



USAID FRONTIERS IN DEVELOPMENT



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USAID **FRONTIERS**
IN DEVELOPMENT

U.S. Agency for International Development



AFP Photo: Noah Seelam

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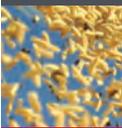
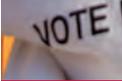
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Foreword

Never before has the world experienced such significant progress in human development and at the same time seen such rapid and unpredictable changes in the forces that affect development. 700 million fewer people live in absolute poverty today than 20 years ago. The share of children dying before their first birthday is half of what it was in 1975. Since the collapse of the Soviet Union and the end of the Cold War, democracy has swept across developing countries. And today more developing countries are experiencing sustained broad-based economic growth than ever before.

We at USAID are proud to be a part of this great progress. Our investments in health and education, support for agriculture and food security, encouragement of democracy and good governance, and assistance to governments in building capacity and encouraging private investment has helped build greater prosperity and stability, both for our partner countries and for the United States.

But the forces affecting development are changing rapidly. Private-sector capital flows are seven times larger than what they were a decade ago, and now dwarf development assistance. The Arab Spring has ushered in new possibilities for democracy and growth in the Middle East, but also led to new challenges and uncertainties. Conflict and extreme poverty are increasingly intertwined. The growing success of many emerging markets has lifted millions from poverty, but also has unleashed much greater demand for natural resources, energy, and food. Climate change threatens to slow and possibly even reverse development gains in many countries.

USAID and others working in developing countries must both embrace these changes and evolve with them in order to continue to be effective in supporting and sustaining development. Creating space to evaluate and better understand key development trends is essential to adapt to the rapid transformations in the development landscape. Rather than chase the latest fad or

jump between shifting priorities, we must seize pivotal opportunities that we know can leave behind generational legacies of success. To that end, USAID is engaging with the smartest, most innovative, and most experienced thought-leaders and practitioners from around the world to stimulate debate around key development challenges and opportunities.

We call this effort *Frontiers in Development*. Designed to encourage forward-looking, provocative discussion and debate and to strengthen the analysis, design, and implementation of development programs, *Frontiers in Development* is aimed at cultivating innovative analysis and leadership to expand the Agency's learning and to increase our effectiveness. We are starting these conversations both through these essays and by holding a forum at Georgetown University from June 11–13, 2012, to debate, discuss, and learn from each other in person.

This collection of essays includes ideas from some of the brightest minds and best practitioners in development, some of whom you will be familiar with, and others you may not recognize. The essays include insights from people working in private, non-profit, and security sectors; from higher-income and lower-income countries; and from foundations, governments, and academia. Many of the authors, such as President Ellen Johnson Sirleaf, Bill Gates, and Paul Collier, are widely recognized as critical thinkers within the development community. Other contributors, including Admiral James G. Stavridis and Kay Warren, are tremendous leaders in their own respective fields and have applied their unique expertise to valuable effect in this volume. Thirteen essays come from USAID staff selected through an Agency-wide contest to seek out the best ideas, and six other essays were selected through an external contest open to the general

public and run by Devex on behalf of USAID.

These essays do not necessarily reflect the official positions of USAID or the U.S. government. We did not select only those essays that support our own views or approaches. Rather, we selected essays based on their ability to encourage forward-looking and provocative debates on critical issues. From Emilia Pires' treatise on working effectively with fragile states to USAID's Cameron Khosrowshahi and his frontline report on entrepreneurship during political upheaval, we hope that this collection will inspire new thinking among development practitioners across a range of issues and challenges, and set the stage for our discussions at Georgetown and beyond.

Frontiers in Development is designed to encourage forward-looking, provocative discussion and debate and to strengthen the analysis, design, and implementation of development programs.

We would like to express our deep appreciation to the organizations and individuals that have made this publication possible. Both the publication and the Forum are funded entirely through the generous contributions of the Bill & Melinda Gates Foundation, the William and Flora Hewlett Foundation, the Rockefeller Foundation, and the John D. and Catherine T. MacArthur Foundation. Georgetown University has generously agreed to host the Forum on its beautiful campus in June. Many people at

USAID contributed in a variety of ways to this publication and the Forum, but several stand out for their leadership and commitment to this effort, including Rachel Bahn, Wade Channell, Nan Dearborn, Clay Doherty, Suzannah Dunbar, Peggy Hoyle, Soumya Kantamneni, Amit Khardori, Sarah Lane, Thereasa Lyles, Sean Maloney, Michael McShane, Portia Persley, Kelly Ramundo, Angela Rucker, Sarah Sieloff, LaTrisha Swayzer, David Trichler, Elisa Walton, Rod Watson, and Marquita Wise-Williams. Raj Kumar and Lauren Brander at Devex did a terrific job in managing the external essay contest. We are also grateful for the support of the editorial team at Bravo Zulu Consulting LLC, the layout and design team at Graves Fowler Creative, and the USAID Knowledge Services Center.

It is our hope that this collection of essays and the Forum itself will be the first of a biannual series to support the Agency's ongoing efforts to be at the leading edge of understanding and meeting development challenges. Ultimately, our success is driven by the practitioners and staff at USAID, our partner organizations, and most importantly the people and leaders of the countries where we work who dedicate themselves to solving current and future challenges. Please join us as we work to chart a course together for exploring and better understanding the Frontiers of Development.

Rajiv Shah, *Administrator*

Steven Radelet, *Chief Economist*

U.S. Agency for International Development

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Photo: Karl Grobl, Education Development Center, Inc.

Introduction

When we think about frontiers, we imagine unexplored territory, unknown dangers, and often, the thrill of discovering something new. The possibility of the frontier is what sent explorers to the edge of the map, drove America's pioneers west, and launched mankind into space. With this book, we seek to bring that same spirit to the frontiers of development. Although the idea of development is familiar, and the places where we work are well known, the challenges, the excitement, and the new perspective of the frontier is with us once again. Why? Because the world is changing in remarkable ways. And these changes mean that all of us who work in development have to transform the way we approach our work.

To begin with, the context in which we operate has shifted. In the 1960s, official government aid represented more than 70% of the money flowing into developing countries. Today, with the growth in private-sector investment, NGO activity, trade volume, remittances, and other activities, it is just 13%. More countries

are working in development than ever before. Emerging economies such as China, India, and Brazil are engaging in more places. And as new technologies continue to connect and empower people in every region, the number of voices and potential partners is growing exponentially.

At the same time, experience has changed our understanding about how to achieve the results we want. We used to diagnose development problems in terms of what was missing—money, manpower, infrastructure. Of course, resources remain vitally important, but today we recognize that progress also depends on the choices people make and the leadership they show. It requires tough political decisions, like reforming land-ownership rules or changing tax policies so they don't unfairly favor powerful elites. A range of leaders—presidents and prime ministers; finance and foreign ministers; trade, defense, and justice experts—must be just as engaged and committed as development agencies and outside NGOs.

Taken together, these changes mean we no longer look at development in isolation; we must

survey the entire landscape. Before we commit resources, we make strategic assessments about the risks and opportunities in developing countries, and we make calculated decisions about where to put our resources to help catalyze economic growth. Where will we get the most out of every dollar we spend? How can we work with partners to best leverage their expertise and resources? How do we ensure that our work will lead to lasting change that helps people reach their potential? Essentially, we no longer think about development as aid; it is an investment. And like all investors, we expect results. So we are benchmarking and gathering comprehensive data to help us determine which development efforts are having an impact and which aren't. Where we are not seeing progress, we cannot be afraid to re-evaluate, make adjustments where possible, or, when necessary, start again.

To do this, we need to gather all the available resources and get them working together toward the same ends. As the number of people and organizations working in developing countries continues to grow, we risk working at cross-purposes, or over-investing in some areas while missing others. Governments, however, are uniquely suited to bring partners together, set common goals, and help craft shared strategies. This is where diplomacy and the U.S. government's wide range of relationships are critical.

We are committed to elevating development alongside diplomacy and defense as an essential pillar of our foreign policy and a critical element of our smart-power approach to national security. In 2010, President Obama issued the first-ever Presidential Policy Directive on development. I joined leaders from around the world in Busan, Korea, last year at the Fourth High-Level Forum on Aid Effectiveness to make it clear that doing development right

is one of our foreign policy priorities. And this year, I am sending instructions to every American embassy and consulate with specific guidance on how we must continue to modernize our diplomacy, improve our practices, and enhance our leadership to better support development.

We are promoting broad-based economic growth, because when more people can unleash their entrepreneurial energy and innovative spirit, everyone benefits. Because we recognize that accountable governance is the linchpin for development success, we are investing in building effective, democratic governments and vibrant civil societies around the world. We want every partner to become more self-sufficient—and eventually end their need for aid altogether. And we are putting women at the center of all our efforts because we know it's an essential step in achieving our foreign policy goals.

In practice, we are putting a much greater emphasis on partnership and planning to get everyone working together from the very beginning. With Feed the Future, our presidential initiative to end hunger and increase food security, we are bringing partners and donors from many different sectors together to help countries develop their own investment plans for agriculture. It is a field-to-market-to-table strategy. We help countries build their capacity and policy environments so they can jumpstart their agricultural productivity and achieve better nutritional outcomes for millions of people.

Our Global Health Initiative (GHI) works closely with host nations, helping them build their capacity to run their healthcare systems. GHI also coordinates all our efforts in a country so that our work has the greatest possible reach and impact on the ground. So far, we have worked with more than 40 countries to develop integrated strategies that focus on improving health systems instead of

providing individual services. Through GHI, we are leveraging our resources and platforms to secure an AIDS-free generation, end preventable child deaths, and save the lives of mothers around the world.

Similarly, under our Partnership for Growth initiative, we are working with four countries—El Salvador, Ghana, Tanzania, and the Philippines—to spark reforms that will pave the way for sustainable development progress. Each partnership agreement starts with all parties sitting down together—our technical experts and theirs, our political leaders and theirs, all at one table—to identify the most critical barriers to economic growth. Each country drives its own unique plan for development, with both sides making commitments that will help tackle specific challenges.

These efforts are part of a larger, ongoing conversation in the international development community about how all of us can be more effective while working in this new world. That conversation is continued in this book by people working on aid issues at every level, from senior government officials and academic leaders to development workers in the field.

In these pages, Emilia Pires, the Finance Minister of Timor-Leste, makes a dramatic case for why countries must lead their own development efforts, even in fragile states. PepsiCo's Derek Yach and Tara Acharya highlight how

unconventional partnerships can be crucial for addressing development challenges in new ways. And Admiral James Stavridis, NATO's Supreme Allied Commander in Europe, illustrates the nexus of our development goals and our security priorities.

Many of these essays also stem from our commitment to tap the deep reservoir of talent that lives in the development world. We asked our USAID experts for their input, and we invited others from around the world to submit their ideas for this publication—and they delivered. You will be delighted to meet the Survival Girls who are turning their stories of abuse into empowerment in a Nairobi slum; be inspired by the Egyptian entrepreneurs working against the backdrop of the Arab Spring to grow their businesses; and be impressed by the people making mobile money a reality in the remote valleys of Afghanistan.

We have changed our conception of what it means to work in development, and we have changed how we define our objectives to better navigate in this environment. But these are only the first steps. We must keep working together and holding each other to account until we achieve our goals. If we succeed, millions of people around the world will have the opportunity to build more stable and more prosperous lives for their families. That's a future worth braving any and every new frontier.

Hillary Rodham Clinton is U.S. Secretary of State.

Bending the Curve of Development

Throughout history, the greatest leaps in social and economic development have come when the development community chose to do things a little differently, investing in new technologies, forging strong public-private partnerships, and leveraging the expertise of local communities to generate groundbreaking solutions.

This approach enabled some of the most significant achievements in modern development: a new vaccine delivery tool that made global smallpox eradication possible; oral rehydration solutions that prevented diarrheal diseases from rapidly killing millions of children; a polio vaccine that has helped nearly eradicate the debilitating disease; and new strains of wheat and rice that ushered in the Green Revolution, preventing widespread starvation and poverty.

We need to learn from these experiences, harnessing the same approach to generate groundbreaking solutions against some of the toughest challenges in development today.

Consider the phone. Fifteen years ago, hardly anyone could have imagined that the mobile

phone would become one of the most powerful development tools in existence. Today, mobile phones are ubiquitous, having moved in less than a decade from the briefcases of the wealthy to the pockets of farmers, teachers, and health workers nearly everywhere on earth.

Today, thanks to mobile technology, poor farmers can use text messages to compare prices and get more for what they grow. Community health workers can use phones to collect information and track disease outbreaks in real time. Protestors can use them to document and share videos of electoral violence. And mobile banking can give billions the chance to save money for the first time.

This is not to suggest that technology itself solves all our problems. But new tools like the mobile phone have created a sense of possibility that motivates diverse actors, including governments, the private sector, and local communities, to come together to generate dramatic results.

In order to leave behind generational legacies of success, we cannot afford to stick with the status quo or be content with linear and incremental gains.



Technical staff members from the Litani River Authority rehabilitate the face joints of the Qaraoun Dam in Bekaa, Lebanon, through the USAID-funded Litani River Basin Management Support Program. The program inspected the dam in November 2010 to detect minor leaks from aged joints. | Photo: Nabil Amacha/Litani River Basin Management Support Program

We need to see over the horizon, adopting lessons from our own history to bend the curve of progress and foster a spirit of entrepreneurship and innovation that can dramatically accelerate development.

In some areas, in particular, we stand poised to achieve transformational results through the power of science and technology. We can harness innovation to help communities build real resilience to disasters, so that droughts do not shatter development gains or give rise to violence. We can develop new production technologies, like better seeds, fertilizer, and irrigation systems, to significantly boost harvests and fight poverty. And we can scale up proven technologies, like vaccines and bed nets, as we develop new scientific breakthroughs to help

bring an end to preventable child deaths.

Development is full of competing priorities, but only a few represent significant opportunities to have the greatest impact at the lowest cost. Innovation, partnership, and the inspiration born of local solutions hold the key to achieving unprecedented gains in human health, prosperity, and dignity.

Building Resilience through Innovation

Last year, Dr. Jill Biden, Senator Bill Frist, and I traveled to Dadaab, Kenya, site of what has now become the largest refugee camp in the world. In 2011, the worst drought in 6 decades forced more

than 290,000 Somalis to seek refuge in neighboring countries.

The drought caused enormous suffering throughout the Horn of Africa, where more than 13.3 million people needed emergency assistance. In southern Somalia, where 20 years of conflict wore down the country's ability to cope, the drought led to a famine. At least 3 of every 10 children there were malnourished, and 2 out of every 10,000 people were dying each day. One in five lacked access to basic foods like bread or rice.¹

While we cannot stop disasters from occurring, we can do much more to help people withstand them, whether it is a drought in the Horn or an earthquake in Haiti. The development community has to expand its focus from relief to resilience—from responding after emergencies strike to preparing communities in advance.

In the Horn, this effort began with an innovative early warning system we established years ago in partnership with the U.S. Geological Survey, NASA, and the National Oceanic and Atmospheric Administration. Able to predict the severe drought months in advance, we shipped food ahead of time to storage sites in the region so we could quickly distribute it once crisis struck.

Because studying past famines showed us that preventable disease, not hunger, was the leading cause of death among children under five, we stockpiled vaccines in advance of the crisis. And we helped communities in Kenya build catchments so they could collect and store as much water as possible before the drought.

As we shift our focus to long-term resilience, some of the most important innovations are not

focused on saving lives, but saving livelihoods, enabling individuals to hold onto their sources of food and capital throughout a crisis.

In Kenya's drylands, families rely on livestock for 95% of their incomes, making them especially vulnerable in times of drought. To help strengthen their ability to cope, we are focusing on their animals by promoting vaccine programs and accessible veterinary care. Since the onset of the drought, we helped vaccinate nearly 300,000 livestock, protecting this main source of income for some 25,000 Ethiopian households.

But it is not just vaccines and new knowledge about resilience that is making it possible to help vulnerable populations weather adversity. Today, significant advances in actuarial science have allowed us to partner with insurance firms to pilot cutting-edge microinsurance programs to compensate farmers and herders who suffer grave losses. Last October—during the height of the drought in the Horn—those programs made payments to more than 600 cattle herders who had purchased coverage for their animals earlier that year.

Bridging the divide between disaster response, resilience, and sustainable development is not easy, but it is critical to saving lives more effectively in an emergency, and it is essential in our efforts to ensure that droughts no longer lead to food crises.

Pioneering a New Approach to Agricultural Development

In 2008, the balance of the world shifted, as more people lived in urban settings than in rural communities for the first time in history. But despite the rapid growth of cities and the slums that tend to surround them, poverty has remained, by and large, a rural phenomenon. The majority of the very poor and hungry are still farming families who tend small plots of land. That is especially true in countries like Ethiopia and Tanzania,

¹ Jason Corum, "Understanding the Declaration of Famine in Somalia," World Food Program USA, July 27, 2011, <http://usa.wfp.org/blog/understanding-declaration-famine-somalia>.

where three out of every four workers lives on a farm. For most poor people in the world, tending the land is one of the only ways to earn money and feed their families.

That is also why almost every country that has emerged as a developed economy has done so by increasing the productivity of its farms. In fact, just a 1% gain in agricultural production can generate a 46% increase in the purchasing power of the poor.² As a result, growth tied to gains in agricultural productivity is up to three times more effective in raising the incomes of the poor than from other sectors.

Simply put, fighting poverty means boosting harvests.

At the 2009 G8 Summit in L'Aquila, Italy, governments agreed to reinvest in food security, in large part because of personal appeals made by President Obama. Most critically, these governments pledged to direct their funding in a very different way.

This new approach, embodied in President Obama's global food security initiative Feed the Future, directs money toward plans that are developed and led by partner countries and focused on smallholder farmers, especially women. The strategies emphasize science and technology to increase agricultural output and private-sector investment to develop strong market linkages. Within this framework, Feed the Future is investing across 20 countries in the specific crops and regions that our partner countries believe will most rapidly spur economic growth and fight malnutrition.

To accelerate progress, we are focusing on scaling up access to agricultural technologies and prioritizing research into new seeds that can

withstand droughts, thrive in floods, and resist climate change. As a result, vitamin A-rich sweet potatoes are now helping children in vulnerable regions like the Horn of Africa resist disease and improve their nutrition.

In the last three years, we have more than doubled our agricultural research investments, building new bridges between U.S. universities and their counterparts in the developing world. In the

We need to adopt lessons from our own history to bend the curve of progress and foster a spirit of entrepreneurship and innovation.

Philippines, USAID and the U.S. Department of Agriculture worked with two U.S. universities and the International Rice Research Institute to develop submergence-tolerant rice. More than one million farmers are already seeing improved harvests. By partnering with national rice research centers across South Asia, we hope to reach 70 million more people.

We also saw staggering results last year in Haiti when we piloted a program designed to intensify rice yields through improved planting techniques in the areas surrounding Port-au-Prince. Haitian farmers saw their yields increase by almost 120%, while lowering their cost of production. The farmers even cut 10 days off their normal harvest. Today, that program is being expanded to reach farmers in other priority development areas throughout the country.

Although innovation in agricultural

² Ethan Ligon and Elisabeth Sadoulet, "Estimating the Effects of Aggregate Agricultural Growth on the Distribution of Expenditures," Background Paper for the World Development Report 2008, siteresources.worldbank.org/INT/WDR2008/Resources/2795087-1191427986785/LigonE&SadouletE_EstimatingEffectsOfAggAgGr.pdf.

development begins with new research and breakthrough technologies, it does not end there. In order for agribusinesses to thrive, smallholder farmers need access to durable supply chains, reliable sources of capital, and affordable insurance products. And women farmers need exactly the same access as men. Without these fundamental elements, farmers cannot succeed—here in the United States or anywhere else.

That is why we are helping unlock the power of the global—and local—private sector through innovative, high-impact partnerships that can deliver profits for companies, lift up smallholders, and reduce poverty at the same time. As important to agricultural development as a new seed or irrigation system, these public-private partnerships abide by high standards of responsibility, transparency, and accountability—in deep contrast to some of the more controversial private-sector engagements of the past. As we work, we are also consistently measuring and evaluating our efforts to ensure that our investments effectively empower women in their businesses and lives.

This past year, we partnered with PepsiCo and the World Food Programme to help 10,000 chickpea farmers improve their yields and join PepsiCo's supply chain. PepsiCo will use those chickpeas to create a highly nutritious food paste to sell to the World Food Programme, which can use it to save the lives of malnourished children.

We are also working with J.P. Morgan to drive capital toward East African agribusiness. Along with the Bill & Melinda Gates, Gatsby, and Rockefeller Foundations, we enabled a Kampala-based fund manager to invest \$25 million in at least 20 agriculture firms throughout the region, raising incomes for at least a quarter of a million households.

Inspired by the legacy of the Green Revolution, it is easy to think of new seeds as the silver bullet. But success will be determined not

just by investments in science, but also by our ability to mobilize responsible private-sector investment to generate real results. Ultimately, we can help developing countries transform their economies, reduce poverty and address the staggering rates of malnutrition that rob children around the world of their potential.

Ending Preventable Child Deaths

When we emphasize the importance of breastfeeding, train a community health worker to use a low-cost bag mask to help newborn babies breathe, or provide bed nets, we do not often stop to consider that we are harnessing significant innovations in development. But it is precisely these breakthroughs that make it possible today to achieve an unprecedented legacy in global health.

Thanks to tremendous progress over the last several decades, the global community has the knowledge and the tools to end preventable child deaths and bring child mortality in the developing world into parity with the developed world.

But in order to realize this vision, we need to do things very differently. We need to engage more effectively with emerging economies that do not receive development assistance, but have the ability to reach this goal. We need to figure out how to improve the rate of child survival in large countries that have lagged behind, including Nigeria and the Democratic Republic of the Congo. And we need to help shape a policy and political environment that can maintain focus on this critical goal in a fast-moving world that always offers new priorities.

The effort to end preventable child deaths begins even before the moment of birth. Through the President's Emergency Plan for AIDS Relief, we are ensuring pregnant HIV-positive women can give birth to an AIDS-free generation. On World AIDS Day in 2011, President Obama announced that the drop in the cost of a year's supply of AIDS

medication—from \$1,100 to \$335—allows us to provide lifesaving medication to six million people.

Because many infants die from asphyxia during their first “golden minute” of birth, our Helping Babies Breathe partnership is equipping midwives and caregivers with low-cost tools that can help newborns take their crucial first breaths. That is also the spirit behind *Saving Lives at Birth: A Grand Challenge for Development*. This global competition we helped launch last year garnered more than 600 cutting-edge ideas to help mothers give birth safely in low-resource settings, including a creative device to resuscitate newborns at one-fortieth the cost of currently available tools.

It is only recently that we began to understand the long-term societal consequences of widespread stunting—or how easily an effort like breast-feeding or child nutrition could fight this hidden hunger. To support these simple, effective, and life-saving interventions, our 1,000 Days Partnership is shifting our nutrition efforts to focus on the critical window between a mother’s pregnancy and her child’s second birthday.

Thanks to the dramatic scale-up of malaria prevention and treatment efforts under the President’s Malaria Initiative—driven, in part, by new long-lasting insecticide-treated bed nets and combination therapies for children who get sick—we have seen extraordinary results in child survival around the world. In Senegal, child mortality declined by 40% in five years, largely because preventing children from contracting malaria creates a cascade of other life-saving health benefits.

This past summer, when children arrived with their families at the Dadaab refugee camp in Kenya, they received polio, measles, and pneumococcal vaccines at the point of registration. It was only recently the world came together to help ensure that children everywhere have access to the latest vaccines that will protect them against pneumonia



Chairwoman Rose Peter of the Upendo Women Growers Association in Mlandize, Kibaha, Tanzania, shows off the first batch of sweet peppers the women have grown in their new greenhouse. The 22 women in the group received support, training, and technical assistance through USAID Tanzania’s Feed the Future Initiative. | Photo: USAID

and diarrhea, the two leading causes of global child death. Offering a lifetime of protection, vaccines remain one of the smartest, most effective investments we can make in global health.

Interventions are only truly successful when they reach those who need it most. For instance, although oral rehydration therapy has been hailed as one of the greatest development innovations in recent history, less than 40% of children with diarrhea in developing countries receive the life-saving treatment. By focusing on this key bottleneck, we can dramatically



The newborn daughter of an HIV-positive mother receives the antiretroviral drug Nevirapine at the Paarl Hospital, about 70 km from Cape Town, South Africa. Some 70,000 babies are born HIV-positive annually as a result of mother-to-child transmission of the virus, which afflicts one in nine South Africans.
AFP Photo: Anna Zieminski

reduce childhood mortality from diarrhea, which kills 1.3 million children under 5 every year.

To close gaps like these, we have established the Center for Accelerating Innovation and Impact at USAID, designed to help rapidly transform new scientific and technological discoveries into life-saving impact in the field. The Center will support our efforts to work more closely with product manufacturers, ensure our country programs can rapidly introduce cost-effective technologies, and serve as a hub for learning and knowledge dissemination around this critical task.

To realize the goal of ending preventable child deaths, we need to do more than spur innovation. We have to overcome final barriers to

success, transforming facility-dependent programs designed to treat diseases into community-driven programs focused on treating patients. When expectant HIV-positive women receive medication to protect their children, they should also receive a bed net to take home. And children should receive nutritional supplements and their vaccinations at the same time.

By working closely with countries and continuing smart investments in global health, we can bring the rate of child mortality in poor countries to the same level it is in rich countries. This tremendous achievement would not only save millions of lives, but would help nations accelerate economic growth through a shift in their population called

the demographic dividend. As children live longer and family sizes decrease, the productive share of a population rises with the percentage of those able to work—usually those between 15 and 64—much larger than the share of the very young or very old. Along with smart economic and labor policies, that demographic pattern can add as much as two percentage points of growth annually.

Development is full of problems we have few ways to solve, but leveraging innovation to help children reach their fifth birthday is not one of them.

Bending the Curve

Throughout the history of the United States, our nation's development has been defined by a drive for innovation and an unfailing determination to push the boundaries of science and technology. From advances in medicine that eliminated some of society's most debilitating diseases to cutting-edge strategies for combating droughts and effectively managing drylands, we have continually looked to science and technology to overcome immense challenges. Today, when drought threatens our farmers and ranchers, they can buy insurance products, access our government's real-time data-monitoring systems, and count on our universities to study the problem and foster new solutions.

Even as we support developing countries as they chart their own futures, we can learn from our own history to help unleash human ingenuity around the world. As President Obama and Secretary Clinton have both emphasized, the focus of the development community must always be to work ourselves out of business, replacing our efforts with those of responsible institutions, thriving civil societies, and vibrant free markets.

To help build genuine country ownership, we recently launched a major effort—the most significant in our history—to shift 30% of our

investments toward local entrepreneurs, NGOs, and partner governments by 2015. By putting more resources in the hands of those who need it, we help empower change-agents who have the cultural knowledge and expertise to ensure our assistance leads to sustainable development.

That is why we created the Development Innovations Ventures fund to find and support entrepreneurs throughout the world who have a good idea and need the resources to test it. That is why we developed Grand Challenges in Development to encourage innovators—no matter where they live—to break through development's most intractable problems. That is why we are harnessing mobile banking platforms in nations like Haiti and Afghanistan to expand opportunity and catalyze local wealth creation. Today we have mobile banking programs in four countries. By next year, it will be 20. And that is why, right now, USAID teams dedicated to finding investments and empowering entrepreneurs are on the ground in places like Cairo, Lima, Nairobi, Bangkok, and Dakar.

Today, the very challenges that confront us also dramatically expand the realm of possibility in development. In our work to build resilience, fight poverty, and improve child survival, we can bend the curve of development, realizing transformational leaps of progress that would have been unimaginable only a decade ago. By working closely with innovators and entrepreneurs around the world, we can seize these unprecedented opportunities and help developing countries solve some of the greatest challenges of our time.

Rajiv Shah is the Administrator of USAID.

DEMOCRACY AND SECURITY

VOTE P



Building Peaceful States Against All Odds: The g7+ Leads the Way

Every morning I am greeted by the local gardener, Guilherme, who busily tends half-broken trees and overgrown bushes, planting seeds in the modicum of soil available in the suburbs of Dili, the capital of Timor-Leste, in hopes of springing new life to a city that had been almost wholly destroyed in 1999, devastated by war and cyclical instability. Salutations are brief. Guilherme considers himself my de facto advisor. Each day he offers a brief but new insight into the health, well-being, and livelihood of the collective “we” that is his village—one of 442 *sucos* in Timor-Leste. In early 2008, Guilherme said, “Minister, we are not producing; bellies will not be full come rainy season.” Guilherme knew what I knew: Food security and peace go hand in hand.

As I entered the office, I asked my chief economist to look up the price of rice. He returned ashen-faced bearing the bad news: The price of rice had risen 218%. With a reduction in domestic production and rice imports rising, our budget was now in shambles. This is what the international community calls an “external shock.” As Minister

of Finance, I call it “being in shock,” a state I have become well versed to since coming into office on August 8, 2007.

On day one of my mandate as Minister, I walked into the Ministry of Finance with no handover, no functioning computers that could spit out the kind of standard information ministers of other nations would expect, and a highly politicized public service that was deeply loyal to the previous ruling party. I admit I was never trained in how to “rule”; I am a technocrat with a background in public service. We were a government formed to serve. A major mentality shift was about to be introduced.

The final crisis of 2006 resulted in 150,000 internally displaced persons (IDPs)—almost 15% of our population—and adding to our burden, we had more than 700 rebels in the mountains threatening stability. Economic growth was negative 5%; consumption had declined 26%. If the engine room of any government is a well-oiled public finance management system, my engine reflected that of a 1967 Chevy that had never been serviced.



East Timor Prime Minister Xanana Gusmao (right) campaigns for presidential candidate Taur Matan Ruak (left) at a rally in Likisa. Preliminary results from April 17, 2012, showed former guerrilla Ruak winning East Timor’s presidential run-off by a wide margin in a pivotal year for the nation almost a decade after independence. | AFP Photo: Valentinho De Sousa

The highly centralized systems had all but stalled service delivery, and my people were suffering. Reform was the name of the game, but even in that, the challenges seemed insurmountable. The average math level of my 723 ministry staff was at third grade, remnants of a generation lost to war. The fight for freedom was a de facto education in pursuit of independence and democracy—all principles that we as a government were now charged with operationalizing. But the reality was, I did not have one qualified accountant in the Ministry of Finance. A quick review by international auditors revealed 54% of the 2006–2007 budget was recorded to a vendor called “no vendor,” mechanization had yet to be introduced, and we had little information from which to collate a

comprehensive budget going forward. We turned to the international community for answers, and so the \$8 billion question came to be.

The answer, of course, is in the question. More than \$8 billion had been spent, and poverty had increased by a minimum of 15% and a maximum of 25%. Poverty had doubled in some regions, and the national average stood at 49.9%. One out of every two of my people now lived in extreme poverty. We were being called a failed state. After 400 years of occupation, 24 years of war, 2 years of a transitional United Nations Administration, and 5 years of a government mired by cyclical instability, the hopes, dreams, and expectations of my people had been eroded. This mattered more than any label stamped on us. We were not a failed state

because the state had yet to be built. But we had all failed; that was an undeniable truth.

We still had few functioning roads, virtually no connectivity, inoperable hospitals comparable to international standards, substandard schools, no electricity, not enough water, and substandard sanitation. We still had few teachers, accountants, lawyers, and doctors. Our standard of living was of the fourth world, and while so much money had been spent, so little had changed.

I still believe the majority of the perception of the western world is that donor aid is handed to recipient governments to spend as they wish. But the reality is, governments in fragile states do not see aid money. It does not go into our coffers, it does not go through our systems to strengthen our capacities or align to our programs and service delivery, it does not go into our budgets; it is for the donors to spend on projects, programs, and technical assistance (usually sourced from their own countries). Imagine having technical assistance at any one time speaking some 30 different languages, not one of which is the local language. Program workers cannot converse with local staff, and they are promoting different ways of thinking. This further fragments capacity-building efforts and governance structures and systems that are weak to begin with.

If we did have a better vision of donor aid, I believe we would have roads, electricity, water, and proper sanitation. The fact is, we in fragile states rarely know how donor aid is spent. Donors often bypass the state agenda to pursue their own agendas, delivering services directly to our people, at times, without our knowledge and often without our consent. This not only causes fragmentation and proliferation in development but also weakens any legitimacy we as representatives of and for the people have in building viable institutions or leading a national vision and inclusive agenda for peace. This way of doing business must change.

Harmonization and alignment between recipient states and donor countries has yet to become a reality to make long-lasting change to fragile states. We have achieved little results for those who matter the most—our people. When things go right, the international community is the first to take the credit. When things go wrong, the government is the target of blame. This is the way of the world, and the world must now be re-educated on the aid paradigm so together we can get it right.

In Timor-Leste, we quickly learned not to focus on the past; it was now about creating a future. If Guilherme could wake up every morning and plant seeds despite the challenges, so could we as a government. But we also knew that any chance we had to localize peaceful states through inclusive politics must first be socialized at the global level. In my country, we began with the first coalition of five political parties. Commentators said it would never last, and I sit here today, five years on, with continued peace—writing proudly and confidently that we still are a functioning brethren of ministers that put our politics aside for the bigger picture of peace, stability, and development. We as a cabinet decided to strive for one thing internationally: **Inclusive politics must be globalized before it is localized.** And so our agenda for fragile states began, with peacebuilding and statebuilding at the forefront.

For decades, fragile states have been seen as a minority, when in the global context, we are the majority. We represent the critical mass, the 1.5 billion people (or 20% of the global population) who live among the most extreme situations of poverty and are affected daily by current or recent conflict. We are the voiceless, the under-represented, the ones discriminated against because aid architectures that apply to “normal” developing nations don’t consider or calculate the unique

challenges that we, in the fragile context, face. In fact, one cannot even be labeled a “fragile state” when there is no globally accepted definition of “fragility.” We also learned recently that fragile states are disadvantaged, by no fault of their own, receiving 5 cents per capita in aid compared to other developing countries that receive 11 cents per capita.¹ Interestingly enough, statistics show that aid to fragile states is an investment with a greater return. This is a simple equation. Billions are spent on defense each year by the global community. When development can act as a catalyst to peace, funnel it to where it counts the most.

Politically, the word fragility has become akin to a curse word. The technocrats understand the word relates to institutions yet to be established, low capacity, lack of an established justice system, lack of infrastructure, lack of systems—all characteristics that have nothing to do with strength of sovereignty. Politically, the word must be embraced for what it is. I often describe fragility as a fine champagne flute, something that is beautiful but easily broken and therefore must be handled with care. Imagine the citizens of the United Kingdom with little to no access to schools, health care, water, social security, police, or banks. It is easy to see then how conflict erupts. This is fragility.

Less than two years ago, a milestone was reached when representatives of several fragile countries sat together in a room and talked about our commonalities and our challenges. As colleagues from Burundi, the Central African Republic, Chad, the Democratic Republic of the Congo, Liberia, Nepal, Solomon Islands, Sierra Leone, South Sudan, and Timor-Leste spoke around one table, we discovered that, although we had our differences in regards to region,

linguistics, culture, historical backgrounds, and our root causes of conflict, we had much more in common than we could have ever anticipated. Through this solidarity we formed a deep bond, and after hours together of sharing our experiences, we acknowledged that in order to emerge from fragility, it would take a consolidated forum to make a tangible difference both in our own countries and in the way we do business with the international community. We needed a united and shared voice. We needed our own policies; we needed the international community to understand our unique challenges and shared objectives—and so the g7+ group of fragile and

If we did have a better vision of donor aid, I believe we would have roads, electricity, water, and proper sanitation.

conflict-affected states was born and rapidly grew from 7 to 19. The g7+ symbolizes the first time in history that we, as fragile states, have a voice in shaping global policy, advocating our own country-led and country-owned transitions out of fragility and, most importantly, identifying that peacebuilding and statebuilding are the fundamental foundations to transition from fragility to the next stage of development, the ultimate aim in reaching the Millennium Development Goals.

Peacebuilding means that inclusive politics, security, and justice are the cornerstones of building stable and long-lasting states. Statebuilding means that donors can no longer bypass our state institutions, weakening our ownership and hindering our nations from building the institutions and capacity

¹ “Chapter 3: Trends in official development assistance” in *Resource Flows to Fragile and Conflict-Affected States* (OECD, 2010), 49–59.



Internally displaced Sudanese from the south pack their belongings in Khartoum on October 27, 2010, as they prepare to return home in preparation for South Sudan's referendum on independence on January 9, 2011. | AFP Photo: Ashraf Shazly

necessary for strong bureaucracies to serve the needs of our people. We ourselves must take responsibility for developing economic foundations, quality resource management, and service delivery with the support of the international community.

Together with the international community and through the International Dialogue on Peacebuilding and Statebuilding, the g7+ created a new aid architecture for fragile states called the New Deal. We made it simple, clear, and concise with three simple elements: the Peacebuilding and Statebuilding Goals (PSGs), FOCUS, and TRUST. The PSGs are the goals that will allow us to transition to the next stage of development. FOCUS is a new way of engaging, and TRUST is a new set of commitments.

The five goals are **Legitimate Politics**—to foster inclusive political settlements and conflict

resolution, **Security**—to establish and strengthen people's security, **Justice**—to address injustices and increase people's access to justice, **Economic Foundations**—to generate employment and improve livelihoods, and **Revenues & Services**—to manage revenue and build capacity for accountable and fair service delivery.

The letters of the word FOCUS stand for:

- **Fragility assessment.** We will conduct a periodic country-led assessment on the causes and features of fragility and sources of resilience as a basis for one vision, one plan.
- **One vision, one plan.** We will develop and support one national vision and one plan to transition out of fragility. This vision and plan will be country-owned and -led, developed in consultation with civil society, and based on inputs from the fragility assessment.

- Compact. A compact is a key mechanism to implement one vision, one plan. A compact will be drawn on a broad range of views from multiple stakeholders and the public, and be subject to an annual multistakeholder review.
- Use PSGs to monitor. We will use the PSG targets and indicators to monitor country-level progress.
- Support political dialogue and leadership. We will increase our support for credible and inclusive processes of political dialogue.

The letters of the word TRUST stand for:

- Transparency. We will ensure more transparent use of aid.
- Risk-sharing. We accept the risk of engaging during transition, recognizing that the risk of non-engagement in this context can outweigh most risks of engagement. We will identify context-specific, joint donor risk-mitigation strategies, which will require different approaches to risk management and capacity development. We will conduct joint assessments of the specific risks associated with working in fragile situations and will identify and use joint mechanisms to reduce and better manage risks to build the capacity of and enhance the use of country systems, to step up investments for peacebuilding and statebuilding priorities, and to reduce aid volatility.
- Use and strengthen country systems. We will jointly identify oversight and accountability measures required to enhance confidence in and enable the expanded use and strengthening of country systems.
- Strengthen capacities. We will ensure efficient support to build critical capacities of institutions of the state and civil society in a balanced manner, increasing the proportion of funds for capacity development through jointly administered and funded pooled facilities.
- Timely and predictable aid. We will develop

and use simplified fast-track financial management and procurement procedures to improve the speed and flexibility of aid delivery in fragile situations, and review national legal frameworks to support our shared objectives. We commit to increase the predictability of aid, including by publishing three- to five-year indicative forward estimates (as committed in the Accra Agenda for Action), and to make more effective use of global and country-level funds for peacebuilding and statebuilding.

These interrelated and interdependent principles are established through a tangible working model that each state and its partners can work through on a matrix that is both fluid and reflective of the fragile circumstances—and can be the foundation of a compact between the country and the international partners. In the Busan IV High Level Forum on Aid Effectiveness, the New Deal was endorsed by 32 countries and 5 major international organizations, with a trial that includes the UK, Australia, Denmark, Afghanistan, Timor-Leste, and South Sudan. The agreement will change the way aid is configured, managed, and delivered—and most importantly, make a change in the outcomes of aid on the ground. What matters is results.

We Say We Are Now Making the New Deal a Real Deal

I have the honor of being the chair of the g7+ and the co-chair of the International Dialogue from where the agreement for the New Deal gained consensus. Coming from Timor-Leste, I knew that the only way we could make long-lasting change on the ground on inclusive politics, the foundation of the PSGs, is pushing forward the agenda of globalizing inclusive politics. This is not an easy process because it requires changing the attitudes, perceptions, and way of doing business between

the fragile states, the international community, and the public.

I will use my own country as an example. This year we celebrate 10 years since the formal restoration of our independence. In 1999, after the national referendum that set us on this course, we were a country that was devastated by war. Most of our infrastructure and the homes of many of our citizens were burnt to the ground. Between 1999 and 2007, despite billions being spent on Timor-Leste, as our President His Excellency Jose Ramos Horta often says, very little had been spent in Timor-Leste. When I assumed my mandate as Minister of Finance, time was not on our side. Accelerating development and fast-tracking

It might take generations to change traditions and cultures but the will is there, and our partners in development must take the journey with us.

reforms, especially in public financial management; establishing institutions to manage our vast resources in oil and gas; and ensuring that transparency and inclusivity led our actions in implementing social and fiscal expansionary policies was a core element to transforming our small nation.

The international community often had a different view of how we as a government should act and what we should do, and they were vocal in their interventions. For instance, with 15% of our population displaced, development could not progress. We were told it would take 10 years to resettle the displaced. However, we in government knew that 10 years was not an option.

Through dialogue with local actors and cash packages for families, we resettled all 150,000 IDPs in 2 years, closing 65 IDP camps and reintegrating families back into communities across the nation without conflict or dispute. We were accused of buying peace.

At the same time, we entered into conflict resolution with the rebels, former members of the army who had been released from duty by the previous government. From the mountains where they once threatened to destabilize national confidence, they returned to the capital, peacefully disarmed, and reintegrated into communities. We were accused of not providing justice.

The government promised pensions to the elderly, the disabled, mothers, veterans, and orphans. This, we believed, was the obligation of the state for the sacrifices our people had made over the 24-year struggle for independence. We believed it was the responsibility of the state to take care of our most vulnerable as in other socially compassionate nations, such as Australia, the UK, and many countries throughout Europe. We were accused of being fiscally irresponsible.

My point is that there is no price for peace, and governments of fragile states have one main objective—that is to keep peace and stability. Without peace, services cannot be delivered, and without services delivered, there can be no peace. We as government know our people and the political complexities. Often these complexities go back generations, and few outsiders can navigate the political landscape. They must simply trust that with a constitution and the concept of democracy, a nation will find its way, but always with peace at the forefront of its journey to emerge from fragility.

Timor-Leste is a nation blessed with natural resources. We have \$10 billion in the bank and no debt, with growing capacity to execute. Our



Supporters of candidates ride in trucks during a campaign in East Timor's capital city of Dili. East Timor was officially recognized as independent in 2002 following Indonesia's brutal 24-year occupation. | AFP Photo: Romeo Gacad

strict controls, checks, and balances also ensure we never fall into the oil curse. Best-practice resource management is part of the g7+ mandate. The Timor-Leste Transparency Model was the first to go beyond the Extractive Industries Transparency Initiative with a five-pillar 360° transparency modality across government. What we lacked in structure, we made up for in innovation, leading global good practice even by international standards. This surprised many.

International standards would naturally mean harmonization and alignment of all development actors, with government leading the agenda. This was the decision and agreement between international actors in the 2005 Paris Declaration and the 2008 Accra Agenda for Action. Recipient countries lead, and partners in development align

their planning accordingly. It hasn't worked according to plan.

In Timor-Leste, 46 donors and 302 NGOs are all working in good faith for the good of our people, but often bypassing our state institutions, which weakens the capacity of our systems. We often do not know what they are doing—where they are engaging or what the methodology of engagement is. We do not know how much money they are spending in what sector, and this causes confusion and can also be a cause of conflict. When we ask our donors to use country systems, this is our way of attempting to align and harmonize all interventions to national priorities and to one plan, one vision. Too many chefs in the kitchen create chaos and confusion, and this is why over decades we see very few results; and at times, more harm than good.

A recent example demonstrates the unwitting conflict that can arise when planning is not properly coordinated. A g7+ nation told the story of a village that had been given toilets as part of a development project, and the next village over was taught by an NGO to dig holes for their waste. The chiefs of both villages were enraged at the inequity. They did not blame the NGOs; they blamed the government. And while the government is responsible for aid effectiveness, it often lacks information on activities, which can be excruciatingly difficult to collect from donors.

One of the most important initiatives that Timor-Leste has activated is the Transparency Portal. Everything is online, from the budget expenditure to procurement to aid. But when

it comes time to gather the aid information, we still find that our partners are not forthcoming with details for the Transparency Portal. In a country where capacity is very low, it should not be so difficult. Harmonization and alignment of programming to government is a key to success. When Timor-Leste took the reins in 2007, we started identifying national priorities and insisting that donors align and harmonize with those national priorities. Within two years, we had reduced poverty by 9%. These are results achieved for our people. These are the results of true development partnerships.

I can say that one of the second most important initiatives Timor-Leste achieved was Census Fo Fila Fali. Many people in our countries have no



UN and East Timorese police (right) secure a polling center in Dili on April 16, 2012, as volunteers (wearing yellow) look on. East Timor went to the polls to elect a new president in a run-off vote as the young democracy prepares to celebrate its first decade of independence and bid goodbye to UN forces. | AFP Photo: Valentinho de Sousa

idea about the world around them or even the villages around them. They have no data or statistics in their language that help them understand how they can be part of the development process.

