

# Yes Africa Can

## *Success Stories from a Dynamic Continent*

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## Overview

Over the past decade, Sub-Saharan Africa has seen a remarkable turnaround in economic performance. After years of stagnation, economic growth has spurted—from annual average GDP growth of less than 2 percent in 1978-1995 to nearly 6 percent over 2003-08. Inflation is half the level of the mid-1990s; and private capital flows have risen to \$50 billion, exceeding foreign aid. Likewise, exports are growing and so is private sector activity. The number of democratic regimes has grown and the security situation has improved. Yet, large differences in performance across countries topped with the regions' historically volatile macro performance casts doubt on the sustainability of this progress. Moreover, low economic diversification, poor regional integration, large infrastructure deficits and weak technical skills further hamper the pattern of progress achieved.

### CHANGING ECONOMIC LANDSCAPE:

After lackluster economic performance for decades, during which the divergence between Sub-Saharan Africa and the rest of the developing world widened, the region's economies have seen a visible turnaround beginning in the mid-1990s. The most visible is the sustained acceleration in output growth from under 2 percent in 1978-1995 to nearly 6 percent in 2003-08. Similarly, Africa's exports, FDI, agricultural output and productivity levels are also improving. After stagnating in volume and value terms in the 1980s, exports doubled in volume terms and rose five-fold in value terms in the period 1994-2008. FDI has more than tripled between 1995 and 2008. Agricultural GDP growth has averaged nearly 3 percent over 1980-2004, but growth per capita of agricultural population has averaged only 0.9 percent, between one-third and half that of other developing regions (WDR 2008). Inroads have also been made in education and health. For example, primary school enrollment has jumped 14 percentage points, from about 59 percent in 2000 to 73 percent in 2008—the fastest improvement of any region. In health, child deaths (under-five mortality rates) have declined from 181 per 1000 in 1990 to 132 per 1000 in 2009, with some of the poorest countries—e.g. Eritrea and Malawi—showing remarkable progress.

### APPROACH AND METHODOLOGY:

Drawing on the existing knowledge of African development presented in academic and policy publications, *Yes Africa Can: Success Stories from a Dynamic Continent* takes an in-depth look at 26 economic and social development successes in Sub-Saharan Africa across countries, themes, programs and sectors. The overall goal of the research is to address how African countries have overcome major development challenges. The 26 case studies presented in this volume cover six broad topical areas: successful growth experiences; post-conflict situations; leveraging sectoral advantages to expand growth; boosting agricultural efficiency and output through targeted reforms; engaging the private sector to upgrade infrastructure and improving human development outcomes through innovative policies.

### MAIN FINDINGS OF THE CASE STUDIES:

While the proximate causes of African countries' failure to thrive are quite different they can be boiled down to two main sources: market failures, such as the common-property externalities associated with desertification, and government failures, often created by state intervention to correct market failures. Market failures can be corrected by implementing a tax or subsidy or by generating a public good, such as improved infrastructure or a better public health care system, for which the government can take credit. Overcoming government failures is more difficult, as the source of the problem is usually powerful people who are benefiting from the intervention. Correcting it involves undermining these people's rents. In some cases, governments fail to correct a market failure—another form of government failure—because vested interests are benefiting from the distortion (think of politically-connected monopolists). To learn from the studies, it is useful to classify them into four categories: overcoming or avoiding massive government failure, rebuilding or creating a government, rationalizing government involvement in markets, and listening to the people.

- *Overcoming massive government failure:* A good example is Ghana's cocoa sector, which was destroyed by the hyperinflation and overvalued exchange rate in the early 1980s. When the exchange rate regime was liberalized and the economy stabilized, cocoa exports boomed (and continue to grow). Similar examples include Rwanda's coffee sector, which grew rapidly when price controls were abandoned, and Kenya's fertilizer use, which increased sharply when the sector was liberalized in the early 1990s. In all these cases, existing policies were standing in the way of growth. The country cases, Mozambique and Uganda, are also examples of what happens when what is arguably the biggest government failure—civil war—comes to an end. The rapid economic growth that these countries have enjoyed in the ensuing decades shows how much potential was held back by the war.

- *Creating a government where none existed:* At the other extreme is the situation where there is virtually no government, and hence by definition no government failure. Yet there are market failures to be corrected. The case study of Somaliland is an illustration of traditional structures playing the role of government (to provide public goods for transport) where no formal system of government existed. The recovery of the two post-conflict economies, Liberia and Sierra Leone, are further instances of building a government system from the rubble of war.
- *Rationalizing government:* A number of case studies illustrate how Africa succeeds when governments intervene just to correct market failures—and no more. With mangoes in Mali, gorilla tourism in Rwanda, or textiles in Lesotho, governments stepped in to provide those public goods necessary for the private sector to thrive. In Mali, it was access to air, rail and road transport and cold storage; in Rwanda, the protection of gorilla reserves; in Lesotho, the infrastructure for textile factories. The important point was that the governments provided these services and very little else. Responding to the possibility of profits, private entrepreneurs did the rest. On an economy-wide scale, Mauritius is a case study of government’s intervening at different points in time to play a catalytic role in private sector development. Even in difficult areas such as health, when governments provide public goods, such as malaria control or family planning services, the results are truly impressive.
- *Listening to the people:* Lastly, many of the case studies are policies, such as free primary education, or innovations, such as new rice varieties, that had been tried before and had mostly failed. This time, they were successful. What explains the difference? To avoid the government failures of previous times—where the state thought that it “knew” what was good for the people and designed the policy from the top—this time the government in different ways elicited feedback from the public while formulating and implementing the policy.

Regardless of which category each of the case studies falls into, as a group, they demonstrate that the African landscape is dotted with success stories. The sectoral and geographical diversity of the case studies illustrates that there are many ways to overcome Africa’s challenges.

## WHY DID REFORM HAPPEN AND WHY WAS IT EFFECTIVE?

From a political economy perspective, poor policies persist because the preferences of those in power are not aligned with those of the public, and the former use bad or inefficient policies for political purposes and/or financial gain. Accountability mechanisms—checks and balance—on policymakers are designed to reduce incentives for opportunistic behavior and distortionary policies. But coordination and collective action problems prevent the establishment of strong accountability mechanisms. The weaker the constraints on politicians, the less likely reforms are to occur. However, policy change can occur in an environment of weak political constraints when there is a big change in political power.<sup>1 2</sup> Such a change disrupts the existing status quo and shifts power from existing interest groups to new ones, and possibly to a broader group of people. That is what seems to have happened in the case of several countries in this study. But why do these reforms work in some cases and fail in many other instances? A few insights are provided by the case studies. One possible factor could be that the reform was part of a broader set of reforms. This meant that successful policy reform in one area was not being largely offset or negated by reforms elsewhere (as powerful interest groups opposed to the reforms attempt to thwart their effect)—what Acemoglu et al. (2008) call a seesaw effect. Simultaneous reforms that were complementary meant that the effect of any one reform was likely to be enhanced. Examples of such complementary reforms analyzed in this study are the Tanzania, Uganda and Ghana cocoa stories, among others. In each case the governments implemented a broad set of home grown reforms resulting in fiscal stability, real exchange rate alignment, and price liberalization. Another factor is the level of commitment to reform. Here, it is important to consider what prevents the reform from being reversed. In cases where political commitment to reform was strong, such as in Liberia’s governance reform, Rwanda’s results-based financing scheme and Ethiopia’s health extension workers program, implementation of these programs was generally smooth and largely expected to be sustained.

*Authors: Punam Chuhan-Pole and Shantanayan Devarajan*

<sup>1</sup> Politicians can also adopt reforms when their earlier policies prove to be utterly ruinous to the economy and changing course seems to be the only viable option to avoid political change.

<sup>2</sup> “Jones and Olken (2007) find empirical evidence that assassination of autocrats affects institutional change—specifically, a move towards democracy—“Hit or Miss? The Effect of Assassinations on Institutions and War.” NBER Working Paper No. 13102.

## Growth acceleration and increased public spending with macroeconomic stability

*GDP growth averaged about 6 percent from 1996 to 2009*

*Inflation averaged around 7 percent in 2006-2009, down from a decade average of about 30 percent between 1986 and 1995*

### CHALLENGE

In 1967, the Arusha Declaration began the period of Ujamaa socialism in Tanzania, marked by a one-party system, large state owned enterprises, unsustainable budget deficits, high inflation and widespread poverty. Moreover, growth was constrained by inadequate infrastructure, regulatory bottlenecks, weak technical skills and overall a poor legal framework.

### APPROACH

In the mid 80s the government, with donor financing, embarked on significant structural changes, establishing a private banking system; a unified exchange rate; agriculture, trade and price liberalization; civil service reforms and privatization of major state parastatals. While these reforms were being introduced, the government successfully balanced macroeconomic policy—creating an environment conducive for growth—while containing potential vulnerabilities that in the past hampered growth. Growth has been sustained by domestic demand spurred by increased consumption and investment spending. Additionally increased productivity, diversification of exports, continuous flow of foreign assistance, improved revenue collection and increased government spending have led to continued macroeconomic stability.

### RESULTS

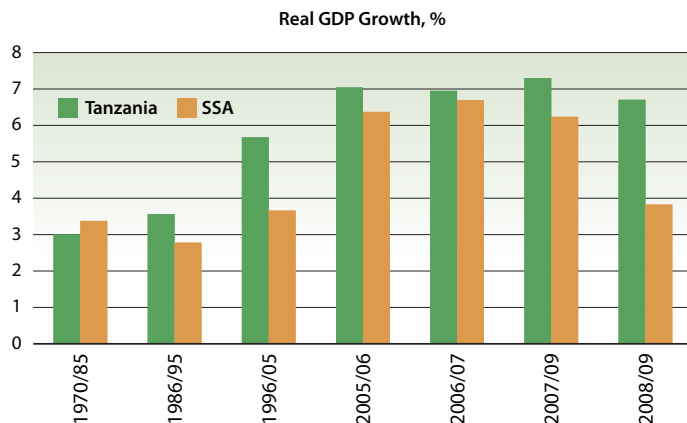
The impacts of Tanzania’s reforms have been dramatic. Growth averaged at about 6 percent from 1996 to 2009. Over the same period, inflation was contained in single digits, international reserves rose sharply, debt to GDP ratios declined and the level of government spending increased, facilitating an expansion of public services. Significant inroads were also achieved in the education sector, where primary enrollment increased to 95 percent from about 60 percent a decade earlier. This progress is clouded, however, by issues relating to the quality of education and unfilled teacher vacancies.

### LESSONS LEARNED

Tanzania’s growth spurt was a result of several major home grown reforms facilitated by donor financing. Key to the reform process was the government’s ability to maintain economic stability while controlling for potential vulnerabilities and external shocks. Sustaining Tanzania’s growth

will involve developing and implementing a new set of policy instruments that address major development challenges the country is still facing: an over reliance on foreign financing, inadequate infrastructure, a worsening business environment and a still high poverty headcount level.

*Authors: David O. Robinson, Matthew Gaertner, and Chris Papageorgiou*



# Economic Growth and Performance in Uganda

## The Importance of Sustained Reform

*Uganda is one of the few Sub-Saharan African countries that is expected to achieve the Millennium Development Goal of halving poverty by 2015*

*Economic growth averaged around 7 percent over 1997–2007*

### CHALLENGE

Following the end of decades of political instability and civil war in 1986, Uganda was relatively peaceful but economically troubled. Economic growth was sluggish, the country was uncompetitive in export markets, and poverty was rampant.

### APPROACH

Uganda's first major reform effort was the Economic Recovery Program, which began in 1987, under which domestic prices were liberalized and a floating exchange rate adopted, among other things. The next set of reforms stimulated private investment and encouraged competition through abolition of marketing boards and parastatals and establishment of the Uganda Investment Authority. With the economy back on solid footing, the multi-sectoral Poverty Eradication Action Plan was introduced in 1997. Specific reforms regarding agriculture modernization, the private sector, and exports were implemented, accompanied by institutional reforms including decentralization efforts, abolition of state-owned marketing boards, and restructuring of the public administration.

