more than twice the global average during this decade, and mobile communications is transforming the economies of certain countries (e.g. Kenya) through mobile banking and other services. But internet penetration via fixed broadband links remains inadequate.

Water and sanitation

Africa still lags the rest of the world in provision of clean drinking water and improved sanitation facilities. In Sub-Saharan Africa, only half the population enjoys access to safe drinking water and the gap is widening due to urbanization. Improved sanitation (septic tanks and improved latrines) reaches less than one-fifth of Africa's population and less than one-tenth in rural areas. African policy makers need to consider both how to increase funding for infrastructure investments and how to improve the quality of services delivered from infrastructure.

Policy directions for development of Africa's infrastructure

African policy makers need to consider both how to increase funding for infrastructure investments and how to improve the quality of services delivered from infrastructure.

Infrastructure financing needs

Financing for infrastructure in Sub-Saharan Africa tripled over the past decade, reaching \$83.5 billion in 2015. African national governments themselves provided one third, through their fiscal resources; multilateral and bilateral partners provided 30%; government-to-government lending, almost entirely from China, one-quarter and private sources less than one-tenth. Current annual spending needs are estimated to be \$120 billion (2016 dollars) simply to maintain current endowment levels.

Diversifying funding sources

Future financing needs cannot be met through fiscal revenue, development assistance, and government-to-government loans alone. Policy makers must call to a much greater extent on private sector financing, both from direct investors and from institutional investors who manage pension funds and insurance assets.

Private investors and lenders are wary of financing infrastructure in Africa because of the poor creditworthiness of the sector. This is an outcome of inadequate tariffs, poor payment by governments for the services they receive, and weak operational and financial management. For the sector to become financially viable, users must pay the full cost for the service they receive. Policy makers must establish tariff mechanisms that cover costs and adjust to changing circumstances, government departments have to avoid accumulating arrears to utilities (e.g. through the use of prepaid cards), and better operational management must be sought, for example from increased participation in the sector from private operators.

Finally, policy makers must be more aggressive in pursuing private provision of many infrastructure services

(notably, electricity, water supply, rail, ports, airports, and broadband internet), and creating African infrastructure as an asset class able to attract funding from institutional investors.

New Threats to Africa's Stability and Growth

Serge Michailof

While Africa is obviously doing much better that 15 years ago, the continent is nevertheless confronting two major new threats: The first is the contrast between successful countries and those seemingly doomed to failure. The second is that even the successful countries have not always been able to prevent the emergence of deep social and geographic inequalities, which have often been accompanied by rising tensions and increasing insecurity. Since this last phenomenon often combines with an erosion of authority as the state loses control over some peripheral regions, these regions become lawless zones that eventually threaten the integrity of the states.

The most emblematic case is certainly Nigeria where the economic boom has not prevented the emergence of a "caliphate" in the north of the country. This new type of threat is arising in a global context, where radical Islam has replaced the secular ideologies of the twentieth century that had barely penetrated Africa. It provides the populations of these regions with simplistic explanations for the misery into which they are plunged and establishes in their minds the responsibility of the West for all their ills. This situation has become a very serious issue in many parts of Africa. The most serious problem has now arisen in the French-speaking Sahel, where despite regional alliances, external support from France and the US, and billions of dollars spent on military budgets, insecurity is still developing, particularly around Lake Chad and in the north and center of Mali.

The key causes of these developments are generally the coincidence of strong demographic growth, a narrow economic base principally focused on relatively unproductive agricultural activities, vast territories that are difficult to control, populations fragmented into multiple ethnic or religious groups, and the presence of a large Muslim population subjected for several decades to strong Salafist propaganda. These constraints translate into considerable underemployment of a large cohort of young men entering the labor market without prospects. In some cases, these difficulties are heightened by marginalization or by economic or political discrimination. These countries or regions, described as "fragile," are currently the target of attempts at destabilization carried out by jihadist groups on a sometimes mafia-like scale. These groups usually control specific economic circuits dealing with illicit trafficking (including weapons, cigarettes, drugs, and migrants).

While flashpoints threatening to spread very swiftly may require external military intervention, as was the case when French forces had to put a stop to a military offensive led by jihadist groups in Mali in 2013, this type of conflict can neither be settled by foreign armies nor definitively solved by military means alone. They require responding to the state's shortcomings and, to this end, considerably strengthening not only the national armed forces but also consolidating—or in some difficult cases rebuilding—the entirety of the other state sovereign institutions, particularly the police, the judiciary and local administration. This type of consolidation can be part of an ambitious program of security sector reform, the scope of which must be expanded compared to current practice.

Since the poorest countries lack the fiscal resources to enable them to carry out this strengthening of their state apparatus, they are currently caught in a double impasse that is both budgetary and security-related. They risk falling into a conflict trap if they are not strongly supported in their efforts by donors, which up to now have carefully avoided involving themselves in security-related issues. The agenda of African governments facing these new threats needs to be ambitious, but it will be hard to implement.

Basically, these countries will have to (i) consolidate or rebuild their state apparatus and negotiate exceptional financial, technical, and political support from the West for this purpose; (ii) regain control of international aid spending so as to reorient it as far as possible toward the factors that fuel insecurity, particularly rural poverty, in order to create massive employment opportunities; and (iii) undertake wide-ranging reform of their education systems and vocational and technical training programs. (iv) In addition, the massive creation of jobs demanded by their exceptional The success of such a comprehensive response to the security challenge presupposes that governments demonstrate the political will to act simultaneously on these various axes by building coalitions adapted to the exceptional scale of the challenges they face.

level of demographic dynamism also means facilitating the development of a dynamic private sector. (v) Finally, these multiple efforts will remain insufficient if the rate of population growth is not brought down to a level compatible with the countries' economic capacities. The implementation of such policies will require exceptional communication and pedagogical efforts.

The restoration of security throughout this region implies a very important ideological dimension. Therefore, it is imperative that governments engage in a courageous struggle against Islamic fundamentalism and jihadist ideology. The success of such a comprehensive response to the security challenge presupposes that governments demonstrate the political will to act simultaneously on these various axes by building coalitions adapted to the exceptional scale of the challenges they face. The Emerging Markets Forum was created by the Centennial Group as a not-for-profit initiative to bring together high-level government and corporate leaders from around the world to engage in dialogue on the key economic, financial and social issues facing emerging market countries.

The Forum is focused on some hundred market economies in East and South Asia, Eurasia, Latin America and Africa that share prospects of superior economic performance, already have or seek to create a conducive business environment and are of near-term interest to private investors, both domestic and international.

Further details on the Forum and its meetings may be seen on our website at http://www.emergingmarketsforum.org

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