While g7+ countries are often rated and ranked in comparison to the most developed, this is done without any of the same accurate, qualitative, quantitative, real-time, or conclusive data. In Timor-Leste, we conducted a census for the first time in 400 years to give the information, segmented by village (all 442), back to our people. Twenty people from each village were trained at how to read the census and how to use it in identifying the action the village would need to take to better their community. As a result, 8,840 more people are now educated on their state and community and understand their role in development. This is inclusive politics.

In 2011, Timor-Leste launched the Strategic Development Plan 2012–2030. We rifled through some 4,000 reports written on and about Timor-Leste over the past decade, and to our surprise, not one cross-sector analysis had been done on how to build the nation or what the global costs would be in a state the size of a small town in the United States. Not one town planning document for the capital had been developed. We wanted to know one simple question. How much will it cost to create the basic and core infrastructure for Timor-Leste? Not one donor, international partner, or government office had coordinated the most basic of information. This should cause a moment for pause for any partner in development. Why have we not gotten the basics right? Data, planning, alignment, interventions? This is FOCUS in the New Deal.

Without accurate information, engagement and interventions into states are like shooting darts blindfolded. Every donor and government is responsible for ensuring states are equipped with

the technology and ability to collect real-time data—not data that are three to nine years out of date—but real-time, cutting-edge data that can shape and form effective policy and planning, which counters risks and builds effective national planning systems. This will ensure not only local development for peaceful states but also regional and global solutions for building more inclusive states.

Census Fo Fila Fali is the kind of initiative, creative and innovative, that we need to set for the fragile states. These are the lessons learned and shared through the members of the g7+.

Our aim in fragile states is to build strong bureaucracies that cannot be politicized and can stand the test of time through generations serving our people with strong service delivery in areas like health and education. What we want in the fragile states is an independent judiciary, free and fair elections, parliaments that represent our people and can speak freely. But we alone in fragile states cannot bring this agenda forward. It might take generations to change traditions and cultures but the will is there, and our partners in development must take the journey with us.

Inclusive politics means that we must be part of policy on the global level. We can no longer be exempt from dialogue or the recipients of a monologue. We can no longer be seen and categorized through the lens of the developed but instead must be seen through the eyes of the developing.

The actions of the most powerful affect the most vulnerable, and it is we who serve the most vulnerable and must act quickly to ensure we secure local, national, and regional stability. We must now globalize and localize peacebuilding and statebuilding. If we are looking at stopping the acts of terrorism or the acceleration of our youth in participating in illegal activities, if we are looking at avoiding conflict and wars, if we are looking

at promoting peace as a way for the future, then the way we utilize aid and donor systems must be re-evaluated. Fragile states cannot be penalized, just as our partners in development cannot be blamed. The international community and we as governments must now take equal responsibility for our failures and successes and look to a new way of engaging.

This Is the New Deal

In another decade, our countries should no longer be characterized by no connectivity, no roads, no hospitals, no schools, no water, no sanitation, no service delivery, no doctors, no lawyers, or no accountants because this would mean no economic or social development and a progression of all that fragility brings. No more time should go by when we do not focus on the very foundations that will build peaceful states.

When I look at my own country, in many ways we are starting from the beginning and are lucky to have established one of the best resource petroleum funds that will benefit our people now and in the future. Internationally, we are recognized for our revenue transparency; however, that level of transparency must start at the global level.

We went from being a failed state to being one of the top 10 fastest-growing economies in the world. It is a success story because of inclusive politics, because we, as a nation, fought a common enemy—poverty—and we made our national motto “Goodbye Conflict, Welcome Development.” From the smallest village to the city centers, our people were looking to the future with this phrase and with economic and social policies reigniting hope. It was their united will that brought peace and stability. When the United Nations handed over primary policing responsibilities to the Timorese police, there was no increase in crime. This was a benchmark that trust

and confidence had been earned and communities were normalized to a new way of life.

The peacebuilding and statebuilding goals will be taken to the United Nations for resolution in front of the General Assembly in September, 2012. This will be one of the single most important initiatives to accelerate development in the fragile states and allow us to transition to the next level of development where we can achieve the Millennium Development Goals—where we take ownership and responsibility of our own national visions and plans and make inclusivity a cornerstone of success.

Recently in a g7+ meeting, my colleague from South Sudan said, “Nothing about us, without us.” I echo his sentiment. There should be no more policy where we are not at the table, no more research where we cannot contribute, no more forums where we are not offered a seat, and every “G” meeting should embrace our little “g” because we represent the largest population of the globe, but also the most vulnerable, and we deserve the opportunity to contribute to peacebuilding for all regions and continents.

One day, I asked Guilherme the gardener about the fruit in Timor-Leste. He said that banana was the most common fruit but durian was the most coveted. From that advice, I created the Banana Show for my Cabinet members targeting the success of budget execution. Every Minister had to hit a certain budget execution rate that was associated with a Timorese fruit, banana being common (less than 25%), papaya the next (between 26% and 50%), with the durian being outstanding (above 75% execution rate). The Banana Show would be transparently published in the local paper for our people to judge the performance of their government. Through humor, good will, a common purpose, and a little innovation the Banana Show became legendary. Budget execution



Economically challenged residents receive a free sack of rice from the government, being distributed at a veterans' center in Dili on March 15, 2012 that will be used as polling center for the upcoming presidential elections. | AFP Photo: Romeo Gacad

was the highest ever, rising from 49% when we came into office to reach 89% and continuing to progress on increased budget amounts. It worked.

Soon after that day I had learned of skyrocketing rice prices, we were one of the first countries to set up an economic stabilization fund. The international community said it was not the right thing to do and accused us of intervening in the private sector by subsidizing the purchase of rice. However, we had enough rice for our people come rainy season and every season thereafter. A year later, we witnessed one of the largest interventions into the market in world history with the U.S. banking sector. I was not surprised. Right or wrong, governments either from fragile nations or world powers must often make difficult decisions for their people.

The very same people who criticized the Timor-Leste economic stabilization fund offered an apology. I accepted.

Now, I am not sure if Guilherme the gardener ever knew that I listened so much, but this is inclusive politics on the local level. As for the global level, Guilherme can teach us this: Listening and planting seeds to grow, even in the most arid places where you think they could never grow, is worth taking risks...and Timor-Leste is an example.

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The Arab Spring and Its Lessons for Democracy and Development

Several weeks before the Tahrir Square uprising in January 2011, a less momentous event took place in the heart of Cairo. In hindsight, however, it became critically important to our understanding of the deepening interconnection between democracy and development in the age of social media and disenfranchised youth.

Over three days, more than a hundred Egyptian entrepreneurs competed for two cash prizes and a chance to make real the dream of starting their own business. Eleven prominent American investors and entrepreneurs, brought together through a joint USAID-Department of State initiative called the Global Entrepreneurship Program (GEP), evaluated business plans, offered guidance, and established mentoring relationships with their Egyptian counterparts. Private investors made six seed investments in Egyptian startups. By the time the crowds had coalesced in and around Tahrir, a USAID-funded Entrepreneur-In-Residence (EIR) had a permanent office in both “Cairo” and Alexandria and was planning frequent programs for Egypt’s newly energized

entrepreneurs—from IT Boot Camps to Startup Weekend competitions.

Less than a year later, and barely a week after the first free election in Tunisia’s history, GEP was once again on the ground, this time in the birthplace of the Arab Spring. A delegation of a dozen Silicon Valley entrepreneurs and angel investors conducted two days of intensive mentoring workshops, competitive pitch sessions, and panel discussions with several hundred young Tunisian entrepreneurs. Key private-sector partners included global corporations, such as Microsoft Corporation and The Coca-Cola Company; local civil society stakeholders like Tuninvest Finance Group, an investment house; and the Mediterranean School of Business, a Tunisian university. These private-sector partners harnessed their local business networks to identify the most promising entrepreneurs across the country, coaching them before they presented their business ideas to the delegation. They also planned, funded, and hosted many of the events, infusing the delegation with the authenticity of local actors. The winning entrepreneur in Tunisia—a female professor with an



People gather on December 17, 2011, in Sidi Bouzid's Mohamed Bouazizi square, for the first anniversary of the uprising that unleashed the Arab Spring revolutions. | AFP Photo: Fethi Belaid

innovative biotech solution—received a three-month business incubation prize in the United States, as did winners from both Morocco and Algeria.

The confluence of events in the above two scenarios was not planned, but was no accident. The link between the democratic aspirations of the Arab Spring and the economic malaise of a new generation of Arab youth, a full one-third of the working-age population across the region,¹ is incontrovertible. After all, Mohamed Bouazizi, the Tunisian fruit seller who literally lit the fire of the regional uprisings, ultimately died for the fundamental right to build his own business. In the words of the economist Hernando DeSoto, he was “a budding entrepreneur” like “50% of all working

Arabs”² whose “goal was to accumulate capital to grow his business.” According to DeSoto’s research team, 35 additional Arab small businessmen in 4 countries subsequently immolated themselves in solidarity with Bouazizi.³

Bouazizi’s death, in the once-isolated hinterland of a tiny North African nation, galvanized an entire region in a matter of days. The Arab world’s many ethnic, tribal, and sectarian cleavages solidified over centuries melted into a shared experience that crossed borders and became, if only for a short time, a common identity. That predominant identity—from Tunisia to Yemen—was not Islamic or Arab or Berber, nor was it rural farmer or urban merchant. It was young, jobless, and increasingly aware that much of humanity

1 Farzaneh Roudi, UN/POP/EGM-AYD/2011/06, “Youth Population and Employment in the Middle East and North Africa: Opportunity or Challenge?” July 22, 2011. This youth group spans ages 15 to 24 across the Middle East and North Africa (MENA) region. On average, only one-third of youth in MENA are in the labor force, compared to half of youth globally.

2 Hernando DeSoto, “The Free Market Secret of the Arab Revolutions,” *Financial Times*, November 8, 2011. This comment was DeSoto’s opinion and does not seem to be based on extensive research.

3 *Ibid.*

had progressed, politically and economically, while Arab societies had been left behind. The Arabic word for dignity, *karama*, for which these revolutions were waged (and continue to be waged), in the end, has come to mean economic security and the freedom to prosper as much as political justice.

Opinion polls conducted by the Arab Barometer in the period just before the Tunisian elections only confirm this new concept of democracy as a guarantor of economic opportunity first and foremost. A full 43% of Tunisians polled identified either a small income gap (21.1%) or the provision of basic necessities for all members of society (22.4%) as the primary indicator of democratic governance. By comparison, 27.4% said the most important characteristic of democracy is free and fair elections, followed by 11.3% for the ability to criticize the government, and 11.1% for equality of political rights.⁴

During the entrepreneurship delegation's visit to Tunisia, we sat down for a dinner discussion with a senior minister in the interim Tunisian cabinet. He was very direct in suggesting that if you talked to the young Tunisians who had toppled Ben Ali, they would graciously accept your admiration for their accomplishments, but the first question from their lips would invariably be "Can I have a job?" For many of the Arab Spring's courageous foot soldiers, the revolutions will be largely incomplete unless they can unlock the economic aspirations of all groups in society. Unemployment and under-employment is particularly acute in the case of women, whose rates are the highest of any region in the world. Just as the Arab Spring began with a young entrepreneur denied the right to work and feed his family, its consolidation must begin with a solution to the employment crisis afflicting the region's youth.

In this context, and as we look at USAID's

⁴ Michael Robbins and Mark Tessler, "Tunisians Vote for Jobs, Not Islam," *Foreign Policy*, December 7, 2011.

changing mandate moving forward, we might revise one of the key questions of our topic: How is democracy central to sustaining development *and, conversely, how central will development be to sustaining democracy?* While the answer is always multifaceted and complex, economic opportunity and fairness must be a significant part of any comprehensive solution.

Here is where the American experience with entrepreneurship could be pivotal, particularly as donors struggle to earmark dwindling resources for formal foreign assistance. Accelerated job creation is intimately linked to entrepreneurship across every region of the world. This is because entrepreneurs are typically the innovators behind growth companies, and growth companies overwhelmingly drive new employment. It has been shown, time and again, that countries that nurture their entrepreneurs and provide the healthiest enabling environment for business creation experience the fastest job growth. The best policies have always been a mixture of reduced regulation and red tape, coupled with active support, such as tax incentives for early-stage investment and public funding for incubation. American expertise in encouraging, financing, and sustaining entrepreneurs in imaginative ways is world-renowned. It is this expertise, housed in the U.S. private sector, that the USAID-GEP alliance has sought to deploy, even before the sweeping changes of the Arab Spring made it even more imperative.

Tapping the private sector as a key partner in driving development is nothing new in the USAID toolkit. The public-private partnership is a well-known and well-utilized mechanism. Growth of entrepreneurship, however—catalyzing a culture of experimental incubation for small business that has led to growth miracles such as Silicon Valley—is little understood among governments, U.S. agencies, and international development institutions alike.



Startup Weekend Alexandria brought together about 250 Internet technology developers, business managers, startup enthusiasts, marketing gurus, and graphic artists pitching ideas for new startup companies September 22–24, 2011. The event was sponsored by USAID/Egypt. | Photo: Khaled Abdel Aziz

Leveraging this proficiency does not necessarily require importing these capabilities wholesale into the public sector. Like much else in the technology-intensive 21st century, this is about harnessing a diffuse network, not centralizing expertise. In this way, the USAID-GEP alliance has acted as a global channel for American entrepreneurial capacity, introducing and acclimating it to different developing-world contexts.

The alliance has worked well for one critical reason: USAID’s development objective—supporting the next generation of growth companies that will drive employment—is in lockstep with the core goal of our private-sector and civil-society partners, who also prioritize company growth (and profitability) above all else. This approach also falls in line with USAID’s agency-wide strategic priorities of strengthening local civil society and leveraging the private sector to maximize resources and sustainability. Moreover, it lies at the natural intersection of two important initiatives to adapt American foreign and development policy to the new global age: the 21st Century Statecraft

of “smart networks” that stress connectivity and decentralized capacity, and the commercial power of Economic Statecraft.

In this new era, democracy and development are more intimately intertwined than ever before across the Middle East and North Africa region, and indeed the world, as a potent stew of market forces, technological innovation, and demography combine to upend the existing order. Indeed, the spark of the Arab Spring has not been confined to just one region or people, inspiring similar movements for change across the world. This is a tectonic shift since the days of the Cold War, when the overarching ideological struggle between superpowers often superseded freedom and opportunity, leading both sides to support authoritarian regimes and corrupted elites. Today, the ability and willingness to do so is much more limited.

In this sense, we can say that *development itself has been further democratized*, as newly empowered actors, such as the Arab street, make it more difficult for a narrow minority to receive a disproportionate share of international and domestic resource flows. In order to channel these positive changes, however, development agencies must reimagine the prevailing models for engaging emerging actors across every region of the world. A holistic solution to both development *and* democracy depends upon it. By mobilizing private-sector innovation combined with the diffuse capacity of smart networks, the USAID-GEP alliance offers one template of how organic development can reinforce democracy.

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If Development Were Soccer

If there were a prize for global organizations most tainted with corruption, FIFA, the International Federation of Football (Soccer) Associations, would be a strong contender. For years, its board members are said to have demanded, received, and dished out bribes for purposes such as vote buying and selling rights to host the World Cup. The “crony culture” inside FIFA has reportedly caused huge losses—about \$100 million in one instance alone when an exclusive deal with a marketing company went belly-up. These acts have spawned investigations, books, and blogs seeking to expose the organization,¹ but FIFA appears to have warded off serious reform. Its current boss has been in charge for 14 years and part of FIFA for 38. He ran unopposed in the last election, in part because

his two rivals were disqualified for foul play. His predecessor had been at the helm for 24 years.

In several respects, FIFA’s inside dealing and lack of transparency, as well as the longevity of its aging leadership, is reminiscent of the poor governance of many developing countries. This state of affairs is associated with malaise and dysfunction, misuse of public resources, poor public service delivery, and entrenched inequities.

But the state of soccer, far from being a basket case, is vibrant and thriving.

Precise numbers are difficult to establish, but soccer has well over a billion supporters worldwide. Many of these tune in every week on radio, TV, and, increasingly, the Internet. More than 700 million are estimated to have watched the final games of the World Cup in 2006 and 2010, across all six continents. It is easily the world’s biggest sport.

While growing up in Mwanza, Tanzania, listening to commentary of English league games on a crackly BBC shortwave transmission was the highlight of my week. Today, walk through East Africa’s bustling neighborhoods or rural

¹ See, for instance, *FIFA’s Dirty Secrets*, a three-part investigative series by BBC Panorama at <http://www.bbc.co.uk/programmes/b00wfl8t> and <http://www.bbc.co.uk/news/uk-11841783>; Andrew Jennings, *Foul: The Secret World of FIFA: Bribes, Vote Rigging and Ticket Scandals* (London: HarperSport, 2007); and David Yallop, *How They Stole the Game* (London: Constable, 2011).



As a powerful development tool, sport inspires change, delivers hope, and unites communities around the world. | Photo: Pernille Baerendtsen

communities on weekends, and you will likely see animated men and (increasingly) women listening to a duel between national rivals or watching Chelsea play Arsenal or Barcelona take on Real Madrid. You will see much of the same across large parts of Africa, Latin America, and Asia. In many cases, these are communities that have no electricity and low incomes, but some entrepreneur will have rigged up a generator and an improvised satellite dish, and be turning a tidy profit charging entrance fees.

It's not only about relaxing in front of the TV. Soccer is among the most common topics on social media, radio call-in shows, and street corners. Crotchety pundits, hip pre-teens, and nerdy economists alike pore over team statistics to discern patterns, debate choices, and predict outcomes. It is public engagement interspersed

with politics, business, and local drama, but soccer remains at the core. And soccer evokes great emotion. When there is a crucial goal or save, observe the poetry of celebration rituals or the slow-motion implosions of defeat among both players and fans. It's quite an experience.

Why does soccer work? Why, unlike so many badly governed public agencies, NGOs, and projects, is soccer so powerful, lively, and engaging?

Could it be that soccer has got something so right, that it doesn't much matter that its state of supra governance is somewhat shambolic? And if that is indeed the case, might it provide useful insights for how we think about development in countries where the intractable problems of supra governance will not be sorted out soon?

Soccer and development, while very different, have several features in common. I'll highlight



Two women wear T-shirts advocating a peaceful referendum as they watch men wave a southern Sudanese flags outside a polling station in Juba during voting on January 9, 2011, on the first day of a week-long independence referendum. | AFP Photo: Phil Moore

four. Both have purposes or goals to score. Both have rules and conventions of how things are to be done. Both have someone deciding whether conduct is right, imposing sanctions for foul behavior, and judging the final outcome. And both have actors who need to be motivated and focused to deliver.

But each handles these features very differently.

In Soccer, Success Is Clear and Simple

Soccer isn't called the "beautiful game" for nothing. Players display enormous skill when dribbling, passing, and making daring dives and gravity-defying turns. Fans love these moves, and TV screens replay some of the best ones over and over, so that viewers can study the skill and savor the moment. Papers speak of the teams that play

the most entertaining football. But all this skill is aligned toward a very simple and very clear purpose: to score more goals than the other team. Sure, a lot of other statistics are collected, such as the number of passes, number of fouls, percentage of possession, ages of the players, and so forth. The artistry is fun and appreciated, but what matters is how it contributes toward the purpose. What counts is the final score.

The incentives are well aligned too, in the short and long term. You win the game, you celebrate, your team gets three points. Everyone involved—the players, the managers, the owners, the spectators—understand this. In the long term, those points and goals add up, and you move up the league table or on to the next round of the competition, until you win the cup. The better you perform, the more likely you are to earn a better salary.

In development, there are also goals and purposes. While some are clearer than others, too many development initiatives suffer from three kinds of problems. First, they try to do too many things at one time. Indeed, many things contribute to whether humans can flourish. They cannot be encompassed in a single, narrow goal. When an initiative tries to do all the important things—to be *comprehensive*—it tends to get distracted, pulled in many directions, and energy and focus dissipate. Ultimately, this means that it fails to reach any of the important goals in any meaningful sense, and over time falls under the weight of its own elaborate design or is difficult to sustain at scale. I have seen this in the education sector in Tanzania, for example, where programs have tried to initiate reforms with teachers and books and infrastructure and curriculum and pedagogy and examinations and finances and governance and gender and HIV/AIDS and environment, all at the same time. Doing it all would be difficult even where there is great institutional depth. To try to do so where this is not the case can be downright hubris.

Second, because the achievement of goals can take time and require several steps, there is a tendency to develop many interim markers of progress. Hence, it is common to find a plethora of input, process, and output targets, as well as corresponding indicators. These are lined up in a linear sequence, implying that A will lead to B, which shall lead to C. But the proliferation and labor of keeping track of these, meant to be signposts toward achieving the ultimate goals, can become so consuming that one ends up spending an inordinate amount of time on them, losing sight of the goals, or worse still, conflating the interim markers with the measures of success, even where they do not effectively contribute to the achievement of the goals that matter. This would be the equivalent, in soccer, of players focusing

so much on the number of passes, height of their headers, speed of their runs and the like, that no one remembers the score.

Third, even where development initiatives manage to keep a clear-eyed focus on the goals that matter, the incentives are not aligned to reward success. Put differently, there are no consequences. One gets funded for the cost of the *inputs* of the project, not the *outcomes*. Staffs are paid salaries for undertaking activities, writing proposals and reports, and moving money rather than achieving results. So while, in theory, the achievement of goals should matter, in practice, they do not. The metric for rewarding performance is often poorly related to attainment of goals and rarely determinative of what you actually receive. The health worker who toils nine hours a day delivering quality care is likely to be paid the same as a colleague who is absent and discourteous. And whether a project gets renewed, or a ministry receives more budget, or a country receives more aid is determined largely by factors other than its track record of attaining goals. In soccer, one also faces some of these challenges, particularly in the short term. But the yardstick of winning games and progressing up the league table is never far away; it quickly concentrates the minds of wayward souls.

Soccer Has Clear Rules

Over the years, soccer has developed an extensive set of rules and conventions. For a newcomer, these can be quite bewildering. What exactly is an offside? Why is it a handball when the ball touches an arm in some instances and not in others? Which offenses deserve yellow or red cards? But for those who have grown up with soccer or engage actively with it, these rules make sense, for they have evolved organically, with relatively few changes at a time. Importantly, while people argue over the interpretation of rules, and human error

is not uncommon, the rules themselves are known to everyone and not renegotiated while playing the game. Players and managers are expected to follow the rules, and that's largely that.

In development, particularly in developing countries, the relationship between the game and its rules is tenuous at best. In recent years, often in response to donor pressure, several countries have undergone reform. These have produced a raft of new laws, regulations, and institutions. Many of these, such as anticorruption laws and agencies, ethics commissions, and public-expenditure management systems, are meant to strengthen governance. In Uganda, for example, so many laws and agencies were created, with overlapping mandates, that no one could quite keep track, and a new body had to be created to coordinate the other new bodies. The problem is that all this impressive rule-making bears little connection to how people go about their daily business. It's not that people lack respect for the rule of law. But how a rule comes about, and the manner in which it can be and is enforced, makes all the difference. Ironically, in many cases, the zeal for reform appears to have led to "too much too fast," preventing change from taking root.

When poorly established, rules fail to fulfill their key function, which is to provide credible and predictable guidelines with which to conduct affairs and adjudicate differences. Observe, for instance, a negotiation between government and donor representatives on the Performance Assessment Framework (PAF) for General Budget Support (GBS). There is constant haggling over the small details: whether a report gets published, which civil society should be around the table, what constitutes adequate accountability, and so forth. Not only do the goalposts keep changing, but also many of the basic rules. If soccer were development aid, before the whistle blows,

there would be drawn-out negotiations on the definition of a penalty, a task force established to appoint the referee, and a manual drafted on how to procure the whistle. That this is frustrating, wastes time, and generates ill will is bad enough. Worse still, it disrupts the flow of achieving development, draining it of creativity, motivation, and a clear-headed strategy.

Soccer Has Independent Referees

Like most professional sports, soccer has independent referees. The principals are the teams, but it is the referees who are fully in charge on the field, responsible for making the game flow, upholding the rules, and serving as impartial judges of conduct. Referees are not immune from undue influence and corruption, but on the whole, they need to play their roles ably—because they have little wiggle room to do otherwise. The value of independent referees in soccer is taken as a self-evident truth; no one would even think about proposing that a professional game be played with refereeing by a player from one or both the teams.

Yet, in development, where the stakes are arguably higher than most games of professional soccer, that is precisely what happens much of the time. In many countries, the executive branch of government is to be held in check by the parliament, but its ministers themselves are members of parliament. In Tanzania, for instance, about a fifth of parliament is in the cabinet, and at least another third have key appointments in the boards of government agencies. Elsewhere too it is not uncommon for heads of state to confer plum assignments to members of parliament—the very ones who cook in the kitchen then assess the quality of the food. One possible exception is the role of supreme audit institutions, whose independence is often constitutionally enshrined. But here, too, their powers are limited to stating



Protestors kiss soldiers during a demonstration against former Tunisian leader Ben Ali's Constitutional Democratic Rally on January 20, 2011, in Tunis. | AFP Photo: Martin Bureau

findings and giving advice to the very cadre they investigate. Among NGOs and donor agencies, the independent auditors and evaluators still need to be appointed by the ones that they will assess, and that fact is usually not lost on those who are hired. In soccer, it's simpler. Teams do not get to hire their referees.

One of the most palpable illustrations of this sort of conflict of interest is in the structure of the aid relationship. Donor agencies and recipient governments play multiple roles. They determine the basis of the partnership, the content of the program, the rules of the game, the assessment of progress, and the consequences of performance. The Paris Declaration on Aid Effectiveness calls this “partnership” and “mutual respect.” Fair enough, except that, having been involved in planning the menu, shopping for ingredients, cooking the meal, and establishing the standards for review,

both parties have a clear self-interest in having the dinner look good. Assessments, therefore, while noting an obligatory set of gaps and areas for improvement, tend to be done through rose-tinted lenses with little rigor about actual impact.²

Even where reviews are fair and balanced, the consequences are limited. Governments and NGOs want cash to spend. Donors need to exercise the imperative to disburse because moving money is a large part of the measure of success. Third parties, such as watchdog groups and journalists, try at times to offer independent viewpoints, but with difficulty because they have only limited access to

² See, for instance, William Savedoff, Ruth Levine, and Nancy Birdsall, *When Will We Ever Learn? Improving Lives through Impact Evaluation*, Report of the Evaluation Gap Working Group (Center for Global Development, 2006), available at http://www.cgdev.org/files/7973_file_WillWeEverLearn.pdf.

information. In these circumstances, unlike in soccer, the real outcomes get fudged. And the real losers end up being the very ones who development was meant to have served.

Soccer Is Radically Transparent

Assessments of outcomes don't get fudged in soccer, in part due to the clarity of goals and rules and the independence of the referees—and also because the game is radically transparent.

It's hard to play soccer in secret. Soccer is played on streets and open fields. Everyone can watch and bear witness. For the big games, that involves not only the 60,000 people at the stadium, but also millions more watching on TV. Cameras capture every move, so that disputed calls

There is a growing appreciation of the role of experimentation and the value of failure among writers of development.

(or actions that happen behind the referee's back) can be replayed from different angles, in slow-motion, to establish the truth not only for the experts but for everyone. This means that everyone can have an informed opinion about the game—the manager's strategy, the players' performance, the referees' calls, the fans' behavior—and the increasing opportunity to voice it through social and traditional media.

Because the players and managers know this, they know they need to do well and to play it right. Players who seek individual glory but do not help the team win are quickly exposed. Managers cannot continue to field favorite players or their

cousins who fail to perform, for the wrath of the fans will be upon them. Referee decisions are constantly scrutinized, and every error or seemingly partial call faces the harsh light of day. How well teams do, the final score, and the league table are open and updated in real time; they cannot have errors for long because the "crowd" will quickly point them out. Importantly, transparency in soccer constitutes public or shared (rather than private) knowledge, allowing collective responses and pressure. This sort of deep public transparency fosters accountability like nothing else.

The field of development is also moving toward greater transparency, aided by the proliferation of technologies that make it easier to collect, store, analyze, visualize, and share data; and by pressure of citizens from India to Kenya to Brazil, demanding their right to know. The Open Government Partnership,³ a unique multilateral effort involving 50-plus countries, launched by Presidents Obama and Rousseff in 2011, is a reflection of this turn. But there is still a long way to go before governments achieve the transparency of a game of soccer.

Public service is a misnomer in most developing country contexts because it has little public orientation and even less service. Several recent studies, for example, show that absenteeism of public servants is widespread in health and education. Despite establishing client service charters and much capacity building, there is little responsiveness toward clients in both central and local governments. This can go on because, unlike soccer, there is no public witness, and the officials know that they can get away with it. Performance is not directly observed or replayed on video, whether it is malpractice by a tax official or the quiet dedication of a head teacher. Assessments

³ See www.opengovpartnership.org.

are discussed behind closed doors, at best with a few stakeholders, and tend to meander into process and protocol where nothing is quite straightforward.

In contrast to soccer, the data collected in development are also not as revealing. First, the quality, especially of administrative (as compared to survey) data, is unreliable. Officials compiling data have little incentive to get it right, and the data do not go through the quality assurance and crowdsourcing checks that soccer enjoys. Second, data are often locked up in a few cupboards or on hard disks, with access restricted to a few, and a nightmare to obtain for others. Where data are made public, they tend to be in non-machine-readable formats that are harder to mash, map, and analyze. Third, the data rarely give a clear indication of the aspects that matter, such as learning outcomes or quality of care or levels of satisfaction. Fourth, it is usually not easy to compare one entity with another. Say that I find out that 1 out of 12 women dies in childbirth in my community. How do I make sense of it unless I know the rates in the neighboring communities and other countries? Like in soccer, meaning is rarely absolute; it comes from the ability to compare.

Soccer Is Open and Responsive

Soccer's regulatory apparatus and data are impressive, but what excites most people is how the game is played. How does a player know what to do, how to play, how to help her team score goals, and prevent the other team from doing the same? No doubt, managers do a lot of strategizing, studying of opponents, planning of tactics, and practicing of "set-pieces," such as corners and penalty kicks. But unlike development, there is no fixed plan with steps charted out in the form of a log frame. No manager tells a player to follow a script line by line because she understands that a game is fluid,

dynamic, and unpredictable.

In soccer, the point is not to devise a plan that anticipates every possible move of the other team in great detail, but to coach players on how to read the signs and respond skillfully and quickly. Surprise and unpredictability are constants as each team tries to catch the other off guard and do something different. It takes an open architecture way of doing things—a constant risk-taking, experimentation, and adaptation that requires an intelligent reading of constraints and opportunities as well as the ability to respond with agility. What works, what connects, what moves the ball forward is quickly recognized, not least of all from the cheers of the fans. This sort of feedback is crucial to testing players and ideas. In the soccer marketplace, who and what works quickly will rise; what and who doesn't will be expediently set aside.

Save a few feigned dives and injuries (that are punished, should the referee catch them), the energy is focused on playing ball and winning the game. There is no time to offer explanations and excuses, or to passively wait for someone else to do their part. Everyone chips in, takes responsibility, takes initiative, and works to score goals. Everyone searches for opportunities to make things happen rather than reasons to explain why they did not.

In development, the inability to continually interpret feedback and adapt is a great limitation. Instead of developing sensitive antenna and intelligent response capabilities to deal with uncertainty, developers try to figure things out at the outset (for example, by undertaking situation analyses) and then devise plans with as many fixed markers as possible. It is almost as if the response to the dynamism of context is to establish absolute certainty, to say that "we will establish every aspect so carefully and in such great detail, that whatever else happens doesn't

matter.” If soccer were development, the manager would tell Player A, at the outset, things like “ignore all else that is happening; at minute 37, from the left back position, pass the ball on to Player B on the far right side, who will then head it on to Player C,” and so forth. In trying to play it like that, whether that particular move makes sense or a better opportunity is missed is not even a consideration.

The other problem with fixed pathways is that experimentation and improvisation are discouraged. Tinkering, trying things out, making unorthodox connections, falling and failing, and trying again and again until it works are not traits rewarded by development managers or funders. Yet this sort of approach is common not only in soccer but also in a great many innovation hubs in Silicon Valley, theaters in Mumbai, and among makers of articulate toy cars using twigs and discarded flip-flops in Sumbawanga. In soccer, a manager understands that success comes from an intelligent and creative unleashing of human agency. In development, success is too often misconstrued to require a straitjacketing of agency. The good news is that this is changing; there is a growing appreciation of the role of experimentation and the value of failure among writers of development.⁴ But the bureaucracies and incentive structures of governments, NGOs, and aid agencies have a lot of catching up to do.

Conclusion

I have argued that the vitality of soccer derives from the clarity of its regulatory framework; a clear alignment of goals, success, and incentives; and the open-architecture nature of its play, in

⁴ See, for instance, Abhijit Banerjee and Esther Duflo, *Poor Economics: A Radical Rethinking of the Way To Fight Global Poverty* (Public Affairs, 2011) and Tim Harford, *Adapt: Why Success Always Starts with Failure* (Farrar, Straus, and Giroux, 2011).

Libyan girls flash the “V” sign from the porthole of a small ship as they arrive to Banghazi port coming from the devastated Libyan city of Misrata, on April 18, 2011. A ferry rescued almost 1,000 people from the city. | AFP Photo: Marwan Naamani

particular the space it fosters for an improvising human agency. Soccer as a metaphor for international development may come across as frivolous, except that the features that make soccer work may be essential to motivating and realizing success in development. These same features seem to drive innovation and growth in industry and business, and increasingly in some of the most interesting parts of academia. Perhaps when it comes to solving complex challenges in any sphere, *play* may be just the verb we need.

This viewpoint also suggests that, as with soccer, getting a few key things right about the core aspects of development may matter more than sorting out the intransigence of its supra governance. For a great game of soccer, and possibly for development, everyday governance and incentives writ small matter more than the election of officials who hand out the trophies. Observe the young people who play soccer every day, how they think, how they make their moves, how they make the game flow. Observe the intensity and delight in their play. You will know that they’ve got something deeply right.

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Democracy and Development Reconsidered

The global expansion of democracy in the past 25 years is one of humanity's greatest achievements. At the end of the 20th century, democracy emerged as a universal value.¹ Today it faces no significant *ideological* challenge. Undemocratic regimes abound, but they cannot offer a competing global vision. Rather, they persist pragmatically, through appeals to nationalism and religious identity, or some combination of rewards and repression. Most autocratic regimes feel the need to present at least a veneer of electoral democracy.

Although the Third Wave² of democratic transitions came to a halt by the mid-1990s, we are witnessing a democratic resurgence, not only in the Middle East, but in the growing challenges

to semi-authoritarian rule and one-party dominance in Russia and East Asia. Burma has begun an opening after 50 years of dictatorship. More democratic transitions are likely in the rest of this decade. We do not yet know what kinds of regimes these transitions will produce, and whether this constitutes a Fourth Wave is an academic question. What is clear is that a combination of demographics, information technology, and global ideology now combine as a powerful force against authoritarian rule in all of its forms. Whereas once scholars debated where democracy could take root, today's question is: "Where can dictatorship survive?"

And yet in most countries where USAID works, democracy is struggling to deliver a better life, and by doing so, to take root.

Elusive Consolidation

Democratization theory proposes a "consolidation" phase following a transition from authoritarian rule in which democratic behaviors, attitudes, and institutions mutually support and sustain each

1 Amartya Sen, "Democracy as a Universal Value," *Journal of Democracy*, 10.3 (July 1999).

2 Samuel P. Huntington, *The Third Wave: Democratization in the Late Twentieth Century* (Norman and London: University of Oklahoma Press, 1991). The Third Wave refers to a historic period of democratic transitions spanning 1974 into the 1990s, including the collapse of the Soviet Union.



Southern Sudanese hold pro-independence banners as they travel the streets of the southern capital Juba on October 9, 2010, to mark three months until a referendum for their independence.

AFP Photo: Peter Martell

other. Following the transitions of the early 1990s, USAID turned its attention to consolidation as a long-term vision. Consolidation became central to five-year strategies featuring local governance, the rule of law, elections, and civil society. As one strategy followed another, practitioners came to view consolidation as an aspiration—not an urgent problem. Nearly 20 years later, the concept of “democratic consolidation” has gone stale and lost its utility. It is time to let it go and rethink how we assist democracy, human rights, and governance if the triumph of democratic rule is to become more than ideological. The fundamental challenge today is to make governments work.

Of the 20 largest recipients of USAID assistance in 2010, only 4 rank above the World Bank Institute’s 50th percentile in

government effectiveness scores. While a few cases have shown modest improvements, only one (Colombia) has moved from below the 50th percentile in the past 10 years.³ Consistently over the past decade, 16 rank below the 50th percentile, and half of those at the 25th percentile or lower. These scores are consistent with other governance categories, such as transparency and the rule of law. Of course, USAID invests its resources where they are most needed—in poorly governing states. But even with considerable

³ USAID, Policy, “Where Does USAID’s Money Go?” September 30, 2011, <http://www.usaid.gov/policy/budget/money/>; World Bank, “World Governance Indicators,” <http://info.worldbank.org/governance/wgi/index.asp>, accessed December 22, 2011. World Bank data for Sudan are prior to the independence of Southern Sudan in 2011. Indonesia, Ethiopia, and West Bank/Gaza have shown modest but steady improvement.

USAID assistance, many have made relatively little progress in this critical indicator.

To make matters worse, weak governments confront young, impatient populations. The median age for the 16 low-ranking USAID recipients falls below 19 years, compared with the global average of 27.⁴ All of this means higher pressure on limited resources—land, water, and jobs—and chronic incapacity to respond. Most of the 16 are trapped in a state of internal or external conflict, or are recently recovering from one. In countries such as Afghanistan and Pakistan, these conflicts are about fundamental questions of legitimacy and identity. But in others, such as Haiti, the ongoing pressures on resources create a permanent state of misery and exclusion.

Therefore, an open-ended commitment to “democratic consolidation” needs to give way to a more clearly defined goal of making governments work better, and to do so in a decade. Effective governance, then, should translate into concrete improvements, such as:

- The ability to manage conflict and natural resources
- Creation of jobs
- Improved education and skill levels for youth and women
- Protection of public health

This requires action to integrate governance around the environment, economic growth, and the health sectors, among other disciplines.

Placing Governance at the Center

A decade ago, we feared that a decline in citizen participation would lead to democratic breakdowns and the return to authoritarianism. Today, open authoritarianism—in the form of military

⁴ UNDP, *Human Development Report 2011*, Statistical Tables, pp. 164–165.

juntas, for example—is increasingly difficult to impose, for the reasons stated at the outset. The greater threat is to *development*. Our investments in agriculture, food production, education, health, gender equality, and conflict resolution all depend on participation and ownership—by governments, but more importantly, by citizens. When citizens lose confidence in the ability of their governments to provide services, and they cannot improve those services through political action, they opt out in various ways:

- They buy services privately (such as tutoring or private security in its various forms).
- They pay for services via bribery.
- They refuse to use services (such as early withdrawal from school).
- They look to their villages and kin and solve their problems locally. (Although local initiative is positive, state weakness can feed local disputes as well as broader conflicts. Such is the case of Afghanistan.)
- They emigrate in frustration, taking their critically needed skills with them to better places. (This is occurring throughout the former Soviet Union and Central America.)

These forms of opting out undermine the *quality* of governance, which remains the foundation of USAID’s development mission and the quality of democracy.

Re-engaging a Cross-disciplinary Approach

In the 1960s and 1970s, USAID invested heavily in public administration and human resource training because the early practitioners assumed that development rested on an effective civil service. This assumption was correct, though open-ended training programs were not the answer. Unfortunately, attention to the core public sector was lost in the various development approaches

that followed, which focused on communities, the private sector, civil society, and local government. The challenge is to balance both the demand for good governance with its supply, engaging both public and private spheres. This means taking what we have learned about governance and integrating that knowledge with the substantive specialties of agriculture, health, natural resource management, and education to achieve specific objectives. Today, experts in these fields do coordinate, but they tend to operate in parallel—even in field missions.

Governance (a subset of democracy assistance) may remain its own discipline, but governance specialists should be embedded with teams working in other sectors to acquire as much substantive knowledge as possible, and reciprocally, non-governance specialists should serve with teams working on governance initiatives. This approach requires new thinking and more holistic training. Perhaps a new version of the former Development Studies Program—a rigorous course which years ago brought different disciplines together around development problems—can serve this purpose.

The principle of integration is illustrated in youth programs. About a decade ago, USAID launched anti-gang programs in Central America under its “rule-of-law” program. It gradually became evident that the lack of educational and economic opportunities were the decisive factors driving the growth and resilience of gangs, more so than the weakness of justice institutions. While effective prosecution and policing could suppress a fraction of offenders, the only way to stop the constant regeneration of gangs was to choke off their supply of uneducated, unemployed, and abused youth. That led to creative solutions bringing educators, businesses, and churches together around community initiatives to create “youth

centers” and job programs, jointly supported by education and rule-of-law programs. Combating youth violence could no longer easily fit into any single program category: It may have been led by the democracy and governance office, but it became everyone’s business.

Notwithstanding numerous conflicts and economic crises since the end of the Cold War, the expansion of democracy has brought about an unprecedented level of peace and an opportunity for greater prosperity. The irony is that this hard-won achievement is threatened not by any ideological or national force, but by the steady erosion of governance—with direct negative consequences on the quality of life. Importantly, building effective governance provides powerful support to the growing consensus among donors to make great use of local institutions in development. Those efforts extend beyond the passing of money through host governments to the explicit transfer of responsibilities to local public institutions and the sharing of risks over a sustained period.

Ultimately, the fate of democracy will depend not only on credible elections and an effective legislature, but also on the effective management of issues that affect citizens’ daily lives, such as climate change, providing water and education, and creating jobs. More than a universal ideology, democracy can become a universal way of life for billions of people. We can achieve this in our time.

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Democracy and Development in Sub-Saharan Africa

Twenty-five years ago, Sub-Saharan Africa (SSA) was a region of despair. Outside of Botswana and Mauritius, democracy was but a distant dream. Unelected and unaccountable governments held power across the subcontinent. Dictators treated their countries as personal fiefdoms, ruling by force and intimidation, taking what they wanted, doling out riches to a favored few, and sprinkling a handful of crumbs to the rest. The terrible scar of apartheid made a mockery of justice and plunged the entire southern region into conflict and crisis. And the politics of the Cold War made a bad situation worse, as East and West propped up unsavory rulers for their own purposes with little regard for the effect on Africans themselves.

The leadership crisis translated into an economic crisis that left the region effectively bankrupt. Authoritarian leaders used the state to try

to control the economic commanding heights, in part to finance their patronage systems. In the end, their control only destroyed economic assets and personal livelihoods. For 20 years starting in the mid-1970s, nearly all of the countries of SSA saw zero or negative economic growth in per capita incomes. Promising businesses were ruined, and new investment virtually stopped, except for the grab for natural resources. Unemployment soared, and working men and women could no longer provide for their families. Schools and health facilities deteriorated badly. The only things that seemed to thrive were poverty, graft, and conflict.

But that was then. Today, all of that has begun to change—not across all of SSA, but across much of the region. Dictators are being replaced by democracy. Authoritarianism is giving way to accountability. Economic stagnation is turning to resurgence, with SSA today one of

Parts of this essay are excerpted from Ellen Johnson Sirleaf, “Introduction,” in Steven Radelet, Emerging Africa: How 17 Countries Are Leading the Way (Washington: Center for Global Development, 2010). We are indebted to Molly Cashin for comments on earlier drafts.



A Sudanese supporter of secession pastes posters upon the arrival of Sudan's President Omer al-Bashir at Juba airport on January 4, 2010, five days prior to the country's referendum for independence on January 9. | AFP Photo: Yasuyoshi Chiba

the fastest-growing regions in the world. Poverty rates are falling. Investors who never would have considered Africa a decade ago are lining up to look at new opportunities. Political conflict has subsided, and governments are strengthening the protection of civil liberties and political freedoms. About half of the countries in the region have embraced democracy, fragile and imperfect, to be sure, but a far cry from the dictatorships of old. And most important, despair is being replaced by hope—hope that people can live in peace with their neighbors, that parents can provide for their families, that children can go to school and receive decent health care, and that people can speak their minds without fear.

What happened in SSA? How did authoritarianism begin to give way to democracy? How has

the economic resurgence affected the move toward democracy, and how has democracy affected the economic turnaround? How is democracy likely to evolve in the future in SSA?

The Contested Relationship

For the past nearly half-century, scholars and practitioners have heatedly debated the relationship between democracy and economic development, and have had difficulty matching global theories with African realities. They also debate the meaning of the basic terms. Here we consider “democracy” in ideal terms to mean a political system where the people rule, usually through periodic elections, and whose rights include meaningful degrees of freedom of assembly, of free speech, and of equality before the law. “Development” includes

economic progress—increasing national investment and income, expanding education and health services, and reducing poverty.¹ It also features social progress, in the expectation that quality of life, economic progress, and democratic culture go hand in hand.