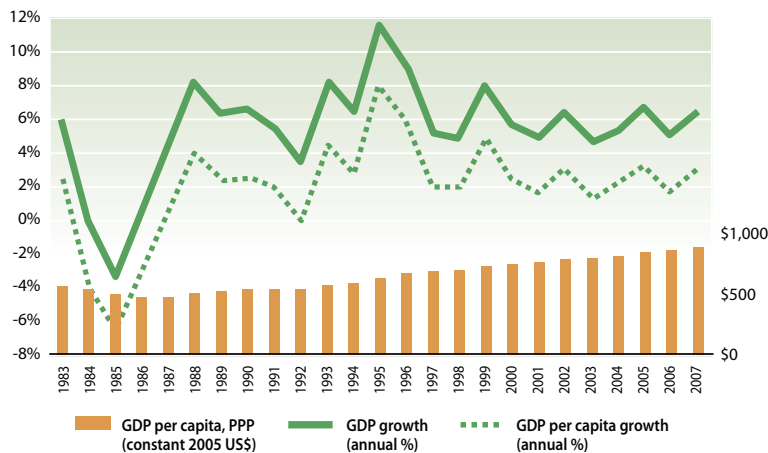
### RESULTS

Uganda's economy has grown at a strong and sustained pace in recent years, averaging around 7 percent per year over 1997–2007. Equally impressive has been the sharp decline in the poverty rate, which fell by about 15 percentage points over the same period. Exports as a share of GDP increased from approximately 8 percent in 1998 to 18 percent in 2009. Despite strong economic growth, Uganda's economy has experienced limited structural transformation owing to the fact that growth has emanated largely from the services sector, which mostly employs the highly skilled, and less from the agriculture sector, which still employs 70 percent of the population.

### LESSONS LEARNED

Chief among the lessons learned from Uganda's experience is that sustained, focused effort at the national and sub-national levels is needed to turn around an economy. Additionally, it is clear that significant challenges remain, particularly in the context of slow transformation and employment growth in the agricultural sector, low domestic tax revenue collection, a still-narrow export base, continuing infrastructure deficiencies, and high levels of unemployment (particularly among youth). The five-year National Development Plan of 2010–15 highlights specific interventions to be undertaken in several of these areas.

*Author: Sarah Ssewanyana, John Mary Matovu and Evarist Twimukye*



# Growth & economic transformation in Mozambique

*Mozambique has been the fastest-growing non-oil economy in Sub-Saharan Africa over the past 15 years*

## CHALLENGE

Following 16 years of devastating civil war, Mozambique was one of the poorest countries in the world with a poverty headcount at almost 70 percent and the second-lowest on the Human Development Index.

## APPROACH

The end of conflict in 1992, ushered in political stability and an environment for structural reforms. These reforms sequenced with responsible macroeconomic policies and increased donor financing have been the bedrock of Mozambique's growth spurt. High levels of investment—particularly foreign direct investment in the mining sector (“mega-projects”)—have allowed for increases in output, consumption and export. Similarly, increased productivity and higher quality-adjusted labor inputs have sustained the country's growth for the past decade.

## RESULTS

Mozambique's economic growth over the past 16 years has remarkable, averaging more than 8 percent from 1993 to 2009. This was accompanied by a significant reduction in poverty between 1997 and 2003, as measured by household surveys, and noteworthy improvements in other social indicators. Mozambique has posted double-digit growth rates in mining, manufacturing, construction, electricity, gas and water, reflecting a significant transformation of output to more productive sectors that generated positive composition effects in aggregate productivity. Foreign direct investment increased from less than \$50 million in 1993 to nearly \$900 million in 2009. Poverty reduction, however, appears to have slowed in recent years. And in spite of the progress, the structure of the economy remains narrow, and is characterized by subsistence agriculture and a few isolated mega-projects. Additionally, the export basket remains extremely limited, with less than a dozen products registering exports in excess of \$1 million in 2008.

*Macroeconomic stability has enabled broad-based economic expansion, attracted FDI, and sustained aid flows to fund social and physical infrastructure*

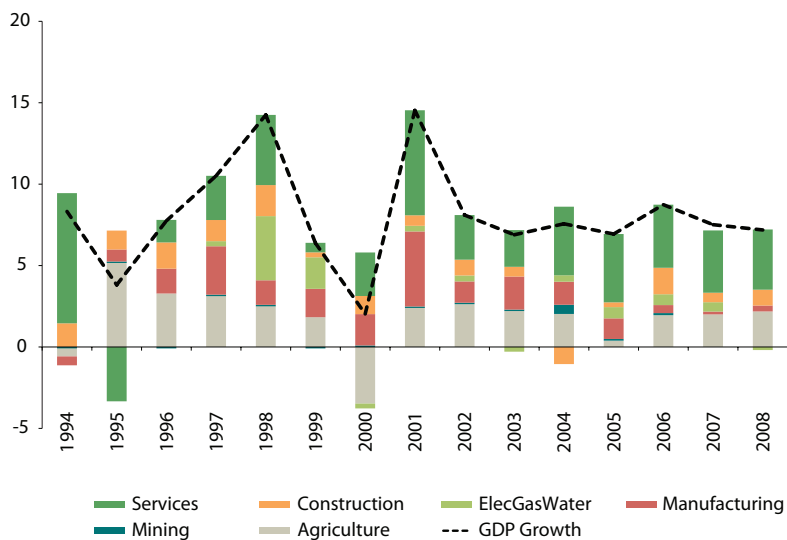
## LESSONS LEARNED

Though Mozambique's economic growth continues to be strong, the pattern of growth is not generating the jobs required to broadly share the benefits of economic growth. Macroeconomic

stability and investments in infrastructure need to be accompanied by far-reaching reforms to enable a more inclusive growth pattern based on economic diversification of exports into nontraditional commodities with higher value-added content, greater private sector activity, increased competition and trade integration.

*Authors: Antonio Nucifora and Luiz Pereira Da Silva*

**Sectoral contribution to growth, 1994 and 2008**



# Botswana's success

## Good governance, good policies and good luck

*For over two decades, public sector savings fluctuated between 10 and 40 percent of GDP*

*By 1990, 90 percent of the population of Botswana had access to safe water*

### CHALLENGE

At independence Botswana was one of the poorest countries in the world, with per capita income of just \$70 a year and 60 percent of current government expenditure financed by donor aid. The new nation was characterized by poor infrastructure, low human development levels and an over dependence on agriculture—40 percent of GDP.

### APPROACH

To weather the shocks from boom and bust cycles, Botswana adopted countercyclical fiscal policies. Resources saved during the boom years, were used to insulate low revenues experienced during crisis years. Following this strategy, the government of Botswana, created two instruments—the Public Service Debt Management Fund and the Revenue Stabilization Fund—that serve as mechanisms for fiscal savings, investment and government revenue. As a result, public sector saving was kept high, fluctuating between 10 and 40 percent for two decades from 1975, while public spending remained consistent at 20 percent.

### RESULTS

By the early 1990s, Botswana's investments began to pay off. Life expectancy at birth rose to 60 years, up from 37 years at independence. Under-five mortality fell to about 45 deaths per 1,000 live births. Similarly, annual growth in per capita income averaged 7 percent between 1966 and 1999 and there was noticeable progress on poverty reduction with the proportion of poor people falling from about 50 percent in 1985 to 33 percent in 1994. Infrastructure improved as well, with the number of paved roads increasing to 2,300km in 1990 up from 20km in 1970. All these improvements were occurring under the backdrop of reduced donor financing—development assistance is now 3 percent of government budget.

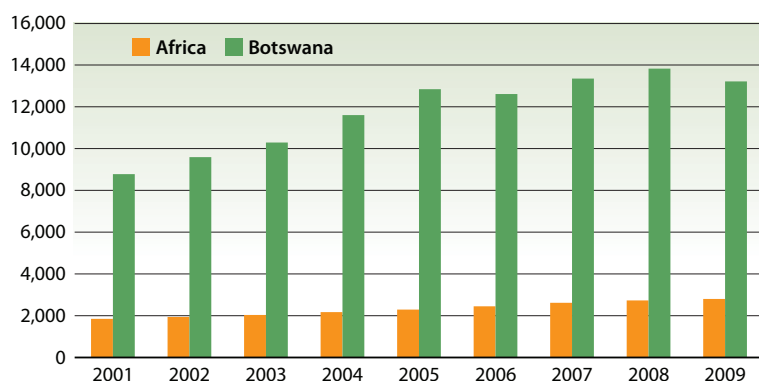
### LESSONS LEARNED

A key lesson to be learned from Botswana's growth experience is that good governance will strengthen the effectiveness of good policy, and good policies encourage better governance. Strong democratic leadership since independence allowed for the design and implementation of policies leading to stability and economic progress. Furthermore, the government neither

adopted import substitution policies nor did it expand the reach of state owned enterprises, thereby minimizing inefficiencies and fiscal drain. While Botswana's success has been long lived, it faces serious challenges. It is still a mineral-based economy with the mining sector that contributes about 40 percent of GDP and employs 30 percent of the active workforce. Policies for increased diversification are needed to ensure macroeconomic stability.

*Author: Michael Lewin*

**Average per capita income in Africa and Botswana 2001-2009**



## An economic success story

*Tourist arrivals reached 900,000 in 2008 up from 240,000 a decade earlier*

*Between 2004 and 2007, Mauritius attracted more FDI stock, than the cumulative stock of FDI during the previous 25 years*

### CHALLENGE

At independence, Mauritius was a poor agriculture based economy with limited arable land and a high population growth rate. Sugar—its cash crop—accounted for 25 percent of GDP, a third of total employment and export earnings. Through most of 70s and 80s, Mauritius implemented a highly protective trade policy further crippling growth. Tariffs on clothing, footwear and furniture were above 50 percent, while those for electronics and plastics averaged above 40 percent.

### APPROACH

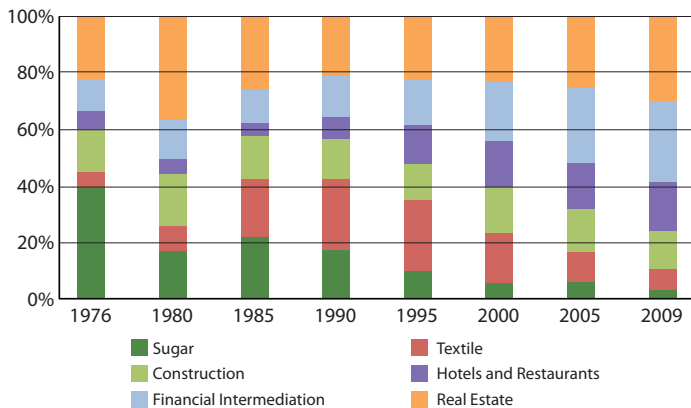
In the late 1980s, the Mauritian government underwent tight fiscal policies, withdrawing food subsidies and minimizing the public wage bill. To ensure export competitiveness, in 1979, the Bank of Mauritius devalued the Mauritian rupee by 30 percent and again in 1981, it adjusted the rupee, pegging it to a trade-weighted basket of its major trading partners. Finally in 1991, it switched to a managed float. The government established export processing zones (EPZs), providing powerful incentives to foreign investors. In recent years, the government has encouraged diversification of the economy into business process outsourcing, financial services and information technology by investing in infrastructure for ICT, hotels and tourism services.

### RESULTS

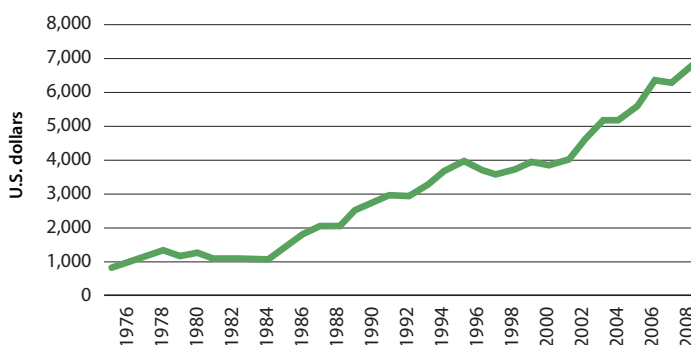
Under the government's reforms, GDP growth averaged more than 5 percent a year since 1970 and GDP per capita increased about sevenfold between 1976 and 2008 from less than \$1,000 to roughly \$7,000. Efforts at economic diversification have been successful, allowing the nation

to transition from a sugar dependent economy to a broader service economy. Measures of human development have improved in tandem with GDP growth with life expectancy above 70 years in 2008 and child mortality below 20 deaths per 1,000 live births.

**Major economic sectors in Mauritius 1976-2009**



**GDP per capita in Mauritius, 1976 – 2008**



### LESSONS LEARNED

Prudent fiscal, monetary and exchange rate policies were the key to Mauritius' growth miracle. Revenues collected in the boom years were used for capital accumulation rather than consumption. The government acted as a facilitator of private sector expansion, engaging country stakeholders through the Joint Economic Council (JEC)—an umbrella association uniting several sectors. Equally important, was the government's ability to adopt policies to a constantly changing external environment, correcting external and internal imbalances when necessary.

*Author: Ali Zafar*

# Post-conflict economic governance reform

## The experience of Liberia

Between 2000 and 2005, public spending was \$25 per person in Liberia, one of the lowest levels in the world

Liberia has rapidly climbed Transparency International's Corruption Perceptions Index, moving from 137 of 158 in 2005 to 97 of 180 in 2009

### CHALLENGE

When Liberian President Ellen Johnson Sirleaf took office in January 2006, two years after the signing of the Peace Accords that brought a fragile end to a conflict that had killed more than 250,000 people and left over half a million more displaced, she took charge of a country facing enormous challenges. The scale and intensity of the violence made Liberia a failed state. Gross domestic product had fallen over 90 percent from its peak. Between 2000 and 2005, low levels of revenue collection and the disorder of war resulted in annual public spending of about \$25 per person, one of the lowest levels in the world. External debt had ballooned to \$4.7 billion, roughly 800 percent of GDP and 3,000 percent of exports. Public trust in economic governance was destroyed.

### Approach

Two major policy shifts in 2006 provided the thrust necessary to make sustained inroads in economic governance in Liberia. First, the new, democratically-elected leadership embraced the need for change and set out ambitious reform plans for their first 150 days in office and beyond. The government also ensured donors were on board with innovative donor coordination mechanisms. Second, a major international policy initiative aimed at improving economic governance in Liberia, the Governance and Economic Management Assistance Program (GEMAP) was introduced. GEMAP played an important role early on in stabilizing expenditure and establishing processes, but was less useful in securing revenue.

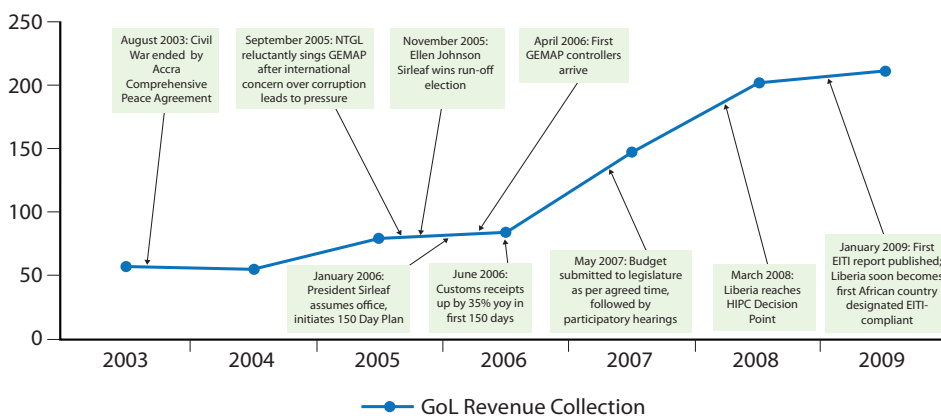
### RESULTS

Liberia's approach had several positive effects. Revenue collection tripled between 2006 and 2010. The Central Bank had built its reserves to nearly \$100 million at end-2008 from only \$6 million at end-2005. Important budgeting and expenditure processes have also been established. The Liberian government now pays civil servants on time and no new arrears have been accumulated. Gains have also been made in increasing transparency. Though such indicators are difficult to measure, one telling sign is that Liberia has rapidly climbed the ranks of Transparency International's Corruption Perceptions Index, moving from 137 out of 158 in 2005 out of 180 in 2009.

### LESSONS LEARNED

Improvements in Liberia's economic governance could not have been made without strong political leadership. The importance of flexibility in policy interventions in a fast-changing post-conflict environment became apparent as well—the interventions appropriate in late 2005 appeared outdated just two years later as the Liberian situation changed rapidly. If anything, the international community did not pivot fast enough to move from the emergency stabilization measures to building up capacity and durable systems for the long term.

### Economic Governance Reform Timeline



Note: Revenue data is exclusive of grants and is from IMF. Liberia's fiscal year runs from July to June. All figures reported are of the fiscal year ending in June.

# Decentralization in post-conflict Sierra Leone

## The genie is out of the bottle

*When Sierra Leone emerged from conflict in 2002, elected local government had been suspended for 30 years*

*Access to schools, health clinics, roads, and water have all improved considerably since the Local Government Act was passed in 2004*

### CHALLENGE

When Sierra Leone emerged from more than a decade of conflict in 2002, it was as one of the poorest countries in the world and faced an extremely challenging governance and political environment. What little infrastructure the country had was destroyed, while areas outside Freetown were excluded and marginalized and a legacy of undemocratic, Freetown-centered politics prevailed.

### Approach

The end of civil war in Sierra Leone saw the emergence of political support for both decentralization and reinstallation of elected local government (suspended since 1972). More political than economic, the drivers of change led to the 2004 Local Government Act. The Act established 19 urban and rural councils; recast administrative, functional, and fiscal center-local relationships; and identified a four-year period of transition to end-2008, during which central functions were to be devolved to local councils in phases.

### RESULTS

Sierra Leone's decentralization legislation resulted in several key achievements. Two council elections have been completed. All local councils have the core staff necessary to carry out planning, budgeting, accounting, and procurement functions. A system of intergovernmental transfers is also in place, and local governments are able to work with centrally-managed front-line staff to manage delivery of health, education, and water supply and sanitation services. Survey data shows that the quality of public services is at least at pre-decentralization levels and, in some cases, the availability of basic services has improved dramatically between 2005 and 2008. All of this said, the new legal and policy framework did not fully resolve tensions between the chieftaincies and the councils with respect to their respective domains.

### LESSONS LEARNED

The post-conflict environment provided Sierra Leone the opportunity for important reform and for providing a political and economic peace dividend through that reform. In addition, Sierra Leone's experience with decentralization shows that it made sense to push ahead with legislation

knowing that the design was imperfect and that learning and improvement would happen through implementation.

*Authors: Vivek Srivastava and Marco Larizza*

### Service availability and quality (percent of respondents)

	2005	2007	2008
Access to school within 30-minute walk	68.3	73.9	74.3
Satisfaction with primary schools	87.7	94.4	90.3
Satisfaction with health clinic	81	90.9	90.6
Spoken to an extension worker in the past year	23	17.8	9
Access to sufficient storage space (farming households only)	8.4	11.8	14.3
Drivable road within 30-minute walking distance	67.1	73.2	77.5
Market area within 60-minute walk	31.9	45.8	50.9
Water source within 15-minute walk	61	73.4	80.9

*Import containers at the port of Berbera have doubled between 2003 and 2007*

*Between 1997 and 2006, the number of primary schools in Somaliland has risen from 165 to 516*

## CHALLENGE

After the civil war with Ethiopia in 1991, chaos ensued and Somalia collapsed into a stateless entity, dominated by bandits and warlords. The Somaliland Republic, a resulting break-a-way state of Somalia's civil war, is yet to be internationally recognized as a nation state. Somaliland's international status makes its 3.5 million people ineligible for foreign aid, however, Somalilanders seem to have developed an efficient means of keeping themselves and their local governments accountable—a system not observed in other parts of Somalia.

## APPROACH

The end of conflict in 1991, ushered a political process that led to a fairly successful democracy in about a decade. The Somaliland government redistributed fiscal revenues to different regions across the country. The nation's pre-existing assets: transport infrastructure (the port of *Berbera*) and its preserved traditional institutions were the means through which Somaliland ensured economic activity. By exploiting features of "indirect rule"—remnants of its British colonial past—Somaliland elders (who by tradition have a significant level of authority in their communities) were given the power to run the country's affairs at the local level, by exchanging security for revenues from port taxes. In so doing, the government established at a low cost the required level of security necessary for making economic activity successful and profitable. Tax revenue was used to invest in education and social services.

## RESULTS

The traffic at the port of *Berbera* has been rising steadily over the last decade. Import containers have doubled between 2003 and 2007. Somaliland has managed to keep an acceptable level of security along the paved road connecting the port of *Berbera* to Ethiopia and a large share of Ethiopia's international trade is now shipped through this port. Additionally, significant strides have been made in the education sector. Between 1997 and 2006, the number of primary schools has risen from 165 to 516, while the number of Universities has risen from 1 to 5.

## LESSONS LEARNED

The success of *Berbera* offers several lessons for policy makers with similar pre-existing conditions. The competitiveness of the port depends on (i) the profitability of doing business with competitors (other ports) and (ii) the costs of physical transport incurred while getting to the port. These two variables are further dependent on the bandits, who either chose to attack traders or not, and the tax authority, that determines the cost of using the port. In essence, this study shows that the right local conditions (political settings) are necessary to make redistribution of the benefits of cooperation among different stakeholders within a country credible and sustainable. In the case of Somaliland, elders were paid to keep violence controlled, ensuring economic activity at the port. A comparison between Somaliland and other parts of Somalia, underscores the significance of a bottom-up governance approach, where traditional authorities are strong enough to deliver services and a central government is democratic enough to be credible. Furthermore, Somaliland offers examples of how diaspora of Somalilanders, who had fled conflict, have played a key role in the country's political development and emergence as a democracy.

*Author: Jean-Paul Azam*

# Growing Mali's mango exports

## Linking farmers to markets through innovations in the value chain

*Mango exports to the EU, increased sixfold between 2003 and 2008*

*Mali overcame infrastructural and supply chain challenges through a multi-modal transportation system*

### CHALLENGE

Mali is a landlocked country that is heavily economically dependent on agriculture but with limited transportation infrastructure and, until recent years, little market understanding and agricultural export competitiveness. Though the government identified mangoes as an option for diversifying Mali's export base in the 1990s, it faced significant inefficiencies: high costs of air freight, poor access to sea ports, and weak harvesting and storage techniques. These problems were further exacerbated by lack of finance, insufficient management capacities, an unfavorable investment climate, poor organization, and an inexistent land market.

### APPROACH

In the early 90s, Mali began implementing a multi-modal (road, rail, and sea) transportation system to ship mango exports to destination markets in Europe more efficiently. Through a donor-funded partnership with private operators, a cold-chain (refrigerated) system was developed, phytosanitary improvements were made, certification and traceability programs were implemented, and training in orchard management practices and post-harvest handling was offered to Malian agricultural workers. The overarching goal of the strategy, though, was to increase rural incomes.

### RESULTS

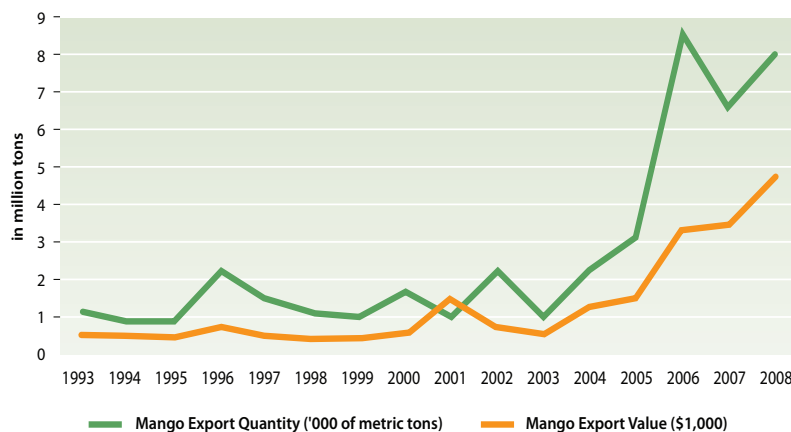
Most importantly, Mali's mango exports to the EU increased sixfold in volume between 2003 and 2008. Sea freighted exports, which were zero in 1993, rose to 4,600 metric tons. Transit time for mangoes from Sikasso to Northern Europe, meanwhile, decreased from 25 days to 12 days over the same period, and Mali has become an increasingly-recognized origin of fruit imports to the European Union. In addition, the approach also brought producers a significantly higher price for mangoes at the farmgate level—125 CFAF in 2008, up from 50 CFAF in 1993.