Arguments on the relationship between the two have followed several familiar paths, with dramatic implications for foreign policy, alliances, and international assistance. There are four broad prevailing views:

1. Economic development leads to the establishment and maintenance of democracy.

In this view, economic development leads to the creation of a middle class, a broadly educated citizenry, and a vibrant civil society. The argument is that members of a middle class and educated citizens typically demand political voice and participation, government accountability, and the rule of law to protect their property, often working initially through civil-society organizations. Some also argue that sustained development produces political values like an emphasis on personal agency and freedom that contribute to demands for political liberalization.

These changes, whether through slow evolution or street demonstrations and, at times, civil violence, can paralyze economies, provoke external pressures for change, or splinter authoritarian elites (including militaries), and so compel authoritarian governments to agree to a transition to democracy. A poster child for this type of relationship is Korea, which had an authoritarian government at the beginning of its economic miracle in 1961.

¹ Vast numbers of books and articles have been written to define these two broad terms. Here we are including only the basic qualities associated with both conditions. Unlike authors such as Amartya Sen, we do not include political freedom in “development” because we are trying to examine the relationship between economic progress and political freedom. Including freedom in “development” would lead us into tautological arguments.

It wasn’t until the mid-1980s, with pressures from its increasingly prosperous populace and the international community, that its rulers began a credible transition to democratic governance. Arguably, much of the experience of Latin America in the past several decades also fits this general model, suggestive less of causal relations between economic development and democracy than long-term determination, international glare, and good luck. Few credit it with blanket application for Africa.

2. Democracy is a requirement for successful and sustained economic development.

This view reverses the cause and effect. Democracies, with their open, participatory politics, are seen as putting restraints on rulers and forcing government accountability through the availability of information on public policies and the periodic elections that penalize political mismanagement and misbehavior. In effect, democratic governments, accountable to their populaces, are more likely in the long run to be less corrupt, more responsible economic managers, more stable (since political opposition is channeled into open political discourse and competition and not repressed into violent demands for change), and more protective of property rights (deemed necessary to encourage the investment required for long-term growth and development). This argument has been among the justifications for democracy promotion programs funded by the United States and other governments in SSA. We believe that this view is the most applicable to the experience of SSA.

3. Democracy can create obstacles to economic development. Some scholars and public officials (the latter almost always in authoritarian governments) have argued that democracy can undercut development through its cumbersome decision-making processes and the potential



Workers unload ballot kits for the independence referendum on South Sudan before a handover ceremony between the UN and the Southern Sudan Referendum Commission in the southern Sudanese city of Juba on December 23, 2010. | AFP Photo: Trevor Snapp

gridlock created by competing powerful interests. In this view, authoritarian governments—or at least a subset that might be thought of as benign dictators—can better resist or suppress power-driven redistributive and populist pressures to consume national resources, thus protecting national savings and investment, as well as property rights. Many have pointed to the success of the early East Asian “miracle” countries to support this view.

These arguments continue to hold sway, especially as China continues its rapid growth and development. But as a general proposition they have lost credibility as more developing country democracies have begun to succeed. Indian growth has surged over the past two decades, along with emerging democracies in Asia, Eastern and Central Europe, SSA, and Latin America. At the same time, many authoritarian

regimes, especially some countries in Africa and the Middle East, have proven to be predatory, corrupt, and indifferent to property rights and human rights, constituting obstacles to the development of their countries. One has only to think of Algeria, the Democratic Republic of the Congo, and Zimbabwe to recall development lost to seemingly irrational despotism.

But there are additional arguments that democracy can create problems for development, for it can exacerbate regional, religious, and ethnic differences. As groups based on these affinities become the focus of political competition, societal divisions can be deepened, exacerbating potential sources of instability and conflict and endangering development and regional security beyond country borders. Recognizing this threat, a number of African constitutions have provisions requiring political parties

to have branches and members in a high proportion of domestic provinces in order to negotiate local conflict through constitutional means.

4. Democracy and development must go together. One final argument made later in this essay is that democracy and development must in some circumstances go hand in hand, rather than one clearly leading the other—especially in post-conflict situations where a new government must take rapid action across a variety of issues to create the conditions for recovery and growth in the future. Without the legitimacy that comes with free and fair elections, a new government will lack the credibility to make the contested and sometimes painful decisions needed to implement reforms. Legitimate elected governments are also important to persuade international institutions, foreign governments, and investors to adopt supportive policies essential for recovery—for example, reducing international debt, providing generous amounts of aid, or making crucial investments. Development is also important in these countries to signal to the population that recovery is underway and to ensure the political stability necessary for both development and democracy to endure. This is not a theory that has been elaborated or tested in the scholarly literature, but it reflects a reality for a country like Liberia. (Much depends on how democratic governments are structured and how elections are held. Where elections are based on a “winner take all” model, the losers—often ethnic, religious, or regional groups—can lose any stake in the system, undercutting both democracy and development. This is what happened in Angola.)

Thus, the relationship between democracy and development remains contested and unclear. Things appear altogether more complex than a direct causal relationship between these two conditions. Empirical evidence is mixed.

For example, one data-based survey found that prosperity can help democracies survive but has little relationship to transitions to democracy.² Other analysis reaches different conclusions, with no clear consensus. One of the major problems for demonstrating a clear relationship comes from simple differences in place and time. Regions and countries differ substantially from one another; what works in one country at one time may not work in another at a different time. Clearly, one size does not fit all—neither in terms of democratic structures nor in the relationship between democracy and development.

A Brief History of Democracy in Sub-Saharan Africa

The history of democracy and development in Africa has not been a happy one. Most countries gained independence in the 1960s and early 1970s. They inherited democratic governments at independence (which had typically been put into place a year or two before the colonial powers withdrew), but in many cases, these governments were undercut by constitutional changes that created one-party states, or were overturned by military coups. Most of Africa’s first-generation leaders governed with few legal or institutional constraints on their behavior (they controlled the press, the courts, the sole political party, the unions, and most other civil-society organizations), and many treated the country and the economy as their private preserve, basing their rule on patronage to favored elites and ethnic groups and repression of any potential critics or rivals.

Ghana, the first SSA country to emerge from colonialism and gain its independence in

² Adam Przeworski, Michael Alvarez, José Antonio Cheibub, and Fernando Limongi, *Democracy and Development: Political Institutions and Well-Being in the World, 1950–1990* (Cambridge: Cambridge University Press, 2000).

1957—and so often seen as a bellwether for important trends in Africa—was a democracy at first, led by the charismatic Kwame Nkrumah. Within three years, he had altered the constitution to create a one-party state. He spent Ghanaian resources freely to promote African unity and his own power and prominence. Nkrumah was overthrown by his military in 1966, and economic mismanagement and political instability continued to depress the economy. By 1980, Ghana was poorer on a per capita basis than it had been in 1957. Not all African countries followed Ghana’s authoritarian path in the years after independence, but many did.

One exception to this pattern was Botswana. This small, very poor country neighboring South Africa, gained its independence in 1966 under the leadership of Sir Seretse Khama. From that time until the present, the government of Botswana has been both democratic and a model of good economic management. It has held regular elections that are regarded as free and fair (even if the same political party has consistently won) and has managed its mineral wealth (discovered well after independence) in a prudent and effective manner, making it one of the fastest-growing countries in the world for nearly a half century. What explains this exception to the broader rule in the region? Some have speculated that the culture of Botswana, being very legally oriented, led to relatively clean and effective government. Some have claimed that the fact that 80% of the population are part of the same broad ethnic group (the Batswana) helped. Others have argued that economic and political success at home was a survival strategy, given that South Africa had once claimed the territory that is now Botswana. But Botswana also enjoyed a stroke of luck (in addition to its mineral resources). The first leader of the country was a chief with essential legitimacy

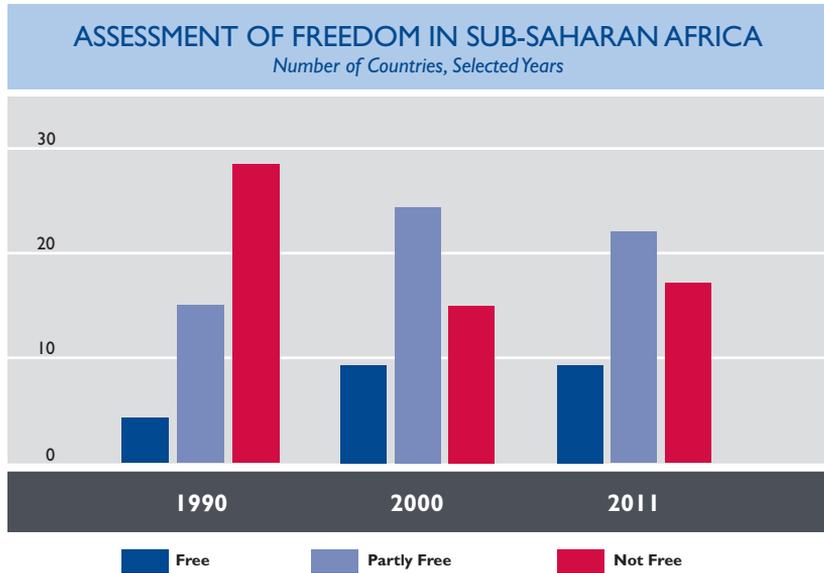
in the eyes of his people, an able, honest person, committed to the welfare of his country—what we call “leadership.” And he led the country for 18 years, time enough to institutionalize good governance and democracy.

About half of the countries in the region have embraced democracy, fragile and imperfect, to be sure, but a far cry from the dictatorships of old.

The impact of Africa’s corrupt and repressive regimes on the region’s development was often disastrous. Earnings from national resources were stolen or wasted, and corruption was rife. Economic policies often favored key political groups (consumers and urban dwellers) and disadvantaged rural producers. In the 1970s and 1980s, poor economic management, political instabilities, coups, and the lack of property rights, along with poor (and often deteriorating) infrastructure and international economic volatility depressed growth throughout the region. Volatile world prices for primary products exported by these countries exacerbated these problems. Finally, by the beginning of the 1980s, the debt burden of some countries and the swiftly deteriorating balance-of-payments problems of most others forced much of Africa to turn to the International Monetary Fund (IMF) and World Bank for increased assistance. The assistance came with conditions—a variety of economic reforms from currency adjustments to more fundamental changes in economic management,

In 1990, Freedom House categorized only 4 African countries as “free,” 15 as “partly free,” and 28 as “not free.” But by 2000, the balance of free and non-free had shifted. Nine countries were free, 24 were partly free, and 15 were not free. By 2011, 9 countries were free, and 22 countries were partially free. The remaining 17 were not free.

Source: “Freedom in the World: Percentages by Year,” Freedom House, www.freedomhouse.org, accessed December 26, 2011.



almost always leading to less-government-controlled and freer markets. Many governments implemented reforms, but economic conditions did not improve significantly for most—at least not right away.

The disappointing initial results of structural adjustment programs in the 1990s led the international aid community to ask why. One of the answers was that economic reforms were either only partially implemented or were insufficient. What was needed further, it was argued, was improved governance—meaning more open political systems where government transparency and accountability were greatly increased. In short (though the World Bank and IMF were reluctant to say the word), democratization would put real constraints on rulers and give political rights to citizens, including the information needed to assess (and punish through elections if need be) economic failures of governments.

Reinforcing the trend toward political reform was a wave of democratization following the end of the Cold War that swept most of the region. It

began with the National Conference in Benin that installed a democratic constitution, called for elections, and ultimately voted its long-term dictator, Mattieu Kérékou, out of office. At almost the same time, the political winds changed dramatically in Southern Africa. Namibia’s independence in 1989 led to a new democratic government. By far the most important change was the crumbling of apartheid in South Africa, which paved the way for a shift to democracy across much of the southern region. Following Benin, other Francophone countries held their own national conferences, after which some implemented real democratic reforms (such as Mali and the Republic of the Congo). In others (such as Togo and the Democratic Republic of the Congo), sitting presidents managed to prevent real political change. In Anglophone Africa, political reforms also began, usually through constitutional changes that permitted multiparty elections. Again, political reforms varied from country to country, but in most, some opening and increase in transparency and political rights did occur (such

as Zambia, Kenya, and Malawi). In countries where governments were deeply corrupt, repressive, and resistant to change (like Sierra Leone, Somalia, Sudan, the Democratic Republic of the Congo, and Liberia) civil conflict often erupted, leading to the destruction of life and property.

Although not all countries shifted toward more democratic governments, since the mid-1990s, there has been a remarkable turnaround in Africa. Twenty or more countries have enjoyed, for the first time since independence, sustained and substantial economic growth and development over nearly two decades.³ At the same time, a wave of political liberalization swept the region. In 1990, Freedom House categorized only 4 African countries as “free,” 15 as “partly free,” and 28 as “not free.” But by 2000, the balance of free and non-free had shifted. Nine countries were free, 24 were partly free, and 15 were not free. By 2011, 9 countries were free, and 22 countries were partly free. The remaining 17 were not free.⁴

These numbers show several interesting trends: a doubling of free countries between 1990 and 2011, but free countries still only represented a little less than a fifth of all SSA countries (48 in 2011). Meanwhile, the number of partially free countries rose substantially, nearly doubling between 1990 and 2011, with a slight fall-off between 2000 and 2011. The “not free” countries decreased substantially during that period. The political changes reflected in these numbers are dramatic even if there is still much to be

accomplished. We shall return to them later when we consider the future of democracy in Africa.

Not all of Africa’s economic success in recent years can be attributed to the spread of democracy. Other important factors include favorable commodity prices (especially petroleum and mineral prices), which have brought economic relief to many countries; new technologies, such as cell phones, which have expanded knowledge among the population of political and economic issues; and rising aid and private investment. But it is a widely held view that political liberalization in the region—especially in the less resource-rich countries like Mali, Benin, and Tanzania—and good economic management and democratic governance have played a key role. Why? Because in Africa, where the middle class is small and education only now is catching up to other parts of the developing world, constraints on governments that come from a free press, political competition, public demands for accountability, and external pressures as well, are essential to encourage regimes to deploy national resources for the common good, to protect property rights to encourage investment, and so, to promote national prosperity. In short, where development may have produced democracy in Asia and Latin America, it is democracy that has often been among the important factors in promoting development in Africa.

Democracy plays another essential role in promoting development in Africa—one that is not so often recognized. In countries that have suffered from civil conflict, where ethnic groups, clans, or other political factions (or just brutal autocrats) have torn the country apart, there has to be a post-conflict government that is seen as legitimate by the populace of the country in order to avoid sinking back into conflict again. A democratic election—however time-consuming,

3 See Steven Radelet, *Emerging Africa* (Washington, D.C.: Center for Global Development, 2010); and *Regional Economic Survey: Sub-Saharan Africa* (Washington, D.C.: IMF, 2008), p. 28. These two studies have different countries on their high-performers list. Radelet does not include oil-producing countries (which, for the most part, have the benefit of high export prices). The IMF includes them but excludes other countries on Radelet’s list. The point here is that, however calculated, a significant number of countries in Africa have enjoyed sustained growth.

4 “Freedom in the World: Percentages by Year,” *Freedom House*, accessed December 26, 2011, www.freedomhouse.org.

complicated, and expensive—is really the only way to create such a government, provided the election and government structures are tailored to the needs of the country and are seen by the populace as clean and fair.

Democracy and Development in Liberia

Let us turn to a concrete case of the relationship between democracy and post-conflict recovery and development. Few countries have suffered from civil conflict as long as Liberia. Riven by a tragic history of ethnic conflict, exclusionary politics, and authoritarian rule, Liberia plunged into violence in the 1980s and was nearly destroyed by a senseless civil war. The war was the culmination of a degenerative process that spanned several decades in which the country suffered under disastrous economic policy and financial management, a steady erosion of civil liberties, unlimited presidential powers, and a complete closing of the political space. During the war, an estimated 270,000 people were killed—about 1 in 12 Liberians—and hundreds of thousands more fled their homes. Families were uprooted, communities were destroyed, and infrastructure was left in ruins. Children spent more time at war than at school. Human and financial capital fled the country, productive activity ceased, and the economy collapsed. The warlords used violence and intimidation to loot the country's national assets, smuggle diamonds, and traffic in arms and drugs. Anguish and misery were everywhere.

The current government began its first term, in 2006, with a country beset by an extraordinary breadth of problems. The first test was how to begin to set priorities: Schools, salaries, healthcare centers, roads, and jobs were all lacking. There was no time for deep analysis into various options and strategies. The people had been waiting for a long

time for any glimmer of hope. Expectations were running high, leading to the strong possibility of disappointment and resentment. There was a need to move quickly on all fronts. The reality is that in Liberia, democracy and economic development had to be equally indispensable and mutually reinforcing.

The election of 2005 represented the first time in more than 30 years that the will of the people, expressed through free and fair elections, ushered in a democratic government. This was necessary not simply to address the history of political exclusion and marginalization, but also to grant legitimacy to the difficult journey ahead.

This required a response, which brought several of the political opposition leaders into a government of inclusion. It also required policies that assured an open society through the exercise of basic freedoms—speech, association, and religion, as well as rights to media and civil-society organizations.

At the same time, the deep-seated nature of the country's economic malaise and the exceptionally high level of poverty required actions with benefits that were immediately visible.

The government began by putting its fiscal house in order, increasing revenues through strengthened collection efforts and strictly monitoring every dollar spent on a cash basis. All forestry concession agreements were canceled, thereby ensuring the lifting of United Nations sanctions on the forestry sector.

The most important and immediate initiative was to tackle the outstanding \$4.9 billion external debt under an IMF/World Bank Heavily Indebted Poor Country Program. Today, Liberia is virtually debt free. This success was achieved in just three years. The country has won back its reputation, regained financial independence, and is poised to use that new freedom to speed up development.



People queue up to cast their vote for presidential, senatorial, and legislative elections on October 11, 2011, at a polling station in Monrovia. Around 1.8 million Liberians were eligible to vote in only the second election since the end of a 14-year civil war. | AFP Photo: Issouf Sanogo

With this burden of debt lifted, the money saved can be spent on improving the lives of the citizens.

As important as obtaining debt relief was, its effect was not immediately apparent to the millions of Liberians who expected to reap the dividends of a hard-won peace. There were pressing needs—schools for an incredibly young population, access to health care, and the provision of basic services. There was a need to build and repair roads and bridges and restore public electricity and pipe-borne water that had been lacking for more than two decades. There was a need to reconstruct public buildings and other infrastructure that were either destroyed by the war or fell apart from disuse and lack of maintenance. Hundreds of schools were rehabilitated, more than doubling primary school enrollment, and the number of functioning health clinics providing basic services doubled as well.

The political change and early actions created stability and trust in a democratic government, which in turn began to attract foreign investment. Over the past six years, more than \$16 billion in direct foreign investment has been mobilized for operations in the mining, agriculture, and forestry sectors. Foreign investors are hiring and training Liberians and are working with Liberian businesses to meet their local needs. They are creating jobs and improving infrastructure across the country. As these investments come on-stream, Liberians will see benefits in the form of new jobs, schools, and clinics. Critically, every investment includes commitments by the investor to meet a certain degree of social responsibility. They are required to provide social services in the areas of health, education, and infrastructure development (such as roads and housing) in the communities where they operate. Government regulatory and



People sell newspapers on a street in Monrovia on October 12, 2011, a day after Liberia's second post-war election. | AFP Photo: Issouf Sanogo

monitoring institutions will ensure that they are held accountable.

Liberia's young, competitive democracy is made strong by the country's development progress. The first elections in 2005 started a tradition of competitive elections. This was followed by nine by-elections held between the two general elections, in which the opposition won five and the ruling party four. Currently, the collective opposition has more seats in the National Legislature than the ruling party. The country can boast of a vocal press, an active civil society, and better protection of rights. While all of these achievements still require improvement and constant vigilance, Liberia has moved farther than it has ever been on the democratic spectrum.

To consolidate and improve upon these gains, a decentralization program is under way to dismantle the traditional imperial presidency by moving power and authority from the center to

the periphery. A full and rigorous decentralization policy based on constitutional and statutory reform will ensure participation of the governed in decisions that affect their lives and welfare.

The vision for Liberia is as ambitious as it is simple. It is a goal to be free from official development assistance within a decade and to transform the country to a middle-income country by 2030. It is a goal to build a country that is peaceful, where the rule of law is upheld and economic opportunities abound. This vision faces immense challenges: a low human-resource base, the momentum of the social and political unrest of the recent past, and the still-massive infrastructure deficit. Changes will take time, but the transformation is under way, buoyed by a people with confidence in the future and in a government elected to respond to their needs. The first six years lifted Liberia. The next six aim to lift Liberians. In Liberia, democracy and economic

development are, indeed, equally indispensable and mutually reinforcing.

The Future of Democracy in Africa

At the core of SSA's shift to democracy has been strong leadership, and strong leadership will be the key to the future of democracy. Africa's crisis was a failure of leadership and management. Sub-Saharan Africa is rich in resources, talent, energy, and spirit. But historically, it has not been rich in leadership. It is made up of richly endowed countries that were poorly managed, and the results were disastrous.

Good leadership is only partly about the individual people in leadership positions. Much more important is how these leaders are chosen and how they are held accountable by their citizens. In fact, good leaders are often created or at least enabled by good institutions; witness the experience of Botswana. As Africa shifts toward constitutional reform and institutional accountability, the prospects for democratic leadership brighten. In the past, Africa has had many well-educated presidents and prime ministers who initially looked like they might be good leaders, but they failed because they had too much centralized power and because basic systems of checks and balances and accountability did not function. Finding good leaders and sustaining good leadership requires establishing and honoring freedom of speech, freedom of political discourse, free and fair elections, transparency of government actions, and checks and balances through strong legislatures and judicial systems. As the African nations continue to build these institutions of accountability, skillful leaders will emerge, and they will be able to lead effectively.

For more than a century, Africa's fate was more often than not decided by people beyond its shores. But not anymore. The future of the

emerging countries is in the hands of their people. It is Africans who must determine their own economic policies, make choices about how to manage their budgets and spend scarce resources, decide how to encourage new technologies and expand trade throughout the region and with the rest of the world, make choices about the highest priorities in their development strategies, and establish their own strong systems for accountable governance. The record in a growing number of SSA countries on these issues since the mid-1990s has been strong, and there are good reasons to be optimistic that they can continue their success into the future.

Two major questions stand out on the future of democracy and development in Sub-Saharan Africa. First, where are the current democracies headed? Some of the data from Freedom House cited earlier suggested there was some retreat from democracy underway. It is true that the recent performance of several countries has been disappointing. But the actual experience of those countries suggests a cause for backsliding and perhaps a more optimistic view of the future. In a number of countries that have moved from "free" to "partially free" or have seemingly gotten stuck at partially free, we see attempts by aging presidents, long in power, to remain in office despite constitutions that limit presidential terms or elections that turned them out of office. The recent experience of Côte d'Ivoire is one case. Senegal is yet another along with Malawi, Ethiopia, and Uganda. Critically, in a number of these cases, the populations have resisted constitutional changes intended to create presidents-for-life and demanded their presidents leave office—for example, in Zambia. Or their people, in concert with the international community, have turned recalcitrant politicians like Laurent Gbagbo of Côte d'Ivoire out of office.

There is something about the taste and smell of democracy that is addictive. Populations in many parts of the world, once they have had a political voice and political rights, or have seen neighboring or even distant countries enjoy political freedom, gain the confidence to demand and protect their own democracies. These changes do not happen overnight. Sometimes they fail at least on the first try, and sometimes there are steps backward in between strides of progress—but they happen, including in Africa where democracies have been consolidated in formerly authoritarian countries like Ghana, Mali, Benin—and, it appears after two successful elections—Liberia. These

Something about the taste and smell of democracy is addictive...once they have had a political voice, populations gain the confidence to demand and protect their own democracies.

countries, plus South Africa and Nigeria (whose democracy continues albeit at times chaotic and flawed), constitute essential role models and beacons of hope for Africans in less democratic societies. It seems quite likely that the Arab Spring—the establishment of democracies in at least some countries, although also shaky in these early months and years in formerly authoritarian states—will constitute such a beacon, much as the new democracies in Eastern Europe and the former Soviet Union did in the early 1990s for many Africans.

As for the second question: What of the relationship between democracy and development in

Supporters of the opposition National Democratic Congress wave flags and portraits of President-elect John Attah Mills to celebrate his election in Accra on January 3, 2009. | AFP Photo: Pius Utomi Ekpei

the region? It is striking that resource-poor countries in Africa have also enjoyed healthy growth over recent years, including Mali, Ghana, Benin, and Cape Verde. These countries had traditionally achieved low rates of growth, in each case due to poor economic policies and authoritarian and often unstable governments before their political transitions in the 1990s. It appears that in these countries where democracy preceded development, more accountable governments did play a key role in furthering development and growth.

New democracies are usually fragile, the more so in ethnically and religiously diverse countries like many in Africa. Sometimes they are only partial democracies; sometimes their populations are not informed or mobilized to demand full democracy with strong political and civil rights. Sometimes democracies revert to semi-authoritarian regimes. But it is clear that the often time-consuming process of spreading political freedom on the continent is under way—and with it, prospects for prosperity long dreamed of in the region but still yet to be fully achieved.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.



Mightier than the Sword: Social Science and Development in Countering Violent Extremism

Suicide bombings, improvised explosive device attacks, narco-trafficking, kidnapping, and other irregular security threats linked to violent extremist organizations (VEOs) are on the rise.¹ VEOs harm states and citizens alike, taking lives, reducing quality of life, and impeding economic growth. In 2010, more than 13,000 people lost their lives around the world in terrorist attacks,² and the economic consequences of extremist violence around the world have been severe.³

Standard Approaches Have Not Been Effective

U.S. policymakers have favored the use of military force, drone strikes, and covert operations as tried-and-true approaches for dealing with extremist

groups because they produce clear and immediate results. Funding for development and diplomacy efforts remains dwarfed by money for “kinetic operations.” Through FY 2008, for example, less than 7% of funding for counterterrorism operations in Iraq, Afghanistan, and under Operation Noble Eagle was set aside for Department of State-led foreign aid and diplomatic operations.⁴ Despite the familiarity of the military response, decision-makers are beginning to recognize that we cannot, as former Chairman of the Joint Chiefs of Staff Admiral Mike Mullen publicly acknowledged, “kill our way to victory.”⁵ Further, programs such as drone strikes, no matter how precise, often aggravate relationships with foreign governments and negatively affect civilian populations, expanding opportunities for VEO recruitment by

1 Andre Le Sage, “Africa’s Irregular Security Threats: Challenges for U.S. Engagement,” *Strategic Forum*, no. 255 (2010).

2 National Counterterrorism Center, 2010 *NCTC Report on Terrorism, 2011*.

3 Alberto Abadie and Javier Gardeazabal, “The Economic Costs of Conflict: A Case Study of the Basque Country,” *American Economic Review* 93, no. 1 (February 2003), 113–132.

4 Amy Belasco, “The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations since 9/11,” Congressional Research Service Report for Congress 33110 (October 15, 2008), 10.

5 “Admiral: Troops Alone Will Not Yield Victory in Afghanistan,” CNN Politics, September 10, 2008, articles.cnn.com/2008-09-10/politics/mullen.afghanistan_1_afghanistan-pakistan-afghan-economy?s=PM:POLITICS.



Two Somali policemen are framed by a bullet-riddled street sign on August 13, 2011, in what used to be Mogadishu's busiest commercial district until fighting between pro-government African Union troops and radical Islamic al-Shabab militiamen faced off here. | AFP Photo: Roberto Schmidt

enhancing and supporting master narratives of grievance.⁶ The Pakistani parliament, for example, has recently demanded an end to U.S. drone strikes in its country.⁷

Standard nonmilitary approaches have not shown strong efficacy. Broad-based public diplomacy programs such as the provision of Arabic-language Voice of America television programming have been funded only sporadically, and planners have not convincingly demonstrated their impact on people who may lack access to television. While some have argued that democratization and poverty alleviation can advance efforts to counter extremism, the

process of democratization itself is no guarantee of pro-U.S. or anti-VEO environments, and there is no robust evidence that the presence of a democratic regime eliminates violent extremism.⁸ Broad-based poverty alleviation efforts have been ongoing for decades, but research has not shown conclusively that increased development and rising individual income levels decrease the “production” of terrorism.⁹

Discarding Folk Wisdom

The development approach to countering violent extremism (CVE) rests on new social science

6 “Special Report: Al-Qaeda,” Al-Qaeda Master Narratives and Affiliate Case Studies: Al-Qaeda in the Arabian Peninsula and Al-Qaeda in the Islamic Maghreb (Open Source Center, September 2011).

7 Declan Walsh, “Pakistani Parliament Demands End to U.S. Drone Strikes,” *The New York Times*, March 20, 2012.

8 F. G. Gause, “Can Democracy Stop Terrorism?” *Foreign Affairs* 84, no. 5 (2005): 62-76.

9 Alberto Abadie, “Poverty, Political Freedom, and the Roots of Terrorism,” *American Economic Review* 96(2) (2006), 50–56; Philip Keefer and Norman Loayza, eds., *Terrorism, Economic Development, and Political Openness* (New York: Cambridge, 2008).

research on the root causes of extremism and radicalization. Researchers have started discarding folk wisdom that sought to tie radicalization to poverty, madness, and ignorance, and have come to recognize terrorism as a decentralized, complex, evolutionary process.¹⁰ Rather than envisioning counterterrorism efforts as a war fought through military tactics, this soft approach to CVE repositions military intervention as one tool among many. From an economic perspective, violent extremism can be seen as a labor supply problem, and development programs can dry up support for VEOs and reduce their ability to recruit by enhancing the legitimacy of partner governments, integrating marginalized groups into society, and providing social services.¹¹ This approach breaks the deleterious cycle through which VEOs are able to carry out more attacks more quickly over time as they gain new members.¹²

The soft-side approach categorizes drivers of violent extremism as push, pull, and environmental factors driven by political, cultural, and socioeconomic conditions with different impacts on women and men.¹³ Perceptions of social exclusion, real or perceived discrimination, frustrated expectations, and government repression may push individuals into collective violence. Friends, social networks, and services provided by extremist groups, alternatively, may pull individuals into violent extremism. Environmental factors, such as ungoverned spaces, border areas, and dislocation, facilitate movement toward extremism.

10 *Theoretical Frames on Pathways to Violent Radicalization: Understanding the Evolution of Ideas and Behaviors, How They Interact, How They Describe Pathways to Violence in Marginalized Diaspora* (ARTIS, 2009).

11 Alice Hunt, Kristin Lord, John Nagl, Seth Rosen, eds. *Beyond Bullets: Strategies for Countering Violent Extremism*, Solarium Strategy Series (Center for a New American Security, 2009).

12 Aaron Clauset, Kristian Skrede Gleditsch, "The developmental dynamics of terrorist organizations," working paper (2011).

13 Guilain Denoeux and Lynn Carter, *Guide to the Drivers of Violent Extremism*, Management Systems International for USAID (2009).

Providing educational and vocational opportunities for populations susceptible to recruitment by extremists serves both to counter indoctrination offered by VEOs and to provide youth with new skills, job security, and a positive vision of their future, blunting push factors. The U.S. government could assist foreign governments in understanding the grievances of peripheral communities, such as the Tuareg in the Sahel, and work to reduce marginalization through negotiation over grievances with the goal of reintegration.¹⁴

Rather than broadcasting mass media messages to the few households that may have access both to electricity and televisions, U.S. planners can deliver tailored messages through trusted media channels, such as radio programs run by local residents, on peaceful cross-cultural interaction and positive interaction with the West.¹⁵ More broadly, the United States could use such media to systematically provide a counternarrative to the themes of encirclement, humiliation, and obligation being forwarded by VEOs such as al-Qaeda in the Islamic Maghreb in northwest Africa, Lashkar-e-Tayyiba in South Asia, and Abu Sayyaf in the Philippines.

By disaggregating data on relevant communities by gender, the U.S. government can better alter modalities for delivering counternarratives to ensure it uses the most effective ways for reaching women and men, who have different forms of influence over their networks and families. For example, data have shown that women in Pakistan can use various strategies to de-radicalize their children and that women's radio-listening clubs in

14 John Campbell, "To Battle Nigeria's Boko Haram, Put Down Your Guns," *Foreign Affairs* 90, no. 5 (2011).

15 For developing communities in South and Central America and Africa, radio programs and serialized dramas have proved critical at diffusing information and altering local norms; see Karen Greiner, *Applying Local Solutions to Local Programs: Radio Listeners as Agents of Change*, prepared by Equal Access for USAID (2010).

the Sahel offer new sources of influence in otherwise insulated communities.

Finally, despite the limitations of democracy assistance, the U.S. government can aim to increase the legitimacy of authoritarian and democratic governments alike, help fight corruption, and strengthen the rule of law, thereby reducing the “vicious circle of insecurity” for residents who may join VEOs to find stability and public goods in unstable political environments.¹⁶

Toward the Future: A Critical Role for Social Science

Decisionmakers in the United States and abroad are now taking social science-based CVE analysis more seriously. The 2011 U.S. National Strategy for Counterterrorism and the Quadrennial Diplomacy and Development Review recognized the need to counter al-Qaeda ideology and diminish the drivers of violence that it exploits. To ensure that the United States moves in the right direction, social science and evidence-based programming must receive pride of place in the counter-extremism community. USAID, the Department of State, and the Department of Defense have begun to use randomized field experiments to better infer causal relationships between variables of interest. For example, quasi-experiments in Western Africa have shown that focused, locally based radio programming increases civic participation and links local residents to counternarratives involving nonviolence.¹⁷

Far too many CVE programs have lacked effective evaluation and measurement criteria, and relevant actors have recognized the need

16 David Shinn, “Fighting Terrorism in East Africa and the Horn,” *Foreign Service Journal* 8 (2004): 38.

17 Jeffrey Swedberg and Steven Smith, *Mid-Term Evaluation of USAID’s Counter-Extremism Programming in Africa*, AMEX International for USAID (2011).

for local, longitudinal studies on how attitudes and behaviors have changed from the beginning of an intervention to the end, as seen in recent experiments carried out by USAID and the Department of State in Pakistan and Afghanistan. Building on the work in the field of complexity theory, planners could adopt multiple, small-scale tactics rather than single, large-scale ones. Carrying out simultaneous experiments in the field prevents planners from getting locked into enormous, multiyear projects that may have little actual impact. Should any of the experimental interventions prove successful, less-effective methods can be halted and replaced with the more efficacious ones.

The development, diplomacy, and defense framework serves as the new foundation for U.S. security policy, and USAID has a critical role to play in shaping it. Social science-based CVE policy creates stability and security by building resilience to VEO recruitment and narratives in populations around the world. While development-based responses may require a longer time horizon than standard approaches to the problem, their effects are long-lasting and can help de-radicalize marginal communities and create citizens more connected to their governments. As we enter an extended era when irregular, asymmetric engagements and terrorism may be the most salient threats to people around the world, countering violent extremism through development will prove a valuable tool for creating a stable and peaceful future.

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Combat and Compassion

The Arab Spring of 2011 marked a watershed in the politics of the Middle East. Yet it also was a defining moment for civilian-military cooperation in crisis response. In March 2011, the popular uprising that ousted longtime Libyan dictator Moammar Gadhafi required a robust and integrated military-humanitarian action. While North Atlantic Treaty Organization (NATO) warplanes attacked Gadhafi regime elements under Operation Unified Protector in accordance with United Nations Security Council Resolution 1973, a humanitarian emergency was developing as thousands of migrants poured across Libya's borders into neighboring countries every day. Most of those fleeing the fighting were third-country nationals, from countries as far away as Nigeria and Bangladesh, who had been employed in the oil industry or service economy in Libya. They quickly saturated hastily constructed migrant camps in Tunisia and Egypt, which themselves had just undergone unprecedented political uprisings that ousted from power their long-serving leaders President Zine al-Abidine Ben Ali and President

Hosni Mubarak. To prevent this massive migrant flow from destabilizing the region even further, USAID immediately sent Disaster Assistance Response Teams to Tunisia and Egypt—and eventually into Libya itself—to enable the delivery of humanitarian assistance inside Libya by working with partners and bordering governments as well as managing complex logistical operations out of Malta. In addition, the Department of State's Bureau for Population, Refugees and Migration led an international effort to fund one of the largest humanitarian airlifts in history, conducted by the International Organization for Migration and the UN High Commissioner for Refugees, which repatriated more than 200,000 people to their home countries in Sub-Saharan Africa and Southeast Asia. Even U.S. military aircraft participated in the evacuation, repatriating more than 1,000 Egyptians back to Cairo.

The success of this international operation to protect civilians in Libya was due not only to the military skill of NATO, but also to the humanitarian efforts of many governments and



Egyptian people carrying their belongings run to take the bus after fleeing from Libya on February 27, 2011, at the Ras Jedir border post, near the Tunisian city of Ben Guerdane. In one week alone, more than 50,000 people left through the border post, including more than 15,000 Egyptians. | AFP Photo: Fred Dufour

organizations. Furthermore, it arguably represents the future of crisis response in conflict zones as many U.S. political, military, and humanitarian leaders increasingly recognize that combat and compassion are equally important to our security and foreign policy, and that we must have the capacity to be equally adept at both.

The United States addresses the need for a comprehensive approach to conflict prevention and response in several documents, from the National Security Strategy through interagency guidance and Department of Defense (DoD) doctrine. These publications discuss the need to articulate the links among foreign policy objectives, human needs, and security imperatives. However, due to the huge array of actors with differing agendas, it is

also necessary to further define the most appropriate roles for soldiers and civilians in this complex arena, and enable governmental agencies to achieve success in the diplomatic/military/humanitarian nexus. This approach could strengthen U.S. conflict prevention and response capabilities by forming productive partnerships with like-minded governments, international agencies, and NGOs that broadly share our interest in promoting security and prosperity around the world.

A Changing World

Whether it is strengthening governance in fragile states, helping to rebuild failed states, or delivering timely and critical humanitarian aid, providing various forms of assistance to vulnerable civilians

around the world is increasingly recognized by leaders in both U.S. foreign and defense policy as a pressing security imperative. Through activities like the adoption of robust policies on atrocity prevention by the National Security Staff or sending diplomats and development experts to austere conditions in South Sudan before its independence, civilian foreign affairs agencies of the U.S. government have been deeply engaged in conflict prevention and crisis response both in Washington, D.C., and in the field, often in some very innovative ways. Similarly, by avoiding civilian casualties in Afghanistan or providing health care from a U.S. hospital ship in Ecuador, the American military has become increasingly involved in addressing essential human needs of non-combatants in both peace and war around the world. It has done so both on its own, and in partnership with host governments, civilian U.S. government agencies, and private organizations. These initiatives to help civilians are increasingly indicative of modern military operations.

Although the means of this assistance may be humanitarian because it promotes civilian well-being, the underlying motivation may have a strategic component as well. For example, defeating the enemy in the age of counterinsurgency means building trust with the local population for the purpose of shifting its loyalty to a legitimate domestic government, a task enabled by actively protecting civilians from the insurgents while helping local officials assume the tasks of delivering essential services. However, this trust can be undermined by inadvertently harming the population.

The U.S. military has learned and re-learned the strategic importance of assisting civilian populations many times over, from the reconstruction of the American South after the Civil War and the tough engagements of the Philippine Insurrection, to the “pacification” efforts in Vietnam and the

civilian protection challenges in the Balkans. Now a new generation of warriors has learned these lessons again in Iraq and Afghanistan, understanding that military and civilian tools of counterinsurgency must work hand-in-hand on the ground. Similarly, achieving war aims for a secure peace requires partnering with local officials to rebuild a country after a conflict, drawing on a wide range of civilian tasks from repairing infrastructure to engaging civil society as U.S. diplomats and development experts have done alongside their military counterparts in Germany and Japan after World War II, and in Libya and Iraq today.

Preventing wars from happening in the first place necessitates attacking their root causes—an approach far cheaper than sending troops into battle. Diplomats and development experts have pursued conflict-prevention strategies from countries across the Sahel to South Asia by addressing resource scarcity, cooling ethnic tensions, promoting economic growth, and confronting extremist ideologies. Even if there is not a clear security threat present, there may still be both an operational and strategic benefit of military support to civilian assistance initiatives—as was the case with military efforts to help victims of the 2004 Indian Ocean tsunami and victims of the 2010 earthquake in Haiti. In both cases, the deployment of American military assets were tremendous contributions to the effective humanitarian response of the international community, and American policymakers made decisions to commit those assets based solely on the scope of the humanitarian need. Nevertheless, the pictures of American helicopters delivering food and water to vulnerable people in Banda Aceh, and photos of U.S. Navy Seabees refurbishing the docks in Port-au-Prince in record time to enable the landing of crucial humanitarian supplies, helped burnish the image of the United States as a benign actor in Southeast

Asia and in the Caribbean Basin—an ancillary yet welcome benefit of the humanitarian response. To a greater or lesser extent, U.S. defense personnel have engaged in all of these typically “civilian” missions as they work with their civilian counterparts across the spectrum of conflict.

Thus, the types of assistance in which civilian and military actors jointly engage is indeed varied, ranging from preventative diplomacy and programs—which defuse conflicts before they start—to repairing infrastructure damaged by war, to strengthening the capacity of host governments to deliver services to their citizens in fragile states, to delivering emergency food and medical supplies following a natural disaster. Both colloquially and doctrinally, many military officials refer to the totality of such efforts as “humanitarian assistance.” Traditional civilian aid workers, however, generally define humanitarian assistance more narrowly, limiting it to those activities that immediately save lives and that have no other motivation other than saving lives.¹

1 In Stockholm on June 17, 2003, 17 leading donors of humanitarian assistance endorsed the Principles and Good Practice of Humanitarian Donorship (see www.goodhumanitarianidonorship.org/Libraries/Ireland_Doc_Manager/EN-23-Principles-and-Good-Practice-of-Humanitarian-Donorship.sflb.ashx). They articulated these objectives and definition of humanitarian action:

1. The objectives of humanitarian action are to save lives, alleviate suffering, and maintain human dignity during and in the aftermath of man-made crises and natural disasters, as well as to prevent and strengthen preparedness for the occurrence of such situations.
2. Humanitarian action should be guided by the humanitarian principles of *humanity*, meaning the centrality of saving human lives and alleviating suffering wherever it is found; *impartiality*, meaning the implementation of actions solely on the basis of need, without discrimination between or within affected populations; *neutrality*, meaning that humanitarian action must not favour any side in an armed conflict or other dispute where such action is carried out; and *independence*, meaning the autonomy of humanitarian objectives from the political, economic, military, or other objectives that any actor may hold with regard to areas where humanitarian action is being implemented.
3. Humanitarian action includes the protection of civilians and those no longer taking part in hostilities, and the provision of food, water and sanitation, shelter, health services, and other items of assistance, undertaken for the benefit of affected people and to facilitate the return to normal lives and livelihoods.

The differences in definition are more than mere semantics. They represent fundamentally different philosophies about the role of the military in providing assistance to vulnerable civilians and the implications of such involvement for the humanitarian enterprise as a whole.

Some traditional security experts say that using military forces for humanitarian and development purposes blunts their fighting ability and burdens them with superfluous tasks. Conversely, some civilian aid workers passionately believe that the military’s involvement in civilian assistance projects blurs the distinction between partisan armed forces and neutral civilians engaged in delivering humanitarian assistance, thus endangering their ability to assist those in need in conflict zones.² Finally, many seasoned diplomatic experts worry that military personnel interacting with foreign governments threatens to “militarize” U.S. foreign policy.³

While not without merit, such concerns must be placed in the proper perspective. Our post-9/11 understanding of the security challenges posed by

The DoD defines humanitarian assistance as: “Programs conducted to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human pain, disease, hunger, or privation that might present a serious threat to life or that can result in great damage to or loss of property. Humanitarian assistance provided by U.S. forces is limited in scope and duration. The assistance provided is designed to supplement or complement the efforts of the host nation civil authorities or agencies that may have the primary responsibility for providing humanitarian assistance.”

Department of Defense Dictionary of Military Terms, Joint Publication 1–01, November 8, 2010, as amended through February 15, 2012, http://www.dtic.mil/doctrine/dod_dictionary/index.html, accessed January 16, 2012.

2 See, for example, Sarah Kenyon Lischer, “Humanitarian Aid Is Not a Military Business,” *Christian Science Monitor*, April 15, 2003, <http://www.csmonitor.com/2003/0415/p09s02-coop.html>, and James Schoff, “In Times of Crisis: Global and Local Civil-Military Disaster Relief Coordination in the United States and Japan,” Institute for Foreign Policy Analysis, Interim Report (April 2007), <http://www.ifpa.org/pdf/InTimesOfCrisis.pdf>, both accessed December 28, 2011.

3 For an example of this argument, see Michael Cohen, “Arms for the World: How the US Military Shapes American Foreign Policy,” *Dissent* (Fall 2009), 69–74.

fragile and failing states and the deprivation that accompanies them makes it all but inevitable that soldiers and humanitarians, diplomats, and development experts will find themselves operating in increasing proximity to one another, often addressing the same issues with different tools and for complementary purposes. The recurring demands of modern conflict prevention, in a world of increasingly scarce budgetary resources for the federal government, suggest that the days of sharp divisions between civilian and military activities may well be behind us.

A Revolution in Civilian-Military Affairs

The U.S. Department of State and USAID have introduced important policy and organizational reforms to strengthen their ability to bring “civilian power” to conflict prevention and crisis response. The agencies jointly issued the first Quadrennial Diplomacy and Development Review (QDDR) in 2010, which, among other things, recognized conflict prevention and response as a core civilian mission for diplomats and development experts. As the document clearly states:⁴

Successfully responding to the dangers presented by fragile states begins with a clear civilian mission: prevent conflict, save lives, and build sustainable peace by resolving underlying grievances fairly and helping to build government institutions that can provide basic but effective security and justice systems. Over the longer term, our mission is to build a government’s ability to address challenges, promote development, protect human rights, and provide for its people on its own.

⁴ U.S. Department of State, *Leading Through Civilian Power: The First Quadrennial Diplomacy and Development Review* (Washington, D.C., 2010): 13.

Among the innovations at the Department of State prompted by the QDDR is the reorganization of several bureaus reporting to the newly redesignated Under Secretary of State for Civilian Security, Democracy and Human Rights. The Under Secretary also oversees the new Bureau of Conflict and Stabilization Operations, which incorporates the former Office of the Coordinator for Reconstruction and Stabilization and has a mandate to “advance U.S. national security by driving integrated, civilian-led efforts to prevent, respond to, and stabilize crises in priority states, setting conditions for long-term peace.”⁵ USAID strengthened the Office of Transition Initiatives in order for it to play a more robust role in response, recovery, and stabilization operations beyond purely humanitarian emergencies. Accordingly, USAID’s Bureau for Democracy, Conflict and Humanitarian Assistance has assembled capabilities for preventing and responding to conflict and natural disasters, including surge teams, flexible funding, and technical expertise. These reforms have enhanced the abilities of the Department of State and USAID to contribute more comprehensive and flexible expertise to complex crises.

Institutional policy and structural reforms have also enabled closer coordination among Department of State, USAID, and DoD actors. For example, USAID published its “Civilian-Military Cooperation Policy” in July 2008 to delineate relevant roles and responsibilities between the DoD and USAID in stabilization operations.⁶ The Agency started making important strides in civilian-military cooperation as early as 2005, with the creation of its Office of Military Affairs, re-named the Office of Civilian-Military Cooperation (CMC) in 2012. Designed to

⁵ U.S. Department of State, Bureau of Conflict and Stabilization Operations, “About Us,” <http://www.state.gov/j/cso/about/index.htm>, accessed December 28, 2011.

⁶ USAID, “Civilian-Military Cooperation Policy,” July 2008.



U.S. Secretary of State Hillary Clinton (center) and USAID Administrator Rajiv Shah (right) meet with Haiti's President Rene Preval (third from left) in Port-au-Prince on January 16, 2010 to discuss conditions following the deadly earthquake that shook the country on January 10. | AFP Photo: Pool/Julie Jacobson

strengthen the institutional relationship between USAID and the Pentagon, CMC houses senior military officers who serve as liaisons from each of the geographic commands to USAID. Conversely, CMC also manages the Senior Development Advisor program, which sends seasoned USAID Foreign Service Officers (FSOs) to each of the geographic combatant commands to give the commanders and staff expert advice about development issues within their area of responsibility.

Just as the civilian agencies have taken important steps to improve their capacity in conflict prevention and response, the U.S. military has also been assertive in recognizing the significance of these nontraditional threats and developing the means to address them. There is momentum across the entire Department of Defense to integrate and coordinate military, interagency, multinational, or private-sector efforts on matters

of national security. In 2005, for example, DoD Directive 3000.05 first declared that stability operations were a core U.S. military mission, raising it to a level comparable to combat operations.⁷ Stability operations, by definition, demand the full spectrum of civilian involvement—both government and private citizens. This in turn spurred the development of new Joint Doctrine and field manuals on stability operations, as well as counterinsurgency and irregular warfare. Similarly, the Navy's Cooperative Strategy for 21st Century Seapower emphasizes integration across the maritime services, the joint force, the interagency community, international partners, and the private sector—building mutual trust and capability for steady-state security cooperation

⁷ The DoD Directive was updated and replaced by DoD Instruction 3000.05 in 2009.

as a matter of course, and the desire to respond together in the case of crisis.

At the combatant-command level, the U.S. Southern Command, U.S. Africa Command, U.S. European Command, and U.S. Pacific Command have outreach directorates dedicated to partnering with civil-society and private-sector organizations. Similarly, U.S. Central Command, U.S. Northern Command, U.S. Special Operations Command, and U.S. Transportation Command all have inter-agency coordination structures.

Combat and compassion are equally important to our security and foreign policy, and we must have the capacity to be equally adept at both.

These efforts at all levels and across all sectors combined with developments in the field and the materializing of the 21st century security environment, have produced some fundamental alterations to the existing structure, doctrine, and national-security objectives of the U.S. government as we pursue and protect our vital national interests.

Challenges for Strategic Humanitarianism

Though compelling in theory, adopting a comprehensive approach has proven challenging in practice. Three basic reasons underlie this challenge: a lack of strategic consensus, a dearth of sufficient capacity, and a need for viable humanitarian partnerships.

Strategic Consensus

One of the most striking features of U.S. national security during the Cold War was the broad consensus among both policymakers and the general public about the nature of the threat we faced and the means required to counter it. Containment and deterrence were the linchpins of the U.S. strategic approach to the Cold War. Notwithstanding the substantial disagreement about U.S. involvement in Vietnam, the majority of Americans and their leaders in Congress and the Executive Branch forged a bipartisan consensus over the course of the Cold War about the threats to our country posed by Communism and the means to counter them (that is, containment), which endured for nearly half a century.

No such understanding is similarly shared today. Without a coherent strategic framework broadly shared by America's citizens and its government, it will be difficult to garner and sustain support for the sort of interventions that are required to advance our interests. The very phrases "post-Cold War era" and "post-9/11 world" describe our current strategic outlook less by its defining characteristics today and more by its divergence from our understandings of the past. A truly viable strategic consensus would compel our country to make strategic choices accordingly.

To be certain, there have been efforts to encapsulate the diplomatic-military-humanitarian nexus in a way that captures the imaginations of citizens and legislators alike. Concepts like "Smart Power" and "Sustainable Security" advance the notion that we must address the root causes of violence before they escalate into warfare, and that we must be able to rebuild societies after war in order to consolidate gains hard won on the battlefield. This demands investment in our civilian agencies as a national security priority. Regrettably, concepts such as Smart Power and Sustainable Security have not

gained much of a foothold beyond the Washington Beltway. Americans, especially in the wake of the meltdown of the global economy, still do not see the strategic connection between assisting the vulnerable and defeating the enemy.

Military dominance, however, is accepted as an essential governmental function that must be preserved even at great cost. It is this dichotomy, in part, that explains why even a slight increase in the foreign assistance and operations budgets can cause vicious debates on Capitol Hill, while a defense budget many times larger can pass with comparatively little strife. The irony is that not only are both military and humanitarian programs essential for our security, and should be funded accordingly, but that by investing prudently in approaches designed to prevent conflict and in post-conflict stabilization efforts—as opposed to reactive (and expensive) kinetic military operations—we might actually spend less money and become more secure. Integrating this understanding in U.S. public discourse is essential to generating the support required for confronting the hybrid challenges of this century.

Civilian-Military Capacity

Even if we did have a shared consensus of the importance of civilian humanitarian interventions to our national security, our civilian agencies still do not have the resources to perform all of their required tasks effectively. As former Secretary of Defense Robert Gates put it, “The military and civilian elements of the United States’ national security apparatus have responded unevenly and have grown increasingly out of balance. The problem is not will; it is capacity.”⁸

The numbers are staggering. There are about 13,000 FSOs in the Department of State, who do

everything from negotiating treaties to issuing visas. An exceptionally small number are dedicated to performing humanitarian or stabilization missions in the field at any given time. It is even worse with USAID, which has roughly 1,000 or so USAID FSOs, with about one-third eligible for retirement immediately. Like their Department of State counterparts, this small cadre of USAID FSOs works on the full panoply of development and humanitarian tasks, from managing educational projects to supporting elections, with only a tiny percentage of them working on humanitarian relief and transitional initiatives. Worldwide, the total number of civilian diplomats and development professionals in the U.S. government who directly work on conflict prevention or response in the field at any given time is likely less than the strength of a single combat brigade, of which the Army has 45 in the active component alone.⁹ It is therefore unsurprising, for example, that the Department of State and USAID faced profound challenges in fielding civilian experts to Iraq and Afghanistan in numbers that the military wanted to fully support their counterinsurgency strategies there.

Finally, the highly earmarked foreign affairs budget means that our civilian development professionals often cannot respond in as flexible a manner to emerging threats as is required by policymakers because their funds are already committed. Supporting contingencies often means transferring funds from development programs of lower priority, seeking a supplemental appropriation from the Congress, or finding complex bureaucratic workarounds that provide suboptimal outcomes. The lack of funding flexibility often prevents civilians from responding as rapidly and robustly as their military counterparts want and need in the field.

8 Robert Gates, “A Balanced Strategy: Reprogramming the Pentagon for a New Age,” *Foreign Affairs* 88, no. 1 (2009).

9 In 2011, the U.S. Army had 45 Active Component and 28 Reserve Component Brigade Combat Teams (BCTs).



USAID, U.S., and UN military personnel visit Terrain Accra camp in Port-au-Prince to survey the area after Hurricane Tomas on November 5, 2010. | Photo: Kendra Helmer/USAID

Humanitarian Partnerships

In addition to the civilian-military partnerships that must be the bedrock of all combatant commands, a crucial partnership is with civil society, and, in particular, with NGOs that deliver humanitarian and development assistance. Diverse in mandate and in capabilities, humanitarian and development NGOs can range in size from a few people working locally with a few thousand dollars to hundreds of people operating around the world with budgets in the hundreds of millions of dollars. Many of these NGOs share a deep cultural knowledge of the areas where they operate, a desire to maintain independence, and, if neutrality is an issue, a strategic distance. It is their local knowledge that makes their contributions invaluable, while their desires for neutrality and independence create particular challenges for cooperation.

NGOs have often been operating in communities for years before U.S. military forces arrived. Frequently they have excellent working relationships with the USAID mission in the country and, as

such, are well acquainted with U.S. development priorities and those of the host government. Yet they may have had limited interaction with U.S. military forces. Organizationally, many NGOs are wary of working with (or even near) militaries of any nationality for fear that they will be associated with the political objectives of those forces. Nevertheless, the increasing involvement of U.S. military forces in humanitarian activities means that engaging with NGOs—both organizationally and personally—will be a defining feature of these operations.

Achieving Strategic Humanitarianism

In order to achieve success in our security and foreign policy, we need strategic consensus, more balanced and flexible capacity, and broader humanitarian partnerships.

Strategic Consensus

Interventions such as those by Secretary of State Hillary Clinton, former Secretary Gates, and

former Chairman of the Joint Chiefs of Staff retired Admiral Mike Mullen are important, but more steps are needed to demonstrate the value of civilian-military operations to a broader audience. A number of things could easily be done in this regard. The Congress could lift the limitations of the Smith-Mundt Act, which dramatically restrict the ability of USAID and the Department of State from sharing their successes with the American people. No such restrictions are placed on the DoD, which has a strong public affairs program. Improving the public's understanding of the strategic value of humanitarian action requires, at a minimum, allowing our government's diplomats and humanitarian workers to tell their own stories more effectively. As USAID Administrator Dr. Rajiv Shah has said:

We must carry forth the message that investing in the work of our development professionals... is one of the most efficient, most effective ways we have to deter war.... USAID has worked hard over its history to become the strong partner to the military. But perhaps the best gesture of partnership we can make is keeping our soldiers off the battlefield.¹⁰

Potential components of increased public relations for USAID and Department of State humanitarian and development activities might include the embedding of journalists to cover their projects within the context of prevention and response to complex crises, such as in Afghanistan, or renewing efforts to provide journalists with access to U.S. civilians working on rule-of-law projects in East Africa or on alternative livelihood projects in Kandahar. These efforts would help U.S. television audiences to understand the scope, significance, and stakes of

¹⁰ Dr. Rajiv Shah, Administrator, USAID, "The Best Gesture of Partnership," remarks to the Student Conference on U.S. Affairs, West Point, New York, November 4, 2011, www.usaid.gov/press/speeches/2011/sp111104.html, accessed January 4, 2012.

such projects and, hopefully, improve public support for the aid workers and their missions.

Civilian and military agencies must make better use of their personnel engaged in civilian-military operations as ambassadors for these programs to the American people. Often the best recruiting tools for the Navy or Marine Corps are not slick television commercials but a squared-away Marine, dressed in a starched uniform and filled with war stories, talking to the folks back home. When civic leaders talk about the importance of funding our

The real thrust of 21st century national security is in intelligent management of the conditions of peace in a volatile era.

military, they sometimes focus not on supporting our Army or our Air Force, but on supporting our soldiers, sailors, and airmen. Laudable State/USAID programs such as "Home Town Ambassadors" need to be expanded and given more emphasis to speak in greater numbers with local media and civic groups about the nature of their work and impact on American security. A smart, individual-based communications strategy, leveraging new social networking media and directed at specific localities, could go a long way toward linking Americans with the professional humanitarians who work on their behalf around the world.

Civilian-Military Capacity

Resources and capacity that are not balanced to enhance complementary effects of military and civilian actors are less able to achieve holistic effect. Legislative action could work to right this

imbalance. For instance, the Congress could amend the Foreign Assistance Act and the next foreign operations budget to extend to civilian personnel deployed in military operations such as Afghanistan the same flexibility that their military counterparts have for spending Commander's Emergency Response Program funds (while attempting to prevent waste and potential corruption). The Congress could also authorize an increase in USAID staff in order to complement the Department of State's rapidly expanding political advisor program and send Tactical Development Advisors to every Brigade Combat Team in the Army and every Marine Expeditionary Unit.

There are also initiatives the military can undertake now using existing capabilities to make up for the capacity gap in civilian-military operations while important efforts like the QDDR reforms take shape. The U.S. military has a long history of performing a wide array of civilian assistance operations. As an example, perhaps in our concept of maritime engagement operations, we should no longer constrain ourselves to the current force-packaging paradigm—carrier, expeditionary, and surface strike groups. If we are truly looking for a concrete way to implement the new maritime strategy and new ways to more completely take advantage of both traditional *and* non-traditional sources of national power, now is the time to give civilian assistance missions a permanent, integral place in the spectrum of mission-tailored deployment options.

We could consider developing a new type of deployable group—call it a Humanitarian Service Group, or HSG—that could be organized to conduct humanitarian relief and disaster recovery missions, but would benefit from the precise direction and focus of trained Department of State and USAID development and diplomatic professionals on board, in addition to a full complement from the wider interagency environment. Taking the hospital

ships, *USNS Comfort* and *USNS Mercy*, as platform centerpieces, we already have the foundation for two HSGs—one for the Atlantic Fleet and the other for the Pacific Fleet—each home-ported in a place ideally suited for these ships both to respond to crisis or deploy to areas of most critical need. These platforms could host multiple participating agencies and their representatives to train and exercise together in advance of the deployments, much in the same way a carrier, expeditionary, or surface-strike group goes through 6–12 months of “workups,” honing their skills until they are in finely tuned synchronization. The crews of these HSGs could focus their training on any of several missions involving humanitarian assistance, non-combatant evacuation, training and education, disaster recovery, health engagement, and community development.

Humanitarian Partnerships

Creating opportunities to bridge the cultural divide and finding effective means of working together is essential. In 2007, the U.S. humanitarian umbrella organization InterAction jointly published a set of guidelines with the DoD to establish relations between armed forces and humanitarian disaster relief NGOs in hostile environments. In July 2008, the U.S. military's Combined Joint Task Force-Horn of Africa (CJTF-HOA) hosted a unique forum with NGOs from across the region to hear their concerns and determine how they might operate harmoniously as they pursue humanitarian projects in East Africa. Building on experiences working with NGOs during international stability, humanitarian assistance, and disaster response operations, the DoD and its services continue to develop policies and mechanisms for engagement and cooperation with civilian humanitarian actors around the world.

The most important issue is to recognize that engagement with the NGO community is not a

problem the military can definitively solve, but rather a dilemma that it will have to continually address. The philosophical differences that NGOs have with military involvement in the humanitarian sphere are real and legitimate. Even with perfect understanding of their respective motivations and missions, NGOs and military units will often disagree about the projects they pursue and the means by which they do them. To help ease this friction and keep lines of communication open, the military must be proactive and cooperative in their engagement with the NGO community both in the field and in policy centers like Washington. Each combatant command should consider enhancing its interagency and outreach coordination structures, as well as creating or strengthening a budget to invite NGOs to civil-military conferences and exercises on a continuing basis. The liaison officers of the combatant commands at USAID and at the Pentagon should seek to participate regularly in civilian-military working groups hosted by InterAction and other civil-society groups. It is important that military commanders and planners be proactive in reaching out to this vital constituency and continue to find practical ways to work together despite their philosophical differences.

Conclusion

In order to achieve success in our security and foreign policy, we need strategic consensus, more balanced and flexible capacity, and broader humanitarian partnerships.

Given an environment of unceasing micro-conflict, asymmetric warfare, and constant ideological offensives, the “carrot and stick” approach must work not merely hand-in-hand, but hand-in-glove toward a single purpose and unity of effort, across national and tactical echelons, in ways previously unseen in our country’s history.

We must recognize that the real thrust of 21st century national security is not vested in war, but in intelligent management of the conditions of peace in a volatile era. We must expand our understanding of security beyond lethal means, as an area where all actors have a role to play as part of a single extensive strategic framework. The Department of Defense must remain fully ready for combat operations, but the defense function must work to support those doing diplomacy and development—because their success will dominate so much of what unfolds as crisis or peace and stability.

To survive and emerge even stronger from the 21st century security-environment crucible, we need a comprehensive approach, derived from a strategic plan and mindset, where combat and compassion are equally important to our security and foreign policy, and we have the capacity to be equally adept at both. Done correctly, this new way of doing business incorporates more fully the political, military, economic, humanitarian, and diplomatic dimensions of regional and global operations into a single, coherent strategic approach—an approach that keeps us on our journey toward completing the bridge to a new era of national security.

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The views expressed in this essay are the authors’ own, and do not necessarily represent the views of the United States Department of State, United States Agency for International Development or the United States Government.

Civilian-Military Cooperation: What's Next?

To many, the linkage between conventional development and military action remains unclear. Development is by nature civilian-based, inclusive, and long-term; military operations tend to be direct, decisive, and concerned with conducting or preventing war. Yet the two are inextricably linked: Both are fundamentally rooted in promoting U.S. interests and protecting national security. Development is distinct from counterinsurgency, and should remain so, but its time-proven principles can inform effective engagement within warzone communities. The question is, “What more can be done to enhance USAID’s capabilities to work alongside the U.S. military while safeguarding its core mission?”

Aid workers rarely question the value of Department of Defense (DoD) support to large-scale humanitarian operations like the 2010 Haiti earthquake, the 2004 Indian Ocean tsunami, and the 2011 Pakistan earthquake. Nor would many question the need for tightly integrated planning when development workers operate in unsecure (non-permissive) environments. But a decade of

U.S. military working alongside USAID and its implementing partners in Afghanistan, Iraq, and elsewhere has underscored the gap that separates the two communities and the need for improved operational capabilities on both sides. DoD should focus on developing its capabilities to work effectively in interagency environments, and USAID officers need to gain better familiarity with how the military plans and executes its operations. We must pay serious attention to developing the tools and approaches to address instability and violence, which often pose the greatest threat to sustainable development. The benefit to doing so will be to achieve development results that would not be possible through civilian or military programs conducted alone.

Growth in Civilian-Military Collaboration

Over the past decade, coordination and collaboration of development with DoD became common, accelerating rapidly since the creation of the Office of Civilian-Military Cooperation in 2005. USAID



Pakistani aid workers offload food supplies from a U.S. Army CH-47 Chinook helicopter to aid flood survivors in Kalam Valley on August 10, 2010. In 2010, torrential monsoon rains lashed Pakistan for two weeks, triggering catastrophic flooding. | AFP Photo: Behrouz Mehri

developed, and the DoD has widely adopted, a framework for analyzing the dynamics of conflict in non-permissive environments, such as Afghanistan, and has trained thousands of ground troops in this approach, using DoD funding. The placement of Military Liaison Representatives from the DoD's geographic combatant commands (COCOMs) within USAID and the placement of USAID Senior Development Advisors inside the COCOMs and Joint Staff has opened the door for effective, real-time civilian-military cooperation.

USAID routinely approves or advises on the expenditure of DoD funds for humanitarian and civic action purposes. These linkages have already yielded significant benefits to U.S. national security, ranging from rapid and effective coordination

in the response to the 2010 Haiti earthquake, extensive development and stabilization activities in coordination with Operation Enduring Freedom in Afghanistan, and joint exercises and experiments for humanitarian assistance and stabilization responses.

Considerable Gaps Remain

Aid workers have voiced understandable concern about being too closely associated with U.S. military objectives. USAID implementing partners are sensitive about how they are viewed in the eyes of their counterparts—with whom they must develop relationships based on trust. Securitization of the U.S. presence overseas has made it difficult to interact with host-country counterparts.

On the other side, military planners assigned to interagency work are typically frustrated by the apparent lack of a chain of command, the inexplicable need for consensus in decision-making, and the chronic lack of resources and personnel. The imbalance in resources and personnel is such that USAID can generally afford only one advisor to serve an entire COCOM. These tensions can lead

Development partners will need to be adept at working in the civilian, military, and civil-society environments. No single agency can do this alone.

to mutual suspicion and parallel planning efforts in isolation from one another. Both sides must work assiduously to mitigate these tensions.

Daunting as the challenges of institutional alignment may be, there are some encouraging signs from the field. USAID cooperation with the military has made some significant gains in the past five years or so—particularly in these three areas: stabilization operations, like those in Colombia and Pakistan’s Federally Administered Tribal Areas; training of USAID and military personnel in joint civilian-military operations; and coordination of humanitarian assistance interventions. Each of these deserves a closer look:

- **Stabilization has yet to be recognized as a discipline distinct from conventional development.** In countries like Afghanistan, tools provided for long-term institutional change are pressed into service to achieve short-term

effects. In such cases, tactical gains can be made at the expense of strategic goals. But there is growing evidence of USAID’s influence on DoD’s broader counterinsurgency strategy. Among the themes familiar to development practitioners are the critical role of host-country ownership in countering violent extremism, the importance of integrating gender analysis into conflict, the value of effective monitoring and evaluation, and the critical necessity of understanding the host country context in program design. A recent U.S. Army study highlighted USAID’s efforts and the development approach in military operations in the Philippines, where the Agency has enjoyed a strong relationship with the Joint Special Operations Task Force for many years.¹ The Army’s Counterinsurgency Field Manual (FM 3-24)² reflects a development approach to stabilization, and USAID is having increasing success in influencing core DoD policy documents, including Guidance for the Employment of the Force, the Quadrennial Defense Review, and the regional Theater Security Cooperation Plans, which are now shared with USAID regional bureaus as a matter of course. It is significant that in the workshops now underway to redraft FM 3-24, the authors have expressed particular interest in the role of gender in conflict analysis.³ These efforts should continue, but the time has come to address stabilization as a separate discipline from development and counterinsurgency. This could begin

1 Seth Bodnar and Jeremy Gwinn, “‘Monetary Ammunition’ in a Counterinsurgency,” *Parameters*, U.S. Army War College, August 2010.

2 “Counterinsurgency,” Field Manual 3-24, Headquarters, Department of the Army, December 2006. The document is currently undergoing a substantial review based on the past five years’ experience in the field.

3 The *United States National Action Plan on Women, Peace and Security* (released by The White House in December 2011) notes that, in Afghanistan, U.S. and NATO forces have established gender advisors to assist commanders in identifying the differing effects that a potential operation may have on local men and women.



Rear Admiral Carol Pottenger, commander of Task Force 76, speaks with USAID personnel aboard the amphibious assault ship USS Kearsarge (LHD 3) after meeting with American and Bangladeshi military and government personnel to help plan Tropical Cyclone Sidr relief efforts on November 24, 2007.

Photo: Peter R. Miller/U.S. Marine Corps

with a serious retrospective examination of what has worked on the ground over the past decade and culminate in a whole-of-government policy on stabilization that applies shared metrics of success to guide civilian and military efforts. These efforts would help to propel stabilization into a recognized and distinct discipline that can be established with appropriate funding and institutional support.

- **Training in civilian-military cooperation has expanded, but must move beyond the briefings and online courses now available for use in preparing missions.** The goal of joint training and personnel exchanges should be to develop a body of qualified civilian and military professionals adept at civilian-military coordination and joint operations, able to

work together in the field toward a shared objective in permissive and non-permissive environments. This can only succeed if the civilian-military collaboration function is recognized as a legitimate discipline and not a temporary rotational assignment. Interagency exchanges should continue and expand, and such exchanges should be viewed as career-enhancing rather than a departure from a successful career path. USAID does not tend to value training and education in the same way as the military, which poses difficulties for designing effective joint training experiences. But if it is true that “everything depends on personal relationships,” the concerned agencies should explore and encourage the assignments and rotations that build these relationships.

- **Coordination in complex crisis response is clearly improving, as evidenced in humanitarian relief efforts in Haiti and Pakistan.**

In peacetime, DoD can expand its support to the militaries of countries cooperating in disaster reduction, response, and mitigation. Security Sector Reform (SSR) on the civilian side should be complemented by similar DoD efforts aimed at professionalization of host-country military forces. Military-to-military cooperation in SSR should be guided by the same principles used in civilian work, like supporting host-country ownership, incorporating good governance and respect for human rights, which links security and justice and fosters transparency. This cooperation can apply the recognized principles of “Do No Harm” that have guided NGO work around the world for many years.⁴ Planning efforts should focus less on crisis response and more on building partner capacity to strengthen resiliency.

The coming decades will challenge our institutional agility and ability to adapt. The information revolution, the media, non-state actors, the growing role of civil society, the flow of refugees

⁴ Mary Anderson, *Do No Harm: How Aid Can Support Peace—Or War* (Boulder, CO: Lynne Rienner Publishers, 1999). The text is used in training provided by the USAID/Ethiopia Mission to Civil Affairs teams in the Horn of Africa.

and internally displaced persons, and resource conflicts are thrusting civilian and military personnel into the same arena. To succeed, development partners will need to be adept at working in the civilian, military, and civil-society environments to build partnerships that form a strong network. No single agency can do this alone.

Aid workers understand that, in the end, development is the only effective long-term guarantor of U.S. national security. USAID contributes a powerful set of tools to help create peace and stability around the globe. DoD’s role is to ensure the security conditions are in place so that countries can transition toward peace that can take root and grow. The effectiveness of U.S. government involvement depends on coordinated action between the two. Few believe that the need for military action will disappear in our lifetimes. The challenge for USAID is to demonstrate that a development approach to conflict prevention and global security issues is cost-effective and scalable.

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PRESSURE ON THE PLANET



Photo: Kendra Helmer/USAID/Haiti



Pressures on the Plundered Planet

As the world economy grows, it increasingly faces natural constraints. These provide both new opportunities and new risks for the poorest countries; managing them well will be central to their exit from poverty. These were the themes of *The Plundered Planet*. Here I bring out some of the key current issues.

Industry needs natural resources, for energy and material inputs, but many of the natural resources we use for these purposes have a fixed endowment, which we are depleting. A growing global population needs food, and food needs land, but land suitable for agriculture is finite. Both industry and agriculture emit carbon dioxide into the atmosphere, but the stock that can be safely absorbed by the atmosphere is finite, and as it builds up it gradually changes the climate. How concerned should we be about these constraints, and what do they imply for development?

I think that the concerns about industrialization grinding to a halt because of shortages of vital natural-resource inputs are misplaced. As any particular resource becomes depleted,

its price rises. In turn, this induces fresh investment in prospecting and so furthers discoveries, and ultimately research into innovation. This has happened so many times across such a wide range of activities that we can be fully confident of it. The past decade of rising prices for natural resources has already triggered these waves of investment. Currently, by far the highest-valued natural resource is carbon-based energy, from oil, coal, and gas. The high prices of the past decade have triggered an astonishing wave of new technologies that enable us to tap into endowments that were previously inaccessible: The United States has already discovered enough additional resources through these new technologies to be self-sufficient for several decades. Beyond technology-based discoveries are technology-based substitutes: For example, in the 19th century, nitrates were considered vital and finite; then we discovered modern fertilizers.

Similarly, the global population will not face hunger because of land shortages. There are still huge areas of grossly underutilized fertile land;



USAID has played a pioneering role in advancing co-management of natural resources by communities and government in Bangladesh. Building upon successes with forests and inland fisheries, USAID is now working to scale up the approach to all ecosystems. | Photo: KlausHartun

beyond that are drip-feed and greenhouse technologies that open up lands that are currently too dry or cold.

Nor will we face a stark choice between energy shortage and overheating. Although global supplies of carbon-based energy are finite, there are many non-carbon sources of energy waiting to be developed. Indeed, modern physics tells us that the endowment of other forms of energy is infinite: The challenge of permanently sustained energy supply is entirely technological, and we can be confident that innovations will be forthcoming.

But although we are not facing a nature-imposed Armageddon, natural resources, climate, and food are interconnected in ways that pose new opportunities and new risks for the poorest developing countries.

Can Poor Countries Harness the Opportunity of High Commodity Prices?

The new resource discoveries that are being triggered by high global prices for natural resources are creating major new opportunities that are concentrated in the poorest countries. There is a simple reason for this concentration. The poorest countries are the last frontier for land-based discoveries using traditional technologies. As of 2000, per square mile of territory, only one-quarter as many natural resources had been discovered in the poorest countries—the “bottom billion”—as in the rich parts of the world. This is not because they have less to be discovered, but because historically there has been less prospecting: Mining and oil companies are now making up for it.



USAID's rural economic growth program expands agribusiness opportunities in such niche markets as specialty coffee, chili peppers, baskets and essential oils. For example, in 2000 no specialty coffee was exported from Rwanda; in 2006, 3,000 metric tons were produced. Export revenue from this sub-sector has grown to \$8.5 million, and Rwandan specialty coffee has been featured by Starbucks and Green Mountain Coffee as their "best of the best." | Photo: USAID

This spasm of new discoveries in low-income countries will, during the coming decade, generate massive revenue flows for the governments of some of the poorest countries of Africa and central Asia. It is an opportunity without precedent, but one that comes with huge risks. The historical record of resource extraction in these regions is one of plunder—the few expropriating what should have benefited the many, and the generation that is currently in control of decisions expropriating what should have benefited many future generations. There are evident pressures for valuable natural resources to induce such misgovernance. The challenge, both for these societies themselves and for the international community, is to prevent the current opportunity from being squandered.

The default option is indeed for history to repeat itself, but this is far from inevitable: Societies can and do learn from their own history and from the mistakes of others. To offset the pressures for plunder, societies need to enact rules,

build institutions that are dedicated to implementing the rules, and create a critical mass of citizens who understand why the rules and the institutions are needed and so defend them.

The United States has already shown leadership through enacting the Cardin-Lugar amendment to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, and this has already triggered complementary legislation in Europe. It requires all the resource extraction companies that have listings on U.S. stock exchanges to comply with full disclosure of their payments, making bribery and corruption much more difficult. The United States has also recently become a signatory to the Extractive Industries Transparency Initiative, a voluntary, multi-stakeholder process that supports the same objective. These important steps to strengthen the integrity of financial flows were the right place to start, but harnessing the opportunity of resource revenues requires much more. Local communities in the vicinity of

resource extraction must be treated decently; otherwise, there is a risk of violence and disruption. Revenues from the inherently unsustainable process of extraction must be used prudently. To offset depletion, revenues need to be invested, mostly in the domestic economy. To cope with the inherent volatility of commodity prices, they also need to be saved to provide a financial cushion for shocks. The full chain of decisions involved in transforming the potential of undiscovered natural resources into the reality of a sustained exit from poverty is long and complex. The *Natural Resource Charter*, which sets out guidelines for the entire decision chain, is being supported by a partnership of donors: USAID should surely be an important member. An international academic and civil-society initiative, it has been adopted by the New Partnership for Africa's Development, the economic arm of the African Union, and is helping governments and citizens to assess how well prepared their countries are to handle the new opportunities.

A key reason why the new revenues from resource extraction must be managed prudently is that they will not last. As the new supplies from discoveries (including the technology-based discoveries in North America) come on-stream, commodity prices may decline. More fundamentally, the extraction of carbon-based energy will hit two natural limits. The most evident is exhaustion: Many of the discoveries in poor countries are small and will only last a couple of decades. The less obvious limit, but the one that will be globally binding, is that we cannot actually use up the global endowment of carbon-based energy without dangerously overheating the planet. Hence, the binding global constraint on carbon-based energy is not how much there is in the ground, but how much we dare to send up into the atmosphere. Over the coming decades, by some combination of regulation and financial incentives, all the major

nations will need to curtail their carbon emissions. A consequence is that those poor countries that are becoming dependent upon revenues from exporting carbon-based energy will lose their source of income. The windfall from high prices and new discoveries in low-income countries must be seized, while it lasts, to finance transformation.

Can Africa Harness the New Opportunities for Green Growth?

As the world economy shifts its sources of energy from carbon-based to green technologies such as hydro, nuclear, solar, biofuels, and wind, this will create new opportunities for the poorest countries. Africa has superb sites for hydropower, its abundant sunlight gives it a potential advantage in solar power, and its abundant land gives it a potential advantage in biofuels. It also has the advantage of being a latecomer to industrialization: Most of the energy-related capital that Africa will need has yet to be installed. It will generally be much cheaper to fit the emerging green energy technologies on new sites, rather than to retrofit them into the existing generation and usage of energy as must be done in much of the rest of the world.

However, for each of these advantages, there is currently some offsetting disadvantage because Africa must take decisions based on prices and costs that differ markedly from those prevailing in the rest of the world. For example, although Africa has many sites suitable for hydropower, they are mostly unexploited. This is because hydropower requires huge fixed capital investments, while the cost of finance in Africa is far above world levels. Hence, these investments are not viable at the cost of finance faced by African governments. International private investors have access to much cheaper capital, so could they fill the financing gap? Probably not. Because of the political risks, hydropower investments are left on the drawing board.

Yet it is in the global interest to curtail carbon emissions from anywhere on the planet. The fundamental criterion should be to do it as cheaply as possible. In failing to finance hydropower, leaving Africa to invest in carbon-based energy instead, the world is missing an opportunity to reduce carbon emissions much more cheaply than by retrofitting green technologies in developed economies. The international community appears to lack the political architecture for matching the opportunity of hydropower investment to the vast global pool of low-cost finance. Actually, we don't lack the political architecture: Aid can perform this role. The obstacles have been that funding has been both inadequate and insufficiently innovative. For example, partial risk guarantees might overcome the inhibitions of private investors.

Similarly, solar panels, though potentially ideal for African conditions, are expensive investments for households and small firms that typically face severe credit constraints. Additionally, panels require a network of reliable maintenance, but Africa currently lacks the organizations capable of providing such a service. In the developed parts of the world, these problems have been overcome: The obstacle is usually the lack of sunshine. Between them, the global microfinance movement and social enterprise might be able to provide both the credit and the network of maintenance that solar power in Africa needs for viability.

Although biofuels can be grown in Africa, they compete for land that could be used to grow food. As long as Africa continues to be a huge food importer, there is little rationale in producing biofuels. Given high transport costs, exporting biofuel in exchange for imports of food is unlikely to be as economic as using the same land to grow more food. In fact, Africa is so abundant in land that it should be possible for the region to meet its food needs and still have arable land to spare

for biofuels. But for biofuels to make sense, food production must first increase.

Even Africa's latecomer advantage is not as advantageous as it might seem. The region is already extremely short of electricity. Indeed, so severe are power shortages that the value of extra electricity in Africa is far greater than in any other region. Currently, none of the green technologies are as cheap as coal for electricity generation, but coal is the most carbon-intensive form of energy. Hence, while Africa is facing an electricity crisis, it cannot afford to wait for the new green technologies to improve.

Each of these frustrated advantages points to a potential opportunity for a low-cost means of curtailing global carbon emissions that will be missed given the constraints that Africa currently faces. It is therefore in the global interest to overcome the obstacles that impede Africa from making more use of its opportunities for green energy. Aid in its various forms can do just that.

Can Poor Countries Cope with Climate Change?

Curtailing global carbon emissions is both technically and politically difficult. As the major nations stumble toward effective action that shares the burden of adjustment, excessive emissions will continue to build up and so, given the long lags between emissions and climate, a prolonged phase of climate change becomes increasingly likely. The problems posed by climate change affect, selectively and systematically, the poorest regions of the world. The channels of transmission work through both production and consumption.

In terms of production, neither people nor crops are infinitely adaptable to climate: Some parts of the world are hotter than would be ideal, and others are colder. Systematically, the poorest countries tend to be too hot. Globally, the likely

consequences of climate change are rising temperatures and increased volatility. Rising average temperatures disadvantage mostly poor regions that are already too hot while advantaging mostly rich regions that are currently too cold. Increased climate volatility is detrimental everywhere, but it particularly disadvantages those areas in which economic activities are most vulnerable to climatic shocks.

The poorest countries are particularly vulnerable because they are far more dependent on rain-fed agriculture, which is evidently more sensitive to climate than other activities. Within the poorest countries, it is the poorest households that are most dependent on food production as a source of income. And within the poorest households, food production is predominantly the domain of women. Yet women are often disadvantaged as food producers in terms of access to finance, weak legal rights over land, and competing claims on their time. African agriculture, and women in particular, need help to adapt to this climatic deterioration, which has obviously not been caused by Africa. Without accelerated adaptation, food productivity, which is already low, will be further menaced. Fortunately, some are at least beginning to recognize this problem. The Obama Administration's Presidential Initiative for Global Food Security called "Feed the Future" places a critical focus on climate-change adaptation and has launched a global research portfolio of investments to create more productive crops, sustainably intensify agricultural production systems, ensure food security, and enhance access to nutritionally improved diets. Much more needs to be done, but this is a start.

In terms of global consumption, the good most vulnerable to climate change is food. The world food market is sensitive to supply shocks in a few major exporting countries, such as Australia, Russia, and the United States. This sensitivity has

twice been demonstrated in recent years. In 2008, the Australian grain crop was hit, while in 2011, it was the Russian. In each case, as a direct result of these production shortfalls, global food prices rose, but the price increase was then accentuated by the responses of the governments of some of the other food-exporting countries, which imposed export bans to protect their own consumers from the surge in global prices. These export bans were acutely damaging, accentuating the price increase and so generating a spike in food prices.

In the short term, high prices for food cannot increase supply, and so prices equilibrate the market by squeezing demand. In less technocratic

Austerity is indeed a time to get smart, but not to abrogate the responsibility of global leadership.

language, some people eat less. The food needs of Africa's big coastal cities are largely met by imports, so food is priced around world levels. Africa's urban poor are particularly exposed to surges in food prices. Lacking land, they are unable to grow their own food. Lacking income, they are sensitive to high prices. In the case of food, this income-selective squeeze works twice over. Because food is a necessity, poor people spend a larger proportion of their budget on food than do richer people. The typical poor urban household spends around half of its budget on food, whereas for high-income households only around a tenth of income is spent on food. So, when food prices rise, for a poor household to keep eating the same

quantity of food would require a much larger squeeze on other expenditures than for a richer household. But of course, poor households are least able to cope with a squeeze of any magnitude. They have fewer assets to fall back on and fewer discretionary items of expenditure that can be dropped. And so, the global food market equilibrates to a shortfall in world supply by forcing poor urban households to eat less.

Within such households the most vulnerable are the young children. If a young child is malnourished for more than two years, the result is stunting. Two aspects of stunting are truly disturbing. First, it is not only a physical but also a mental condition: As the term implies, the children will be short, but their mental abilities will also be impaired. Second, it is irreversible: Physical and mental impairment will last for the rest of a child's lifetime, and indeed, evidence on physical impairment shows it to be passed on from one generation to the next, taking several generations to work itself out. We do not know whether this is also the case with mental impairment. Both the U.S. Global Health Initiative and the Feed the Future Initiative support country-owned programs to address the root causes of poverty and malnutrition and improve the future potential of millions of people. This commitment to building local technical capacity will enable developing countries to manage nutrition programs over the long term. Through effective collaboration with other development partners, the United States also supports the Scaling Up Nutrition movement, which focuses on collaboration, results, harmonized multisector approaches, and the critical 1,000 days from pregnancy to a child's second birthday.

As carbon emissions build up as a result of global industrial growth inadequately mitigated by incentives and regulation, a climatic shock to one or more major producers could quite easily reduce

global food supplies for a few years. On current patterns, this would have adverse consequences for some of the poorest people on earth that would echo down the generations. Such inherited disadvantage is the antithesis of the opportunities for social justice proclaimed by the United States in the iconic symbol of the Statue of Liberty. While the core leadership on this issue must lie with African leaders and citizens, as the greatest food producer on Earth, and home to some of the world's major international agricultural companies, the United States has an undeniable leadership role in ensuring global food security.

Both to address the adverse effects of climatic deterioration on food production, and to guard against the consequences of shocks in the global market, it is important for Africa to increase its own food production. It is indeed extraordinary that the region is a major food importer given that it has so much arable land per capita. Dependence on food imports has emerged due to a prolonged stagnation in African food productivity, in contrast to trends elsewhere in the world. Climate change is set to make matters worse, but rapid adaptation could mitigate the damage. For example, investment in irrigation would reduce exposure to rainfall shocks, and the development of new crop varieties could increase resilience to rising temperatures and drought. U.S. research into genetically modified organisms puts it at the forefront of innovation in crop varieties, and this is a technology that Africa urgently needs. Indeed, the yield gap between African agriculture and global agriculture is now so pronounced that in one sense it is hopeful: There must be considerable scope for productivity growth simply through learning from agriculture in other regions.

Recently, international investors have woken up to the potential opportunities of African agriculture. Following the price spike of 2008,



USAID works with conservationists and the Waorani indigenous community to protect *charapas* river turtles in Amazonian Ecuador. In 2008 and 2009, community member Roque Alvarado and his children Renata, Orlando, and Annabelle (pictured) gathered 1,000 eggs and carefully tended 700 hatchlings before releasing them back to the wild. | Photo: Julie Larsen Maher/Wildlife Conservation Society

food producers in the food-exporting economies became concerned that periodic resort to export bans would make them unable to take advantage of high world prices, and so started to look elsewhere to expand production. Further, in the high-income food-importing countries, governments and food importers became concerned that during future periods of global food shortfall export bans would prevent them from purchasing adequate supplies on the global market. Hence, they too started to look to new locations in which, if necessary, they could grow food supplies that could preempt the global market.

Coincident with the 2008 global food price spike, there was a spike in the global price of oil. This too triggered new investor interest in African agricultural land, in this case to grow biofuels.

Hence, there were three distinct international investor interests in African agriculture: harnessing the opportunity of the widening productivity gap, protecting against future food price spikes, and preparing for future energy price spikes. After half a century of neglect, African agriculture was suddenly attracting international commercial interest.

These three types of investor interest have very different implications for Africa—the first potentially highly beneficial. International commercial agricultural enterprises could bring the management, technology, finance, and market connections that could unlock Africa's agricultural potential. Further, the first investors will be pioneers. Given the specificities of agricultural production and marketing, it is usually not possible to assess whether the first such venture in



Smallholder farmers harvest cowpeas. | Photo: Elisa Walton/USAID

a locality is commercially viable other than by trying it. As pioneers, they will be taking risks which, if successful, will serve as demonstrations for many others, including international firms and African farmers. As with most pioneering, these demonstration effects are benefits to society that the investors themselves cannot capture, and so there is a good case for their public support. Fifty years of limited success for international public efforts to assist Africa's small farmers directly suggests that new, more commercially based approaches are needed. Meanwhile, commercial farming in countries such as Brazil has been hugely successful: Not only does commercialization raise food production, but it has the potential for complementarities with small farmers through imitation of methods and piggybacking on technology and logistics through outcropping. The Feed the Future initiative has developed a strategy to engage these private-sector pioneers in a meaningful, comprehensive way that speaks to core business interests while also addressing critical development objectives. It is these types of "win-win" partnerships that can foster private-sector-led growth in emerging markets, increasing the collective impact of donor

interventions in sustainably reducing poverty.

However, the other two types of investor are primarily speculators. Typically, they seek long leases at nominal rents for idle land, in the hope that a future price spike, whether in food or energy, will make the cultivation of their holding commercially attractive. Until then, the land is barely cultivated: The attraction to the investor is what economists term the "option value." The circumstances under which the option becomes valuable are precisely those in which African governments would regret having parted with it. In other words, these transactions depend upon African governments signing away land rights that may become valuable, in return for a very small immediate gain.