### LESSONS LEARNED

Mali's experience underlines the importance of bringing together a combination of ingredients—public-private investment, technical expertise, national capacities, and innovation—that are likely to drive positive economic change. Additionally, it emphasizes the importance of sustained development effort over time and highlights the significance of building partnerships, which in this case were used to support value chain improvements and export growth.

*Authors: Yéyandé Sangho, Patrick Labaste, and Christophe Ravry*

**Mango Exports (1993-2008)**



# Economic liberalization in Rwanda's coffee sector

## A better brew for success

*The average export price per kilogram of Rwandan coffee nearly doubled between 2003 and 2008, from \$1.60 to \$3.10*

*Coffee washing stations have produced both jobs and important indirect benefits, in the form of informal business cooperation and learning*

### CHALLENGE

Agriculture is the main source of livelihood for 90 percent of the Rwandan population. Though most farmers are subsistence farmers, some produce crops for export. Coffee is chief among these. For many years, however, the coffee sector was stuck in a “low-quality/low-quantity trap.” Compulsory production, substantial export taxes, and a monopsony export control agency meant that producers had little incentive to invest in the production of high-quality coffee. Highly volatile world coffee prices in the 1980s (and state capture during boom years), coupled with the economic destruction of the country during the genocide in 1994, left coffee producers in an even worse situation.

### APPROACH

Changes in Rwanda's coffee sector were implemented in several waves. The first began shortly after the genocide, when the government removed a variety of barriers to trade, created incentives for groups and individuals to transfer their efforts from semi-washed to fully-washed coffee as an end product, and facilitated entrepreneurship in the coffee industry. More substantial reform efforts began in 2000, when the government, working with consultants and donors, studied the potential for adding value to Rwandan coffee through the production of higher-quality, washed, and fermented specialty coffee. In 2002, the government issued a National Coffee Strategy that outlined a plan for capturing a larger share of the specialty-coffee sector. In the intervening years, more than 100 coffee washing stations have been built.

### RESULTS

Rwanda's approach to liberalizing its coffee sector has resulted, in the country's coffee farmers now having the opportunity to sell higher-quality beans for a higher price. Indeed, the average export price of coffee nearly doubled between 2003 and 2008. For smallholder farmers and other participants in the coffee value chain, producing specialty coffee means not just more income, but expanded connections to world markets and positive effects from informal economic cooperation at coffee washing stations. Importantly, coffee washing stations had created 4,000 jobs as of 2006. Rwandan coffee exports generated more than \$47 million in revenue in 2008, compared with \$35 million in 2007.

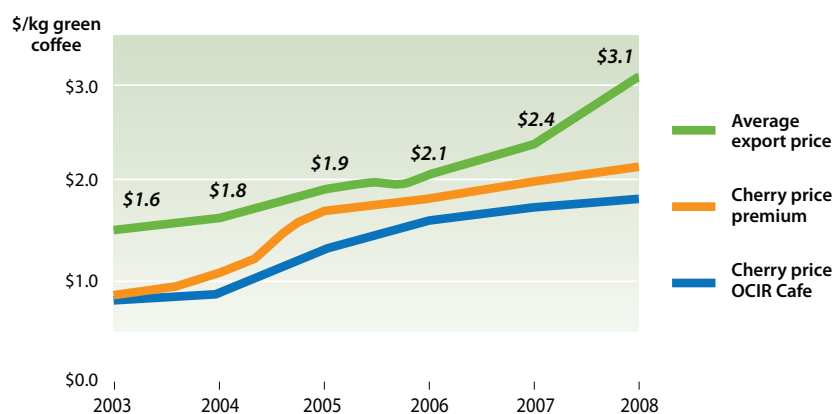
### LESSONS LEARNED

Perhaps most importantly, aspects of the approach to the coffee sector could be replicated in other sectors, thus helping push Rwanda toward its goal to become a stable, middle-income

economy. The shift in incentives from the public to the private sector in the context of the coffee sector reforms is also significant. Finally, it is clear that Rwanda could take steps to further improve the coffee sector—for example, by implementing further price incentives for producers to focus on high-quality coffee, improving management of producer cooperatives, and reducing still-high transportation costs related to poor infrastructure and Rwanda's landlocked status.

*Author: Karol Boudreaux*

**Average farmers and export prices 2003–2007**



## Shaping the success of an economy

*Cocoa offers livelihoods for more than 700,000 people in Ghana and has long been a major source of export earnings*

*Following near collapse of cocoa production in the early 1980s, Ghana instituted policies that revived the sector starting in the mid-1980s and continuing into the 1990s; between 2001 and 2003, production doubled*

### CHALLENGE

The link between cocoa and the Ghanaian economy is long and deep. Since the country's independence in 1957, cocoa has been central to its debates on development, reforms, and poverty alleviation strategies. Cocoa offers livelihoods to more than 700,000 farmers in the southern tropical belt of the country, and has long accounted for a major portion of export earnings. Cocoa production has not been an unmitigated success, however. Ghana experienced a major decline in production in the 1960s and 1970s, and the sector was close to collapse in the early 1980s. But the ups and downs offer interesting lessons.

### APPROACH

Over the past three decades, Ghana has undertaken several measures to expand cocoa production and improve the circumstances of the people who produce the crop. After the near collapse of the industry in the 1980s, Ghana raised the share of the free on board (f.o.b.) price of cocoa paid to farmers, over time, from about 10 percent to nearly 80 percent reducing the incentive to smuggle cocoa for export in neighboring countries. In addition, the devaluation of the cedi, reduced the level of implicit taxation of farmers. Cocoa marketing boards were liberalized starting in 1992, and technical advances were also encouraged.

### RESULTS

Ghana's approach to its cocoa sector has brought about four noticeable achievements: emergence as one of the world's leading producers of cocoa, with more than 650,000 pounds in 2008; an international reputation for high-quality cocoa; success in linking cocoa production to poverty reduction, particularly in recent years; and the successful use of technical advances, such as increased fertilizer usage and adoption of improved cocoa varieties, to increase output. In volume terms, Ghana's policies brought about a rapid recovery of the sector starting in the mid-1980s and continuing through the 1990s. Between 2001 and 2003, cocoa production nearly doubled.

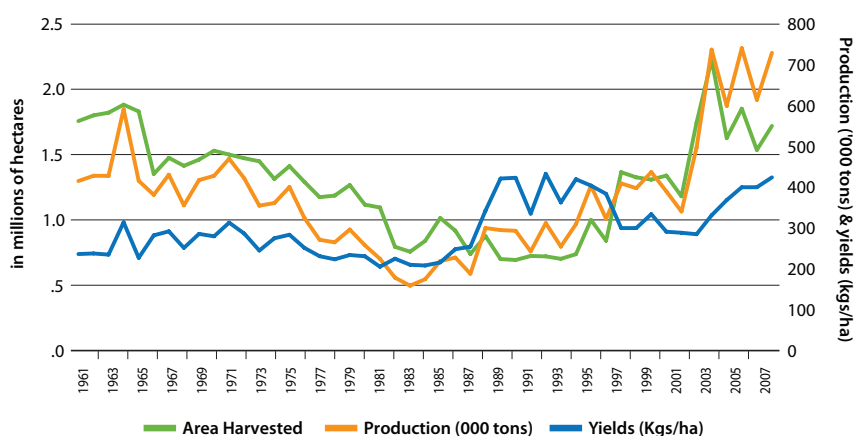
### LESSONS LEARNED

Two key lessons emerge from Ghana's cocoa experience: the need for appropriate macro management and the need to pinpoint an appropriate role for the state. Specifically, the need for suitable policies—exchange rate policies in particular—are evident from the effect that an

overvalued exchange rate had on Ghana's cocoa production in the mid-1980s. Equally important is the potential contribution the private sector can potentially play in improving the efficiency of marketing and in passing on a greater share of the f.o.b. price of a commodity to farmers.

*Authors: Shashi Kolavalli and Marcella Vigneri*

**Cocoa production in Ghana, 1960 – 2008**



# Apparel exports in Lesotho

## The state's role in building critical mass for competitiveness

*Lesotho's apparel exports to the United States more than doubled between 2000 and 2008*

*More than 52,000 people were employed in the apparel industry in 2008, up from about 17,000 in 2000*

### CHALLENGE

Lesotho is a landlocked country of 2 million people with limited transportation infrastructure, undeveloped factor (land, labor, and capital) markets, inadequate technical expertise and backward and forward industrial linkages. Taken together, these factors have meant that Lesotho traditionally has had trouble competing internationally in any industry.

### APPROACH

In the early 2000s, Lesotho pursued an aggressive investment and export promotion strategy just in time to capitalize on the U.S. African Growth and Opportunities Act (AGOA), which runs through 2012. First, it took measures to rapidly develop factor markets, offering early investors publicly-owned factory shells at subsidized rents. Second, it developed public-private collaboration to develop internationally acceptable standards on labor rights, compensation, and skills. Third, the government worked with the private sector to develop business services and infrastructure for the apparel value chain, including forward and backward linkages, transport and logistics, and customs procedures.

### RESULTS

Under the apparel strategy undertaken by Lesotho, the industry has become not only an entry point for a broad range of light manufacturing industries, but a significant contributor to the economy's growth and competitiveness. The growth of the apparel industry has made immediate contributions to employment and created significant backward and forward value chain linkages. The export effects have been tremendous: Lesotho exported just under \$350 million apparel to the United States in 2008, 29 percent of all apparel exported to the United States from Sub-Saharan Africa. Even higher-income countries such as Mauritius and South Africa are rapidly losing their comparative and competitive advantages to Lesotho in the apparel sector.

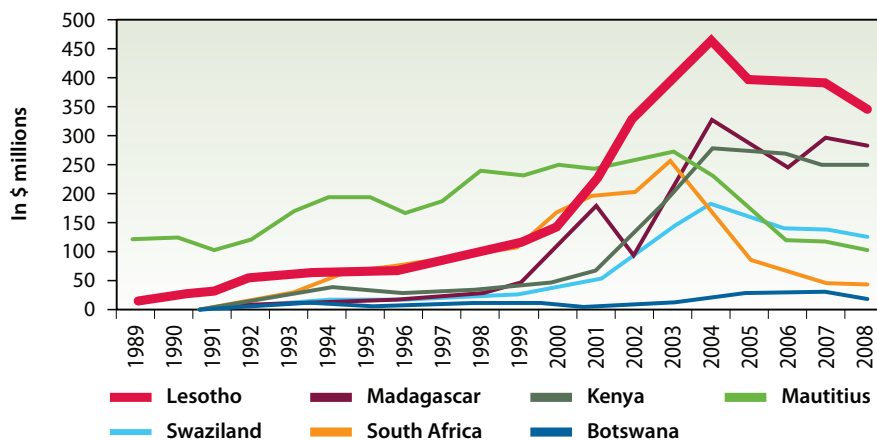
### LESSONS LEARNED

Lesotho's apparel industry case presents several lessons that could be useful for countries with a similar development profile. First, it developed competitive strategies in factor markets that balanced short-term measures with long-term goals. It also shows that collaboration is

necessary: competitiveness is neither solely about firms nor solely about government policies, and successful public-private collaboration can be a boon to a developing industry. Finally, the Lesotho case shows that countries should not take "market" at face value. Global markets are punctuated by multiple bilateral and multilateral agreements, and countries should determine how they can strategically leverage these agreements rather than pursuing competitiveness in isolation.

*Author: Mallika Shakya*

**U.S. imports of clothing and textiles from AGOA countries (\$ millions), 1989–2008**



# The success of tourism in Rwanda

## Gorillas and more

*The number of tourists visiting Rwanda's national parks has increased exponentially over the past decade, from 417 in 1999 to 43,000 in 2008*

*Local investors are key: 86 percent of all new tourism-related projects in Rwanda since 1999 are locally owned*

### CHALLENGE

Attracted in part by gorilla-viewing opportunities, a growing number of tourists visited Rwanda in the 1980s. By 1990, approximately 22,000 people visited Rwanda's three national parks. That was the peak before a steep downturn, however. Between 1994 and 1998, civil war, genocide, and intermittent periods of unrest brought tourism to a halt. Aside from the stigma of the genocide, gorillas in the Virunga Mountains were severely threatened by conversion of their habitat to farmland and extraction of their resources for other mammals. Illegal hunting and trafficking by local communities further threatened the gorilla population.