Evidently, the future of food production, both globally and in the poorest countries, faces risks. Policies can affect these risks. There is considerable scope for partnerships between governments and the private sector in support of African-led investment plans and policy frameworks. The U.S. government, with its unrivaled network of aid and diplomatic links to Africa, and the world's foremost agricultural sector, is in a strong position to guide the many U.S. enterprises that could contribute to African development in the region. Sometimes with aid as pump-priming, U.S. firms could enable Africa to adopt those green technologies in which it has a potential advantage, but that would otherwise be unviable because of a variety of impediments. U.S. enterprises, allied to appropriate policies adopted within Africa, can be pioneer investors in agriculture, while refraining from the speculative accumulation of option values in land. The U.S. government is encouraging African governments to create enabling policy environments and physical infrastructure that facilitate private-sector investment by individual agricultural producers,

small and medium enterprises, and larger businesses. Such structures might shift, for example, from import bans to regulations for new genetic crop technologies, then pump-prime their adoption by African farmers. Through these and other means, supportive U.S. aid policies can accelerate the pace at which African agriculture becomes more productive and more resilient.

Aid in an Age of Austerity

Africa is at last starting to catch up. Over the next decade, the commodity booms will be injecting revenues that dwarf all past financial flows, including aid. Meanwhile, the United States and other members of the Organisation for Economic Co-operation and Development face a decade of austerity. Africa will, therefore, inevitably self-finance much of its development. As it succeeds, it will also find it easier to attract private capital on commercial terms. Yet, within this newly hopeful African environment, there are also grave new risks. Africa faces important new policy challenges: managing the commodity booms, determining the pace of adoption of green energy, and meeting Africa's food needs while responding to a deteriorating climate. Africa cannot be coerced into good public decisions on these matters, but it can be informed and supported. The continuing role for development assistance in the new environment of African self-financing of development is to be smartly targeted onto such issues, and thereby become highly leveraged.

The pulse of revenue to African governments from commodity exports is likely to be temporary, though of unknowable duration. The challenge is for societies to build the defenses of rules, institutions, and a critical mass of informed citizens needed to prevent a repetition of the plunder that has despoiled Africa. The U.S. combination of legislation to regulate the behavior of the extractives

industry and pump-priming finance for international policy guidelines is an example of a smart and supportive intervention.

The necessary greening of the world economy will shift energy technologies away from the carbon-based energy that is currently Africa's chief source of income, but will introduce other energy sources for which the region is potentially well suited. Currently, however, each of these potential technologies faces Africa-specific impediments, such as high-cost finance. Helping to get green energy established in Africa by partnering with the private sector to break these impediments is a further example of smart development assistance. Cheaply curtailing the growth of carbon emissions in Africa reduces the need to curtail them more expensively in the United States.

Climate change is inevitable for the coming decades, and this threatens African food security. Africa has the potential to produce far more food than it does, but realizing this potential requires a combination of money, expertise, and appropriate policies. While the key leadership in meeting these challenges lies with Africans themselves, as the world's foremost agricultural economy the United States has an evident supporting role. The appalling consequences of food insecurity, both the immediacy of hunger and the persistence of stunting, make it a clear priority for the U.S. government.

Austerity is indeed a time to get smart, but not to abrogate the responsibility of global leadership.

Paul Collier is Professor of Economics at Oxford University and the author of *The Bottom Billion*. The views expressed in this essay are his own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

Strengthening Food Security in a Growing World

Global food production has been beset by significant challenges in recent years: the global economic slowdown, the rise of commodity costs, and, simultaneously, the increase in consumer demand for healthier and more sustainably produced goods. For the food industry, that last one is the biggest challenge. In the coming decades, amid worldwide economic volatility, 9 billion people will need more nutritious food products, and scarce environmental resources will need to be protected. Meanwhile, the reality of doing business in this new paradigm gets more and more challenging. Despite global change and economic upheaval, companies have to keep costs low, generate profits, and deliver value to shareholders so that their continued trust and support can drive long-term success. To meet these global challenges, businesses, governments, donors, and civil society must work in partnership to strengthen food security for a growing global population. As a planet and as an international business and political community, the future food security of millions depends on this enhanced coordination as never before.

Doing Business in a Volatile and Changing Environment

In 2011—for the first time in decades—the number of hungry people in the world increased from the previous year. The World Bank estimates that the doubling (or even greater increase) of food prices between 2006 and 2008 pushed 100 million people into poverty worldwide. Around the world, a billion people go hungry every day, and the situation has worsened in recent years due to rising food prices. These rising costs are due, at least in part, to increasing demand for energy-rich foods like meat and dairy in China, India, and other emerging markets, which then drives up grain feed and ingredient prices. Other factors contributing to increased food costs include unexpected weather events, such as droughts and floods in major food production regions of the world; a weaker dollar; and increasing speculation on commodities.

Simultaneously, and paradoxically, more than a billion people are overweight and at risk of developing chronic ailments like cardiovascular disease and diabetes. The transition from



Afghan farmers harvest their wheat crop in a field in the Shomali plains, about 30 kilometers north of Kabul on July 8, 2009. | AFP Photo: Shah Marai

traditional diets to a more “Western” diet higher in calories is partly responsible for the alarming increase of overweight and chronically ill people in developing countries.

The Food and Agriculture Organization of the United Nations (FAO) and many other institutions have warned that the state of the global economy and stresses from climate change are likely to keep the pressure on food production and lead to a great deal of volatility. For example, world food prices hit a record high in early 2011 but by the end of the year, prices had dropped considerably. The FAO said that strong yields in several commodities, combined with slowing demand and a stronger U.S. dollar, led to sharp drops in the international prices of cereals, sugar, and oils. The World Bank has stated that the decline in global food prices could be halted if weather patterns change, or if world oil prices rise, pushing up price volatility and demand for biofuels.

The people most at risk under volatile conditions are, of course, the poorest. Economic uncertainty, the rise of the biofuel industry, and the unpredictability of climate change are putting more and more people at risk. In 2011, 12 million people in the Horn of Africa were placed in critical danger, driven from their homes due to political instability and the impacts of a 10-year drought that has undermined their long-term food security.

There are many connected issues involved in global food security, including agriculture and nutrition. For example, human health depends heavily on the quantity and quality of nutrition, which depends on agricultural production. Agricultural production is dependent on fuel and environmental resources such as water and labor. Labor issues involve human rights and the critical role of women in agricultural production, as well as the importance of educating girls.

Sixty percent of the world’s population now

lives in cities, and this increase in urbanization requires more convenience foods—ready-to-eat, packaged meals and healthy snacks—not just commodities like rice, wheat, and corn. This means more jobs for primary processors, product developers, distributors, and retailers. Walmart alone, as the world’s largest retailer, employs 2.1 million people. Public-private partnerships are proving to have a positive influence in training and building capacity in developing countries. For example, Partners in Food Solutions (PFS), an innovative, hunger-fighting non-profit

Despite all the world’s advances in modern medicine and technology, hunger still kills more people than AIDS, malaria, and tuberculosis combined.

launched by General Mills, links the technical and business expertise of hundreds of volunteer employees to small and medium food processors in Africa. PFS aims to strengthen the food supply chain, raise living standards, and create market opportunities for smallholder farmers.

The most immediate impact that food companies can have on economic growth is through contract farming. Companies like Nestlé, PepsiCo, and Kraft work with hundreds of thousands of farmers worldwide to supply agricultural raw materials for their operations. In the countries that process those raw materials and produce finished goods, contract farming can provide jobs and create valuable opportunities for capacity development.

Agriculture’s benefits to the national and global economy are many—not just food and health, but income, jobs, trade, and security, as well. The agricultural sector has always been the world’s largest employer, with more than a billion people. A rapidly rising global population is placing increasing pressure on agriculture systems and, given the complex and interwoven issues, private and public sectors must work together to meet these challenges.

We need to boost agricultural productivity

Despite all the world’s advances in modern medicine and technology, hunger still kills more people than AIDS, malaria, and tuberculosis combined. Around 25,000 people die each day of hunger, and one in every three children is malnourished, placing them at high risk to die from infectious diseases and often preventing them from partaking in educational opportunities to reach their potential. However, these numbers are dropping. Worldwide, the percentage of hungry people has dropped from 34% to 17% in the last 40 years. Food companies play a big role in lowering those numbers.

As food companies, we can thrive only if we have access to agricultural crops to make our products. Moreover, we can only thrive if our consumers are healthy enough to have productive jobs, earn wages, and buy our products. A solid agriculture base and good nutrition practices are integral to our very existence, which is one of the reasons why PepsiCo began with agriculture when it launched its business in India in the 1980s. PepsiCo worked directly with thousands of farmers in the state of Punjab, and other states, and transferred the company’s best practices to improve the yields of tomatoes, chili peppers, and rice. The newly introduced tomato and chili varieties tripled the yield of these crops.

In China, PepsiCo has worked with local

potato farmers to develop thriving crops in the middle of the desert by sharing water-saving irrigation and crop-rotation methods and providing regular training on modern, environmentally sustainable technologies. The company benefits from the resulting increased production because we buy the output from these farms at competitive prices and farmers, in turn, are able to make a good living. We have found that this kind of business strengthens food value chains by providing higher-quality seed and microcredit to farmers, improving the affordability of fertilizer and the efficiency of irrigation systems, and by sourcing foods locally.

We must waste less food

We need to produce more food to feed a growing world population, but it is critical to note that more than half the food produced today is lost, wasted, or discarded. Our global food system needs to become much more efficient not just at production, but also at maximizing the use of what is produced.

Overall, the food wasted in the world every year is equivalent to the amount that Sub-Saharan Africa produces—220 million tons!¹ In some developing countries, nearly 50% of the food produced on farms is lost post harvest due to poor storage facilities, inadequate transportation infrastructure, low food-processing capacity, and underdeveloped markets. There are deep-seated financial, managerial, and technical limitations in harvesting techniques, storage and cooling facilities in difficult climatic conditions, infrastructure, packaging, and marketing systems. For farmers, a reduction in food losses could have

¹ Jenny Gustavsson, Christel Cederberg, and Ulf Sonesson, “Global Food Losses and Food Waste.” Food and Agriculture Organization of the United Nations, 2011. http://www.fao.org/fileadmin/user_upload/ags/publications/GFL_web.pdf, accessed April 17, 2011.

an immediate and significant positive impact on their livelihoods.

The food supply chains in developing countries need to be strengthened by encouraging small farmers to organize, diversify, and upscale their production and marketing. Investments in infrastructure, transportation, food industries, and packaging industries are also required. Both the public and private sectors have a role to play in achieving this. For example, a 2011 FAO study points to a need to invest in the food-packaging industry in developing countries. According to the report, many products exported to developed countries are already processed at the point of origin, and the demand for these to be packaged in retail-friendly form is on the rise. This is an opportunity for governments of developing countries to allow the packaging industry to grow through supportive policies and regulations.

Importance of “Processed” Food

The food industry plays a very important role in reducing the amount of food lost post harvest. This is done through the use of processing technology. “Processed” food may have acquired a poor reputation in the marketplace, but this reputation is undeserved. Fresh food is subject to tremendous loss and waste. A U.S. study reported by *New Scientist*, July 2011, aptly illustrates the point: U.S. consumers, by throwing out perfectly edible food, waste more energy each year than is generated from the oil and gas reserves along the U.S. coastline. According to the report, about 16% of the energy consumed in the United States is used to produce food, yet at least a quarter of it is wasted. Fresh produce and dairy foods have the worst records. Food waste can also artificially inflate the demand for raw materials, such as wheat or rice, driving up global prices to the disadvantage of the world’s poorest people.

In addition, “fresh” does not always mean “most nutritious.” Food processing actually results in fewer fruits and vegetables rotting on the way to the market. With rising consumer incomes, urbanization, and the need for preservation and convenience, the food industry will play an expanding role in processing agricultural outputs into food products. The logistics and distribution capabilities of food companies give them an unparalleled worldwide reach into urban and, increasingly, rural markets. A recent paper published by researchers at the University of California, Davis, and PepsiCo shows that depending on the fruit or vegetable of interest, and its particular preservation needs and specific nutrients, “advanced” technologies may have a positive, neutral, or negative effect on nutrient retention. To address the impact of these technologies properly, studies on the impact of processing on nutrients need to view the entire farm-to-fork supply chain. This is an issue of great importance to consumers, and public and private support of well-designed research studies is essential to take nutrition research to the next level. Without this type of information it is impossible to determine which methods of preserving fruits and vegetables can best minimize nutrient losses and offer consumers safely preserved, nutritious fruit and vegetable products to consume at locations distant from production. It is time to start viewing processed food as value-added food.

We must not only produce more food, but also meet the nutrition needs of nine billion people

This brings us to the importance of providing consumers not just with enough food, but with good, nutritious food. Between the 1960s and 1990s, crop production in the world increased by 70% and per capita food consumption rose by 28%. However, the availability of sufficient calories is not the only way to measure the success of global

food production. The food system should also be measured by nutrition and health benchmarks.

With a growing population, the world needs to produce more food that meets the nutritional needs of all people. The nutritional needs of children, aging adults, and urban populations in developing and developed countries are distinct. What people eat is as important as how much they eat. People who do not get the nutrition they need find their energy sapped, their cognitive ability diminished, and their economic potential reduced as they become more vulnerable to chronic disease.

At the World Food Prize in 2009, PepsiCo’s CEO Indra Nooyi remarked that the world would have had an opportunity to align nutrition science with agriculture priorities had David Morley and Norman Borlaug crossed paths. Morley’s research, starting in Nigeria back in the 1940s, has made us understand the need to monitor growth and food intake from a very young age. Norman Borlaug’s Green Revolution has tripled yields in many parts of the world and probably saved a billion lives.

We need to take the opportunity to connect food production to nutrition and refocus on how agriculture affects health.

The recent report from the Chicago Council on Global Affairs, entitled “Bringing Agriculture to the Table: How Agriculture and Food Can Play a Role in Preventing Chronic Disease,” highlights this point. According to the report, the agriculture and food system plays a significant role in the illness and early death that arise out of the imbalanced diets, empty calories, and overconsumption that are rampant in high- and middle-income countries and increasingly apparent in the nutrition and epidemiological transitions underway in developing countries.

This report describes the links between agriculture and health and demonstrates that



Abebaw Gesesse, a poultry farmer in Mojo, Ethiopia, received a \$128,000 loan from Dashen Bank thanks to a guarantee facilitated by USAID’s Development Credit Authority (DCA). USAID uses DCA to share risk with local banks, thus opening financing for underserved but credit-worthy borrowers.

Photo: Morgana Wingard

agriculture’s long-term success in meeting and surpassing growing demand through greater production—though not yet in Africa—is a *necessary* but not sufficient response for modern societies. Long-term human and environmental health should also be goals of agriculture.

One way forward is to take the value-chain approach, building agricultural systems all the way from improved seeds and diverse crops to better storage, processing, and transport to reach consumers. Many companies that are largely vertically integrated have deep experience in value chains in developed markets, but establishing such value chains in developing countries is not straightforward. Supportive government policies and available capital and risk-reduction mechanisms from banks can help to lower the barrier to entry for multinational companies. Both public and private

institutions should support activities such as the early successes of organizations like HarvestPlus, part of the Consultative Group on International Agricultural Research. HarvestPlus, with support from the Bill & Melinda Gates Foundation, has introduced the orange-fleshed sweet potato into countries in Africa. The orange color is due to the high beta-carotene content, which helps address vitamin A deficiency in malnourished people. Commercialization of such products could help to grow demand and drive adoption by consumers.

An even more recent report by the Chicago Council, entitled “Girls Grow: A Vital Force in Rural Economies,” explicitly describes the need to empower adolescent girls to prepare them for their significant role in society—and at the nexus of agriculture, health, and environment. Women represent 70% of the labor force in agriculture.

Adolescent girls and women are the key to fully realizing the productive potential of agriculture, and the report suggests that if women were given the same access to productive resources as men, the results could be significant. Women's agricultural yields could increase by 20% to 30%, and the number of undernourished people could be reduced by 12% to 17%. The findings are completely in accord with the Girl Effect, the movement that shines a spotlight on the unique potential of adolescent girls to end poverty for themselves and the world. It was created by the Nike Foundation, NoVo Foundation, United Nations Foundation, and Coalition for Adolescent Girls. Most importantly, helping a woman farmer to increase her productivity is good for her family: When women and girls earn income, they reinvest 90% of it into their families.

PepsiCo's nutrition team has developed iron-fortified products for low-income consumers in India. The products are specifically aimed at reaching young women and girls so that their health and productivity—and that of their children—can be increased. Results, though still early, are positive.

Major food and beverage companies with deep links to agriculture continue to build their commitment to nutrition and public health. Ferrero, General Mills, Grupo Bimbo, Kellogg's, Kraft Foods, Mars, Nestlé, PepsiCo, the Coca-Cola Company, and Unilever formed the International Food and Beverage Alliance (IFBA) to work toward public health goals in food re-formulation, consumer information, responsible marketing, promotion of healthy lifestyles, and public-private partnerships. Although the top 10 soft drink companies account for half of global sales, the top 10 packaged food companies account for only a small proportion of market share with most individual companies contributing less than 3.3% each.

Major multinational companies need to be

joined by the myriad small and medium enterprises in developing and implementing programs to improve the health of the public, globally. Without full participation of these companies, the impact of commitments made by IFBA members and other major multinational food and beverage companies will remain limited. PepsiCo is beginning to bridge the divide by launching a process to share salt-reduction technology with small and medium enterprises. Governments and civil society can also act by developing public policies and messages that enable both the formal and informal food sectors to shift to ingredients and practices that support public health. International organizations such as the World Health Organization and the FAO can also work together to coordinate their priorities in support of food production as well as health improvement.

Business and economic growth cannot thrive without investing in people. Running a sustainable business means responding to the needs of consumers. Long-term sustainability for the business world translates to keeping costs low and keeping growth steady. It takes courage and patience to keep focus on long-term sustainability.

Investment in agriculture, especially with smallholder farmers, is crucial to the long-term viability of the world's food supply, as well as to help improve the nutritional status of the very poorest individuals. Business could strengthen food value chains by providing higher-quality seed and microcredit to farmers, improving the affordability of fertilizer and efficiency of irrigation systems, and by shifting to rely more on local sourcing of foods.

We have to do all this while using fewer resources

In October 2011, the world's population reached 7 billion, just over a decade after passing the

6-billion milestone. With increased population comes increased demand on resources such as water, land, and fuel. Businesses, like people, need natural resources to survive and flourish. Water scarcity is one of the biggest threats to economic development, particularly for the agriculture sector, which is responsible for 70% of the world's freshwater use. Around 1.2 billion people live in areas of physical scarcity, and 500 million people are approaching this situation. Another 1.6 billion people, or almost one-quarter of the world's population, face economic water shortage (where countries lack the necessary infrastructure to take water from rivers and aquifers). There is enough fresh water to sustain the world's population, but it is distributed unevenly; and much of it is wasted, polluted, and unsustainably managed. It is an obligation of everyone—companies, governments, NGOs, and individuals—to use such natural resources responsibly.

PepsiCo helps conserve global water supplies, especially in water-stressed areas, and provides access to safe water. To do this, we have committed to improving our water use efficiency by 20% per unit of production by 2015, striving for positive water impact in our operations in water-distressed areas, and providing access to safe water to 3 million people by the end of 2015. Back in 2009, we were also the first company of our size to recognize water as a human right. As one example, PepsiCo has worked with local scientists in India to implement a drip irrigation technique that reduces the use of water in paddy fields while saving crops and generating income for farmers. This isn't simply the right thing to do. This is a matter of business efficiency and long-term survival.

The Way Forward Is Partnership

Whether one calls it Performance with Purpose, or Creating Shared Value, or Social Enterprise, the

purpose of a successful business should be not only to make money for investors, but also to deliver value to society. That value is through the goods and services that the company provides and by the responsible conduct that it adopts in its operations. Food companies are increasingly offering low-cost, nutritious products to underserved, low-income populations. We face the same challenge that social enterprises face: Can they generate enough revenue and attract enough investment to cover their costs and grow their activities?

The social value of providing poor people with affordable health and hygiene products or nutritious foods is enormous, but the cost of private funding often outweighs the monetary return. Companies and investors will need to experiment with innovative, blended business models that allow profits to be reused to expand the company's reach, improve the quality of the product or service it provides, and design methods to lower the cost of the product or service. But we need the support and partnership of the public sector to make those business models successful.

With support from governments, NGOs, and civil society, food companies will be able to deliver value to underserved communities worldwide. For companies, this means assuring that our actions support financial goals, but also human and environmental health. For governments, it means assuring adequate and comprehensive policies and incentives for companies to operate effectively and deliver goods and services to underserved consumers. For NGOs, this means helping governments and the private sector respect and protect consumers and natural resources while supporting economic development. For individuals, it means doing what you can on a personal level to respect producers, consumers, and natural resources.

This approach has started to work in Ethiopia, where PepsiCo, the World Food

Programme (WFP), USAID, the Government of Ethiopia, and local businesses have come together. Within just a year, we have demonstrated agricultural best practices to improve the yield of chickpeas in Ethiopia and have established the groundwork to launch a chickpea-based relief nutrition product for hungry children. WFP and the Prime Minister of Ethiopia provided the impetus for the initiative, USAID provided the technical advice, and PepsiCo, Omega Farms, the Ethiopian Institute of Agricultural Research, and the Ministry of Agriculture provided the hands-on technical expertise to deliver success.

In another example, in 2011, PepsiCo entered into a landmark partnership with Inter-American Development Bank (IDB), the largest multilateral provider of development financing for Latin America and the Caribbean, to spur social and economic growth in 26 countries across Latin America and the Caribbean.

The partnership's inaugural project was launched in Mexico with an agriculture initiative that seeks to significantly expand commercial sunflower production. The project is to create a sustainable market for sunflowers—a once-thriving commercial crop that has diminished in recent years—while providing loans and a source of income for some 650 Mexican farmers and their families. For PepsiCo, the sunflowers will provide a source of heart-healthy high-oleic sunflower oil for cooking potato chips, biscuits, nuts, and other snacks that PepsiCo produces in Mexico under the Sabritas and Gamesa-Quaker brands.

As part of the sunflower production program, PepsiCo has committed to purchase 100% of the crop, for an estimated \$52 million over seven years. Additionally, PepsiCo will support management of the Mexican sunflower crop and will provide technical training to the small farmers. Financial partner Agrofinanzas, an

A farmer admires the size of a cacao bean. Small farmers in this region of Ecuador used to export very little processed chocolate. Now, with the help of a USAID partnership, their cacao is processed in Ecuador and shipped to markets worldwide.

Photo: Satre Comunicaciones 2006

institution specializing in supply chain finance, will make available microloans to provide the farmers working capital. The IDB, through its Opportunities for the Majority Initiative, will provide Agrofinanzas a partial credit guarantee for up to \$5 million.

The five-year partnership between PepsiCo and the IDB will mark the first time a private-sector organization has participated in the IDB's innovative regional trust funds for development activities.

We firmly believe that if the efficiency, competitiveness, and dynamism of business can be harnessed to deal with specific social problems, surely we can make significant improvements in global health and nutrition. But for this to happen, all players—private sector, public sector, civil society, and consumers—need to change in some ways. The private sector and investors need to become more comfortable with blended business models, governments need to deploy mechanisms that reduce risk for companies, and civil society needs to support these efforts through positive messaging.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.



Reducing Vulnerability to Food Insecurity: Conservation Agriculture as Regenerative Disaster Risk Reduction

Within the past decade, climate-induced disasters have caused many vulnerable populations around the world to be repeat victims of events such as drought and floods. With sufficient time between disasters, families can often recover lost assets and income. However, in many parts of the world, and Africa in particular, the time between event recurrence is shrinking. For example, severe droughts in Northern Kenya occurred approximately 1 out of every 10 years, but over the last decade, Kenyans have suffered drought every second or third year.¹ Families whose food security depends on rain-fed agriculture become less resilient with more frequent shocks and are often faced with chronic food insecurity and increasing vulnerability to subsequent shocks as their assets and resources are depleted.

¹ Julius Huho, Josephine Ngaira, and Harun Ogindo, “Living with Drought: The Case of the Maasai Pastoralists of Northern Kenya,” *Educational Research* 2(1) (2011), 779–789.

Although high-cost solutions like emergency provision of food, fertilizer, and extensive irrigation can help these families survive climatic shocks, USAID’s Office of U.S. Foreign Disaster Assistance (USAID/OFDA) is considering affordable, long-term disaster response options to support farmers. These interventions can be broadly categorized as regenerative disaster risk reduction (DRR), and include appropriate, small-scale technologies for water harvesting; rangeland management techniques; and other interventions that share the characteristics of reducing disaster risk while, at the same time, improving the natural-resource base upon which rural livelihoods depend. By adopting regenerative DRR as a development strategy, countries faced with increasing drought conditions can begin to reverse declines in productivity, and marginal areas can become more productive—contributing to the overall aggregate food supply, enhancing household livelihood security for rural communities, and reducing outmigration from rural to urban areas in search of work.



These planting basins in southern Africa allow farmers to prepare crop fields during the dry season while minimizing topsoil disturbance—one of three core principles of conservation agriculture. | Photo: USAID

One such regenerative DRR initiative is conservation agriculture (CA), which pairs accessible technology, like minimal tillage, with improved agricultural practices, like timely planting. The UN Food and Agriculture Organization (FAO) defines CA as a “way of farming that conserves, improves, and makes more efficient use of natural resources through integrated management of the available resources combined with external inputs.”² CA helps position smallholder farmers to sustain and improve their productivity—even in years of poor rainfall.

Programs that promote CA in vulnerable populations reflect a shift in humanitarian thought and approach. For many years, the traditional disaster response to drought and crop failure was to offer seeds and tools as a remedy for food insecurity. While many populations coping with repeated shocks have come to rely

on emergency aid to provide these and other inputs to jump-start agricultural production, the long-term sustained benefits to food security are questionable. The work of CA is a longer-term commitment to helping households survive during and between climatic shocks. CA builds resilience by reducing underlying fragility within the farming systems and mitigating some of the risks that lead to food insecurity of the most vulnerable.

Using CA as Drought Mitigation in Southern Africa

In regions where climate change models indicate less favorable climatic conditions in the decades to come, the viability of agriculture as a livelihood is being challenged. The conditions in Southern Africa highlight the vulnerability of farmers in these areas:

- 70% of the population earns a living from agricultural production.

² FAO, “Conservation Agriculture,” <http://www.fao.org/ag/ca/11.html>.

- Nearly 90% of farmland is only rain-fed.
- Most climate models predict hotter, drier weather to come.

Clearly, smallholder agriculture will need to adapt to these changes to remain a viable livelihood in the region. In Southern Africa, agricultural DRR programs have successfully used CA to respond to the challenges of unpredictable rainfall and declining soil fertility.

CA's core concepts work well with the constraints and budgets of the most vulnerable of households. The poorest of the poor have often been left behind in larger-scale agricultural development programming because of the many hurdles to successful participation they face, which may include literacy and numeracy, minimum land size, access to credit or capital to invest, limited linkages to markets, and time available to dedicate to being part of a program.

The three core principles of CA can reduce risk for the farmers and increase resilience of the farmers and their production over time:

Limited topsoil disturbance is achieved by using individual planting basins (holes) for each seed rather than using conventional tillage to plow. Rather than waiting for the first “plowing rains” to fall, farmers can prepare crop fields during the dry season by digging planting basins rather than plowing, spreading labor demand over weeks, as opposed to days. Land preparation during the dry season leads to timely planting, and timely planting leads to improved yields (1%–2% per day). For those with limited time or labor capacity, this is a key strategy. When using the planting basin, CA encourages careful application of inputs and precise spacing and seeding rates, which reduce the overall cost of inputs. Organic fertilizers (compost and manure) are added to the basins to improve fertility and water retention, and while chemical fertilizers

can also be used to supplement the organic sources, they are used in much smaller, targeted amounts (microdosing). These components enable farmers with minimal funds for input to participate.

Intercropping legumes further serves to provide organic nitrogen to the soil, while providing an additional food or fodder crop for the farmer.

Use of mulch or cover crops, such as squash and pumpkin, enhances moisture retention and reduces weed growth. Over time, mulching improves soil quality and structure.

The use of a diverse crop suite through intercropping and using cover crops can diffuse risk and increases the options for dietary diversity and the potential for market surplus. The same planting basins are used and re-fertilized each season, and over time, the soil structure improves, gradually increasing soil fertility, and enabling greater water penetration and retention and reducing labor demands over subsequent seasons. For many technical reasons, CA contributes greatly to improvement in yields, soil structure, and moisture retention, as well as the reduction of erosion, even in the face of limited or irregular rainfall. At the same time, CA addresses the constraints of vulnerable farmers—especially in terms of limited labor, capital, technical knowledge, and risk amid climate uncertainty.

The Promise of CA

Evidence to date has shown that smallholder farmers adopting CA significantly increase yields during times of adequate rainfall—in many cases doubling the period of household food security supported by what farmers are able to produce on their own land. Even during times of inadequate rainfall, losses are significantly lower (in some cases, up to four times lower) on fields

using CA than on those using conventional tillage.³ CA practices have the potential to significantly shorten the length of time households are food insecure prior to harvest, a period typically known as the lean season. Reducing the lean season means that household income, derived from other sources and generally spent to supplement own-production, is freed up to be invested in education, health care, and other productive activities, resulting in an overall improvement to household well-being.

Given USAID/OFDA's mandate to reduce the risk of disasters, programs in Southern Africa have largely targeted extremely poor, food-insecure households living in marginal, semi-arid, drought-prone areas of the region—those populations who suffer the most during droughts. For these poorest farming households, the objective is to increase the percentage of food-secure farmers from their own production by reducing losses due to drought. As such, the emphasis has been on manual, non-traction-based CA involving farming plots of less than two hectares.

Targeting all segments of the farming population can increase food production in all sectors. Even non-commercial farming households that use draught-animal power and cultivate larger land holdings can benefit from adoption of “mechanized” CA by replacing plows with rippers and seeders. As with manual CA, land can be prepared before the onset of the rains, ensuring timely planting. The time and effort required of draught animals to “rip” a hectare, as compared to plowing a hectare, is cut by half, and yield increases and loss reduction result in surpluses available for local and regional markets.

As the benefits of soil and water conservation

from CA become more apparent, large-scale commercial agriculture in Canada, Brazil, Australia, and the United States has increasingly adopted these methods, replacing conventional plowing with specially designed low-till seeders, rippers, and related equipment. In Brazil alone, more than 25 million hectares of commercial production were under CA during the 2005–2006 season—up from 5 million hectares a decade prior.⁴

It is crucial that the value of CA is not seen to benefit only poor smallholder farmers, but that the environmental and economic advantages are explored and applied to larger landholders and commercial farming. The ability to increase yields both at the household level and commercially will become increasingly important in the face of climate variability, yet hurdles to widespread adoption remain. One challenge to the adoption of the method in parts of Southern Africa has been its strong association among less vulnerable farmers as a method for the poor. Development initiatives can continue to enhance the delivery of the message that CA is both adaptable and successful and should be more widely adopted by all.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

3 S. Twomlow, J.C. Urolov, M. Jenrish, and B. Oldrieve, “Lessons from the Field—Zimbabwe’s Conservation Agriculture Task Force,” *Journal of SAT Agricultural Research* 6 (2008).

4 Rolf Derpsch and Theodor Friedrich, “Global Overview of Conservation Agriculture Adoption,” paper presented to the IV World Congress on Conservation Agriculture, New Delhi, India (February 2009), 4.

Small Farmers, Big Impacts

While the development community has recently begun the turn toward climate-sensitive programming, climate-related efforts have focused on big transformations and big polluters. Energy generation and deforestation are easily identified sources of greenhouse gas emissions for which we have data and policy tools, and therefore a certain degree of comfort. Certainly, global emissions are greatly influenced by energy generation, distressing rates of deforestation in what remains of the world's tropical forests, and other large sources of greenhouse gas emissions. However, the future of development's work at the intersection of climate change and human well-being lies not in an exclusive focus on big drivers of change, but in a broader engagement that includes a focus on the ways in which the livelihoods decisions of the rural poor might exacerbate or ameliorate the greenhouse gas emissions that shape climate change. The convergence of two fallacies have led to a lack of focus on the individual and community decisions that affect climate-related development

efforts: a fallacy of stationarity, enabled by our limited understanding of lives and livelihoods of the rural poor in the developing world, and a fallacy of scale that results from the particular ways in which we have come to our understandings of these livelihoods and their potential impact on climate.

The Global Poor Keep Adapting

By one global estimate,¹ as many as 800 million rural dwellers consume less than the equivalent of a dollar's worth (in 1993 values) of goods each day. This population gets half or more of its income from agricultural labor and devotes substantially more than half of its consumption to staple foods. Generally speaking, when we use a climate-change lens to think about these people and their livelihoods, the conversation turns to adaptation—and how development institutions will help resource-poor, capacity-challenged populations address the

¹ Michael Lipton, "The Family Farm in a Globalizing World: The Role of Crop Science in Alleviating Poverty," IFPRI, 2020 Discussion Paper 40, 2005.



A Pakistani woman harvests a crop of wheat on the outskirts of Islamabad on April 13, 2009. | AFP Photo: Farooq Naeem

stresses that climate change will place on their livelihoods. We tend to implicitly assume that these populations are generally reactive to external events, focused on short time horizons, and living without sufficient information (even about their local contexts). Thus, their future decisions and adaptations would depend somewhat on external interventions and resources.

A large body of qualitative literature² convincingly challenges these assumptions. Among the rural poor in the Global South—especially those who make a living from rain-fed agriculture—the distinction between a livelihood and an adaptation

² For recent examples of such work, see James Scott, *The Art of Not Being Governed: An Anarchist History of Upland Southeast Asia* (New Haven: Yale University Press, 2010) and William Critchley, *More People, More Trees: Environmental Recovery in Africa* (Practical Action, March 2011).

to climate variability and change is nearly nonexistent. Rural farmers have long adjusted to new environmental and economic conditions in the course of their livelihoods, and they will continue to do so in the context of economic and environmental change going forward. Many have done so without development assistance, and indeed with little resources at all, for generations. Take, for example, the last two centuries of shifting livelihoods in rural parts of Ghana's Central Region.³ Over this timespan, without the benefit of crop science, agricultural infrastructure (such as irrigation), or significant extension, farmers have managed the

³ For a detailed discussion of this case, see Edward R. Carr, *Delivering Development: Globalization's Shoreline and the Road to a Sustainable Future* (New York: Palgrave Macmillan, 2011).

near-complete transformation of their agroecology. Today, in some villages, 80% of the crops are non-African domesticates introduced either through colonialism or later agricultural development efforts. Over the past half century, there is clear evidence of a decline in annual rainfall accompanied by increasing variability in its timing and distribution. Though these agricultural and environmental transformations carried significant risks associated with invasive species, new pests, and engagement with new and often uncertain markets, farmers

Development programs must better understand what people are already doing to adapt to climate variability and change.

in this region avoided economic and ecological collapse while continuing to make a living from the land. It is a remarkable story, and while these outcomes are specific to one part of West Africa, they have echoes in many other places around the world now and likely into the future. Climate variability, climate change, and globalization continue to influence livelihoods, and local populations continue to adjust. As they do, they will change such fundamental drivers of climate change as land cover and biogeochemical cycling—thereby contributing to the drivers of human vulnerability to climate change in future years.

Livelihoods Decisions Are Rarely Made Alone

The cycle of adaptation and change is largely self-evident to any development practitioner

or scholar who has spent time thinking about rural livelihoods and their impacts on the environment. Yet we pay precious little attention to the potential impact of these changes in our programming because we fail to appreciate the aggregate effect that a series of local decisions might have. To understand the potential pathways of adaptation in a given household or community requires intensive fieldwork with a limited number of people. For example, adaptations and livelihoods are variable, even at the intra-household level.⁴ Often men and women farm different crops, or emphasize different crops, on their respective farms. Therefore, their adaptation decisions may differ depending on the needs of those crops, with divergent biophysical impacts. Thus, our data on potential changes and their effects on the natural world tend to be small-scale and locally specific. If a single farmer, or a community of farmers, makes adjustments to their agricultural strategies, the impact on global biogeochemical cycles is extraordinarily small, and therefore we do not spend much time worrying about it. However, individual farmers, and indeed entire farming communities, are not islands. If one community is making particular shifts in agricultural strategy, it is likely that many communities within that agroecological zone are experiencing similar stresses and making similar changes. While one farmer may not have a large impact on the biophysical world, tens or hundreds of thousands of farmers shifting the land cover on potentially millions of hectares certainly will.

For example, one study in the West African savannah in Senegal noted that maize fields

⁴ For example, see Edward R. Carr, “Between Structure and Agency: Livelihoods and Adaptation in Ghana’s Central Region,” *Global Environmental Change*, 18.4 (2008), 689–699.



Indian women trained through a USAID program prepare mango bars using a solar-powered dryer unit. Solar dryers in India enable farmers to efficiently use energy to turn excess produce into food and income off-season. | Photo: Heather Sullivan/USAID

sequestered an annual mean of 7.5 more tons of carbon per 100 m² than millet fields⁵—not much in the global scheme of things. However, under these conditions, were a mere 10% of Senegal’s 121,235 hectares of maize converted to millet due to environmental stress, the mean impact would be the release of more than 900,000 tons of carbon into the atmosphere. A similar 10% shift in neighboring Mali would result in the release of nearly 4 million extra tons of carbon, or the equivalent of a year’s emissions from an average coal-fired electricity plant. Just as some

5 Raphael J. Manlay, Jean-Luc Chotte, Dominique Masse, Jean-Yves Laurent, and Christian Feller, “Carbon, Nitrogen and Phosphorus Allocation in Agro-Ecosystems of a West African Savanna—III: The Plant & Soil Components under Continuous Cultivation,” *Agriculture, Ecosystems and Environment*, 88.3 (2002): 249–269. The study also calculated the impact of different crops in terms of nitrogen and phosphorus cycles.

suggest there is a “Fortune at the Bottom of the Pyramid”⁶ that might be made by selling to the poor, so too is there a lot of carbon to be sequestered—and linked climate and development benefits to be reaped—by working with the poor.

Addressing the Challenge

Given the potential cumulative effect of such livelihoods decisions, climate-sensitive development programs must better understand what people are already doing to adapt to climate variability and change, and also the types of changes that current programs might be fostering. We must determine whether these adaptations have an amplifying effect on emissions or if the various impacts of these

6 C.K. Prahalad, *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits* (Upper Saddle River, NJ: Wharton School, 2004).



A farmer fetches corn from a mud silo at Janjori-Kukuo in Ghana. With USAID support, farmers in Ghana have improved their crop production as climate change puts additional stress on agricultural systems in Africa. | Photo: Louis Stippel/USAID

adaptations cancel each other out or even neutralize emissions from other sources. Without adequate information *within* given livelihoods and agroecological zones, it is impossible to estimate the impact of changes *across* agroecological zones—that is, to understand if the aggregate emissions impacts of change in one zone add to or ameliorate the emissions changes in another.

A two-pronged effort best addresses this challenge, focusing on the collection of new data on livelihoods and their environmental impacts while putting programs and mechanisms in place to make use of this information and to incorporate sensitivity to small-scale climate impacts into development efforts. First, by employing programs such as the Partnerships for Enhanced Engagement in Research or the Collaborative Research Support Program, USAID might catalyze the systematic

documentation of the livelihoods and adaptation decisions of the rural poor to build on and deepen existing efforts by the Famine Early Warning Systems Network. Engaging the academic community is one step, but the initiative should also mine existing data and consider the crowdsourcing potential of new information technologies, which can be employed to extend our knowledge of the various biophysical impacts of livelihoods and adaptation decisions. We can gain new insights into crop selection, agricultural method, and patterns in migration from rural to urban areas (which can open up new fallow land—a form of land-cover change), to name a few.

Once the character and magnitude of such impacts are understood, we can identify alternative livelihoods options and adaptation pathways with more limited climate impacts (or even climate

benefits), and use our enhanced understanding of livelihoods and adaptation decision-making to identify the incentives necessary to motivate the shifts to such pathways.

In the implementation arena, USAID already has many programs and practices in place that, with minor adjustments, could build development programs that are sensitive to aggregated individual and community impacts. For example, for their climate-change adaptation programs, bureaus and missions could demand that vulnerability assessments (required for any adaptation program) take into account what the beneficiaries of development will be doing at various points in the future, instead of assuming a continuous line from the present extending forward in time. This will allow us to determine if the proposed project actually serves as a net driver of the changes to which people are adapting, and to take action to ameliorate such issues. On the mitigation side, the Enhancing Capacity for Low Emission Development Strategies program can use this information to assess the import of rural livelihoods and adaptation to the overall emissions profile of a given partner country, as well as the likely future import of these emissions, to build appropriate rural livelihoods and adaptation programs in those countries.

While the issues of rural livelihoods, adaptation, and climate change present a thorny frontier for development, the potential collateral benefits of addressing these challenges are significant. By driving USAID and its development partners toward deeper engagement with our rural beneficiaries, these challenges present an opportunity to better understand the capabilities of the rural poor, to see them as potential solutions to development challenges instead of problems to be solved. The world has more than seven billion people living on it. Surely there are innovative, cheap, actionable



Coffee plants grow under the protective shade of native trees at a certified farm in Guatemala. USAID supports certification of a number of forest products, leveraging markets to improve prices for growers, conditions for workers, and habitat for birds and other species. | Photo: Charlie Watson/ Rainforest Alliance

ideas out there that we have not yet heard about. We will only find them if we listen.

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A New Agriculture for the New Africa

Africa has become today a continent of opportunities where dreams are not only possible but are coming true. At the heart of Africa's promise is what Africa will do with its agriculture. And what Africa will do with its agriculture is no longer about Africa. For that matter, what Africa will do with its agriculture is no longer about agriculture, at least in the narrow sense. Rather it is about the aspirations of Africa's entrepreneurs, women, and youth, the emergence of Africa's industries, and the expansion of Africa's infrastructure. Why Africa? Why now? Why agriculture?

Why Africa, Why Now?

Reasons internal and external to Africa suggest that it is Africa's time. Let us start with the internal. Two decades of improved governance and better policies and investments in social sectors are paying off in the past five years of solid economic performance and growth. Indeed, according to forecasts by *The Economist* and the International Monetary Fund, 7 of the top 10 fastest-growing

economies in the world between 2010 and 2015 will be in Africa: Ethiopia, Mozambique, Tanzania, Democratic Republic of the Congo, Ghana, Zambia, and Nigeria. Africa is the region with the fastest-growing mobile telephone usage in the world. Africa is home to a population of one billion and growing, whose incomes are on the rise and whose previously untapped potential as consumers is just beginning to surface. The rising majority of this population is made up of the youth of Africa, whose energy, hopes, and ingenuity, if channeled appropriately, will be the backbone of Africa's future. Africa's women are joining the ranks of the educated, with an increasing number of women represented in business, academia, and politics, not to mention the women who have always been the mainstay of Africa's agriculture. Africa is becoming recognized as a place of technological innovation, having introduced the concept of mobile-money transfers to the world, with more to come. Africa is the only remaining continent with vast untapped potential in mineral and metal resources, energy and water resources,



A woman smiles as she checks maize crops on a small farm in Chinhamora, about 50 kilometers north of Harare, Zimbabwe. For more than a decade, most rural Zimbabweans have depended on food aid to survive, but good rains brought an abundant harvest in 2011. | AFP Photo: Alexander Joe

and an abundance of uncultivated land. Indeed, an incredible three-quarters of Africa's arable land is not currently under cultivation.

Externally, the global economy has experienced commodity and financial crises that have changed the order of things, resulting in the push for better alignment of market fundamentals, more transparency, and innovative instruments to manage risk. These crises are changing Africa's role in the global economy. Many believe that the key driver of the commodity crisis is the historical running down of global food stocks and rising excess demand, leading to increased price volatility and heightened speculative activity, in turn creating more upward price shocks. Whether one agrees with this sequence of effects or not, it is clear that the debate is unified on one point—the

need to increase global commodity stocks through increased production and to ensure better delivery systems to reduce loss. And this is where Africa's role as the last remaining frontier of agricultural growth becomes extremely critical. Thus, the recent and dramatic interest in commercial agriculture under what some refer to as “land-grab” schemes is no historical coincidence, but closely linked to the global commodity crisis. Moreover, concerns about climate change are driving “smart” agriculture, with pressure to increase productivity in a sustainable manner. For the “agro-pessimists,” the message is clear: Agriculture in Africa is here to stay.

Why and How Agriculture?

The two forces described above, both internal and external, converge to create the perfect conditions

for a dramatic and rapid agricultural transformation in Africa. What do we mean by agricultural transformation? If we consider more broadly the concept of a *structural transformation*, this describes the process by which an economy transforms itself from a primarily agrarian subsistence-oriented economy, with a majority of its labor force in agriculture, to a modern, service- and industry-based economy, with a majority of its labor force in non-agricultural activity.

One of the key forces driving this process of structural transformation is the dramatic increase in on-farm productivity that sets the transformation path in motion and drives men and women into non-farm sector employment. Increased productivity, or intensification of farm production, raises farm incomes. This generates demand over time for non-agricultural goods, which in turn leads to investments in non-agricultural goods and services, which then absorbs on-farm surplus labor. Higher labor productivity means that labor is freed up. In other words, an *agricultural transformation*, or what

An incredible three-quarters of Africa’s arable land is not currently under cultivation.

can be called a Green Revolution, in many countries has been a pre-requisite to the forces of motion that result in an economy’s structural transformation.

And what does it take for this agricultural transformation to take off? To achieve the virtuous circle described above, all Green Revolutions have been based on a holistic set of interventions. Indeed, despite conventional perception that Asia’s

Green Revolution was singularly driven by the adoption of improved seeds, intensified fertilizer use, and irrigation, the Asian historical experience was also greatly influenced by other key interventions, such as:

- Marketing and trade policies that established minimum support prices and marketing outlets (including export markets)
- The promotion of key absorptive industries (such as agro-processing)
- Policies to enhance rural small and medium enterprises
- Concerted efforts to engage rural energy and water management
- The promotion of producer cooperatives and other forms of collective action in both resource management and input and output distribution
- Major investments in vocational training, rural education, extension, family planning, and health programs

So key lessons from the Green Revolution across history are that while the central driving force for the entire process is the ability to increase and sustain increases in on-farm labor productivity, there are a broader set of interventions that are of critical importance. Nor is agricultural transformation limited to a “Green” Revolution based on crop production. Rather, what we know to be Asia’s Green Revolution for food crops was soon followed by a “White Revolution,” as the Indian subcontinent harnessed tremendous growth in dairy; the “Blue Revolution,” as East Asia saw tremendous growth in aquaculture; and the “Brown Revolution,” as much of Asia witnessed tremendous growth in poultry and swine production. Another lesson is that the “Green Revolution” is really an array of possible transformations, underpinned by higher productivity, rapid overall agricultural growth, and the transition to non-agricultural labor. Essentially, it is the process by



Produce brought to a USAID post-harvest center by Haitian farmers is ready to be cleaned, packaged, and prepared for sale. | Photo: Janice Laurente/USAID

which agriculture works itself out of a job. As John Mellor famously put it, “the faster agriculture grows, the faster its relative share declines.”

Africa’s Own Agricultural Transformation

What are the conditions and terms for Africa’s Green Revolution, and how will it be different from others? While the basic principles may remain unchanged, shifting global and internal circumstances will dictate an African Green Revolution unique to Africa’s moment.

First, the forces of globalization suggest that Africa’s Green Revolution will be an information-savvy, technology-driven, and more “connected” transformation, relying on far greater exchanges of information and people and goods than ever

seen before. Second, the forces of market liberalization suggest that Africa’s Green Revolution will be driven more by private industry and markets, even for Africa’s smallholder farmers who must link to markets and be plugged into value chains. This implies that, not only should we ensure a conducive environment for the private sector, but we must also devise market-based instruments to manage the ensuing market risk. Third, Africa’s Green Revolution will be significantly influenced by its weaker starting point in infrastructure and infrastructure services, particularly in storage, transport, and logistics, which require explicit attention. Fourth, Africa’s Green Revolution will inevitably be influenced by the fact that women play a significant role as primary rather than secondary players in agriculture and that a concerted



A Sudanese man weeds a field of sorghum raised for seed near the South Sudanese capital of Juba.
AFP Photo: Jose Cendon

focus on their engagement in enhanced productive activity will be a pivotal factor in determining the outcome for agriculture in Africa. Fifth, Africa's Green Revolution will depend on its demographics, with an explicit focus required to harness the large number of youth in Africa to reap what we can consider to be a demographic dividend. Sixth, Africa's Green Revolution must be climate-smart, and thus will require an explicit focus on environmental sustainability. Finally, Africa's Green Revolution will go beyond crops, tapping into its vast potential in livestock, dairy, and fisheries.

So, in addition to the basic tenets of intensifying

agricultural production, an African Green Revolution said to be unique to Africa requires an understanding and explicit focus on information technology and global connectedness; industry and market linkages, infrastructure and linked services; women and youth; climate; and what happens beyond crop.

Africa's Green Revolution, or what can be better framed as Africa's New Agriculture, will likely not be "Green" in a cropping sense, but rather green in an eco-friendly sense. More importantly, Africa's New Agriculture will be as much or more about what is outside of agriculture than what is considered within agriculture.

To achieve this New Agriculture, we need to re-think the very nature of what we consider it takes to create an agricultural transformation. Our traditional model of agricultural development is focused on soil and water management, seed, fertilizer, irrigation, extension systems, post-harvest management, and, of late, marketing. However, the New Agriculture concept builds on the above but also requires an explicit focus on industrial and demand linkages, transport and storage infrastructure, logistics, energy, telecommunications and information technology, finance, private investment, climate, health, and the role of women and youth. New Agriculture is more complex, but also more dynamic, more vibrant, and more holistic.

Another important dimension of the New Agriculture is the explicit recognition of the role of commercial large-scale agriculture in Africa. While smallholder agriculture is a major element of African agriculture, there is need to consider the growing role of large-scale, private-investor-owned and possibly foreign-investor-owned agriculture. Although upward of 80% of cultivated land in Africa is currently held by small-scale producers, it is likely that some significant proportion of new land coming under cultivation will be large-scale, capital-intensive production systems. The

emerging duality of Africa's New Agriculture is not one in which the production is *either* small-scale *or* large-scale but rather may well innovate new models in which large-scale commercial systems link to smallholder production through technology, financing, and know-how spillovers. An emerging policy concern is how to devise mechanisms to ensure that positive benefits of large-scale agriculture accrue to small farmers. Creative policies may foster these linkages through promoting innovative outgrower schemes that support modern input provision and extension advisory by large-scale farms to the small-scale farming communities nearby, for example.

Engaging for the New Agriculture

The scope and reach of the New Agriculture for Africa requires a broadening of engagement of types of actors and interventions beyond that required in the traditional model of agricultural development. Thus, New Agriculture requires aiming beyond ministries of agriculture and national agricultural research systems to engaging with the private sector, trade organizations and outlets, end users and processing industries, telecommunications providers, energy sector, infrastructure service providers, the financial sector, and information content providers, as well as educational institutions and civil society.

In turn, the New Agriculture requires a new organizational approach in development interventions. In other words, development institutions engaged in promoting agricultural transformation for a New Agriculture in the New Africa must look and feel different than institutions organized around traditional thinking regarding agricultural development. Thus, an orientation toward a more tech-savvy and business-oriented agricultural transformation must be more corporate- and business-minded itself. And the internal

profile of skill sets, perspectives, and approaches must also adapt to more cross-cutting, business-minded, investment-ready mindsets and development approaches. A more cohesive and integrated approach is required within relevant development institutions. This is, of course, an immediate and perhaps vexing challenge when most of these institutions have spent decades building narrow silos with refined tunnel vision on topics such as plant breeding, soil technology, water conservation, and post-harvest management, among others.

To achieve the cohesive perspective required, there is perhaps merit to the Integrated Rural Development approaches of the 1970s, in which multidisciplinary teams sought to work on common concerns. The key difference in the present, however, is that the unifying principle is the market-driven approach and engagement with the private sector. This approach leads to interesting synergies, such as the case of a value chain linking large-scale global buyers like Walmart, who may set product standards and specify agronomic practices; in-country market institutions that enable delivery of goods; domestic industries that provide value-added processing; public-sector agricultural agencies that support the delivery of seeds and inputs; and even NGOs to support extension service delivery.

A change in strategic orientation is also required. Because the New Agriculture is by its very nature a model of integrating different actors and interventions into a common and coherent framework, the orientation of agricultural development organizations must be seen themselves as catalysts, knowledge brokers, and coordinators of action, rather than sole implementers. In other words, the traditional agricultural development model in which the development-institution-managed programs and projects, such as a seed multiplication project or a post-harvest

management project, must give way to taking on the role of the “broker” of integrated solutions that involve the roles of private seed companies, NGOs (as development partners working with extension agents), technology companies (creating new mobile or other solutions to link actors along the chain), private-public schemes (for innovative financing), and end-user entities (providing know-how and uptake on the post-

It is the will of the leadership and the power of the vision for this New Agriculture that will determine its success. Is Africa ready? Certainly.

harvest output). Thus, in the above example of the value chain, development institutions can play an important role in linking the actors together and supporting the success of the whole chain’s performance rather than focusing on interventions with one or more links within the chain. Key concepts for development interventions to achieve the New Agriculture are partnerships, leveraging, and innovation.

Investing in the New Agriculture

Leveraging. Agricultural development institutions need to be aggressive in their pursuit of sustainable impact that is oriented toward the New Agriculture. Much like their private investor counterparts, public development institutions need to intelligently seek out winning ideas to find those that will produce tangible and sustainable results. These institutions’ roles are no longer to

create often-unsustainable agricultural projects but rather to fill the gaps in providing the needed financial and technical support to partnerships that ensure the best possible sustainable returns on investments in New Agriculture. Such an investor orientation requires a precise knowledge orientation and a clear focus on the bottom line. The notion of maximizing returns in terms of impact outcomes is based on the core idea of leverage through brokered joint initiatives with private and non-private partners.

Such an investment mindset also requires casting the net wide to incubate winning ideas but also the ability to quickly hone in on what works and what does not to make early triage decisions. To effect this transition in approach, core institutional capabilities in leading agricultural development institutions would need to be strengthened in terms of sharp business acumen, a keen performance-monitoring capability, and a relentless focus on results. An investor mentality would aggressively seek partnerships and innovative mechanisms to deliver ever-improving results. This might entail, for example, leveraging the “Manual Distribution Channels” that put bottles of Coca-Cola in the hands of consumers across rural Africa to similarly enable the efficient distribution of small sacks of fertilizer and seeds. It might entail leveraging Africa’s mobile-money revolution to enable production financing or linking to a private weather-satellite service provider to create a mobile application aimed at weather forecasting. Another example of innovative investment would be to create a variant of Linux open-access source code for the development of on-farm breeding trials. In the case of software development, open-access software is made publicly available on the Internet, enabling anyone to copy, modify, and re-distribute the source code without paying royalties or fees, as a form of

community cooperation. This approach has led to many important technology applications, and beyond, in health and science. Applied to plant breeding, it could allow sharing of innovation and a more rapid spread of knowledge.

Innovation. In the somewhat organic approach in which complex actors and interactions form the fabric of the New Agriculture, innovation is key. Innovativeness requires drawing on new energy and new sources of inspiration and leadership, particularly through tapping the roles of youth, women, and entrepreneurs, young and old, male and female. Innovation is not a top-down, hierarchical matter. Rather, innovation emerges from within the logic of the partnerships and the key conduits that enable these partnerships to thrive and sustain themselves. A perfect example of this is the crowdsourcing that has changed the way news reporting is carried out, with power shifted from the external journalistic eye observing and reporting on an event to the collective experience of those reporting as participants within the event. Similarly, perhaps it is Africa's farmers themselves who lead the way in driving innovation in the New Agriculture, rather than those whose external expertise has conceived the problem and the solution from afar. Perhaps it is the synergy that emerges between private service providers and those who use the market mechanisms that is the ultimate driver of change rather than either of the parties themselves.

But an innovation mindset also requires a willingness to take on risk. In the process of constant re-invention and continuously new configurations, an important role for the enabling public-sector development institution is to provide a means to absorb some of the risk associated with innovation. For example, much like the Sand Hill Road venture capitalists spawned the Silicon Valley dot.com entrepreneurs by creating the conditions

for technology innovation labs, public-sector agricultural development institutions can promote such innovations through creatively devised innovation grants and incubator projects.

Leadership

Finally, what of the leadership required for the realization of this ambition of the New Agriculture for the New Africa? Leadership in its many forms, from political to organizational, will drive the required change in mindset and the necessary re-structuring of development institutions and policies in this arena. Coherence is not easy to achieve and requires dogged commitment from the top.

Leadership and vision are required to bring about a New Agriculture mindset that reflects the dynamic, youth-oriented, cutting-edge, technology- and market-savvy agricultural transformation that is sought. It is this leadership that is critical for bringing about the infrastructure, education, policy reform, and implementation needed. Within development organizations, ministries, and private-sector partners, talent acquisition is all important in this effort to enable the New Agriculture to be driven by Africa's brightest and best, those who are ambitious and eager to make a difference, are passionate about the power of transformation, and dream of an aid-dependence-free, prosperous new Africa.

It is the will of the leadership and the power of the vision for this New Agriculture that will determine its success. Is Africa ready? Certainly.

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The Revolution Must Be Green: Feeding the Future through Sustainable Innovations

There are nearly a billion hungry people on our planet, and many more will be arriving soon. The population of Africa alone is expected to double by 2045, bringing perhaps another billion people into an increasingly crowded world.¹ If current trends continue, many of those people will be born into poverty, facing malnutrition from their first days on the planet. Meanwhile, higher incomes in China and India are raising demand for more resource-intensive foods, like meat and dairy. Together, a growing population and changing consumption patterns will continue to push food prices upward, aggravating the plight of the poor and hungry. To close the widening gap between supply and demand for food, several studies suggest that world agricultural production will have to *double* by 2050.²

Donor organizations have been rising to the challenge, investing billions of dollars to help

improve agricultural productivity in developing countries. Their efforts are aimed at the right target. As the Director of the University of Minnesota's Institute on the Environment, Jonathan A. Foley, explained recently in *Scientific American*, farmers' yields (output per unit of land) in much of Africa and other parts of the developing world are far below those of farmers in more advanced regions. Closing this "yield gap" for the world's top 16 crops can increase total food production by up to 60%, he estimates. Reducing waste in the global food system might add another 30%, says Foley.³ Together, those two steps, which donors and developing country governments are already pursuing, would virtually eliminate the global food deficit. That's the good news.

The bad news is that closing the yield gap will not be easy. In many tropical countries, it is becoming harder to grow food. Yields are falling rather than rising in some areas, due to desertification,

1 "Miracle or Malthus?" *The Economist*, December 17, 2011, 81.

2 Jonathan A. Foley, "Can We Feed the World and Sustain the Planet?" *Scientific American*, November 2011, 62.

3 Foley, "Can We Feed the World," 64–65.



Haitian vendors sell fresh produce and meat in a busy open-air market in Petion-ville, a suburb of Port-au-Prince, in December of 2010. In the aftermath of the devastating January 2010 earthquake, donors such as USAID have worked with farmers to help increase their crop yields. | AFP Photo: Thony Belizaire

erratic weather patterns, and other effects of global warming. In other places, soil erosion and pollution are the culprits. Large investments will be needed just to help farmers in those regions maintain their current yields, let alone improve them.

To make matters worse, agriculture itself is the biggest contributor to global warming. Dr. Foley estimates that 35% of greenhouse gas emissions come from farms—more than from all the world’s cars, trucks, and planes combined or all the world’s electrical generation.⁴ In many countries, agriculture is also a leading source of localized environmental disruption—eroding and depleting soils, contaminating and draining water sources—thus reducing even further the planet’s capacity to feed a growing population. So our efforts to increase production in the short term might prove to be counterproductive in the long

⁴ Foley, “Can We Feed the World,” 63.

term, actually making it even more difficult to grow enough food in the future.

How can we escape this paradox? It is clear that agricultural sector growth, no matter how inclusive, will not yield sustainable improvements if we pursue the same unsustainable path that farmers in developed countries have followed. Modern industrial agriculture has achieved high yields, but only at great cost in terms of waste, pollution, and the increasing application of vast amounts of energy, water, and other resources. As Albert Einstein famously said, “We cannot solve problems by using the same kind of thinking we used when we created them.”

In order to close the yield gap and “feed the future” into 2050 and beyond, developing countries must leapfrog industrial agricultural technologies and adopt less wasteful and more sustainable approaches to growing food. The key to doing so, of course, is innovation.

The importance of innovation comes as no surprise to forward-thinking donors like USAID and the Bill & Melinda Gates Foundation, both of which have made it a cornerstone of their approach to agricultural development and food security. Innovations, however, are not always good. There are two ways in which an agricultural innovation might not be as beneficial as it initially seems. First, it might simply not work as well as intended. For example, a new, drought-resistant variety of maize might not deliver the promised yields, or consumers might not like the way it

To close the yield gap and “feed the future,” developing countries must leapfrog industrial agricultural technologies and adopt less wasteful and more sustainable approaches to growing food.

tastes. A competitive market will eventually weed out this type of unsuccessful innovation. If farmers do not achieve higher yields or find that their customers do not like the new maize, they will stop planting it. These experiences are both inevitable and valuable. Markets evolve through experimentation and learn from failure.

The second type of unsuccessful innovation is actually dangerous. Some products and practices seem to be successful because they create value for those who buy or use them while generating profits for those who sell them. However, they only *appear* to be beneficial because their true costs

are borne by neither buyers nor sellers, but pushed off onto others in the form of pollution, erosion, depletion of common resources, or some other form of what economists call *negative externalities*. Markets—even transparent, competitive ones—are not very good at weeding out these “bad innovations,” often conspiring to prolong them even after the damage they do becomes obvious. DDT, for example, was not banned in the United States until 1972—more than 30 years after it was introduced and 10 years after Rachel Carson’s *Silent Spring* made its dangers widely known. Today, farmers along the Mississippi River still apply massive amounts of chemical fertilizers, even though their runoff has created a 6,500-square-mile “dead zone” in the Gulf of Mexico, destroying a rich source of seafood as well as the livelihoods of thousands of fishermen.⁵

To help developing countries leapfrog wasteful and unsustainable technologies, and therefore to succeed in feeding the future, governments and their donor partners must strike a delicate balance. They must promote a wide range of potentially good innovations—knowing that many of them will fail—while preventing bad innovations from coming to market and creating vested interests that would perpetuate harmful technologies.

To promote good innovations, developing country governments must make their agricultural policies more predictable and less distortionary, which in turn will make markets more open and competitive. Open, competitive markets encourage innovation. Governments must also invest in public goods like roads and research. Donors should support governments in taking these steps while continuing to invest in promising new agricultural

⁵ Monica Bruckner, “The Gulf of Mexico Dead Zone,” *Microbial Life: Educational Resources*, serc.carleton.edu/microbelife/topics/deadzone/index.html, accessed March 27, 2012.

innovations driven by the private sector, again, recognizing that some of them will inevitably fail.

To prevent bad innovations from taking root, governments must develop transparent and balanced environmental regulations, along with more effective and accessible judicial systems, so that negative externalities can be internalized—so that victims of pollution can hold polluters accountable for damages, for example. Again, donors can provide money and technical expertise to support those efforts, actively promoting sustainable farming practices in addition to, or instead of, more conventional practices.

Most donors already consider social and economic impact, along with financial returns, when they decide which innovations to support. To ensure sustainability, they must make positive (or at least neutral) environmental impact a *necessary* condition for investing. This will be challenging for some donors because it will mean sometimes favoring long-term sustainability over short-term impact. It might mean, for example, encouraging smallholders to adopt organic farming practices instead of providing them with chemical fertilizers and herbicides.

Some will argue that sustainable farming practices are a luxury that developing countries cannot afford. Consumers in rich countries may be willing to pay a premium for organic food, but organic agriculture can never deliver the huge increases in productivity needed to raise smallholders out of poverty, much less double food production by 2050. That view is mistaken, for two reasons. First, many organic practices—like using chickens in mobile pens, rather than chemical products, to fertilize fields and rid them of pests—are actually cheaper than the commercial alternative, which means smallholders might be more likely to adopt them.

Second, evidence from the field indicates that organic and sustainable farming techniques can

generate impressive increases in yields as well as improved resistance to droughts, floods, and pests. A survey of 40,000 farms in Zimbabwe showed that conservation-oriented tilling practices delivered yields 50% to 200% greater than conventional practices. In Zambia, intercropping msangu trees with maize has been shown to provide the equivalent of 300 kg of fertilizer per year and increase yields by up to 400%.⁶ A United Nations Conference on Trade and Development study of 15 farms in East Africa found that “agricultural yields in organic systems do not fall, and at least remain stable when converting from systems that use relatively low amounts of synthetic inputs... Over time, yields increase as capital assets improve, thus outperforming those in traditional systems and matching those in more conventional, input-intensive systems.” The study also found that 87% of farmers “showed increases in household incomes as a result of becoming organic, which contributed to reducing poverty levels and to increasing regional food security.”⁷

Not only can developing countries afford to leapfrog conventional farming techniques and follow a more sustainable path, they cannot afford *not* to do so if we truly wish to feed the future into 2050 and beyond.

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⁶ Rob Munro, “Conservation Agriculture in Zambia,” USAID PROFIT (Production, Finance and Technology) Project, undated. Figures attributed to the Conservation Farming Unit of Zambia.

⁷ *Organic Agriculture and Food Security in Africa*, UNEP-UNCTAD Capacity-building Task Force on Trade Environment and Development (Geneva: United Nations, 2008), vii – ix.

Reconsidering Resilience for the 21st Century

We live in a world of increasing dynamism and volatility, where technology and greater interconnectedness have accelerated change and altered the way people live. Since the 1970s, the world population has grown by 75%, adding 3 billion people since 1974. In the same period, people around the world have become much more connected in many ways. To name but one example, last year about half of the world's countries reported cell phone penetration of over 100%, that is, more than one mobile phone per person. In the next 40 years, the planet will host more people who will be more connected physically and technologically than ever before, and they'll be distributed around the world in new ways.

The crisis that started in the mortgage financial markets of the United States in 2007–2008 has had dramatic and sustained impacts on

people, states, and markets throughout the world, and even this has now been eclipsed by more recent turmoil in the European Union. Floods in Thailand in 2010 displaced families from their homes in Southeast Asia and disrupted supply chains for electronics manufacturing as far away as Indiana, putting workers out of jobs at sites around the world. In some cases, connectedness and pace of change will be for the better, but many people will be left out or shifted into a new status quo that removes choice and opportunities.

Although these complex and interlinked crises expose vulnerabilities across wide swaths of the globe, building resilience can be seen as an antidote to individual and community-level vulnerability and a self-sustaining approach to promoting human development. The more integrated nature of the global economy, society, and ecosystem increases the likelihood of

This essay is based on prior research and writing done by several colleagues at the Rockefeller Foundation, including Heather Grady, Claudia Juech, Anna Brown, Ashvin Dayal, Bethany Martin-Breen, Stefan Nachuk, Cristina Rumbaitis del Rio, and Fern Uennatornwarangoon.



Although devastated by fire in the late 1990s, Indonesia's Kutai National Park is still an important refuge, supporting up to 2,500 orangutans. USAID's orangutan conservation services program works to reduce threats to this endangered primate, including forest fires resulting from burns to clear agricultural land.

Photo: Donald Bason/Orangutan Conservation Services Program

transmitting and magnifying shocks, and our need to develop more sophisticated approaches to resilience grows in parallel. The growing need for resilience as a counterbalancing force to the vulnerability driven by globalization means that development actors must act with greater urgency and sophistication to build the capacities of communities to adapt to change. In the current economic climate, the likelihood that Organisation for Economic Co-operation and Development members could reduce the amount of overseas development aid offered is just one factor highlighting the importance of designing development programs that move quickly toward autonomy, sustainability, and resilient adaptive capacity. Avoiding the long-vexing dynamics of aid dependency becomes even more critical in an

interconnected world in which economic or financial shocks can so easily be transmitted from the developed world to the developing.

The concept of resilience has a well-established history in many fields, but in almost all contexts, it is closely linked to the concept of vulnerability. In this way of thinking, then, resilient communities, people, and systems have the ability to thrive, improve, or reorganize themselves in a healthy way in response to stress; that is, they are less vulnerable to breakdown in the face of shocks and stress. Poor resilience makes a person or system more vulnerable to serious harm and more likely to break down if the stress or threat is severe enough. With increased resilience, on the other hand, one is less vulnerable to breaking down in the face of adversity. Moreover, resilient systems, communities, or people recover

their normal states more quickly after stress and are capable of enduring greater stress. They demonstrate greater adaptive capacity and can maintain “system function” in the event of disturbances. This capacity applies to the ability to withstand both acute, immediate, and sudden stresses as well as long-term chronic challenges. Most discussions of resilience agree that it is a multifaceted concept and should be understood and measured across multiple societal dimensions, including physical, social,

Avoiding the long-vexing dynamics of aid dependency becomes even more critical in an interconnected world in which economic or financial shocks can so easily be transmitted from the developed world to the developing.

economic, institutional, and ecological fronts. Despite the complexity of resilience as a concept, it has powerful implications for linking previously distinct fields of work such as sustainable development, humanitarian relief, and disaster management, and consequently strengthening work in all of those fields.

Especially promising for those who work in the field of development is the mandate that resilience concepts place on deeper knowledge of the intrinsic workings of local communities in designing interventions. Resilience-strengthening development interventions will require the early input of individuals and communities in the

identification of vulnerabilities and the design of interventions. The complex interaction of different kinds of vulnerability and the tight coupling of social and environmental ecosystems require the critical insights of local actors in the initial diagnosis of vulnerability and the appropriate responses to genuinely build resilience. Sustained resilience is dependent on effective feedback loops that reflect the complex interactions within a community and between the community member and his or her broader environment. Feedback loops need to be equally robust and dynamic between the community and the development or philanthropic organizations engaged in resilience work—whether that is the planning of agricultural improvements in response to a hotter climate, or urban planning that requires re-assessment of wastewater management. Improving dialogue and feedback remains a long-standing need within development programs, even more so when they are in the context of post-disaster situations like the earthquake in Haiti. And in the same way that resilient communities constantly iterate to adapt and improve in the context of changing environments, resilience activities must be founded on strong feedback loops that enable iteration and adjustment.

A Concept Strengthened by Contributions from Many Fields

Resilience has, in the past four decades, been a term increasingly employed throughout a number of sciences—most significantly psychology, engineering, and ecology. It has also made recent contributions to the fields of political science, business administration, sociology, history, disaster planning, urban planning, and international development. The breadth of the use of the term does not, however, imply unified concepts of resilience nor the theories in which it is embedded. Nonetheless there are great overlaps in the fundamental concepts, and the

diversity of approaches provides those working in the field of development with a broad selection of ideas for reconceiving their work.

The field of psychology has examined the concept of resilience of individuals for decades, and some of the most compelling work has come from the field of child psychology. The more traditional approach to studying adversity in child development was through identifying risk factors—identifying those psychological, familial, and environmental factors that put these children at risk for negative outcomes. The “risk factor” approach leaves a policymaker or clinician with two points of intervention: reduce risk where possible and treat or rehabilitate when necessary. It was assumed that most people subject to multiple risks, born into poverty for instance, would have some adverse outcomes. Those few who were able to thrive, those “invulnerable” or “invincible” individuals were seen as just anomalies.

Early studies showed, to the contrary, that high-risk individuals who were able to avoid or overcome adversity shared many characteristics that were sources of strength. One 1992 longitudinal study of children born into poverty in Kauai noted that a full one-third of the children born into high-risk situations developed into “competent, confident, and caring” adults. What distinguished the resilient group from the others was quite ordinary. Some factors seemed intrinsic: Resilient children were engaging, could recruit substitute caregivers, and believed their actions could affect their lives. Other factors reflected the community, including having an extended family, caring neighbors, teachers, or mentors. Notably, for development-oriented resilience work, most of the relevant factors were community-based. Support services that came from outside the community tend to be far less effective.

The field of ecology offers additional compelling insights for resilience as a concept for those working

in development. The 1970s was a turning point in the development of this field and its relevance for understanding resilience as a social phenomenon. In earlier decades, ecology had focused on understanding ecosystems as pristine, stable systems, and on managing ecological systems to that original “perfect” state. C.S. Holling produced significant work on predator-prey relationships in ecosystems and on spruce budworms, introducing the idea that fluctuations in systems are essential to their well-being. In Holling’s work, ecosystems do not evolve toward a single, stable perfect state, but undergo periodic cycles of change, which are fundamental to the operation of healthy ecological systems. These ideas ran counter to the basic management principle of holding systems in equilibrium and became the basis of the concept of adaptive cycles and complex adaptive systems as part of resilience.

Each of these historical and disciplinary perspectives on resilience has contributed to contemporary understandings of a typology of resilience. The disciplinary origins of these typologies do not, however, constrain their utility in various domains: Engineering Resilience is utilized in some child development studies; Systems Resilience is often used in governance and management; and the Complex Adaptive Systems approach has been applied to economics, innovation in technology, history, and urban planning. Thus, different frameworks along the spectrum offer a choice of perspective; the acceptability of trade-offs between them, and not subject matter, will ultimately determine which perspective is chosen.

Highlights from the Typology of Resilience

Systems Resilience takes into account the functioning and interactions of an entire system. The goal of systems resilience is to return a system to its normal functioning status, but not



Schoolchildren run to recess at Ecole Marie Dominique Mazzarello in Port-au-Prince on June 18, 2010. More than 4,000 schools were damaged in the January 12, 2010 earthquake, and USAID responded by constructing more than 300 classrooms for 76 schools. USAID also distributed more than 120 U.S. Army-donated tents, providing an additional 104 classrooms in 49 schools. | Photo: Kendra Helmer/USAID

necessarily to preserve unchanged any individual component of the system. Studies ranging from household management strategies for the urban poor to coping mechanisms for child soldiers all point to the complex interactions of communities and multiple levels of connections that support the resilience of systems and individuals within systems. What they have in common, however, is a focus on the ongoing functioning of an existing system rather than adaptation over time.

This concept of ongoing system-wide change in response to stresses is at the heart of **Complex Adaptive Systems**. Complex Adaptive Systems have multiple, diverse components that interact with each other (as in Systems Resilience). The distinguishing element is that information flows among those elements generate change over time, so that neither individual components nor the system as a whole are static. Shocks generate changes, which become permanent. In an ideal state, these

changes prepare the system for better adaptation to future shocks. In this model, crises have the potential to generate *increased* resilience to future adversity. Understanding complex adaptive systems has led to a common understanding of resilience thinking as “Embracing Change.” Fighting against change can actually cause a *decrease* in resilience, thus the goal of resilience is to adapt to change, not to prevent change. In Complex Adaptive Systems, resilience is best defined as the ability to withstand, recover from, and *reorganize* in response to crises. Function is maintained, but system structure may not be.

In Complex Adaptive Systems, three key properties contribute to resilience:

- *Diversity and Redundancy*. The functioning and adaptive capacity of the system does not depend on any single component, community, or individual, and multiple parts of the system can substitute if one component fails.

- *Modular Networks.* The system comprises multiple smaller systems that are relatively independent of each other, complement each other, to a certain degree replicate each other, and are buffered from each other to minimize the transmission of shocks. Connections between subunits are necessary to enable the system to function as a whole, but structures exist to prevent the propagation of failures.
- *Responsive, Regulatory Feedbacks.* Structures or processes exist to transmit learning throughout the system. These feedback loops must be horizontal and vertical to maximize adaptability. Feedback loops must be understood as broadly as possible, for example, to include social-ecological feedback loops as well as feedback loops within traditional social or governance systems.

Resilience Indices

The capacity of development and philanthropic organizations to promote resilience in strategic ways and to evaluate the impact of this effort will depend on our ability to measure resilience. Important work has already been done on the development of vulnerability indices. In 2003, Cutter et al. developed the Social Vulnerability Index (SoVI), which contains 32 socioeconomic variables primarily sourced from national data sources, such as the U.S. Census. Among those variables are household income, age, race, gender, and unemployment—all of which reduce a community's ability to prepare for, respond to, and recover from shocks. Cutter has also developed the Baseline Resilience Index for Communities (BRIC), which builds on 32 indicators in 5 categories to construct a positive reflection of a community's capacity to adapt to shocks. These two indices not only begin to quantify resilience, but also highlight the inverse relationship between resilience and vulnerability.

Growing consensus around the three elements of Complex Adaptive Systems (redundancy, modularity, feedback loops) gives rise to the possibility of constructing specialized indices of resilience which can then help inform decision-making about resilience and development. Embedded within the Cutter indices and important to evaluate in terms of redundancy, modularity and feedback loops are some of the key components of resiliency mentioned in many studies: labor, education, health, food, shelter, and infrastructure; social capital, governance, and economic capital; innovation capacity; early warning systems; risk-based insurance; and emergency management capacity.

Where and How to Focus Efforts: The Case of Urban Resilience

Resilience is a concept useful in many different contexts; it is, arguably, especially relevant in urban settings, which development actors will need to consider more actively as the developing world's populations become more urbanized. Disasters and acute stressors can have a disproportionate effect on urban areas, tending to expose longstanding structural and substantive problems in the local infrastructure and economy, and in municipal services, social and political systems, environment, and culture. The majority of the world's population already lives in urban centers, and as the trend continues, the urgency of understanding and acting on urban resilience will only accelerate. For example, during the next three decades, 60% of the world's population increase will occur in Asia's urban areas. Eight in 10 of the countries most vulnerable to climate change will be located on that continent. According to a report from the Asian Development Bank, the average temperature in Asia's cities could rise nine degrees by the year



Through a USAID-funded project in St. Petersburg, residents have united in an eco-group—a small sustainable community. In the basement of their building they breed California worms that produce compost, which they use for growing vegetables on the roof. | Photo: Dmitry Feklisov

2100, transforming them “into ovens,” in the words of one Bank economist.¹

Cities provide rural-urban migrants with opportunities, but also intensify the challenges they face on an individual level, and magnify and accelerate shocks transmitted throughout the global system. Centralized city planning has long focused on top-down approaches to “solving” individual urban problems. Urban resilience interventions, on the other hand, should focus at the community level, with a holistic view of enhancing a range of community capacities (including the economy, social networks, and human and institutional skills) for ongoing adaptation and innovation. Urban resilience similarly must be based in the recognition of the interactions between multiple, coupled small-scale systems (for example, multiple small communities and neighborhoods, utilities, transportation, commercial networks, financial structures, multiple

¹ *The Economics of Climate Change in Southeast Asia: A Regional Review* (Mandaluyong City, Philippines: Asian Development Bank, 2009), 3–4. Juzhong Zhuang, the lead report writer, was quoted in *TIME*, “World Quotes of the Day,” on April 28, 2009, <http://www.time.com/time/quotes/0,26174,1894320,00.html>.

formal and informal layers of governance, housing, and nature). This will enable communities to more effectively respond to different kinds and severities of risk, shock, stress, or environmental change.

The Rockefeller Foundation’s deepest work in this area is in an initiative called ACCCRN, or the Asian Cities Climate Change Resilience Network, an initiative investing about \$90 million over several years. The project focuses on 10 second-tier cities with rapidly growing populations in 4 countries—Vietnam, India, Indonesia, and Thailand. It includes not only coastal cities that will experience sea-level rise, but also cities that are experiencing negative effects from climate change such as less-predictable rainfall patterns and increasing temperatures. These cities are making forward-looking investments in infrastructure and land development today that enable innovations in ways of working. In these mid-sized, growing cities we have much more potential influence than in megacities, where institutions are locked into many of the decisions of the past.

The vision of ACCCRN is to catalyze attention, funding, and action on building the climate-change resilience of cities as a whole—and within that, ensuring that the resilience of the most vulnerable and poor communities is also being developed. This is being done through *capacity building*, *developing a network for knowledge and learning*, and *expansion and scaling up*. We have a range of impressive grantees and partners in this work, including U.S.-based organizations, multilateral and bilateral funders, local and regional think tanks and NGOs, and a large network of government officials, academics, and private-sector actors from each of these cities.

Publications released on this work, such as *Catalyzing Resilience*, and information available on the Rockefeller Foundation website summarize the significant lessons on how to build the resilience of households and institutions in cities—lessons that are applicable across the world, not just in

Asia. ACCCRN has shown that to build resilience most effectively, institutions are going to have to work together much more effectively, across disciplines, and in ways that are far more responsive to people, especially poor households that are often directly in harm's way and particularly vulnerable to chronic stresses and shocks. We think it is important to consider the *distributional dimensions of resilience*—focusing on resilient systems that produce more equitable outcomes.

ACCCRN is striving to build urban climate-change resilience by focusing on the intersection of different kinds of analysis. One focuses on “*city systems and trends*.” How is the city growing in terms of population and development patterns? This is especially critical for Asia right now, a region that is rapidly urbanizing and has high numbers of people living in cities. Another area of analysis is “*city systems and populations*.” How do changes in the amount of rainfall, frequency, and intensity of storms, and sea level rise, for example, affect the city and its populations? And what are the potential ripple effects? A third is about *vulnerability*. Who are the vulnerable populations in the city, and where do they live? How will climate change likely increase their exposure and vulnerability to risk? At the core of these interlocking analyses is where urban climate-change resilience-building takes place—and this is at the heart of ACCCRN.

This obviously very complex work includes both hard infrastructure investments and softer measures focused on policy, planning, and behavior change. What we've learned is that there is not one silver bullet, but, rather, a need to invest in lots of 5% solutions, which isn't surprising given the need to operate at the systems level. ACCCRN has shown us that these 5% solutions tend to span nine key dimensions that, when incorporated, increase the resilience of households, communities, institutions, and infrastructure within those cities:

- *Strengthening large-scale ecosystems service.* This is how natural environmental systems interact with the built environment to provide protection, renewal, and resilience “services.” As urban areas develop and expand, land is transformed and converted from undeveloped into built-up land. Farmland, forests, and fields turn into buildings and roads. This conversion also results in coastal marshes, ponds, and other wetlands being filled to enable new construction. This transformation affects the way that water flows in the city and the amount of heat that the city absorbs. Ecosystem services means that natural systems like fields,

The growing threat of climate-change impacts is shaking up cities enough that individuals and institutions are willing to innovate in ways they haven't before, simply to survive.

ponds, and mangroves remain to provide valuable services like storm protection and stormwater retention and drainage.

- *Climate-sensitive land use and urban planning.* A lot of the development choices made by cities today are increasing the vulnerability of urban communities to future risks. Planning and policy presents a strong opportunity to invest proactively in resilience.
- *Drainage, flood, and solid-waste management.* The ability of a city to manage water and flooding depends on appropriately designed and located infrastructure systems that incorporate climate projections, as well as the accompanying



Vietnamese technicians participate in pathology training provided by USAID in partnership with The Smithsonian Institution through the USAID Emerging Pandemic Threats (EPT) program. EPT improves laboratory diagnostic capabilities to detect emerging infectious diseases in wildlife and other animals.

Photo: USAID

maintenance protocols to ensure that these systems remain functional—even in extreme events. For example, Bangkok's mistake in building roads over canals, which exacerbated the impact of last year's floods, can only be corrected through a more holistic approach to the city's climate-change resilience and transportation needs.

- *Community-responsive health planning.* Disease surveillance, expansion of health-provider capacities, and design of insurance services will rely on climate change resilience perspectives and community input.
- *Emergency early warning systems.* These require both effective climate change assessments and integrated community participation.
- *Diversification of climate-affected livelihoods.* This requires financial and technical support for diversified income sources (particularly targeting urban poor and vulnerable populations), including business loans, guarantees, and credit schemes.
- *Education and capacity-building of citizens.* This includes development and implementation of urban climate-change resilience-focused education curriculum at primary, secondary, tertiary, and professional-training levels; climate-change resilience training for journalists; and design and implementation of citizen urban-service monitoring projects (such as water quality and availability, and drainage failure).
- *Resilient housing and transport systems.* Urban climate-resilient building codes and standards must be developed, sensitized, and implemented in close collaboration with formal and informal urban communities.
- *Water demand and conservation systems.* This includes building redundancy and increasing availability of water supply at household and community levels, and protecting water quality and water sources (including protection against salinization, contamination from flooding

events, and leaching). These measures require investments in groundwater protection and recharge, tied closely to community needs.

One could observe that these are what city experts, or development planners, know already—just good practices. However, these are not common principles that multiple departments put into practice in an integrated way. The growing threat of climate-change impacts is shaking up cities enough that individuals and institutions are willing to innovate in ways they haven't before, simply to survive.

Building resilience, as in the ACCCRN case described above, requires addressing components of a system that operate across different speeds (slow and fast) and across different time scales (past, present, and future). Development and philanthropic organizations can achieve this by incorporating the following elements into their strategy and programming:

- Invest in trust- and cooperation-building activities to strengthen the self-organizing capacity of communities in reaction to crises that disrupt normal response mechanisms.
- Bring together stakeholders from a diversity of backgrounds to address problems, even where they have different aims, to create a multitude of simultaneous approaches. (Because some will fail when conditions change unexpectedly.)
- Establish strong feedback mechanisms. Make sure information feeds in from all levels of the system: Local knowledge and feedback are essential to understanding changing circumstances as well as when new approaches might be necessary. These feedback mechanisms must function both within the communities and also between those communities and the organizational and governmental actors with which they interact.
- Foster innovation and learning. Experimentation, learning by doing, and a preparedness to continuously adjust approaches are required to

build the dynamic response capacity needed for the type of unpredictable, disorganizing change that we are going to see more of in the future.

- Take a long view. Build capacity to detect and anticipate threats to spot the problems of tomorrow before they become unmanageable.
- Increase the robustness of systems by increasing redundancy at all levels to foster the diversity of the functions of parts and the diversity of mechanisms to provide identical functions.
- Facilitate decentralization and devolvement of responsibilities as much as possible to the lowest possible scale within the system to allow for simultaneous top-down and bottom-up decision-making and distributed services delivery.

In addition to the technical, economic, social, and political complexities inherent in resilience efforts, there are ethical challenges raised by traditional resilience thinking. A forest burns and strengthens an ecosystem, a business fails and a new more competitive one emerges in its place, or an innovation or social policy isn't successful but generates insights for future programs. These short-term shocks promote resilience over a larger scale and time frame. Their failure or destruction seems a reasonable cost to bear in promoting sustainable forests, market economies, and experimentation. But when we consider people, alone or within families and communities, more immediate ethical obligations may overrule the longer-term, or higher-level, benefits. Faced with famine, an epidemic of acutely fatal infectious disease, or a natural disaster, the humanitarian response is geared toward preventing death or permanent disability. Yet to prevent this, one might need to overexploit resources to provide food and shelter, or to use antibiotics in a way that might increase the chance of resistant infections in the future. Until resilience has been built up enough, such difficult choices between present urgency

and long-term sustainability still need to be made. Over time, resilience may mitigate the risks inherent in these choices.

The most resilient governance structures will be those that balance the livelihood and well-being needs of individuals and communities, especially minority or marginalized communities, against needs of larger-scale entities, for example the needs of a community in the context of an ecological system in which the community resides. Resilience efforts must take into account the coupled nature of social and natural systems. Efforts must build on the inherent strengths of a system rather than approach resilience as addressing or compensating for deficiencies. A community approach to resilience requires a thorough, well-grounded assessment of the current functioning of a community, measuring both its strengths and its vulnerabilities.

Developing more sophisticated instruments for measuring resilience will be critical to the efforts of development and philanthropic organizations in prioritizing the needs of those on whose behalf we are working. Vulnerability and resilience indices will allow us to make more informed choices about where to target interventions, focusing on vulnerable groups and communities and gearing support to building their adaptive capacity. The World Development Report's 2012 focus on gender, for example, begins to build an evidence base for understanding the complex implications of gender for vulnerability, the different ways in which women, men, boys, and girls experience and respond to shocks, and to design interventions that build resilience. The growing body of data generated by mobile communications devices, even in some of the world's poorest urban informal settlements, for example, will provide more opportunities to promote resilience based on analysis of data reflecting the inherent strengths and vulnerabilities of those communities. The efforts of the

United Nations Global Pulse program to create global-level data aggregation systems, supporting real-time interventions, cannot only help build large-scale, short-term emergency-response capacities but can also provide an evidence base for identifying, understanding, and prioritizing the vulnerabilities of the most marginalized communities and groups.

Finally, in the same way that we will work to strengthen the resilience of vulnerable groups and communities, development and philanthropic organizations must also cultivate our own adaptive capacities. Although the large institutions of the development and philanthropic worlds do not experience the same types of vulnerabilities as the communities in which they work, we risk failure, irrelevance, or creating harm if we do not cultivate processes to evaluate, learn, and adapt, creating institutional resilience to changing global and local environments. Although difficult for large, complex organizations, we must constantly take in new information and alter our approaches correspondingly, adjusting and transforming strategy and programs in response to changing conditions. The ability of development and philanthropic organizations to work closely with vulnerable communities and groups and implement the lessons of resilience thinking, so richly informed from fields as diverse as engineering, psychology, and ecology, will determine our success in addressing the critical challenges of the 21st century.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

TECHNOLOGY AND SERVICE DELIVERY



Reimagining the Roles and Responsibilities of Education in the Work of Human Development

What is the role of education in human development? This is a critical question, particularly today. I ask it from the perspective of a life lived within the contemporary American research university; in particular, one that attempts to educate within a Catholic and Jesuit tradition and seeks to integrate the demands of justice into the mission of learning and scholarship. In 1973, Father Pedro Arrupe of the Society of Jesus awakened a need to confront the links between education and the common good when he challenged anyone associated with Jesuit institutions of higher learning to *be on the side of justice*.

I answer his challenge by discussing three different perspectives on education:

- It is a basic human right.
- It must be understood and reimagined within the context of globalization.
- It must play a central role in the work of human development, or the continuous achievement of self-transformation and thriving required for an individual to live authentically and effectively in our world today.

Education Is a Basic Human Right

Most efforts in human development focus on education, if Article 26 of the United Nations' Universal Declaration of Human Rights is any proof:

Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.¹

This Article captures a profound truth about the importance of education. Two UN efforts to make real the promise of Article 26—the achievement of the six goals of its 1990 Education for All movement and of the Millennium Development Goals—are inextricably linked to education.

¹ UN General Assembly, *Universal Declaration of Human Rights*, December 10, 1948, Article 26, available at: <http://www.un.org/en/documents/udhr/>, accessed February 13, 2012.