### APPROACH

Starting in 1994, the government of Rwanda put considerable effort into developing a clear tourism strategy. With local private sector and foreign (UN) input, the government successfully drafted a tourism strategy focusing on high-end tourism with conservation at the core of its plan. The strategy also outlined the need for diversification of tourism to international conferencing, birding, and other animals. An international marketing campaign was launched to improve the image of the country abroad, while a domestic campaign aimed to increase local acceptance of tourists. Several market-based reforms were also adopted—namely, near-complete privatization of the hotel and leisure sector.

### RESULTS

The tourism industry has emerged as Rwanda's top foreign currency earner and export sector, ahead of the coffee and tea sectors. Tourism accounted for 23 percent of total exports over 2005–08, while coffee and tea were 11 percent and 8 percent, respectively, versus 37 percent and 11 percent a decade earlier. The number of visitors to Rwanda's national parks has increased exponentially—from 417 in 1999 to 43,000 in 2008. The revival of tourism has also expanded employment opportunities for Rwandans, and a revenue-sharing program instituted in 2005 is injecting 5 percent of tourism revenues from national park fees into local community projects.

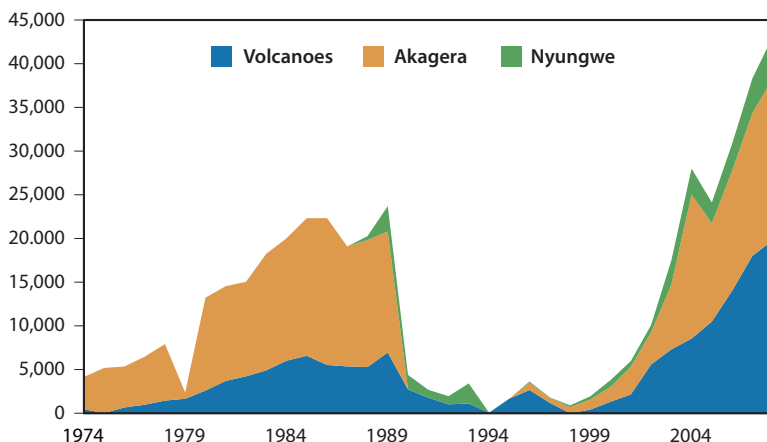
### LESSONS LEARNED

One of the most important lessons of Rwanda's tourism strategy work is the need for a flexible capacity framework. On one hand, empowerment of partners will be constrained where

appropriate powers are not devolved to them. On the other, it is impossible to impose powers on those who feel neither capable nor inclined to exercise them. Rwanda's case also points to the importance of committed, open dialogue between the public and private sectors. Additionally, it is clear that gorilla conservation must be balanced with research visits and tourism trips to ensure that the health of gorillas and the integrity of their habitat are maintained.

*Authors: Hannah Nielsen and Anna Spenceley*

**Visitors to Rwanda's three national parks, 1974–2008**



## Creating wealth in Sub-Saharan Africa

More than 87,000 small-scale agricultural enterprises have been created using MoneyMaker pumps over the past 13 years

Households using KickStart pumps have seen their incomes grow by 100–200 percent

### CHALLENGE

Agricultural productivity in Sub-Saharan Africa is the lowest in the world, with per capita output only 56 percent of the world average. Since 1980, more than 80 percent of output growth in the region has been achieved through land expansion, rather than technological or other efficiency improvements, versus less than 20 percent for all other regions. In addition, population growth in Sub-Saharan Africa surpasses production growth, increasing the likelihood of food shortage. Indeed, food self-sufficiency declined from 97 percent in the mid-1960s to 82 percent in the late 1990s. Meanwhile, low incomes mean that African farmers are unable to afford commercial-quality irrigation equipment.

### APPROACH

Starting in 1991, the nonprofit social enterprise organization KickStart began selling low-cost, human-powered irrigation pumps to enable smallholder farmers in Sub-Saharan Africa (chiefly in Burkina Faso, Kenya, Mali, and Tanzania, but also other countries) to enhance productivity, improve household incomes, and sustainably contribute to poverty reduction. Approximately 130,000 pumps have been sold across Sub-Saharan Africa, irrigating over 31,000 hectares of land.

### RESULTS

With a \$35–95 MoneyMaker pump, a farmer can grow and sell enough additional produce to make considerable progress from poverty toward middle class. For the people using them, KickStart pumps have led to an increase in annual household income of 100–200 percent. Data from Burkina Faso, Kenya, Mali, Tanzania, and other countries show that 440,000 people have experienced an increased standard of living through the usage of KickStart pumps. The pumps have also allowed for the creation of 87,000 small-scale agricultural enterprises across Sub-Saharan Africa. Further, the pumps have proven to be cost effective: the annual capital outlay required for a KickStart MoneyMaker pump, is approximately one-tenth that of a conventional irrigation system.

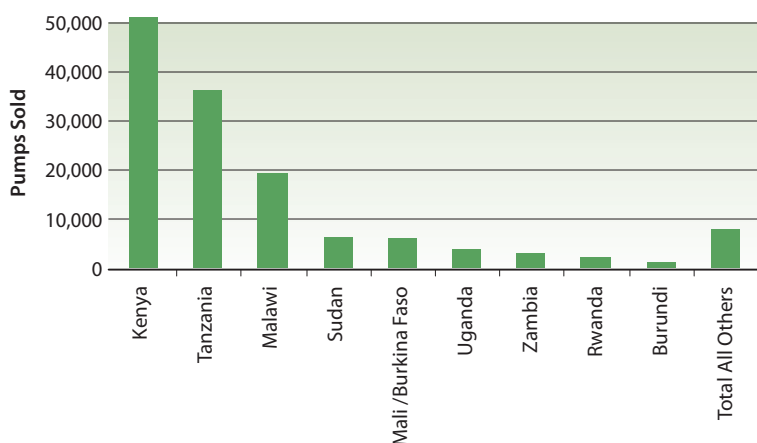
### LESSONS LEARNED

The KickStart experience demonstrates that farmer entrepreneurship, in which agricultural enterprises are run as viable businesses, needs to be introduced in many Sub-Saharan African

countries. It also shows that a participatory approach to rolling out a new technology infusion goes a long way in the absorption of the technology, and that technology evolution driven by users (this was done in the case of the Super MoneyMaker pump) can be powerful in this process. Additionally, the KickStart experience reinforces the idea that people in poverty have the desire and capacity to come out of poverty when accorded appropriate technology to generate wealth.

Authors: I. V. Sijali and M. G. Mwago

Cumulative KickStart pump sales, 1996–June 2009



# The NERICA success story

## Development, achievements and lessons learned

*Africa depends on imports of up to 40 percent of its rice consumption*

### CHALLENGE

Rice has long been a staple food in much of Africa. Since the early 1970s, it has been the number one source of calories for West Africans and the number three source of calories, after maize and cassava, for the continent as a whole. Although rice production on the continent has grown in recent years, current production is still far short of meeting demand. Thus, Africa depends on imports for up to 40 percent of its rice consumption, at a cost of an estimated \$4 billion in foreign exchange in 2009. Relying on world market to such extent to feed Africa's population is a risky and unsustainable strategy that may affect food security and civil stability, as shown during the food crisis in 2008.

*NERICA has had a positive impact on rice yields in Benin, the Gambia, and Uganda*

### APPROACH

Using conventional biotechnology (i.e., not genetic modification) to overcome a sterility barrier between two species of rice, the Africa Rice Center in Benin began developing, along with several partners, new varieties of rice in 1991. In all, 78 varieties of rice were initially developed—18 suited for upland locations and 60 for lowland. The first generation of NERICA varieties was introduced through participatory varietal selection trials in 1996 in Côte d'Ivoire and in additional countries starting in 1997. Following testing, two rice varieties, NERICA1 and NERICA2, were released beginning in 2001.

### RESULTS

As of 2010, NERICA varieties have been disseminated on more than 300,000 hectares in a broad swath of countries in West, Central, and East Africa. Significantly positive impacts of NERICA adoption on rice yields are evident in Benin and the Gambia. In Uganda, NERICA has been found to have positive effects on productivity and allow farmers to improve their yield. No significant impact on yields has occurred in Côte d'Ivoire and Guinea (demonstrating that success are not always easily replicated across the continent). In general, the impact of the NERICA varieties on women farmers has been greater than that for men. In terms of geography, NERICA varieties have shown great potential in both upland and lowland ecosystems in Africa—but particularly in the lowlands.

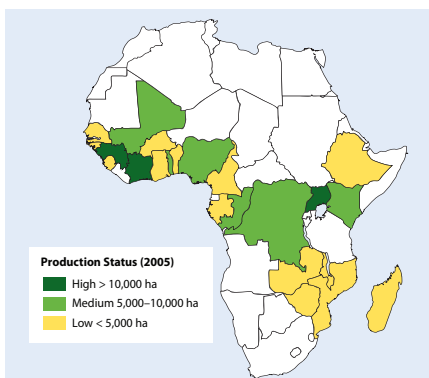
### LESSONS LEARNED

Several pertinent lessons have come out of the NERICA dissemination. First, the use of participatory selection as part of the rice testing process allowed farmers to evaluate the new rice varieties in comparison with their own material, enhancing capacity building and ownership of the NERICA varieties among farmers and agricultural extension communities and reducing the time

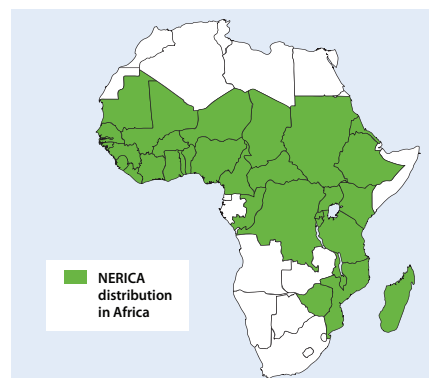
involved in the varietal release process in many countries. Second, partnerships with government authorities in several countries were crucial in NERICA adoption and seed production (still, seed production remains a significant bottleneck in West and Central Africa). More effort is needed to ensure that larger numbers of rice farmers can profit from these new varieties.

*Authors: Aliou Diagne, Soul-Kifouly Gnonna Midingoyi, Marco Wopereis, and Inoussa Akintayo*

**Countries producing NERICA, 2005**



**Countries producing NERICA, 2006**



# Fertilizer in Kenya

## Factors driving the increase in usage by smallholder farmers

*Maize yields in Kenya rose 18 percent between 1997 and 2007, despite the fact that total land area used for maize production was essentially stable*

*Fertiliser use in Kenya nearly doubled between 1992 and 2007, with much of the increase by smallholder farmers*

### CHALLENGE

Fertilizer use is notably lower in most of Africa than in other developing regions, contributing to low agricultural productivity. Though too little irrigation and cultivation of crop varieties unresponsive to fertilizer may explain this to some degree, more often, lack of credit, long distances between farmers and the nearest fertilizer retailer, weak market infrastructure, and liberalized crop input and output markets are blamed. In Kenya, more than 70 percent the population depends on agriculture-related activities for their livelihood, while about half of the population lives in poverty. Ensuring access to food thus requires that the poor are able to either produce or buy enough food for a healthy diet.