An Afghan pupil reads a poem to classmates at a girls' school in Kabul. During 1996–2001, the Taliban banned female education and work. Since their overthrow, millions of girls have returned to school, and many women now work outside the home. | AFP Photo: Patrick Baz

Education is the foundation for attaining basic human needs. That an education prepares us to make our way in the world is widely acknowledged as conventional wisdom in the field of development. In promoting the Millennium Development Goals, the United Nations Education, Science, and Cultural Organization cites these statistics:²

- One extra year of schooling increases an individual's earnings by up to 10%.
- 171 million people could be lifted out of poverty if all students in low-income countries left school with basic reading skills.

² *Education Counts: Towards the Millennium Development Goals* (Paris: UNESCO, 2010).

- A child born to a mother who can read is 50% more likely to survive past age five.

Educational attainment often correlates to a higher gross domestic product (GDP) for a country because it creates new economic opportunities, builds skills in individuals that can lead to better-paying and more dignified jobs, and promotes fuller participation in the democratic process. Additionally, an overwhelming body of research shows that investing in the education of girls and women is critical to creating economic growth in developing countries.³

³ See, for example, David Francis, "As Women Progress in Developing Nations, So Do Those Countries' Economies," *The Christian Science Monitor*, August 4, 2008, www.csmonitor.com/Business/2008/0804/p14s02-wmgn.html, accessed March 29, 2012.

Within this approach, education can best be understood as a basic *good* that enables one to be prepared to enter the economy. Education provides the skills necessary for participation in the economy. “Good” in this sense is instrumental—something that can be traded. But in another respect, understanding the kinds of skills needed to participate in the economy has become increasingly complicated. Viewing education as a tradable good is no longer sufficient; in fact, it imposes detrimental limitations both on the creators and administrators of educational content, and on the young women and men they educate.

Education Must Be Understood and Reimagined within the Context of Globalization

Globalization is the driving force in shaping our world today. This statement no doubt raises eyebrows, in part because it is never clear what we mean by the word. The word globalization is a “Rorschach test”—a term that is loaded with agendas and assumptions for any involved in using it to capture phenomena in need of explanation. For some, globalization captures the inevitable implications of a commitment to a neoliberal economic program that emerged in the mid-20th century with a group of economists associated with the Mont Pelerin Society. For others, it is an evil at the root of the inequalities that characterize our world today. Few are neutral when discussing the term. What is missing is a consensus as to what the word captures. We need to develop a vocabulary for working with the term.

Globalization captures the integration of economic, political, and social life that has become possible through new technologies: information, transportation, energy, and an array of others. Peoples, nations, and individuals have never been more closely connected than they are today.

Globalization has enabled us to all be connected to one another in ways that are unprecedented in history. This is by no means the first globalization. The Persian Empire of the fifth to third centuries B.C. and the “Republic of Letters” of the 15th and 16th centuries, capture two earlier examples of global connectedness. But the resources that are available to us through our globalization offer us opportunities to make distinctive contributions to the welfare of humankind. The defining question for us is whether we can harness these resources in ways that can enable us to have this impact.

We have never been more aware of the conditions under which the people of our world live. We have a deeper understanding of the systems that sustain these conditions. We understand the implications of our systems—the “externalities” that arise as a direct result of the systems and structures with breadth and depth. It is hard to hide from these realities. There is a transparency that emerges, and it is a responsibility of our institutions of education to engage this new understanding.

As part of this second approach, education must enable us to develop more than skills to participate in the economy. Education must help us to understand how the world works. Such an education will allow us to ask ourselves, in the spirit of the Universal Declaration, whether our political, economic, and social systems provide the conditions to respect “*the inherent dignity and... the equal and inalienable rights of all members of the human family...*”⁴

Do some of our practices and systems undermine this inherent dignity and deny these

⁴ UN General Assembly, *Universal Declaration of Human Rights*, December 10, 1948, Preamble, available at <http://www.un.org/en/documents/udhr/>, accessed February 13, 2012.

inalienable rights? Do labor practices give lie to the protection against slavery and servitude as described in Article 4? Do our supply chains undermine any effort to ensure the sustainability of our environment for future generations? Are growing income inequalities between the top and bottom tiers of our societies understood as “inevitable or natural?”⁵ Or in the words of Katherine Boo, in her haunting account of life in a Mumbai undercity: “What is the infrastructure of opportunity in this society? Whose capabilities are given wing by the market and a government’s economic and social policy? Whose capabilities are squandered? By what means might that ribby child grow up to be less poor?”⁶

Answering these questions is the work of education. It is the work associated with our institutions of higher learning. John Henry Newman provides a framework for understanding this role of education. Newman delivered a set of lectures in the mid-19th century while acting as the founding rector of the newly established Catholic University of Ireland, which would later become University College Dublin. These lectures came to be called *The Idea of the University*, and they have provided an articulation of the purpose of an undergraduate education that still informs our understanding today.

For Newman, the “main purpose” of the university is “a real cultivation of mind,” a “habit of mind” capable of grasping “a comprehensive view of the truth in all its branches....” An Intellect... “properly trained and formed to have a connected view or grasp of things....”⁷

5 Andrew Hacker, “We’re More Unequal Than You Think,” *New York Review of Books*, February 23, 2012.

6 Katherine Boo, *Behind the Beautiful Forevers: Life, Death, and Hope in a Mumbai Undercity* (New York: Random House, 2012), 247–248.

7 John Henry Newman, *The Idea of the University* (Notre Dame, IN: University of Notre Dame Press, 1982), Preface and 77.

Newman captures a deep aspect of the purpose of learning. It is this comprehensive view of knowledge that enables us to contribute productively and meaningfully to the complex challenges facing our world. It is a type of learning that enables us to achieve a sense of human flourishing. Newman writes, “The perfection of the Intellect, which is the result of Education...to be imparted to individuals in all their respective measures, is the clear, calm, accurate vision and comprehension of all things....”⁸ For Newman, education is understood as its “own end” pursued for the purpose of cultivating the minds of our young. Newman rejects the notion of an education pursued for purposes of “utility.”

Education is the means through which we question and critique our existing systems and structures and the underlying assumptions that guide them.

Education Is Necessary for Self-transformation

There is still another approach to education that we must consider. As Amartya Sen has taught us, the goal of “development” is “freedom.”⁹ We need access to goods—food, shelter, clothing—in order to survive. Without these goods, we cannot meet our basic needs, and without meeting these needs, there is no capacity to develop further and define our distinctive identities. If we can assume we are meeting our basic needs, the potential of education is to equip us with the resources that allow us to be our most authentic selves. The “freedom” we are seeking is an interior freedom—an awareness of the blocks that prevent us from realizing our authenticity.

8 John Henry Newman, *The Idea of the University*, 105.

9 Amartya Sen, *Development as Freedom* (New York: Oxford University Press, 1999), 3, 36–37, 75–76.



Afghan children and women attend a Koran reading class at an Islamic school in Kabul in September 2011. Women's rights have improved since the end of Taliban rule, particularly access to education.

AFP Photo: Adek Berry

Ultimately, an education involves the transformation of one's self and the capacity to engage in that transformational process throughout the course of one's life. The Greeks had a word for this, *metanoia*, which captures the idea of moving beyond one's current way of thinking. At its deepest level, education involves the profoundly interior work of appropriation that results from a lifelong commitment to achieving the most authentic realization of one's self.

When exposure to this deeper conceptualization of education is demanded, when it involves encounters with a broader horizon within which to explore and create individual worlds, it is possible that our thinking about education can shift. We can begin to imagine how the fostering of individual authenticity through education can become the engine of the greatest contribution to

our thinking about human development to date: the capabilities approach outlined by Amartya Sen and further developed by Martha Nussbaum.

The capabilities approach seeks to address the underlying economic, social, and political conditions that enable each of us to fulfill our promise and potential. This is "an approach to development in which the objective is to expand what people are able to do and be..."¹⁰ It emphasizes individual freedom as the defining aspect of these conditions.

The animating concepts were established in the very first Human Development Report. Human development was defined as "both the process of widening people's choices and the level

10 Séverine Deneulin and Lila Shahani, eds., *An Introduction to the Human Development and Capability Approach: Freedom and Agency* (London: Earthscan, 2009), 23.

of their achieved well-being.”¹¹ At the core, “... The purpose of development is to enhance people’s capabilities....”¹² What does Sen mean by “capabilities?” A capability is the “freedom to promote or achieve what [one] values[s] doing and being.”¹³ It is the freedom to engage in the practices and activities that one values doing and for which there is a value in doing. It is through these activities that one achieves “well-being” or “human flourishing.” The question that Sen asks and that is at the heart of the Human Development approach is: Do you have the capability to engage in the activities, the practices, what Sen calls the “functionings,” that matter most to you? Do the social, political, and economic structures provide you with the framework to achieve this capability?

For so much of the modern era we have considered our responsibilities to each other within the poles of utilitarianism and duty-based theories—between the poles of Mill and Kant. For so much of the modern era, in our understanding of political economy, this has translated into an exclusive focus on GDP. The Human Development and Capability Approach asks us to consider a different way. Again, in the words of the first Human Development Report: “The basic objective of development is to create an enabling environment for people to enjoy long, healthy, and creative lives. This may appear to be a simple truth. But it is often forgotten in the immediate concern with the accumulation of commodities and financial wealth.”¹⁴ This broader focus is lost with an exclusive focus on GDP, since indicators such as health and education—which the human

development approach includes—are not part of standalone measures of GDP.

This idea of human development deeply resonates with the ethos of the university.

It is within the context of the university that I believe we can find the resources for addressing the questions of moral responsibility. For it is the very ethos of a university that we can bring to bear on the challenges posed by globalization. I wish to recast the framing of globalization within the ethos of the university. By “ethos” I mean “the characteristic spirit” that animates the identity and purpose of the university.¹⁵ Our understanding of globalization is too limited, too constrained. I don’t believe our definitions of globalization should be simply economic and market-driven considerations. Instead, globalization should be understood as a force through which we can further advance the betterment of humankind.

This new understanding, and the dialogues that result, can be explored within the university. Animated by their ethos, universities can be leaders in reframing the meaning of “globalization” and in the work of deepening our awareness of, and responsibilities to, each other.

It would be invaluable if we could support efforts to expand an understanding of globalization that accepts this understanding of human development. But beyond that, could we imagine, in the exercise of our institutional agency, the university playing a deeper role in this work of human development? We can, and we must.

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11 United Nations Development Programme, *Human Development Report* (New York: Oxford University Press, 1990), 10.

12 Séverine Deneulin and Lila Shahani, eds., *An Introduction*, 26–27.

13 *Ibid.*, 31.

14 United Nations Development Programme, *Human Development Report 1990* (New York: Oxford University Press, 1990), 9.

15 *Oxford English Dictionary*, 2nd ed., Vol. 5, “ethos.”

The “Ultimate Day”

Fifty years ago, in a letter that led to USAID’s founding, President John F. Kennedy wrote:¹ *We...intend during this coming decade of development to achieve a decisive turn-around in the fate of the less-developed world, looking toward the ultimate day when all nations can be self-reliant and when foreign aid will no longer be needed.*

That “ultimate day” has never before been in our sight—until now. The near ubiquity of mobile phones and the beginnings of a mobile-based network infrastructure brings this day ever closer into view.

Roads, railways, and the Internet transformed markets and unleashed waves of innovation. They radically altered how we interact with one another, the private sector, and our government, opening the door to unimagined possibility. They not only lowered the barrier to entry for the private sector and a cavalry of eager entrepreneurs, but they created a platform for new ideas, new business models,

and new modes of communication and collaboration. The development of a mobile-phone-based, networked infrastructure—with mobile money (mMoney) at its center—holds this same promise.

This position should certainly be met with skepticism. This is not the first time we’ve heard that technology will ameliorate poverty on a scale never before seen. In 1964, Wilbur Schramm, the co-founder of Stanford University’s Department of Communication wrote, “What if the full power and vividness of television teaching were to be used to help the schools develop a country’s new educational pattern? What if the full persuasive and instructional power of television were to be used in support of community development and the modernization of farming?” Fifty years later, we know that television has fallen short of transforming education and farming practices. So why should the mobile phone revolutionize everything we do—in finance, education, health, agriculture, governance—in a way that the television never could?

It took the radio 50 years to reach an audience of 50 million people. It took the television 13 years,

¹ John F. Kennedy, “Special Message to the Congress on Foreign Aid,” March 22, 1961, available at http://www.jfklink.com/speeches/jfk/publicpapers/1961/jfk90_61.html.



A Kenyan man in Nairobi sends money through a pioneering mobile phone service called M-PESA, which has sky-rocketed in popularity for its low costs, convenience, and ability to link rural, underserved users with financial services, many for the first time. | AFP Photo: Tony Karumba

and the Internet 7 years to meet this mark. The mobile phone...took only three. Today, there are nearly 6 billion mobile phone subscriptions worldwide. In Africa there were 49 million mobile phones in 2002. Fast-forward 9 years to today: There are 500 million. By 2016, there will be an estimated 1 billion mobile phones in Africa.² The mobile phone boom is, quite simply, without parallel in its scale. Mobile phones can fundamentally change our approach to service delivery and transform USAID's role in the world. It shifts the question from "How can we effectively deliver services?" to "How can we enable others to run us out of the service delivery business?" And it all begins with mMoney.

² "Did You Know: Mobile Stats for Africa 2011," video production of the Praekelt Foundation, posted September 15, 2011, <http://www.mobileactive.org/blog/infovideo>.

Mobile Money at Scale

mMoney accelerates financial inclusion for the 1.8 billion people with access to a phone but not a bank. It allows people to safely store and seamlessly send money to friends and family in need. Five years ago, only 6 million Kenyans had access to basic financial services. Today, nearly 15 million Kenyans, or about 70% of the country's adult population, use Safaricom's mMoney product, M-PESA, to manage their money.³ When sticking money in a mudjar or under a mattress is the norm, the ability to make secure payments and store money safely means financial inclusion. Payments also become the rails upon which other financial services—savings, remittances, credit, and insurance—ride.

³ Safaricom, press release, "M-PESA Upgrade, Outage on Saturday Night," February 9, 2012, <http://www.safaricom.co.ke/index.php?id=1570>.

The story of M-PESA is often told as a story of financial inclusion. But it is also a story of scale. From 2007 to March 2011, the value of M-PESA transactions topped 828 billion Kenyan shillings, or half of Kenya's GDP. M-PESA has 33,000 stores across Kenya, which outnumbers bank branches by a factor of 20. This begs the question: What is possible when mMoney reaches scale and becomes networked infrastructure?

By significantly lowering transaction costs, mMoney unlocks the private sector to create sustainable fee-for-service models. Already, in Kenya, 700 innovative businesses exist because they integrated with M-PESA to lower transaction costs enough to profitably extend critical services to people in remote areas. In agriculture, the insurance industry offers farmers index-based products using M-PESA to collect small premiums and issue payouts. In health, M-PESA's bill-pay function helps expectant mothers save for maternity health care. In water, rural communities access safe water and pay for it using M-PESA.⁴ This is happening all across Kenya without formal development assistance.

mMoney at scale enables a responsive and accountable government. mMoney is already being used to collect fees and pay social transfers, which can be quickly disbursed and tracked, engendering accountability and responsiveness across government. But mobile phones can do still more than this; they can fundamentally alter the relationship between people and their governments. They can empower people to track and report human rights abuses, organize and amplify the voice of their community, report on the efficacy of government programs, and access and

share critical information, like where and when to vote. In Uganda, the Electoral Commission used SMS to remind voters to vote. In Kenya, BungeSMS empowers citizens to send a text message to their Member of Parliament about their policy preferences. Put simply, the mobile phone begins to replace the elusive "social compact," which depends on an expansive physical infrastructure, with a "mobile compact" that depends on something sitting in your pocket right now.

mMoney enables direct philanthropy. Imagine a world where money can move from your mobile phone to a recipient in Tanzania—in an instant. Imagine if you—not your government or some large foundation unaccountable to you—could pick a project, small business, NGO, or entrepreneur you liked, and donate directly using your mobile phone. Imagine a world where people in developing countries determine for themselves what the donor community funds. It will not be long until something akin to mobile PayPal exists, facilitating payments, credit, loans, and donations across borders without an intermediary organization. It will, of course, require someone on the other end to monitor the progress of the project you funded and evaluate the impact. But even that can be done using a mobile phone—using regular text messages to stay updated. This upends the current landscape—it democratizes the donor community. Instead of a few huge donor agencies determining development priorities and then contracting the work to a few huge private firms, people in developing countries determine their own priorities, and through the simple power of the mobile phone, people around the world support them.

Galvanizing the Mobile Money Ecosystem

Kenya allows us to glimpse this future. It paints a picture of what's possible when mMoney reaches

⁴ Jake Kendall, Bill Maurer, Phillip Machoka, and Clara Veniard, "An Emerging Platform: From Money Transfer System to Mobile Money Ecosystem" (UC Irvine School of Law Research Paper No. 2011-14, May 3, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1830704.

scale. But Kenya is a unique case. Without a successful precedent to follow, Safaricom CEO Michael Joseph boldly bet on mMoney, investing \$30 million up front. Kenya's Central Bank Governor, Professor Njurguna Ndung'u, gave Safaricom room to run, allowing mMoney to proceed even when the requisite regulations did not exist. And with nearly 80% market share, an aberration in the developing world, Safaricom could sprint. It was a perfect storm. And you cannot easily replicate a perfect storm.

That Kenya is the only example of mass scale amid 120 mMoney deployments worldwide shows that the private sector cannot do this alone. Michael Joseph recently said, "For there to be another M-PESA type success with the scale both in terms of volumes of transactions and values, you would need the public sector, particularly the donor community, to get behind it to generate the volume of transactions and the acceptance of the system from the recipients." Here's why:

Think back to the history of the credit card. It took half a century for the credit card to gain traction in the United States. Customers did not want to sign up for credit cards that merchants were not yet accepting, and merchants did not want to invest in a credit card system that had few customers. In 1958, Bank of America launched BankAmericard, the first credit card issued by a third-party bank and accepted by many merchants. To ensure that these merchants would receive the business to make it worth their while, Bank of America mass-produced credit cards and mailed them unsolicited to bank customers. This same chicken-and-egg problem confronts mMoney today: Customers won't sign up for the service unless there is a merchant conveniently nearby, and merchants won't sign up unless there are customers to serve.

USAID has an incredible opportunity to overcome this challenge and scale mMoney platforms

across the developing world. First, we must be intellectually engaged in how to best strengthen this sector. Second, we must be a courageous user and advocate of these systems. If we lever our political presence and financial footprint to get governments, corporations, and implementing partners—that represent big payment streams—to issue social transfers, collect fees, or pay their employees and beneficiaries through mobile phones, we can generate a customer base for mobile-network operators and allay the concern of merchants. Third, we must share our infrastructure to enable growth. This means ensuring that post offices and donor-supported agriculture depots can serve as cash-in and cash-out points. Fourth, we must support public goods such as financial switches and consumer education. Fifth, we must expand access to mobile phones to ensure that this future is for everyone, including women, as there are still 300 million fewer women than men in the developing world who own a mobile phone.

USAID's role will diminish as mMoney opens new markets, empowers responsive and accountable governance, and enables direct philanthropy. This vision is no doubt going to take time. There will be false starts. But we wholeheartedly believe that the mobile phone brings into view that "ultimate day," when the fortune of each individual rests in his or her hands and USAID's role is altogether transformed.

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Global Tech + Local Trust: A Formula for Sustainable Development

Mrs. Khan awakens at 4:00 a.m. on a cold morning in her modest house in a remote province of Pakistan. This is the day she makes her monthly trek to a distant market to spend her husband's remittance check. It's a difficult journey with a long list of possible obstacles. Will the bus arrive on time? Will it break down on the road to the market? Will there be papers to fill out that she cannot read? If any of a dozen things go wrong, she will be struggling to survive until the next month, and the next journey.

On her way to the bus stop, Mrs. Khan passes a concrete shell of a building. Originally intended to be a local market and exchange, a place where people like her could reliably receive remittance checks, its construction was halted years ago. Its demise was the result of a tangled web of shrinking budgets of foreign aid agencies, the corruption and inertia of the national government, and the local innate distrust of projects created and managed by foreigners.

In ways numerous but not always obvious, Mrs. Khan's stressful journey and that unfinished building are two symptoms of the same problem.

Mrs. Khan is just one of the millions of people in developing countries who depend for their very survival on remittances. The process of sending, receiving, and using these funds is fraught with difficulties. And while these remittance and diaspora networks have existed for hundreds of years, the technology supporting them really hasn't changed. In most cases, a husband or brother or child still puts hard currency into a postal system and hopes for the best.

There are alternatives. The *hawala* ("transfer of financial obligation") networks that exist primarily in the Middle East, Africa, and South Asia are more flexible but fraught with their own problems. The strength of *hawala* networks is that they don't depend on the actual transfer of hard currency; rather, a remitter may simply establish an "obligation" with a local *hawaladar* (*hawala* broker), who then "transfers" that obligation to another *hawaladar* in the remitters' native country. The in-country representative can then "pay out" that obligation to the recipient through cash, goods, or services. These networks are especially dependent on trusted ties between families and neighbors, and can sidestep barriers



Pakistani shopkeepers count currency at their store in Islamabad on December 15, 2011.

AFP Photo: Farooq Naeem

such as governments, banks, and currency transfer fees. However, precisely because they sometimes operate outside the boundaries of governments and businesses, they are unregulated, and therefore come under suspicion of trafficking in illegal transactions—especially as funding for terrorist organizations.

The advantages and challenges of diaspora/remittance/*hawala* networks are deeply related to the issues faced by any international development agency that seeks to deliver basic health, education, sanitation, or other services to remote populations. However, new technologies could prove key to solving not only Mrs. Khan's problems, but also those of development agencies working to improve the quality of life for her and millions of people like her.

It is clear that diaspora networks play an important role in the support of their families

and communities. According to recent World Bank studies, reported remittances from diaspora networks reached \$351 billion in 2011, with untold additional billions in goods and services.¹ Recognizing the power of such networks, USAID recently established the Diaspora Networks Alliance, which it describes as a framework that enables partnerships—between USAID, other donor organizations, the private sector, and diasporas—built on “knowledge-generation, engagement, and operational work, with the purpose of promoting economic and social growth in the countries

¹ Sanket Mohapatra, Dilip Ratha, and Ani Silwal, “Outlook for Remittance Flows 2012–2014: Remittance Flows to Developing Countries Exceed \$350 Billion in 2011,” World Bank Migration and Development Brief 17, <http://siteresources.worldbank.org/TOPICS/Resources/214970-1288877981391/MigrationandDevelopmentBrief17.pdf>.

of origin.” USAID has explicitly recognized the potential of these financial networks to change the very nature of international development models: “Of all of the capital that flows abroad from the United States, an estimated twenty-five percent or more are recorded remittances, which makes them second only to private capital flows”²

Currently, however, diaspora support programs are generally unorganized, informal, and disconnected from long-term, sustainable development strategies, and none suggest a link between family remittances and local development goals. Many of the diaspora engagement models rely on existing international financial infrastructures, such as brick-and-mortar banks, national ministries of finance, and large international monetary agencies. Each of these enabling structures brings with it a set of limitations and distrusters. Additional problems include lack of grass-roots engagement, discontinuity between micro- and macrodevelopment planning, insufficient knowledge of local needs, research data that is never shared with local professionals, and even local attempts to malign or undermine projects by forces hostile to “foreign intervention.”

Recent innovations in communications technologies offer an excellent opportunity to effectively engage diaspora networks in these larger issues of development programs while maintaining their local authenticity. The goal is creation of a self-sustaining, long-term model that can be replicated for different diaspora networks across the globe—a model that leverages pre-existing streams of money, information, technology, and, most important, trust. We call such a model the Facilitated Diaspora Network, enabled by the latest Internet and telecommunications

technology, initiated by international development entities, but then handed off to members of the specific diaspora network to manage and maintain.

The first step in creating a Facilitated Diaspora Network is the establishment of a web-based “hub”—a clearinghouse website to be used as a central point of entry and information for current remitters, including family, community, and third-party donors. Such a website would include background information about a community, forums for discussions about local issues, a catalogue of local development needs, links to international development agency efforts and resources, and tools to enable contributions directly to specific family recipients and development projects.

The second step involves utilizing the hub as a centralized link between remitters/donors and receivers/projects, and would draw on innovations in mobile communications that enable direct monetary transfers, bypassing many of the obstacles encountered not only by Mrs. Khan, but by the aid agencies as well. An estimated 5.5 billion people in the world already have cell phones, and recent innovations in microcell technology, smartphone capabilities, and mobile-money support have demonstrated that mobile device-based approaches are effective even in some of the most remote areas of the world. The GlobalGiving and Aceh Besar “Midwives with Mobile Phones” programs are examples of this success.

In its simplest form, such a network would allow a remitter to sign into an account at a “hub” website, make a payment to the network’s central fund, and designate a family recipient. The recipient would receive notice of the transfer, and his or her mobile device would store the information, which could then be used at a market or with a local agent to pay for goods and services. The facilitating entity would handle the actual transfer of funds. As an option, the family remitter could designate a portion of the donation to a particular local aid project which, depending on the project’s

² USAID fact sheet, “Diaspora Networks Alliance: Framework for Leveraging Migrant Resources for Effective Development & Diplomacy,” http://pdf.usaid.gov/pdf_docs/PDACM860.pdf.

scale, might be overseen by an international or local entity. For community-based remitters and third-party donors, the hub would serve as a convenient portal for making contributions (similar to GlobalGiving) and accessing real-time information about development progress. For the remitter and receiver, the process would be painless, efficient, and reliable. For donor and recipient countries, and the facilitating international entities, it would be centralized, accountable, and transparent.

Still, even with such a streamlined remittance/donor process in place, one might ask how the remitters can be convinced to divert even a small portion of their limited funds to local rather than family aid. The key will be making a clear case for how local development *is* aid to their families: a market that makes Mrs. Khan's long trek unnecessary, a clinic that improves her health security, or a school that educates her children. For many remitters, such contributions will fulfill religious obligations for charitable giving. In other cases, the donations might go to local businesses, serving as investments offering future returns. Additionally, a portion of the facilitating entity's revenue would be re-invested in the development projects, providing a sustainable base of funding. Taken together, these factors result in diaspora participants who are invested in aid efforts as *their* projects—to an extent they never have been for projects conceived and financed entirely by foreign donors.

Admittedly, there are challenges to this approach, such as concerns about the diversion of funds, and the differing monetary-exchange and security policies of the donor and recipient countries involved. However, there are several reasons both types of nations would welcome and even actively support such networks. Diaspora “hubs” will allow for much greater oversight and transparency than currently exists, particularly with the essentially invisible *hawala* networks. Money

that enters the facilitated network is not available for the illegal networks. Perhaps most important, many nations have declared their desire to dramatically increase remittances and are fully aware that they receive no taxes or fees from the invisible transfers, suggesting they will be highly motivated to work with facilitating agencies to overcome these and other regulatory and security challenges.

Ultimately, diaspora and *hawala* networks survive on the trust they engender among their constituencies:

- They comprise relatives, neighbors, and acquaintances.
- They are granted credibility by word of mouth among networks of people who know one another.
- They are often a source of pride among the people from the village, town, or region they serve.

Therefore, any model that seeks to capture their dynamism and flexibility must recognize the importance of maintaining their specific and local authenticity.

By tapping into the philanthropic potential of diaspora networks, enabling them with innovative technologies, and coordinating their efforts with those of international aid entities, we believe it is possible to expand and strengthen community relationships, engender local and sustainable development efforts, increase the funds available for such efforts, and create a new and stable model of international development.

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Six Degrees of Mobile Money in Afghanistan

“In a spirit of leadership and cooperation, we must bring together the resources and competencies of our fellow agencies, the private sector, country leaders, and the people we serve—and in the process, build a broader community of development partners.”

— USAID Administrator Dr. Rajiv Shah¹

Traditionally, USAID Missions have managed development programs by segmenting activities into technical offices such as democracy and governance, economic growth, health, education, and infrastructure. Cross-fertilization takes place occasionally, when mutual interests are identified; but meaningful collaboration is rare. The focus on mobile money in Afghanistan breaks out of the usual stovepipes, demonstrating how dynamic teams bringing expertise from different disciplines in partnership with host-country counterparts can contribute to a collective goal—even in a difficult operating environment.

¹ Dr. Rajiv Shah, “Leadership Qualities Essential to Delivering Meaningful Results,” Executive Message to USAID Staff, June 15, 2011.

Ten years after the introduction of mobile-phone technology to the country, more than half of all Afghans have mobile phones, and more than 80% have access to a mobile-phone network.² But only 7% of Afghans have a bank account.³ By leveraging the mobile-phone network to provide financial services to the unbanked, key public- and private-sector services can be improved to serve hundreds of thousands of women and men across the country. With mobile money, a teacher can receive her salary in full and on time in a remote district; a police officer can transfer funds to his family back in his home village; and a businesswoman can repay her microloan without having to spend valuable time away from her business.

Once customers have registered for the service, they can visit a local mobile-money agent to

² “Afghanistan: Communications,” *The World Factbook*, Central Intelligence Agency, continually updated, www.cia.gov/library/publications/the-world-factbook/, accessed March 14, 2012.

³ Eltaf Najafzada and James Rupert, “Afghan Police Paid by Phone to Cut Graft in Anti-Taliban War,” Bloomberg, April 14, 2011, www.bloomberg.com/news/2011-04-13/afghan-police-now-paid-by-phone-to-cut-graft-in-anti-taliban-war.html.



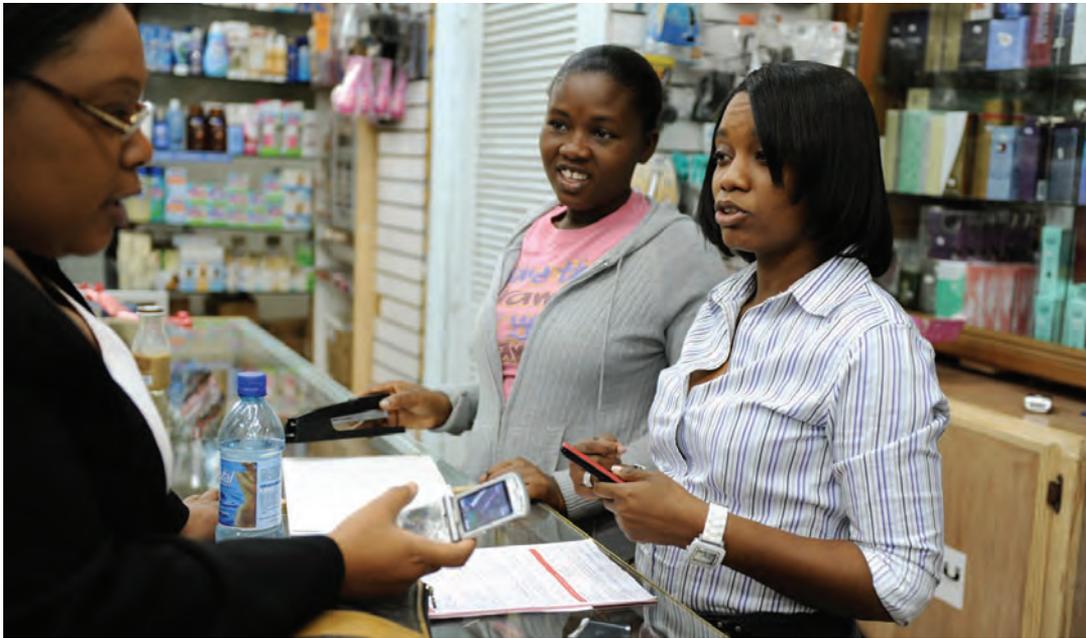
An Afghan youth uses his mobile phone to take pictures of U.S. Marines from 1st Battalion, 8th Marines as they patrol the town of Musa Qala on January 18, 2011. | AFP Photo: Dmitry Kostyukov

withdraw actual cash that had been deposited in their mobile wallet. The agent serves as the ATM, exchanging mobile money for cash once the customer inputs a PIN number into the phone. Mobile-money service provider bank accounts pool funds from all clients in at least four banks to diversify risk.

Mobile money can fundamentally transform the lives of Afghans, just as it has in Kenya, the Philippines, and a growing list of countries around the world. USAID's strategic approach focuses on three main areas of intervention:

- Engaging with key stakeholders, including government ministries, private-sector companies, and international donors
- Ensuring an appropriate legal and regulatory environment and support from relevant host country government agencies
- Encouraging innovation through public-private partnerships that could lead to greater financial inclusion and development results

USAID/Afghanistan started engaging with key partners in the mobile-money initiative in early 2011. Because only one of the four mobile-network operators—Roshan—had a mobile-money service, USAID encouraged the other three operators to focus on mobile money as a corporate priority. In March 2011, USAID organized the Afghanistan Mobile Money Stakeholder Summit, where more than 150 representatives from government, donors, NGOs, and companies interested in mobile money highlighted the challenges and opportunities facing this nascent financial service and created a network of interested stakeholders. A U.S. government



A customer (left) signs up for mobile banking at a supermarket on March 3, 2011, in Port-au-Prince, Haiti. | Photo: Kendra Helmer/USAID

interagency working group was subsequently established to address implementation issues, and the Association of Mobile Network Operators of Afghanistan was formed to encourage ongoing dialogue between the main partners.

Stakeholder collaboration was important as Afghanistan's Central Bank worked to provide robust supervision of mobile-money services to protect consumers and prevent fraud. USAID had previously helped the Central Bank to adopt a new regulation for electronic money institutions in 2009, incorporating international best practices for mobile-money oversight. In November 2011, with additional support from USAID, the Central Bank formally adopted revisions to the existing regulation, lowering barriers to market entry and strengthening mechanisms to fight money laundering and interdict terrorist financing. These important amendments incorporated the expertise of representatives from the U.S. Department of

the Treasury, World Bank's Consultative Group to Assist the Poor, the Bill & Melinda Gates Foundation, and the GSM Association, as well as local banks and telecommunications companies.

Expanding the Application to Benefit Development Priorities

USAID has committed to partnering with Afghan public- and private-sector organizations to expand the use of mobile financial services through the \$5 million Mobile Money Innovation Grant Fund, launched in March 2011. By August, \$2 million had been granted to three mobile-network operators working to initiate mobile-money banking for 100,000 Afghans by the end of 2012.

One grant will focus on paying teacher salaries through a cell phone—the result of a dynamic team formed to pioneer new ways of harnessing mobile-money technology in Afghanistan and improving the efficiency and transparency of

public expenditures. Officials from USAID and the Ministry of Education recognized that mobile money would add value to their programs, and more importantly, boost teacher livelihoods. Additional consultations with the Ministry of Finance clarified the current rules and regulations related to employee salary payments, and the support of additional U.S. government offices and donor implementing partners assisted in the work to map implementation of a new payment process. During the event to announce the grant, Afghanistan's Education Minister, Farooq Wardak, highlighted the urgent need for mobile payments as he told the story of a Ministry staff member who was killed while transporting cash to pay teachers. He expressed frustration that thousands of teachers sometimes wait months to get their salaries—a problem that could be resolved with mobile payments.⁴

By the end of 2011, USAID/Afghanistan had compiled a list of more than 15 potential mobile-money applications, including initiatives to empower women, in partnership with the Ministry of Women's Affairs; pay pensions on behalf of the Ministry of Labor; organize a mobile-money contest for university students; and establish money agents through USAID-funded Farm Service Centers. NATO Training Mission-Afghanistan has also been working to register the national police personnel for salary payment via mobile money. In 2011, the number of those registered increased from 200 to more than 1,000. Each of these individual activities requires the focused efforts of virtual teams from multiple USAID offices, several mobile-network operators, and other Afghan public- and private-sector stakeholders.

⁴ Dr. Rajiv Shah, "Innovating in Afghanistan," USAID Impact Blog, August 24, 2011, <http://blog.usaid.gov/2011/08/innovating-in-afghanistan/>.

Expanding the use of mobile money in Afghanistan has not been without its challenges, and many partners are coming together to address problems that cross multiple sectors:

- Afghans have little trust in the formal banking system, and most use an informal money exchange network—the *Hawala* system—to transfer funds around the country.
- The Afghan Central Bank's capacity to supervise both the traditional banking services and new financial innovations like mobile money must be further strengthened.

Surely this can and must be replicated in other similar countries, many of which have better starting conditions than we had in Kenya.

- Vested interests have slowed progress in some areas such as government salary payments.
- The high rate of illiteracy requires that additional training be provided to potential users.
- An extensive mobile-money agent network needs to be established nationally.
- For many Afghan women, conservative cultural norms restrict access to finance and to mobile phones.
- The targeting of cell towers by insurgents has limited the near-term growth of this service in some areas of the country.

Even in countries where mobile money has been successful, such as Kenya, it has taken three to five years to achieve critical mass. After an initial

£1 million grant (\$1.83 million in 2004 dollars) from the United Kingdom's Department for International Development in 2004, Safaricom's M-PESA mobile-money service in Kenya now has more than 14 million subscribers—or over 30% of the country's citizens—transferring \$23 million daily.⁵ Former Safaricom CEO and recent World Bank Mobile Money Fellow Michael Joseph noted that mobile money “has changed the lives of Kenyans...it created new jobs, new businesses and new opportunities for millions of people.... Surely this can and must be replicated in other similar countries, many of which have better starting conditions than we had in Kenya.”⁶

With USAID/Afghanistan's targeted funding and multi-sector approach to technical assistance, the market is responding through public-private partnerships. Etisalat introduced its *mHawala* mobile wallet in November 2011. MTN advanced the launch of its mobile money service in late 2011. Roshan is engaging with more Afghan government and NGO partners. Afghan banks are now collaborating with mobile-money service providers. With such positive momentum, USAID expects to see additional quantitative and qualitative results by mid-2012.

Collectively, the efforts of the teams contributing to this initiative will likely lead to greater awareness of mobile money, transformation of the Afghan financial sector, increased transparency of government transactions, more convenience for consumers, new revenue-generation opportunities for partner sustainability, and ultimately, improved lives for Afghans across the country. With support from USAID, other countries are now using

Several public-private partnerships have recently increased the spread of Afghan mobile money services, offering more secure alternatives to traditional networks. USAID/Afghanistan is working with the Afghan Central Bank and other stakeholders to improve the policy environment for these services. | Photo: USAID

similar approaches to expand the use of mobile money in Haiti, Indonesia, and Malawi. Other development areas—such as vocational education, health care, and energy—could also benefit from a holistic, networked approach that incorporates staff from multiple USAID offices, counterpart government agencies, international donors, and implementing partners.

By encouraging extensive multi-sector collaboration to promote the use of mobile money through public-private partnerships, USAID/Afghanistan is seeing greater impact in less time—and at a lower cost. Replication of this innovative project management and implementation model could lead to additional benefits for development programs around the world.

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5 George Ngigi, “M-PESA Linked to Inflation,” *Business Daily Africa*, February 14, 2012, www.businessdailyafrica.com/M+Pesa+linked+to+ris+in+inflation/-/539552/1327538/-/tjjsm9/-/index.html.

6 Michael Joseph, “Bringing Mobile Money to the World,” World Bank Private Sector Development Blog, April 25, 2011, blogs.worldbank.org/psd/bringing-mobile-money-to-the-world.



Evidence-based Health Systems Strengthening

Many health experts worry that the dramatic health gains of recent years may prove temporary if external resources wane. The U.S. Global Health Initiative (GHI) outlines an ambitious agenda to permanently strengthen the health systems of the countries we assist, but there is no consensus on how to do this. One promising approach applies the lessons learned from improving care in the U.S. health system to low- and middle-income countries (LMICs). Indeed, a number of countries have already achieved dramatic improvements in this way, but most of the health care provided globally remains untouched by improvement technologies that we take for granted in the United States. We can change that.

High-income countries rarely apply the term “strengthening” to their own health systems, but both public and private organizations have developed technologies to “improve” care. Early on, improvement specialists applied a systems model to health care:

- Health care requires resources, such as trained providers and drugs.

- With these resources, providers implement a series of processes to deliver services.
- These processes produce health outcomes.

In the United States, efforts to improve outcomes focused on processes—the activities carried out by providers. For LMICs, donors have traditionally focused assistance on providing resources and measuring outcomes. Nevertheless, efforts to improve healthcare processes are worthwhile because the same processes are carried out over and over for common conditions. Thus, for a child with symptoms of pneumonia, most health systems provide evidence-based guidelines that define what the health worker should do to properly assess and treat the child. If health workers do not follow such guidelines, the benefits of that care can be seriously diminished. But we have learned that training programs alone are usually not sufficient to achieve the needed level of quality.

Administrative healthcare support activities, such as storing and retrieving medical records, incorporate standardized processes that should



Health workers review logs at a clinic's registration table in the Morogoro Region of Tanzania, where patients receive treatment for malaria. | Photo: Karie Atkinson/USAID

reflect a careful analysis of how to best achieve the desired outcome. Administrative and clinical processes come together when a provider sees a patient. If the provider has the knowledge, skills, and motivation to follow the guideline, has the medical record at hand, and has the needed drugs and equipment, it is because numerous processes have succeeded. But how effective are these diverse processes in the health systems that GHI seeks to strengthen? How can they be improved?

Over the past 30 years, the United States has been a global leader in developing concrete methodologies to improve the way health services are implemented. In recent years, improvement technologies adapted from industry have dominated this field, and a version of the scientific method unites the many approaches:

- Identify a change in a healthcare process that seems promising.
- Carry out a formal test of the change.
- Take action based on the results.

These steps are carried out not by consultants but by regular health workers, working in teams. Collaborating under the label “quality improvement” (QI), they interpret “quality” broadly—including issues such as efficiency and patient access to care. Their objective could be stated simply as improving health care.

The Case for Collaborative Improvement

USAID has made substantial investments in adapting such quality-improvement approaches to the needs of the countries that we support.

Consider a recent example from Niger.¹ In 2005, teams of midwives in 33 small maternities found that they were not implementing a national guideline for preventing post-partum hemorrhage, which is central to active management of the third stage of labor (AMTSL). The basic resources required were available, so the teams focused on improving processes to meet the standard of care. These are some of the problems they solved:

- An injectable drug was needed immediately after the delivery, but it was stored in a refrigerator far from the delivery room. Teams tested a change to the daily routine, storing the drug in an ice chest, which they placed in the delivery room.
- Standard records did not include information on following the guideline. They added information to the record with a locally made stamp and inepad. With this information, senior midwives began reviewing the record of every delivery and providing feedback to the birth attendants.
- Deliveries after hours were often managed by untrained attendants who were not authorized to use the needed drug. The midwives instituted a 24-hour on-call schedule for themselves, which proved effective.

Regular health workers and supervisors conceived of these ideas and conducted the testing necessary to institute new processes. USAID's Health Care Improvement Project advisors provided only an introduction to modern improvement methodologies, and that support role was eventually transferred to local staff.

The collective impact of changes resulted in the guideline being followed for 98% of deliveries,

and the rate of post-partum hemorrhage dropped from 2.1% to 0.4%. The accompanying chart shows the dramatic improvement in delivery outcomes under the new standard of care.

These midwives demonstrated that they can apply the kind of improvement methods used widely in U.S. medical centers, and they showed good insights into the processes that had not been working for a long time. More than 20 years of studies and evaluations have reported on similar quality problems that are prevalent in other countries. A study in Burkina Faso, for example, found problems with processes at every step of patient care, with only 2% of patients presenting with common conditions receiving all of the care specified by national standards.²

Routine information systems do not capture most problems with the details of health care—this requires a special effort. Only rarely do managers know how well clinicians follow national guidelines. Admittedly, available knowledge does not allow us to estimate precisely the health impact of these widespread deficiencies. But the evidence shows that only a fraction of care that is affordable and supported by research is actually delivered to patients. Clearly, a shortage of resources accounts for only part of the problem.

Globalizing Change

Is it feasible to improve a great number of flawed healthcare processes on a global scale? As the Niger example illustrates, modern quality improvement can be carried out by regular health workers, who are potentially available in large numbers to become the face of change. As the interest in QI

1 USAID, Health Care Improvement Project, "Sustaining Better Maternal and Newborn Care and Quality Improvement in Niger: Challenges and Successes," March 2011.

2 G. Krause, M. Borchert, J. Benzler, and H.J. Diesfeld, "From Diagnosis to Drug Taking: Staff Compliance with Guidelines and Patient Compliance to Prescriptions in Burkina Faso," *International Journal for Quality in Health Care* (2000: 12), 25–30.