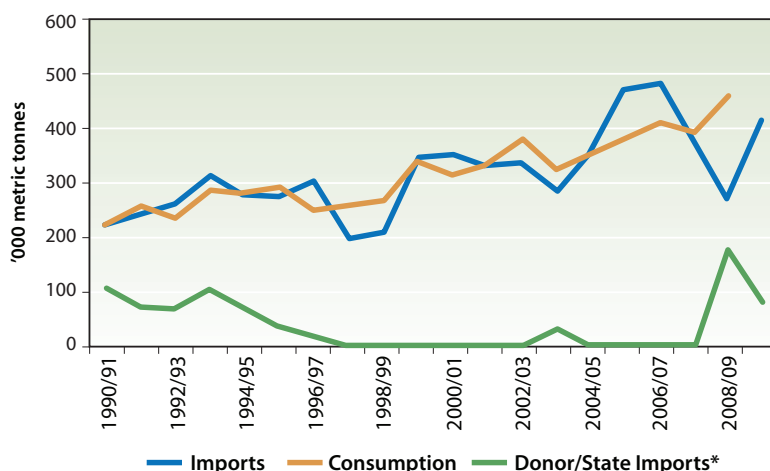
### APPROACH

For a number of reasons, Kenya's efforts in the 1980s to improve food security through increased production and incomes did not produce desired results. Exploration of alternate options led the government to undertake reforms in the fertilizer market. Those efforts targeted maize, the main food security crop in the country. Starting in the early 1990s, fertilizer markets were liberalised, government price controls and import licensing quotas were eliminated, and fertilizer donations by external donor agencies phased out. Kenya also tracked survey data on fertilizer use among 1,251 smallholder farms to examine factors influencing farmers' decisions to purchase fertilizer and the quantity of fertilizer applied per acre of maize.

### RESULTS

Kenya now stands as a notable departure from the Sub-Saharan African average in terms of fertilizer: usage almost doubled between 1992 and 2007, with much of the increase by smallholder farmers. In the productive farming areas of western Kenya, rates of fertilizer application on maize are comparable to those in Asia and Latin America. Maize yields in Kenya increased 18 percent over 1997–2007, despite the fact that total land area used for maize production was essentially stable. Liberalization spurred private sector investment in fertilizer retailing and maize marketing.

**Trends in fertilizer consumption, commercial imports, and donor imports, 1990–2009 and projections for 2010**



### LESSONS LEARNED

Kenya's case shows that geographic differences in agro-ecological potential are a fundamental factor influencing whether farmers use fertilizer, as seen in the dramatic differences between usage in the high-potential agricultural areas of western Kenya and the semi-arid areas, where farmers consider fertilizer use very risky unless it is highly subsidized. Besides price levels, household resource endowments and education also influence Kenyan producers' decisions about fertilizer use.

Authors: Joshua Ariga and T. S. Jayne

# The Malawi agricultural inputs subsidy program

## Experience over 2005–09

*Fertilizer disbursement and sales targets were exceeded each year from 2007 to 2009 by 16, 27 and 19 percent respectively*

*The implementation of this program represents a considerable logistical achievement for Malawi*

### CHALLENGE

Agriculture—specifically—maize, is important to the Malawian economy and the livelihoods of most of its people. Large numbers of Malawi's poor, plant maize on very small areas of land without fertilizer leading to low yields. These low yields then lead to low income and inability to purchase inputs. Moreover, poor farmers cannot purchase inputs on credit as these farmers are considered high risk and rural credit markets are underdeveloped. Therefore, low volumes of input demand, poor infrastructure, high transport costs, high input costs and high volatility in maize prices keep smallholder maize farmers locked in to low productivity maize cultivation. While only 10 percent of Malawian maize producers are net sellers of maize, more than 60 percent are net buyers of maize. This creates a significant dilemma between the need to keep a low maize price for over 60 percent of farmers as well as a high maize price for the 10 percent that are net sellers.

### APPROACH

Following severe food crisis in the early 2000s, the government of Malawi implemented a large national input subsidy program for the 2005/06 growing season. The program was repeated and expanded in subsequent seasons, building on core experiences but also modifying components and implementation from year to year. The objective of the program has been to increase resource poor farmers' access to agricultural inputs, which would increase yields and lead to increased food security and farmer income. The core elements consistent to each program have been its use of vouchers targeting about 50 percent of farmers nationwide for the receipt of fertilizer for maize production as well as vouchers for improved maize seed and for fertilizers for tobacco.

### RESULTS

Malawi's key achievements with its subsidy program have been its ability to raise land and labor productivity and improve food security for large numbers of poor households by relieving both profitability and affordability constraints on the use of inputs needed to increase crop productivity, leading to some combination of increased real wages and reduced food prices. While real wages have increased, poverty headcount rates have fallen. The subsidy program, however, is not the only contributor to these improvements. Over the same period, there were good rains and a marked improvement in macroeconomic management.

### Summary of Malawian Agricultural Input Subsidy Programs, 2005/06 to 2008/09

Indicator		2005/06	2006/07	2007/08	2008/09
Fertilizer voucher distribution (mt equivalent)		166,156	200,128	216,000	195,369
Households receiving one or more fertilizer coupons (percent)		---	54	59	65
Subsidized fertilizer (mt)					
For maize		108,986	152,989	192,976	182,309
For tobacco		22,402	21,699	23,578	19,969
Total subsidized fertilizer sales	<i>Planned</i>	137,006	150,000	170,000	170,000
	<i>Actual</i>	131,388	174,688	216,553	202,278
Redemption price (MK/50-kilogram bag)		950 <sup>a</sup>	950	900	800
Approximate voucher value, (MK/bag)		1,750	2,480	3,299	7,951
Approximate subsidy (%)		64	72	79	91
Subsidized maize seed (mt)					
Hybrid seed (%)		0	61	53	84
Cotton seed (mt)		0	0	390	435
Legume seed (mt)		0	0	24	---
Cotton chemical vouchers		0	0	131,848	---
Total program cost (MK millions)	<i>Planned</i>	5,100	7,500	11,500	19,480
	<i>Actual</i>	7,200	12,729	16,346	39,847

Note: --- = not available; mt = metric tons.  
a. seed or fertilizer coupon (NSO 2008). right here after the table and sources.

### LESSONS LEARNED

Malawi's experience offers a number of important lessons. First, any growth and development strategy that involves agricultural input subsidies must take into account the local context and the particular target groups. Second, performance monitoring, information and auditing systems are needed to develop trust, control fraud, and promote efficiency and effectiveness. Third, complementary policies and investments must be made in areas such as extension, research, health, education and more for the program to work as part of a long term strategy for poverty reduction. Fourth, good macroeconomic management provides favorable conditions for successful implementation. Fifth, political commitment is critical for sustained mobilization. Finally, sustainability of the program should be addressed by paying attention to cost control, scale and logistical performance.

Author: Andrew Dorward, Ephraim Chirwa, T. S. Jayne

# Cotton dependence in Burkina Faso

## Constraints and opportunities for balanced growth

*Cotton production increased threefold from 1996 to 2006*

*Between 2005 and 2010, Burkina Faso was the leading West African producer of cotton, producing 500,000 to 800,000 tons of seed*

### CHALLENGE

Agriculture accounts for 85 percent of Burkina Faso's active labor force. The cotton sector provides income for 15 to 20 percent of smallholder farmers, supporting 1.5 to 2 million people. Although cotton represents a large proportion of the country exports, the contribution of export earnings to GDP at 10 percent, is small.

### APPROACH

In the early 1990s, the government of Burkina Faso committed itself to cotton sector reforms. Reforms started slowly with talks between producers, SOFITEX—the national cotton parastatal—and government. Less than a decade later, cotton farmers, with donor and government support, were able to form a national union based on local and regional groups. After the partial privatization of SOFITEX and the devolution of responsibilities from the state to the producer's union, new private sector players began operating in the sector.

### RESULTS

In 2006 and 2007, Burkina was the leading cotton producer and exporter among all African countries. While the reforms that increased cotton exports were successful, they were not sufficient to translate to productivity increases; instead, the economy's dependence on the cotton sector has exacerbated growth volatility and vulnerability to exogenous shocks. The share of cotton in export earnings shot up from less than 40 percent in the 90s to 85 percent in 2007. Between 1995 and 2003, only cotton producing households significantly increased their expenditures, attesting to the pro-poor growth effect of these reforms for smallholder farmers.

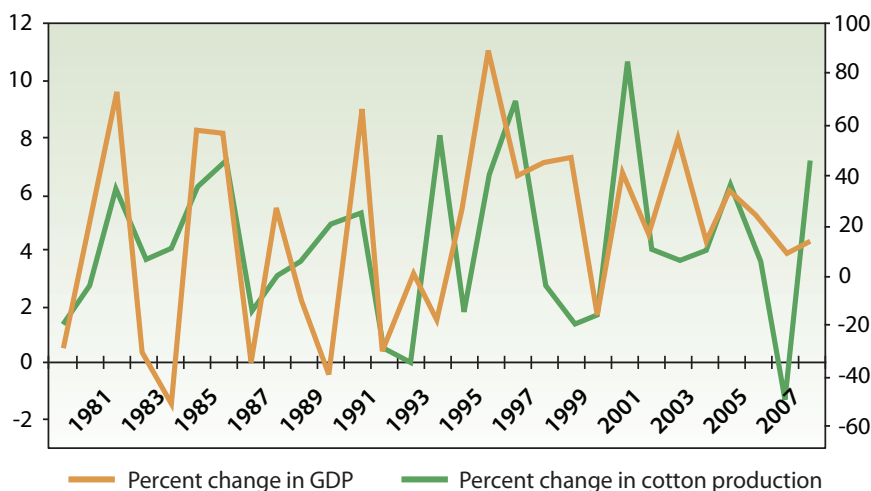
### LESSONS LEARNED

Burkina Faso's experience, underscores the importance of diversification in the rural sector toward higher-value agricultural exports such as fruits and vegetables that create more growth

spillover effects and linkages. Moreover, it emphasizes that diversification should be pursued within an adequate policy framework; however, issues relating to governance, management and institutional capacity still need to be addressed for policies to take root and be sustainable.

*Author: Jonathan Kaminski*

**Annual changes in cotton production and GDP in Burkina Faso, 1980–2008**



## Success stories

*Between 1998 and 2008, the number of mobile phone subscribers increased from 4 million to approximately 259 million*

*The ICT revolution has had a profound impact on African businesses and governments, driving innovation and entrepreneurship*

### CHALLENGE

Only 20 years ago, the information and telecommunication technology (ICT) sector in Africa was trivial and stagnant. Very few people had access to a telephone, and even fewer had access to computers. The idea of an ICT revolution in Africa was beyond the dreams of most people.

### APPROACH

In the 1990s, the global shift to wireless telecommunications created a technology suited for Africa. Governments across Sub-Saharan Africa began changing the way they managed the sector, shifting from a model of state-owned monopoly operators to competition between privately-owned companies. Between 1998 and 2008, more than \$36 billion was invested in telecommunications networks in Africa, mostly by the private sector.

### RESULTS

Efforts by Sub-Saharan African governments succeeded in expanding network coverage of the population from around 10 percent to over 60 percent between 1998 and 2008 while the number of mobile subscribers in the region increased exponentially, from 4 million to approximately 259 million. Simultaneously, prices fell two-thirds, from an average of \$0.30 per minute to \$0.10 per minute, and are continuing to drop, bringing telecommunication services within the economic reach of most Africans. In addition to allowing people to communicate more easily and inexpensively, the ICT revolution has created jobs, boosted investment and the sector is now in the top three sources of government revenues in many African countries. It has also had a profound impact on the way Africa does business and the way governments operate, driving innovation and entrepreneurship in the creation and delivery of both public and private services.

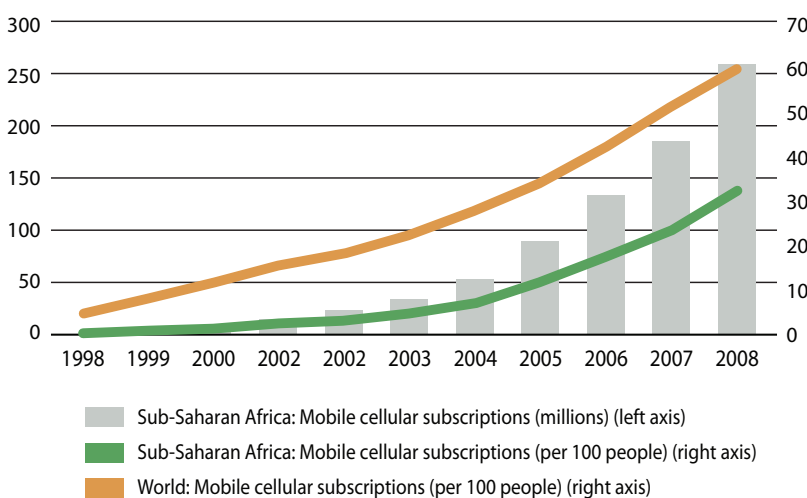
### LESSONS LEARNED

The first lesson of Sub-Saharan Africa's ICT experience relates directly to the telecommunication industry, showing that the sector has investors who are willing to take risks and invest very large sums in the region. The key is having the right business model, the correct policies, and a

regulatory environment that is conducive to doing business. The second lesson concerns innovation and entrepreneurs in Africa. The connectivity revolution has shown that, with the help of ICT, African entrepreneurs will establish new businesses and generate new areas of economic activity. Finally, as some governments in the region are demonstrating, it is possible to use ICT to overcome major public service delivery challenges, increasing reach, raising quality, and reducing corruption.

*Authors: Kaoru Kimura, Duncan Wambogo Omole, and Mark Williams*

**Growth of mobile phone subscription, 1998–2008**



## Mobile payments go viral

*M-PESA's 9 million registered users transfer an average of \$320 million per month*

*M-PESA now processes more transactions domestically within Kenya than Western Union does globally*

### CHALLENGE

Inadequate, inaccessible financial access is undoubtedly one of the reasons why the poor are trapped in poverty. Without access to finance, the poor people cannot invest in tools to increase productivity, start a microenterprise, invest in education or health, or even take time to search for better opportunities. In addition, monetary exchanges require a physical location and people need transportation to get to the location, both of which can be problematic in infrastructure-constrained countries such as Kenya, particularly in rural areas.

### APPROACH

Developed by Vodafone and launched commercially by the company's Kenyan affiliate Safaricom, M-PESA is a small-value (all transactions are capped at \$500) electronic payment and store of value system accessible from ordinary mobile phones. Once customers have an M-PESA account, they can use their phones to transfer funds to both M-PESA users and non-users, pay bills, and purchase mobile airtime credit for a small, flat, per-transaction fee. The affordability of the service has been key in opening the door to formal financial services for Kenya's poor.

### RESULTS

Since its introduction in mid-2007, M-PESA had been adopted by 9 million customers as of late 2009—40 percent of Kenya's adult population—and is now facilitating an average of \$320 million per month in person-to-person transfers (roughly 10 percent of Kenya's GDP on an annualized basis). The extremely rapid uptake of M-PESA is a strong vote of confidence by local users in a new technology as well as an indication of significant latent demand for remittance services. In recent months, M-PESA has begun allowing institutional payments, enabling companies to pay salaries and collect bill payments.

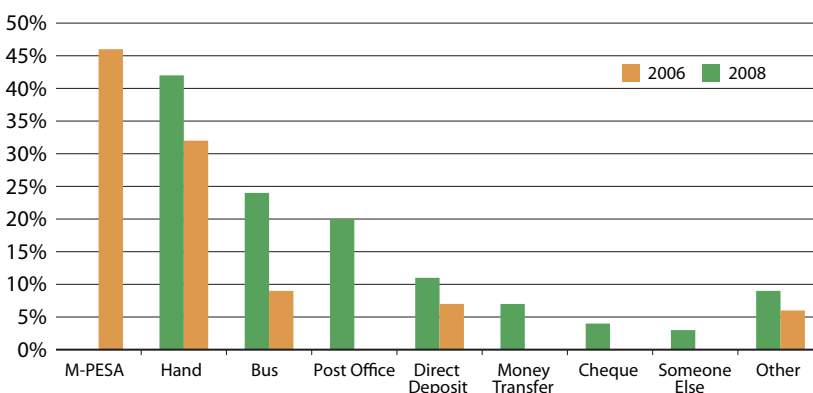
### LESSONS LEARNED

Three major lessons have emerged from M-PESA. First, it demonstrates the value of leveraging mobile technology to extend financial services to large segments of unbanked poor people. Second, it shows the importance of designing usage-based rather than float-based revenue

models for reaching poor customers with financial services. Unlike a traditional bank, which typically distinguishes between profitable and unprofitable customers based on the likely size of their account balances and ability to absorb credit, M-PESA serves any Safaricom mobile customer who pays for an account. And third, M-PESA reveals the need for a low-cost transactional platform that enables low-income customers to meet a range of payment needs.

*Authors: Ignacio Mas and Dan Radcliffe*

**Money transfer methods before and after M-PESA**



## Determinants of success

*Private investment in Sub-Saharan Africa's power sector since 1994 totals \$4.06 billion*

*Two IPPs in Côte d'Ivoire, CIPREL and Azito, survived the civil war in the country, while continuing to supply power to domestic users and neighboring countries*

### CHALLENGE

Until the early 1990s, virtually all major power generation in Sub-Saharan Africa was financed by public coffers—namely, by concessionary loans from development finance institutions. These publicly-financed assets were considered one of the core elements in state-owned, vertically integrated power systems. Funds available under this arrangement, however, were not sufficient to fulfill African's power needs, and state-run utilities had long performed poorly.

### APPROACH

The confluence of challenges led Sub-Saharan African countries to consider reforms in their power systems a priority. Independent power projects (IPPs), as they are known, are greenfield, privately-financed projects supported by non-recourse or limited-recourse loans and that make use of long-term power purchase agreements (PPA) with the state utility or another off-taker. IPPs were considered a viable option for alleviating supply constraints, and could also potentially serve to benchmark state-owned supply. In 1994, Côte d'Ivoire was among the first African countries to undertake an IPP.

### RESULTS

IPPs have contributed to relieving power supply constraints in a number of countries over the past 15 years. Development finance institutions (the IFC, FMO, DEG, among others) and other institutions (such as Globeleq, IPS, and Alwych), though, still play a critical role in developing and financing successful power projects in the region.

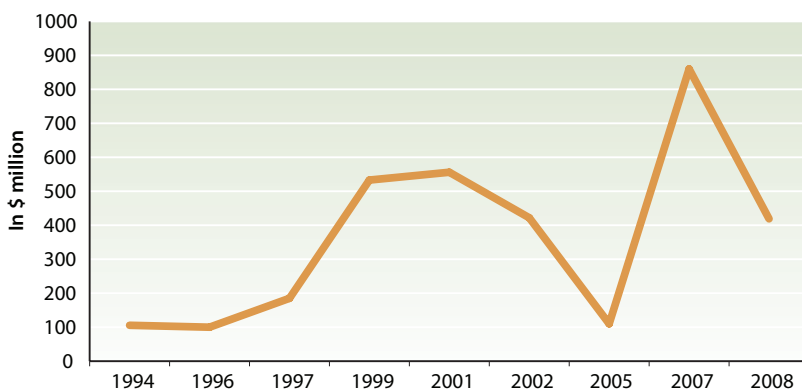
### LESSONS LEARNED

Factors that account for the success of IPPs in Sub-Saharan Africa include clear power sector policy and regulatory frameworks, up-to-date generation expansion planning, timely initiation of international competitive bidding processes, and adequate contracting and negotiation expertise to conclude power purchase agreements. Despite huge investments in IPPs, only 25

percent of Sub-Saharan Africa has access to electricity, highlighting the need for further reforms. Closing Africa's power infrastructure gap inevitably requires structural changes within the power sector that eliminate inefficiency.

*Author: Anton Eberhard and Katharine Nawal Gratwick*

**Private participation in IPPs in Sub-Saharan Africa, 1994-2008**



# Innovative financing for health in Rwanda

## A report of successful reforms

*Between 2000 and 2007, the proportion of women receiving ante natal care rose to 96 percent compared to only 58 percent in 1995 to 2000*

*Between 2002 and 2007, public resources flowing to health facilities more than tripled*

### CHALLENGE

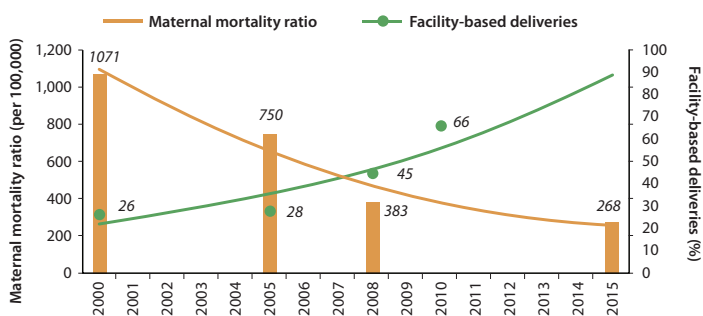
Prior to 1996, health services in Rwanda were free, however, low intake of preventative services and poor quality of care in health centers served as an impetus for reform. In addition, human capacity was weak and the system not financially sustainable. In 1996, the government reintroduced cost recovery mechanisms to improve access for the poor and increase the quality health delivery service.

### APPROACH

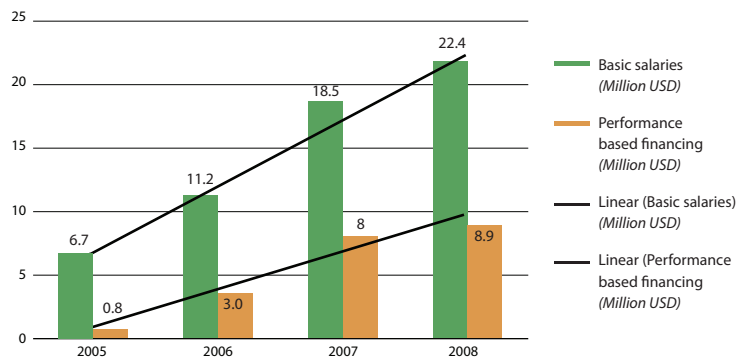
In the late 1990s, Rwanda initiated several reforms throughout its health system. The introduction of community-based health insurance schemes, performance-based financing, and fiscal decentralization, have significantly reduced household out-of-pocket expenditure. Performance-based financing at three levels of the health system—health centers, hospitals and community levels—promotes accountability; avoids conflict of interest and links purchaser and provider incentives to outputs and quality of care. The simultaneous decentralization of authority and resources across sectors empowered local communities with the tools to implement these reforms. While these reforms have put Rwanda on track to attain the health MDGs, challenges related to the performance-based financing scheme need to be addressed for these MDGs to be achieved by 2015.

### RESULTS

The results of these reforms are remarkable. Under-five mortality has significantly declined, falling from 196 deaths per 1,000 live births in 2000 to 103 in 2007, with the death rate among the poorest quintile declining by 50 deaths per 1,000 between 2005 and 2008—a much faster rate than deaths in the richest quintile at 38 deaths per 1,000 live births. The share of women delivering their babies in health facilities has steadily increased to 45 percent in 2008 from 28 percent in 2000 contributing to a similar decline in maternal mortality. The maternal deaths declined at an annual rate of 12.1 percent since 2000, falling to 383 per 100,000 in 2008. In a similar pattern, the use of modern contraceptives increased from 3 percent in 2000 to 27 percent in 2007.



Financing for Human Resources for Health has more than tripled in four years (going from USD 7.5 to 30.3 millions, of which the PBF has grown more than tenfold from USD 0.8 to 8.9 millions)



### LESSONS LEARNED

Several lessons can be learned from Rwanda's health sector reform. First, strong government leadership, vision, implementation and donor financing are critical for long term sustainability and necessary for reforms to take root in the system. Second, reforms focused on results attract more funding creating a mutually reinforcing relationship. Third, the simultaneous implementation of decentralization along with health reforms gave health facility managers both the incentives and power to ensure that these reforms translate into effective service delivery. Finally, Government coordination of donor funding was important as it ensured that aid was effectively aligned with national priorities and established systems for improved oversight at every level of government.

Author: C. Sekabaraga, A. Soucat, F. Diop, G. Martin

# Family planning in Sub-Saharan Africa

## Progress, prospects, and lessons learned

*At 5.1 children per woman, Sub-Saharan Africa has the highest fertility rate of any region in the world*

*Between 1980 and 1995, there was evidence of a decline in fertility in several Sub-Saharan Africa countries*

### CHALLENGE

With 5.1 children per woman, Sub-Saharan Africa has the highest average fertility rate (Total Fertility Rate) of any region in the world. South Asia, by comparison, has a rate of 2.8, and Latin America and the Caribbean a rate of 2.2. In fact, Sub-Saharan Africa is the only region in which overall fertility has not fallen in recent decades. The contraceptive prevalence rate (CPR) in Africa is also low: 22 percent, versus 53 percent in South Asia and 77 percent in East Asia. The dismal aggregate indicators, however, do not reveal incipient fertility transitions and increased contraceptive usage in many Sub-Saharan African countries.

### APPROACH

During the 1960s and 1970s, Sub-Saharan African governments were reluctant to institute effective family planning programs and political support for them in the public sector is weak throughout the continent. Since the 1974 and 1984 world population conferences, however, the governments of several countries have acknowledged high levels of fertility and initiated family planning programs.

### RESULTS

Analysis of Demographic and Health Survey data from Sub-Saharan African countries reveals several noteworthy trends. Over the past two decades, there is evidence of fertility decline in several African countries, with the steepest declines in Ghana, Kenya, Liberia, Namibia and Zimbabwe. Likewise, the increase in CPR over the past 20 years has been remarkable in countries such as Malawi, Madagascar, Mozambique, Namibia, Tanzania, Uganda, Zambia, and Zimbabwe. And in most countries in the region, use of traditional family planning methods has declined over the years while use of modern methods has increased.

**Trends in total fertility rate in select Sub-Saharan African countries, 1990–2005**



### LESSONS LEARNED

Lessons drawn from countries that have made progress attest to the success of policy commitment, institutional arrangements, and service delivery approaches in increasing the use of family planning methods and lowering fertility. Looking forward, policies embraced in these countries may well serve as a model for countries where fertility remains very high and CPR very low.

*Authors: Mona Sharan, Saifuddin Ahmed, John May, Agnes Soucat*

# Health extension workers in Ethiopia

## Improved access and coverage for the rural poor

*In HEP villages, contraceptive use rose from 31 percent to 46 percent while in control groups it rose 30 to 34 percent respectively*

*The number of children who were fully immunized grew at an average of 15 percent per year since 2006*

### CHALLENGE

Throughout the 1990s, Ethiopia suffered from high fertility rates, poor nutrition, uneven distribution of health services—favoring the urban areas—and poor access to basic health services. In 2005, only 40 percent of the population lived within 10 kilometers of a clinic or other health service delivery point. The country had one of the highest child and maternal mortality ratios in the world with malnutrition as the leading cause. Death due to malaria was also high, yet in 2005 only 1 percent of households owned a bed net, of which less than 18 percent were insecticide treated. In addition, there was an acute shortage of trained health professionals, particularly in the rural areas where 85 percent of the population lives.

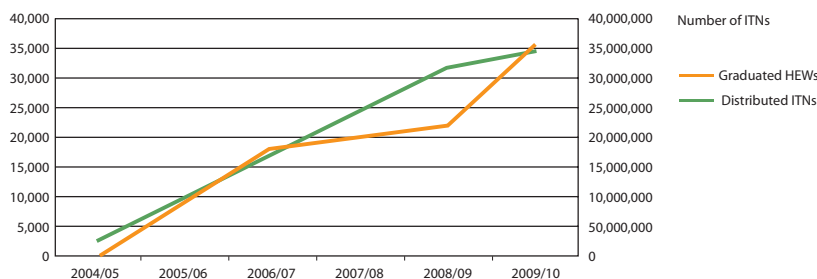
### APPROACH

In 2003, the Ethiopian government launched a community health service delivery program (HEP) with the objective of providing basic preventative and curative health services to the rural population. In line with the program's objectives, 30,000 frontline community health workers were deployed to 4 major rural communities providing 17 health services under 4 broad categories: hygiene and environmental sanitation, disease prevention and control, family health services and health education and communication. The program targets vulnerable groups within the rural communities, particularly women and children.

### RESULTS

Health conditions have dramatically improved in rural communities with health extension workers. As of 2010, these communities had improved access to sanitation, maternal health services, contraceptive knowledge and use, malaria prevention services and vaccination coverage: 62 percent of children had been fully immunized—a 15 percent average increase per year since 2006. Postnatal care and assisted delivery coverage however, remain low as 90 percent of births still occur at home.

**Number of Health extension workers & insecticide treated nets distributed in Ethiopia, 2005 -2010**



**Ratio of health human resources in public sector to people in Ethiopia 2002-2009**

Category	2001/2002	2004/2005	2008/2009
All physicians	1:35,603	1:35,604	1: 34,986
General practitioners	1: 54,385	1:58,203	1:76,302
Health officers	1:138,884	1:104,050	1: 20,638
Nurses (excluding midwives), BSc and diploma	1:5,613	1: 4,980	1: 4,895
Midwives (senior)	1:77,981	1: 55,782	1: 57,354
Health extension workers	n.a.	1: 23,775	1: 2,437

### LESSONS LEARNED

Critical to the success of the HEP was the government's commitment to the program and the ownership of the program by the local community, facilitating its implementation and expansion across the country. Additionally, the multifaceted approach by which it was carried out—building health facilities, training of medical staff at all levels, creating an accountability mechanism and providing adequate supplies further reinforced its objectives. Equally important was the increased resource allocation in health and donor financing aligned to HEP priorities.

*Authors: Nejmudin Kedir Bilal, Christopher H. Herbst, Feng Zhao, Agnes Soucat, and Christophe Lemiere*

## The malaria control success story (2005-2010)

*By 2010, 76 percent of populations at risk of malaria received insecticide treated nets*

*Malaria mortality in Eritrea has fallen by more than 80 percent*

### CHALLENGE

Ninety percent of the world's malaria deaths occur in Sub-Saharan Africa, making malaria the second leading causes of death in the region. The disease is the leading cause of death of children under the age of five in the region and a major cause of complications—maternal death and low birth weight—in pregnancy. Malaria has a high economic cost to the region as death and disability due to the disease is an estimated \$12 billion a year in lost productivity and treatment accounts for up to 40 percent of public sector health expenditures.

### APPROACH

The creation of the Global Malaria Action Plan in the early 2000s provided a framework for malaria control worldwide. Through this action plan, a greater emphasis was placed on malaria-endemic countries allowing African governments—with considerable donor financing—to strengthen the coordination of technical and human resources to combat malaria. A financing mechanism the Affordable Medicines Facility for Malaria (AMFm), managed by Global Fund—was designed to subsidize artemisinin-based combination therapies (ACTs).

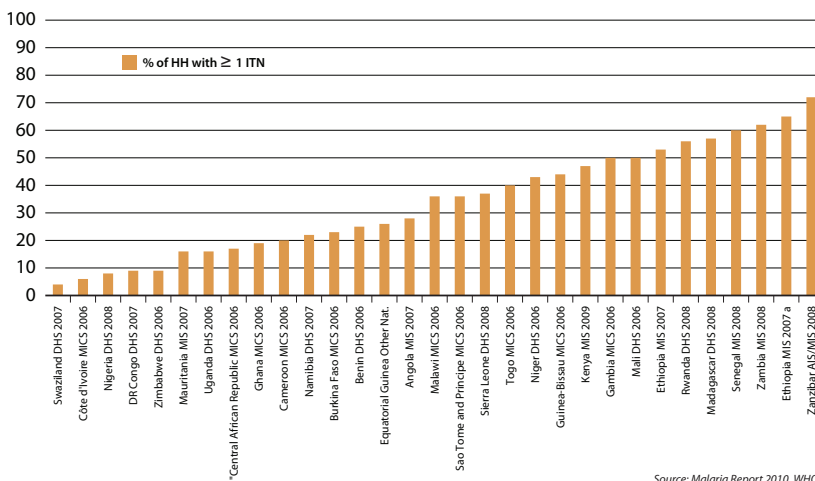
### RESULTS

Since 2000 some improvement can be seen across Africa yet more remains to be done. 11 countries have shown decreases in malaria cases after wide-scale implementation of malaria control activities in populations at high risk of the disease. In Botswana, Cape Verde, Eritrea,

Madagascar, Rwanda and Zambia, malaria cases have fallen by more than half. By 2010, about 290 million insecticide-treated nets were estimated to have been delivered in the region, covering 76 percent of the total population at risk. While deaths due to the disease reduced to 781 thousand in 2009 from 1 million in 2000, there is need for increased and sustained support for further gains to be realized.

### Coverage of Insecticide-treated nets in Africa, by country

% of Households with ≥ 1 ITN in Sub-Saharan Africa



Source: Malaria Report 2010, WHO

### Adoption of policies for Malaria treatment in Africa

Policy	Number of countries
Artemisinin-based combination therapy (ACT) used for treatment of <i>P. falciparum</i>	42
ACT provided free of charge in public sector for all age groups	24
ACT provided free of charge in public sector only for children under five	5
ACT delivered at community level	25
Prereferral treatment with quinine/artemether IM	32
Artesunate suppositories	25

### LESSONS LEARNED

High level external financing coupled with in country ownership were key to the progress achieved in combating malaria. Maintaining current levels of funding is critical as countries would need to strengthen supply chains, human resources and coordination between health systems and disease control. While financing is critical, there also needs to be more focus on key interventions: monitoring of drug resistance, deployment of rapid diagnostic tests and access to ACTs.

*Authors: Anne-Maryse Pierre-Louis, Jumana Qamruddin, Isabel Espinosa, and Shilpa Challa*

## Policy lessons from Uganda

*Uganda's primary school enrollment rate was essentially stagnant in the 20 years following independence*

### CHALLENGE

A variety of sociopolitical crises in Uganda in the 1970s and 1980s, combined with high enrollment costs, hampered progress in the education sector in Uganda. Nearly two decades after independence, in 1980, the gross primary school enrollment rate stood at 50 percent, the same as in 1960. Simultaneously, government expenditure on education was falling. By 1985, expenditure on education was about 27 percent of that of the 1970s. Though a significant improvement was observed in 1985, when the gross enrollment rate increased to 73 percent, that rate remained for the following decade.

*In 1997, the year school fees were abolished, net primary school enrollment jumped from 57 percent to 85 percent*

### APPROACH

Putting education at the center of its 1996 Poverty Eradication Action Plan (PEAP), the government of Uganda committed itself to the provision of universal primary education (UPE) through sector-wide reforms, including the abolition of primary school fees starting in January 1997 and interventions designed to improve governance. Capitation and school facilities grants were designed to shift the burden of school fees from parents to the government, and to provide schools with necessary resources to support adequate teaching and learning. Finally, to reduce misuse of public funds, information about the amounts given to beneficiaries was made public via newspapers.

### RESULTS

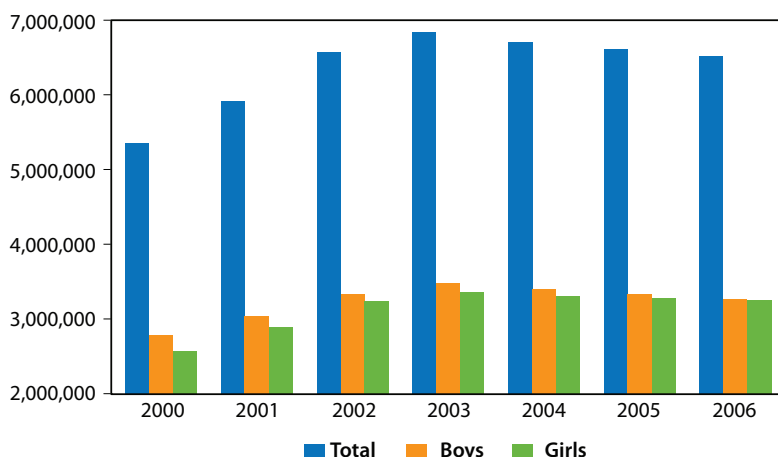
The education strategy had immediate results. The gross primary enrollment rate jumped from 77 percent in 1996 to 137 in 1997, while the net enrollment rose from 57 percent to 85 percent. Enrollment rates stayed at a high level during the ensuing decade. The strategy also improved equity in access for poor children, girls, and rural residents. The quantitative success of the policy, however, put substantial stress on the educational infrastructure with a consequent toll on the quality of primary schooling.

### LESSONS LEARNED

Uganda's success in increasing access and equity in primary education ultimately hinges on four factors. First, it was backed by strong political commitment to a poverty reduction strategy centered on building human capital. Second, it employed domestic and international partnerships supportive of country ownership and donor cooperation within a sector-wide approach. Third, strategy carefully planned and implemented critical prior actions. Fourth, the policy benefited from the efficiency gains from measures designed to improve transparency and accountability at the school level in the use of available resources.

*Author: B. Essama-Nssah*

**Enrollment in public primary schools in Uganda, 2000–06**





African Success Stories Study,  
Office of the Chief Economist  
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