NIGER: REDUCTION IN POST-PARTUM HEMORRHAGE

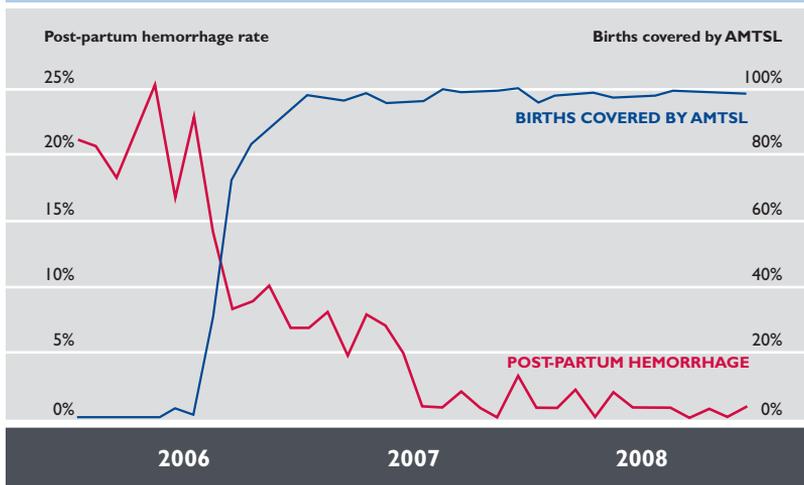


Chart of AMTSL coverage and post-partum hemorrhage rates in USAID-targeted facilities in Niger, from January 2006 through December 2008

Source: USAID, "Niger: Quality Improvement for Maternal-newborn Health Services," May 2008.

grows worldwide, there are many encouraging examples like that of Niger. That said, numerous small-scale success stories seem to be unconvincing for many decisionmakers, who give only lukewarm support to QI programs.

A recently published analysis of 27 USAID-funded QI interventions in 12 countries breaks new ground, substantiating the average level of improvement in a key process—provider compliance with evidence-based guidelines. All major USAID health priorities were represented in this analysis. At baseline, the mean level of provider compliance was 38.3%. The mean increase was 51.9 percentage points. On average, these facilities reached 80% compliance within 9.2 months. The majority sustained performance above 80% for more than a year of observation. These results represent the work of 1,338 facility improvement teams. This is convincing evidence, but we don't yet see a global movement for QI.

Certainly, we have a lot to learn about this promising new field. We are only beginning to see these approaches used to treat AIDS as

a chronic disease and to improve prevention. Early experience with non-clinical issues, such as human resources management, has been encouraging. Documented improvements in social services for vulnerable children suggest the potential for process improvement beyond the health sector.

But much of the recent expansion of QI in LMICs has contributed little to the global learning agenda: A large proportion of QI interventions have been poorly documented, and potentially useful knowledge from these experiences has been lost. Evaluations of these programs are rare, and we lack a consensus on their design. We have minimal health-systems research for use in improving QI programs. Nevertheless, we are still in the early phases of expansion for QI in most health systems, and there is still time to take advantage of a historic opportunity—to develop an initiative under GHI to support process-improvement programs, using an evidence-based strategy that can be shared widely. It's the knowledge the teams gain from improvement activities—the changes



A Democratic Republic of the Congo (DRC) Ministry of Health employee (right) administers a polio vaccination to a Congolese child during the first day of a national polio mass immunization campaign in Lubumbashi on October 28, 2010. Fifteen African countries held similar campaigns for 72 million children. | AFP Photo: Gwenn Dubourthoumieu

made and how they made them—that they need to share with other teams around the world. GHI can provide technical assistance to transfer the evidence-based strategy. Such an initiative should address the following issues:

Documentation. So that we may begin to capture and share experience gained from important lessons, QI programs must keep better records of testing—details of both the process changes and their impacts on care. As memories fade, we are losing important insights.

Global knowledge management. QI is not research, but it generates knowledge about healthcare processes that may be useful for others facing similar problems. When the improvement knowledge from Niger was applied in Mali, mothers began to receive the required standard of care, and a similar reduction in the rate of post-partum hemorrhages followed. Although there are no established institutions to collect and share this kind of knowledge, modern information technology offers a feasible solution.

Evaluations. Most QI programs have never been formally evaluated, which diminishes their potential contribution to global knowledge. Formative evaluations, addressing how to improve these programs, are urgently needed.

Research. QI implemented in LMICs to date has benefitted little from formal research, but a small group of recent studies show the value of such research. A cost-effectiveness analysis of the Niger example showed that implementing the improvements developed by the teams reduced the government's cost for attending a birth from \$35 to \$28—a critical consideration for policymakers.

Scaling up. Because most process improvements do not require external resources, it is financially feasible to implement them on a large scale. Several well-developed models address the process of spreading improved practices through a health system.

Institutionalization. Making improvement a permanent, integral part of delivering health services requires concrete organizational changes and a clear strategy. Research and evaluation efforts in this area are urgently needed.

QI applications outside of service delivery. Initial experiences with applying QI methods to improve management have produced encouraging, quantitative results. This line of research should be expanded.

A substantial body of evidence shows that modern QI approaches can strengthen health systems in a way that complements other assistance strategies. A better understanding of health-care processes may permit donors to target material resources where they will do the most good. More research and evaluation is needed to refine these approaches, but LMIC health systems are already moving to expand QI programs. This presents a one-time opportunity to incorporate a global learning agenda into this expansion.

With modest investments, donors could help these health systems to make evidence-based improvement a permanent, integral part of service delivery. If health systems can learn from one

Evidence shows that only a fraction of care that is affordable and supported by research is actually delivered to patients.

another, improvement approaches can become increasingly efficient. Healthcare processes that are continually improving and leading to better outcomes can and should become a global norm. The potential health benefits of launching such an initiative are difficult to overstate.

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Getting Out of the Lab and Into the Land: Commercializing Technologies for Social Impact

The summer heat of rural Tamil Nadu, India, was beating down on me as I stood near a roadside restaurant. A crowd was beginning to form as more people came out of the woodwork to warily watch three men attempting to rope a tall metal pipe to a gangly tree. The pipe was a component of an improved teakettle stove, which the newly minted celebrities were demonstrating for the restaurant owner. The teakettle stove, which was developed by a nonprofit organization in Bangalore, was supposed to burn wood more efficiently than other stoves. The rope-tying men were hoping that after five days of using the new technology, the restaurant owner would be convinced enough by his fuel savings to purchase it.

This stove was one of many different social-impact technologies that I saw that summer in India. I had also encountered low-cost solar lanterns that not only illuminated but also charged mobile phones, a rural ATM machine that made cash more accessible to remote populations, non-electrical infant warmers, household water filters, inexpensive prosthetics for amputees, drip irrigation systems for

farmers, and smokeless cooking stoves that reduced indoor air pollution. Social-impact technologies like these are moving more and more into the limelight as a potential way to address the global problems of water and electricity service delivery, health improvements, and poverty alleviation.

Designers and supporters of social-impact technologies come from all walks of life, all over the world. Both MIT and Stanford University boast programs that intertwine “design for the other 90 percent” into their coursework. The U.S. Environmental Protection Agency hosts its annual P3 Student Design Competition for Sustainability to fund innovative new technologies. In India, Villgro finds and incubates local inventors of social-impact technologies.

Social-impact products have also made headway in mainstream media. In 2010, Amy Smith, the founder of MIT’s D-Lab, was named as one of *TIME* magazine’s 100 Most Influential People. Julia Roberts and Hillary Clinton both pledged their support for the Global Alliance of Clean Cookstoves—an initiative led by the United



The Afghanistan Clean Energy Program has evaluated dozens of solar lanterns for use in rural Afghanistan, providing more than 7,000 to Wakhi, Kyrgyz, and Kuchi nomadic peoples in northern Afghanistan, as well as Hazar and Pashtun communities in Central and Southern Afghanistan.

Photo: Robert Foster/Winrock International

Nations Foundation that combats climate change and poverty through new cooking technologies for rural areas.

The appeal of technology-based solutions for the bottom of the pyramid is understandable. Compared with the slow, invisible solutions of public policy and community mobilization, social-impact technologies are tangible manifestations of hope that have an immediate social impact.

The Perennial Problem of Dissemination

Their promise aside, no one has painted the big picture of how to move social-impact technologies from the lab to the land. During E.F. Schumacher’s “small is beautiful” Appropriate Technology movement of the 1970s and 1980s, philanthropic and

government-funded initiatives failed because of limited funds, limited scale, low-quality products, and poor management. After management professor C.K. Prahalad proclaimed that there was a “fortune at the bottom of the pyramid” in 2004, the paradigm shifted toward a market-centric view. Companies calling themselves “social enterprises” began manufacturing, marketing, selling, and distributing social-impact products to the poor. By using business models, social enterprises attempt to be accountable to customers, transparent to shareholders, and financially self-sufficient to continue pursuing their social missions.

Social entrepreneurial efforts are being recognized by international organizations as innovation-based, market-oriented solutions that hold the promise of scaled social impact. The

World Economic Forum's Technology Pioneers of 2012 includes four start-ups that deliver a product or service for the bottom of the economic pyramid. USAID's Development Innovation Ventures awards grants to compelling new development solutions, many of which are based on new technologies for the poor.

But social enterprises are no panacea to moving social-impact technologies into the hands of the people they were designed to benefit. The bottom-of-the-pyramid market is riddled with obstacles. For example, there are more than 627,000 Indian villages spread over 3.2 million square miles. These villages face financial hardships, difficult living conditions, and limited access to new knowledge. In many cases, social-impact technologies are still too expensive for rural end users, and they require intensive, in-person marketing. The costs of acquiring new customers are sky-high.

Problematic operating environments also pose obstacles to technology-based social ventures. It is difficult to find startup funding that does not require social enterprises to produce immediate results. In the Indian Social Enterprise Landscape Survey conducted by Intelcap, a social sector advisory firm, 44% of social enterprises named financing as their main challenge. Only 37% of social enterprises that sought funding received enough. Additionally, unsupportive regulatory environments overburden small- and medium-sized enterprises with red tape.

Technology-based social enterprises that engage customers through the market have potential, but they face numerous obstacles. What needs to be done?

Innovating Entrepreneurial Efforts to Change the World through Technology

Based on my experiences in rural India, I believe that technology-based social enterprises and others

working at the bottom of the pyramid need to rethink doing business in these ways:

Branding: These are NOT technologies for poor people

Who wants to be told that they are poor? Nobody I've met. So why do so many social enterprises push their technologies as products for poor people? Social-impact products should be marketed as desirable, aspirational products. End users should want to invest in them. This does not mean that social enterprises should use marketing gimmicks. They should just pay attention to managing their brands differently.

Pricing: \$30 a month is too expensive, but \$1 a day is affordable

One of the greatest takeaways from microcredit and pay-per-use shampoo sachets is that pricing innovations are required to sell anything at the bottom of the pyramid. If a social enterprise requires a poor customer to buy a solar lantern, in full, with cash, then solar lanterns may not sell. A rental or credit scheme is much more cost-effective and appropriate for such a customer's income stream. Creating microentrepreneurs who rent out technologies is another way to generate income and improve livelihoods. This model has already been successful for solar lanterns and mobile-phone chargers in India.

After-sales Service: Prevent rural areas from becoming dumping sites for broken technologies

Working technologies will inevitably fail. When a social-impact technology fails, there can be consequences. First, the technology ceases to bring social benefits. Second, it sucks money out of a population that is already poor. Third, it becomes garbage—thrown out onto the road. (I have seen

improved cooking stoves sit broken in the corners of rural Indian kitchens.) Fourth, it wrecks the social enterprise's brand, shakes customer confidence, skews perceptions around new technologies, and distorts the market for new entrants. For example, I learned that solar lanterns are gaining a bad reputation in Chennai's peri-urban areas because too many low-quality, quick-to-break lanterns have been imported from China. Social enterprises selling higher-quality lanterns have difficulty convincing potential customers of their improvements.

After-sales service is just as important as initial sales because it sustains the long-term impact and sales of social-impact technologies. It also gives social enterprises an opportunity to interact with their customers, creating a bidirectional learning experience that will improve product design and quality. This would be a huge improvement on the current situation, as thorough failure rates and failure analyses for a wide range of social-impact technologies are not available.

Ecosystem: Put the “social” back into social entrepreneurship

Moving social-impact technologies from the lab to the land requires building up an ecosystem that is bigger than one social enterprise. Social enterprises must partner with other businesses and organizations to share resources like local knowledge and community connections. Social enterprises should involve organizations from across sectors (private, public, and social) at all levels (from grassroots to international). They can be catalysts for building robust ecosystems around themselves, and these ecosystems can ultimately support rural customers. One example is SELCO, a company that installs solar home lighting systems in southern India and is famous for forging financial relationships. When the company began, rural banks were not

financing any solar lighting technologies, especially for risky low-income customers. SELCO convinced a bank to offer the nation's first solar-consumer loan program. This had a snowball effect on solar-industry financing and helped rural farmers segue into formal banking.

Private investment markets can play a key role in financing technology-based social enterprises. For example, India has a handful of social-impact investment firms, like Omidyar Network and Aavishkaar, which provide patient capital to social enterprises. Additionally, India's National Innovation Council has proposed a new fund that will be supported by the government, private investors, philanthropists, and bilateral and multi-national institutions. These are pioneers, and more financing is needed.

Moving Beyond Technological Invention toward Business Innovation

Worldwide, socially conscious engineers are creating technologies that improve the livelihoods of low-income households. However, technological invention is not enough. Technologies must get into the hands of end users, or else they are designed in vain. If social entrepreneurs and bottom-of-the-pyramid organizations begin doing business differently, market mechanisms can widely disseminate these products. Only through these innovations can social-impact technologies impact millions of lives as intended.

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Big Data

International development as a field of research and practice has been a laggard in using big data and powerful analytics. Much of the data are of poor quality, and there are huge gaps in the information base we rely on. This situation is changing faster than anyone predicted, and the set of tools driving this evolution represent the single-most important trend in development. The proliferation of mobile technologies, computing power, and democratization of analytics within an open-source, open-data environment will fundamentally change the way we think about and do development. I provide a synopsis of the most impactful developments in three areas: the base (data) layer, the analysis layer, and the feedback (data) layer.

The Base Layer: Open Data and Big Data

How do we know what we know in the field of international development? What is the information, or evidence base? Who generates it and how? There are at least three main collectors, sorters, and repositories of development information:

international institutions (such as the United Nations (UN), World Bank, and International Monetary Fund), national and sub-national official public-sector institutions, and the private sector. Change is afoot in each.

The open-data push by international institutions such as the World Bank and African Development Bank is making a huge amount of information available to a wide range of stakeholders. Similarly, the UN's Global Pulse initiative is creating a platform to harness new data streams and stimulate collaborative inquiry.

Groups such as Development Gateway and AidData have pushed further to show what is possible by this opening. A good example is a tool like Development Loop,¹ which plots all World Bank and African Development Bank projects at precise geographic locations across Africa and overlays feedback sourced from the intended beneficiaries. This full circle or loop is a reminder of the

¹ "Development Loop App," AidData, <http://www.aiddata.org/content/index/Maps/development-loop-app>, accessed December 21, 2011.



An Iraqi woman shows an SMS text message she received on her mobile phone from the Iraqi Ministry of Health asking people to take precautions by avoiding crowded places and using handkerchiefs to avoid catching the flu. | AFP Photo: Ali Al-Saadi

importance of data transparency and universal standards. Opening up aid data in a standardized format will make geocoding a potent tool for real transparency and accountability.

To appreciate what a game-changer open data can be, consider the situation in Uganda. Research conducted there in 2006–2007 by the United Kingdom-based initiative Publish What You Fund revealed that the government was unaware of the amount donors were planning to spend for development that year. The planned expenditure was more than double what the government was aware of. Indeed, financial resources flowing into the country were far higher than had been estimated.²

² “Aid Budgets in Uganda,” Publish What You Fund, www.publish-whatyoufund.org/resources/uganda/, accessed December 21, 2011.

The World Bank’s Chief Economist for Africa calls the next example a “statistical tragedy.” Most of Africa’s population lives in countries that still use an outdated (1960s) method of national income accounting to generate fundamental data, such as gross domestic product (GDP). Ghana only shifted to the 1993 UN system of national accounts last year. When they did so, they found their GDP was 62% higher than previously thought, catapulting the country to “middle income” status.³

If even the most basic information is riddled with problems then what do we really know? Data reliability is one issue, but time lag is another. Too

³ *Blogs.worldbank.org*, “Africa’s Statistical Tragedy,” blog entry by Shantayanan Devarajan, October 6, 2011, blogs.worldbank.org/africacan/africa-s-statistical-tragedy, accessed October 6, 2011.

often, the data used in international development decisions are stale. The information base we rely on needs to be bolstered by building bridges with new sources and data streams.

Opening up proprietary private-sector data for use in international development will be a game-changer in the coming years. To date, public institutions have been leading on open data (for instance, under the purview of the Open Government Partnership). But it is the private sector, the main repository of “big data,” that is the holy grail. If you total all the data collected by the U.S. Library of Congress (one of the largest public-sector repositories), it would be about 235 terabytes as of April 2011. Walmart processes and stores about 2,500 terabytes per hour!⁴

The Analytics Layer: Virtualization, Visualization Driving Democratization

High-power analytics revolutionized the commercial sector and can now do the same in the social sector. At its core, analytics is about understanding relationships and patterns. Analytics helped retailers profit from unlikely trends, and it can do the same for complex social systems. Bringing this capacity to bear on development challenges, such as food security and urbanization, is just the beginning.

The explosion of mobile sensors—especially in the developing world—is facilitating a transformation. Mobile-phone subscriptions have grown from less than 750 million (less than a third in developing countries) at the start of the 2000s to more than 5 billion (4 times as many in developing countries as in the developed world today). About one-fifth of all subscribers live on less than \$5 a

⁴ Abhishek Metha, “Big Data: Powering the Next Industrial Revolution,” Tableau White Paper, www.tableausoftware.com/learn/whitepapers/big-data-revolution, accessed March 29, 2012.

day.⁵ The developing world is the leading driver of mobile big data. Voice, text, transactional, locational, and positional information can be overlaid with the base data layer described earlier (income, health, education, and other indicators generated by official sources) to produce new insights into real behavior and complex incentive structures.

Take the example of the Engineering Social Systems lab.⁶ Coupling terabytes of mobile-phone data with Kenyan census information, the lab is modeling the growth of slums to inform urban planners about where to locate services such as water pumps and public toilets. In Uganda, the same group is developing causal structures of food security, and in Rwanda, they used big mobile-phone data and a random survey to model how different people react to economic shocks. This constitutes a fundamental shift from theoretical models to models informed and built on real networks.

Development analysis has long been limited to correlations and inferences based on correlations. For the first time, big data coupled with high-power analytics are opening up the possibility of, if not entirely causal dynamics, then at least more robust inferences. Our traditional methods of inquiry have conditioned us to think in terms of generalizing on the basis of random sampling. But for the first time, the proliferation of mobile sensors is making possible highly targeted yet nonintrusive inquiry.

The rapid emergence of new data streams has kept pace with the development of analytical capacity to draw useful inference out of them. Twitter, for instance, generates information about

⁵ Nathan Eagle, “Mobile Crowdsourcing in the Developing World,” presentation for MIT University’s Entrepreneurial Programming and Research on Mobiles, 2008, assets.en.oreilly.com/1/event/20/tختهagle_%20Crowd-Sourcing%20on%20Mobile%20Phones%20in%20the%20Developing%20World%20Presentation.pdf, accessed March 29, 2012.

⁶ “Big Data for Social Good,” Engineering Social Systems collaboration, ess.santafe.edu/bigdata.html, accessed December 21, 2011.

the size of the entire U.S. Library of Congress in two weeks and, together with Facebook, has already shown its efficacy during the Arab uprisings. At the heart of this evolution, open-source software systems and tools allow the simultaneous collection, categorization, and analysis of various data types—from Twitter hashtags, to videos, to positional data and machine IDs. Swift River, developed by Ushahidi, is an example of a free open-source platform that enables rapid simultaneous filtering and verification of real-time data. It also visualizes the information in dashboards that the average user can understand.

This is particularly powerful for monitoring immediate post-crisis developments when the information flow suddenly increases, but it is also only useful if immediately analyzed. Similar applications were successfully implemented and yielded important insights on population movements both in the aftermath of the earthquake in Haiti as well as flooding in Pakistan.

Virtualization (of platforms) and visualization (of large complex information to make it engaging for the average user) inspire the community- or crowd-driven problem solving that advances democratization of analytics. For example, Data Without Borders, a pro-bono data scientist exchange, organizes “data dives” to help leverage the potential of information that NGOs, civil-society organizations, and others possess but do not have the time, capacity, or inclination to process.

We at The North-South Institute are playing our own small part in comprehensively visualizing Canada’s engagement with developing countries on aid, trade, investment, migration, and a range of other flows through the recently launched Canadian International Development Platform.⁷

⁷ *Canadian International Development Platform*, hosted by The North-South Institute, www.cidpnsi.ca.

The Feedback Layer: Deep Context, Complex Microsystems, Real-time Loops

The efficacy of the feedback layer is also new. Targeted crowdsourcing has already come a long way. The Ushahidi experience in Kenya, for instance, also worked for monitoring elections in Afghanistan. Mobile-phone SMS platforms have been adapted to make participatory budgeting more inclusive in hard-to-reach areas, such as conflict-affected South-Kivu in the Democratic Republic of the Congo—and results have been encouraging. The experience of the Development

A “statistical tragedy”: Most of Africa’s countries still use a 1960s method of accounting to generate fundamental data, such as GDP.

Loop initiative has already shown that, with creative use of available technologies and committed partners, it is possible to obtain direct feedback from intended recipients of interventions.

To understand how powerful the feedback layer can be, consider the experience of the Mobile Accord. At the initiative of the World Bank’s World Development Report 2011, the Accord ran Geo Poll, an SMS-based targeted polling in the Democratic Republic of the Congo. The poll asked 10 questions that included sensitive topics, such as sexual violence against women. The survey produced 1.2 million text responses, and the outputs were turned into the video “DRC Speaks,”

which captured people's responses to questions about their experiences in their own words. This ended up being one of the largest surveys ever conducted in the country.⁸

Some of the most valuable data in development come from surveys, including household, labor market, living standard, and other social surveys. But there are two key problems with such surveys: time (they take time to implement and can only be done infrequently) and high costs. Mobile technology is helping get around these issues. The World Bank is piloting an interesting initiative in Latin America called "Listening to LAC" (L2L)⁹ where several types of mobile technologies are being deployed to conduct real-time (higher frequency) self-administered surveys, to generate panel data on key questions pertaining to vulnerability and coping strategies. While still in a pilot phase, this is the first time such information is being collected near real-time and with lower costs than large national surveys.

There is a pattern here. In the base layer, more and more data are opening every day. In the analytics layer, experimental ideas are leaving the lab for real-world application. Virtualization and visualization are helping foster new communities geared toward collaborative problem solving. Similarly, in the feedback layer, tools are also democratizing. Ushahidi created an easy-to-use version of their implementation, called CrowdMap. Anyone who knows how to set up an email account can use the tool to set up their own incident mapping of whatever trend, alert, or issue on which they are interested in getting feedback from the crowd.

At sunset, a young girl tests out a new seesaw on a playground built by the Elizabeth Glaser Pediatric AIDS Foundation at the Mkhulamini Clinic in Swaziland. This year, the Foundation will launch a USAID-funded, five-year program to expand services preventing mother-to-child transmission of HIV. | Photo: Jon Hrusa, Elizabeth Glaser/Pediatric AIDS Foundation

Looking Ahead

How we think about data and analysis in the field of international development is changing rapidly, and faster than many organizations that "do development" are prepared for.

The open-data movement has widened access to a broad range of basic contextual information. A similar push is needed to open private-sector big data in the service of social good. Powerful analytical tools and collaborative platforms are dramatically changing what is possible for even the most intractable challenges like understanding socioeconomic risks and responses, dealing with urban planning, and better preparing for emergencies. For the first time, we have a feedback layer, which has made possible deep and near real-time awareness of what is working or not working, where, and why. Together, big data, democratized analytics, and the ability to tap deep contexts will change the way we think and do development in the coming years.

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⁸ The World Bank, "DRC Speaks," World Development Report 2011 multimedia library, wdr2011.worldbank.org/media-library, accessed March 29, 2012.

⁹ "Getting the Numbers Right: Making Statistical Systems a Real Plus for Results," The World Bank: IBRD Results, March 2010, siteresources.worldbank.org/NEWS/Resources/Gettingthenumbersright4-19-10.pdf, accessed March 29, 2012.



Developing-country Producers and the Challenge of Traceability

At the opening of the last century the introduction of mass production techniques (the assembly line, specialization, and replaceable parts) fostered unprecedented expansion of consumer goods through the production and distribution of identical goods at increasingly lower unit costs. In the early decades of the 21st century, the basic concept of a commodity as a mass-produced unspecialized product is evolving with the growing recognition that every unit of product has uniquely identifiable traits that can be tracked from origin to consumption and that confer different market value.

The implications of product traceability, or tracking products from origin to consumption (“farm to fork”), affects virtually all development sectors—agriculture (food safety), health (counterfeit pharmaceuticals), security, the environment (carbon footprint), governance (diversion of commodities), and the application of technology. While the impact of traceability is most immediate for goods entering developed country markets, traceability will increasingly be adopted in

developing countries, particularly given the rise of a growing consumer middle-class and the relatively higher levels of fraudulent or dangerous products entering those markets.

Governments and donors are implementing numerous programs that seek to expand opportunities for developing-country producers, particularly in the agriculture sector, to export directly to developed country markets. The benefits are obvious—higher prices and improved quality standards. The costs related to implementation of traceability, however, will require substantial investment, and will be especially challenging for the small-scale agricultural producers targeted by assistance programs. The challenges for integrating women producers will require special attention, given that female smallholder farmers are generally both less capitalized and have less access to new technology.

As developing countries seek to diversify their economies beyond exports of primary agricultural commodities and integrate into global manufacturing supply chains, the challenges



Sorting organic coffee beans in Aceh, Indonesia. USAID is improving production and processing techniques that bring added value to the local coffee. | Photo: USAID/Indonesia

associated with compliance will only grow more complex. Traceability is a challenge that developing-country producers already struggle with in products such as apparel, where eligibility to claim tariff preferences depends on the importer's ability to identify the source of every fabric and trim used to produce a given garment. Development of competitive agricultural and manufacturing export industries will depend on finding innovative and scalable solutions to address these challenges.

Traceability in Your Kitchen and Your Medicine Cabinet

Traceability is no longer an abstract concept. Anyone who has recently baked cupcakes for a kindergarten class understands that our relationship with the products we consume has

dramatically changed. With the rise of childhood food allergies and dietary restrictions, baking requires a precise understanding of exactly what we are consuming. We must know the list of ingredients, and also whether they have been processed with other products that contain allergens.

The time when products were indistinguishable is disappearing. Consumers, government regulators, and private companies are demanding to know not only the country but the farm where a tomato or pepper was grown, the date and time it was harvested, production conditions (seeds, fertilizers, pesticides, water usage, labor), and how and when it was transported (temperature). The capability to track such information is not new. The U.S. agricultural sector has already developed a sophisticated capacity to track the flow of food along the supply chain, with some sectors capable of

tracking food from the minute of production or the exact area of a field where it was grown.¹ What has changed is the breadth of products covered, the level of detail, the technology, the need to integrate data across firms, and the disclosure of that information to consumers. The products where traceability is being applied include livestock, agriculture, toys, apparel, pharmaceuticals, consumer products, construction materials, jewelry, and “conflict minerals.”

Traceability has overwhelmingly been driven by the private sector, utilizing private voluntary standards, in response to its own economic incentives. On the “soft” side, traceability is being introduced to provide assurance, via independent auditing by third-party organizations, to consumers that are willing to pay premiums for organic, fair trade, hormone-free, “local,” or “sustainable” products. Beyond appealing to consumers, it is used widely as a supply-chain management tool to reduce the costs of recalls and improve inventory management and controls.

Increasingly, however, traceability is also being driven by “hard” requirements, such as laws, regulations, and international agreements that require importers to document the chain of production and custody to ensure a variety of societal objectives, including:

- Food and medicine safety
- Protection of intellectual property rights
- Human rights
- Labor standards
- Environmental protection

Examples include the Lacey Act (wildlife/fish/plants/timber), the Extractive Industries Transparency Initiative, the Kimberly Process (diamonds), Consumer Product Safety Improvement

¹ Elise Golan, Barry Krissoff, Fred Kuchler, Linda Calvin, Kenneth Nelson, and Gregory Price, “Traceability in the U.S. Food Supply: Economic Theory and Industry Studies,” USDA Economic Research Service, Agricultural Economics Report No. 830, March 2004.

Act (children’s products), and Dodd-Frank (conflict minerals). Enhancing enforcement of sanctions regimes is an area where traceability will also become increasingly important.

While these “hard” requirements have largely been legitimate responses to demonstrated failures of private markets to offer sufficient protections, the potential for abuse of traceability requirements by governments will need to be watched closely. Some would use them as trade barriers to protect favored domestic industries in sensitive products, such as agricultural goods. Governments and donor agencies should monitor the development and enforcement of these requirements closely, lest they undermine fundamental objectives, such as the development of harmonized regional markets for agricultural products.

The promise of traceability to improve public health and food safety is particularly noteworthy. The massive increase in counterfeit drugs on the market—associated with drug cartels and other organized crime—has been particularly high in developing countries. And millions of people each year in the United States alone are stricken with foodborne illnesses. New technologies that identify bad actors involved in manufacturing counterfeits or that speed recalls of contaminated food demonstrate the potential gains to be made for consumers and public health outcomes.

Seeking Innovative, Cost-effective Solutions That Can Achieve Scale

The challenge for developing-country firms, governments, and donors is to adapt programming to the rapidly evolving realities of the market. Firm-level solutions to meeting export standards are well known and have been integrated into numerous USAID and other donor trade capacity-building programs. However, these interventions have generally worked with a relatively small number of firms



Naz Gul sits outside school in the village of Chaghai with her family's monthly ration of wheat, received from USAID. | Photo: WFPP

or farms concentrated in a handful of products. The results at the firm level may be meaningful, but rarely do they transform the sector or the country. What is required are innovative technical assistance models with the potential for scale-up and cost-effective delivery.

In pursuit of innovation, the potential for public-private partnerships is compelling. Virtually all interventions will benefit from the technical expertise and financial resources of the private sector, leveraging potential collaborations with international buyers and retailers, private and government standard organizations, third-party auditors, traceability solution providers, transport providers, and financial institutions.

Given that the growth of traceability has been enabled by the increasingly low costs of the underlying technologies—such as electronic product codes, labeling systems, and radio frequency identification devices—the opportunities to partner with technology firms are particularly interesting. The African Cashew Initiative, for example, is a public-private partnership with SAP Research to create a smartphone application that enables tracing of Ghana's cashew supply.² The technology assigns every farmer a unique barcode

² Grace Hoerner, "Innovative Technology Brings Traceability to Cashew Sellers and Buyers," West Africa Trade Hub, August 12, 2011, <http://www.watradehub.com/activities/tradewinds/aug11/innovative-technology-brings-traceability-cashew-sellers-and-buyers>.

that is attached to each sack of cashews produced from that farm. The buyer then uses a smart-phone that registers the barcode and generates a price based on the weight of the cashews and prevailing market prices. A digital receipt of the sale is sent via text message and can serve as the basis for demonstrating sales and cash-flow data that could also help farmers obtain financing. Although the initial pilots rely on subsidies, the more exciting possibility is that private firms or associations develop a sustainable business model that can accelerate the widespread adoption of these emerging technologies.

Integrating developing-country producers into international supply chains, even in large countries with major export sectors, is not an insurmountable task. In Thailand, technology-driven traceability techniques have already been introduced for some commodities (chicken, seafood, fruits, and vegetables) to document the farm of origin, date of harvest, location, and even temperature during shipping.³

Technology is not a panacea. Structuring collaborations with local financial institutions to deliver innovative financing mechanisms to small firms will be required. Developing credible local standards bodies to audit and certify compliance with both public and private traceability requirements should be a priority given the small presence of such organizations in the developing world. Success will also require partnerships within the U.S. government that recognize and leverage the expertise of other agencies such as the Department of Agriculture, the Food and Drug Administration, the Department of Commerce, and Customs and Border Protection.

³ IBM, press release, "IBM, FXA and Thailand's Ministry of Agriculture Join Forces on Global Food Safety," March 26, 2011, <http://www-03.ibm.com/press/us/en/pressrelease/29756.wss>.

An Afghan vendor arranges mangoes on a mobile stand in Kabul. Fruit production levels have increased in Afghanistan in recent years, but problems with packaging and distribution are stifling the country's ability to reach markets beyond its borders. | AFP Photo: Shah Marai

Making Government More Responsive and Accountable

For the public sector, traceability has the potential to improve service delivery while reducing opportunities for corruption and waste. USAID's experience in working with developing countries on supply-chain management of health commodities such as antiretroviral drugs, test kits, and laboratory supplies has demonstrated the possibility of tracking the movement of all products from the point of shipping, through regional distribution centers, down to local medical facilities operated by ministries of health. The technology allows the tracking of inventory down to the location of pallets, as well as the capacity to manage stock levels, plan purchases, and monitor expiration dates. The effectiveness of these systems directly contributes to saving lives, while building confidence for the public and donors supporting these systems. Traceability can begin to give governments, citizens, and donors the information necessary to track the delivery of medicines, equipment, fertilizer, textbooks, construction materials, and emergency food and humanitarian supplies to their destination. The technology exists if the political will is present.

The world is changing. It's time our development model did as well.

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Private Schooling for the Public Good

On a recent visit to a small town in Latin America, several young children eagerly approached me in the street, and I readied myself for a familiar exchange. To my surprise, they asked if I could help pay their school tuition. “Which school is that?” I asked, aware of their country’s recent abolition of public school fees. “That one,” they said, pointing next door to a concrete-walled private school.

This struck me for a number of reasons, not least of all because it seemed to bespeak a common and troubling theme across many countries of the Latin America and Caribbean (LAC) region: how much genuine demand there is for access to quality education and how little supply there is to match it.

Today, most LAC countries are richer, freer, and more stable than ever before—better poised, many believe, to make a lasting leap forward. To this end, many have also come to believe that no sector will be more transformative than education. It is one of the most powerful motors for pulling poor families out of poverty and for producing the missing links for needed labor and industry

booms,¹ as a number of Asian countries have demonstrated. LAC public education systems strive to improve, but it may be the power of private schools and services for the poor—particularly at the critical primary and pre-primary levels—that proves to be one of the most compelling developments. Tapping the capacity of the private sector will require a challenging reassessment of the mechanisms by which educational opportunity is ensured and a deeper understanding of the ways that incentives, finances, and frameworks impact the outcomes we all care about in the sector.

A Sector Constrained

The constraints to educational progress in LAC are significant and diverse. Looming large among them is the socioeconomic inequality that persists across the region, particularly in the poorest

¹ Eric Hanushek and Ludger Wößman, “The Role of Education Quality in Economic Growth” (World Bank Policy Research Working Paper 4122, February 2007), available at www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2007/01/29/000016406_20070129113447/Rendered/PDF/wps4122.pdf.



A Pakistani child reads the Koran during a recitation class in Islamabad on November 1, 2010.

AFP Photo: Farooq Naeem

Central American countries. In the United States, of course, we see a similar dynamic, but as the measures in the Gini index for socioeconomic inequality in LAC indicate, no region in the world has a larger gap between the “haves” and “have-nots.”² This disparity is plainly evident in the education sector, where there are yawning gaps between rich and poor, between urban and rural communities, and between indigenous and non-indigenous populations.³

2 Jeffrey Puryear and Mariellen Malloy Jewers, “Fiscal Policy and the Poor in Latin America,” *Inter-American Dialogue*, 2009, www.corporacionescenarios.org/zav_admin/spaw/uploads/files/FiscalPolicyandthePoorinLatinAmerica.pdf.

3 *A Lot to Do: A Report Card on Education in Central America and the Dominican Republic*, Task Force on Education Reform in Central America (Washington, D.C.: PREAL, 2007).

Since the 1990s, nearly all LAC countries have put more low-income children into primary schools faster than at any other moment in the region’s history, which represents a historic achievement. By law, most of the region’s countries now provide free and compulsory education through the equivalent of grade nine as they close in rapidly on the Millennium Development Goal of universal primary education.⁴ But efforts to improve equality and quality of public schooling in the region have proven much more difficult than getting kids enrolled. Roughly a third of the region’s third graders are still functionally illiterate, and nearly half

4 *Ibid.*

cannot comprehend the most basic aspects of grade-level arithmetic.⁵

Research shows that these early years are critical to establishing the basis for future learning and for staying at grade level—a crucial factor in deciding whether to stay in school, and in other key decisions made by the region’s underprivileged youth. The region’s governments and their civil society and development assistance partners now understand that the full task is getting kids to stay in school and learn more while they are there—key outcomes to both social progress and unlocking the region’s human capital potential.

A Sector Expanded: Private Primary Schools and Services for the Poor

Private schools in the region, as elsewhere, have traditionally served the better-off, and are generally not included in public-system reforms or international aid programs designed to improve education results. While the last several decades have witnessed private-sector growth in upper secondary and tertiary education, in many countries private enrollment rates for both have surged to between 25% and 40%. Meanwhile, private primary enrollment across the region stands at about 15%.⁶ These rates belie a widely accepted axiom in Latin America: Most everyone who can afford to send their own children to a private school does so, whatever the cost. Most, however, cannot afford that cost.

Private primary schools for the comparatively wealthy are generally of international caliber and price. It is, however, the potential growth

of lower-cost for-profit schools and services—and the support of non-profit or religious groups—that may represent an opportunity for the most meaningful demand-driven reforms and associated development aid innovations to address the fundamental inequality inherent in the current private/public divide. There is some regional evidence, for example, that private-school scholarships for the poor are associated with increased achievement.⁷ Additional international evidence indicates that low-cost private schools for the poor have systematically demonstrated better outcomes than their public counterparts,⁸ though rigorous evidence on these trends is still scarce and often controversial. Results from pioneering voucher programs in Colombia and Chile, for example, demonstrate lower cost per student, lower dropout rates, higher completion rates, and higher parental satisfaction.⁹

However, there has been little experimentation with these and related approaches in the poorest countries of the region where donor agencies like USAID focus their education aid. This is not so by accident. Across the region, there are few concepts that elicit as much controversy as “privatization.” In education, however, rising private primary and pre-primary school enrollment rates, increased regional interest in public-private partnerships, and the collective urgency to “do more with less” may motivate a change in understanding of the more nuanced possibilities.

5 Alejandro Ganimian, *How Much Are Latin American Children Learning? Highlights from the Second Regional Student Achievement Test (SERCE)* (Washington, D.C.: PREAL, 2009).

6 UNESCO, Institute for Statistics, custom statistical table from online Data Center, retrieved December 30, 2011.

7 Joshua Angrist, Eric Bettinger, Erik Bloom, Elizabeth King, and Michael Kremer, “Vouchers for Private Schooling in Colombia: Evidence from a Randomized Natural Experiment,” *The American Economic Review* (December 2002).

8 James Tooley and Pauline Dixon, “Private Education Is Good for the Poor: A Study of Private Schools Serving the Poor in Low-income Countries,” Cato Institute White Paper, 2005, www.cato.org/publications/white-paper/private-education-is-good-poor-study-private-schools-serving-poor-lowincome-countries.

9 Alberto Arenas, *Privatization and Vouchers in Colombia and Chile* (The Netherlands: Khwer Academic, 2004).

The Role for Development Assistance

Since the 1960s, many donors—USAID included—have funded public education programs, embracing the traditional approach of partnering with ministries of education to help fill gaps in both the public schools and the ministries that manage them. Today, however, as donor agencies are under increasing scrutiny to show results and “bang for their buck,” there is reason to believe that traditional approaches to education aid in LAC may have diminishing returns.

Armed with new mandates and visions, USAID and other donor agencies with similar aims are poised to help recipient countries in the region expand private educational offerings to benefit the neediest. While such a paradigm shift will be challenging, incorporating the concepts of accountability and choice in education for the poor can have profound enabling effects, benefiting the entire hemisphere. They can help to more effectively bridge the labor gap that dissuades local and international investors from setting up shop in the region, and can help provide more viable alternatives for children whose present choices lead them out of school and toward menial labor, immigration, or violence.

For donor agencies and governments, there are at least four particularly promising approaches to increase the educational options available for the poor and the market for competed education services in the LAC region:

Channel assistance to private providers of public education services. While LAC countries like Chile and Colombia have successfully experimented with privately operated schools funded by the state, it is also increasingly common for governments, through public-private partnerships, to fund the component parts of education, such as management, support, and operational services.

Both whole-school and service-based competition can help the state operate with more accountability and efficiency, and assistance might be given to help facilitate the growth of publicly funded charter, concession, or voucher networks, as well as the growth of sub-sectors in areas like competed school feeding programs, contract teachers, or in-service training.

No recipient country better represents the opportunity to implement promising non-public and supply-side education aid modalities than Haiti, where the private-school enrollment rate has surged to more than 75% in the past several decades.¹⁰ Home to USAID’s largest education program in the region, Haiti faces immense educational challenges, but it will be a place to watch for evidence of how recipients of private-education subsidies and services—funded through public and donor sources—fare in the years to come.

Help facilitate the reform of policies and regulatory frameworks. Even if no public or donor funds go to private-school options for the poor, growth in private enrollment in LAC paid for by out-of-pocket expenditure suggests a growing demand. Still, many countries of the region have complex, costly procedures for opening private schools, or have caps on the number of petitions available for private or for-profit schools. Assisting regulatory reforms could include helping to channel foreign direct investment into the system.¹¹

Engage the private sector in promoting private education services for the public good. Because private actors often have the most

10 Jeffrey Puryear and Michael Lisman, “Haiti’s Educational Moment,” *FOCALPoint*, March 2010, www.focal.ca/publications/focalpoint/227-march-2010-jeffrey-puryear-and-michael-lisman.

11 Harry Patrinos, Felipe Barrer-Osorio, and Juliana Guáqueta, *The Role and Impact of Public-Private Partnerships in Education* (Washington, D.C.: World Bank, 2009).

relevant and up-to-date knowledge about skills demanded in the labor market, their increased involvement in decisions around education reform is key for improving competitiveness in global markets. Corporate social responsibility in education is gaining traction in the region,¹² but more should be done to harness corporate knowledge and its policy influence. Business leaders in the region should be enticed, not just encouraged, to invest in—not donate to—primary education. Tax rebates for private-school scholarships (such as those pioneered in Florida) and more systematic integration of business interests in the crafting of educational policy and curricula might invite such investments.

Promote a more robust base of evidence on the outcomes of incentive-based and private-education services. Given the strong opinions associated with competed education services, nothing could do more for a potential paradigm shift in the region than increasing and improving data on the effects that different private schools, services, and facilities have on kids' learning. For USAID and both its new evaluation policy and education strategy, there is an opportunity to help discover and disseminate the impact of demand-driven modalities on learning—especially around early-grade reading, a LAC regional focus and USAID priority. A key issue therein is the critical question of teacher quality, a sub-topic also ripe for improvement via competitive incentive structures.

Market forces alone will not solve education's challenges. Drastically redistributing resources from public to private (or vice versa) is neither

viable nor advisable. Fortunately, the public versus private dichotomy, long viewed as zero-sum, need not be the one by which decision-makers view sector reform options.¹³ Competition and market forces at play in education must be based on solid evidence, not ideology or even theory. They must—and can—combine to address many of the gaps currently and powerfully preventing educational success for all, regardless of income. Moving forward, finding ways to optimize unequal and underachieving education systems in the LAC region will mean looking beyond traditional approaches to the public finance and provision of education—and leveraging the best of both sectors for the public good.

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12 Justin van Fleet, "A Global Education Challenge: Harnessing Corporate Philanthropy to Education the World's Poor," Center for Universal Education, Working Paper No. 4, April 2011, www.brookings.edu/-/media/Files/rc/reports/2011/04_corporate_philanthropy_fleet/04_corporate_philanthropy_fleet.pdf.

13 Laurence Wolff, Juan Carlos Navarro, and Pablo González, eds., *Private Education and Public Policy in Latin America* (Washington, D.C.: PREAL, 2005).

DEVELOPMENT ASSISTANCE IN A CHANGING WORLD



Foreign Assistance, Innovation, and Progress

As I write this, my wife, Melinda, has just returned from a visit to Tanzania with members of a congressional delegation, led by Senator Lindsey Graham, to learn more about global health and development programs.

Reflecting on the trip, Melinda said the high point was meeting Joyce and Raymond Sandir, small farmers who eke out a living growing maize and a few other crops and selling milk from their single cow. When Melinda asked them about their experience with a new, higher-yielding, disease-resistant maize seed, Joyce said their income had more than doubled. Although the Sandir family lives without running water or electricity, Joyce didn't hesitate when one Senator asked what she planned to do with the extra money. She said she would pay for more education for her children.

For Melinda, the visit was another reminder of why we do this work. For members of the congressional delegation, it was a chance to see first-hand the impact that development aid has on people's lives. A few pounds of healthy seed that wouldn't be given a second thought in wealthy

countries can trigger a virtuous cycle of health and productivity in poor countries. Farmers can feed their families. Children can go to school and become valuable members of the community. Local economies grow, strengthening the social and economic fabric of nations. Eventually, these countries are in a position to offer development assistance to other poor countries.

Some, like Korea, have made the full transition and no longer rely on official development assistance (ODA). Others, such as Mexico, Brazil, India, and China, are following a similar path. These aren't isolated examples in a few lucky countries. In the past 50 years, advances in agriculture saved a billion people from starvation. Vaccines and other medical advances reduced childhood deaths by more than 80%. The proportion of people in extreme poverty has been cut in half. The Sandir family is one example among many millions.

Despite these successes, some policymakers favor pulling back on government aid. Some say that development assistance is not being used



Saboune Adakar Abdoukaye lost everything when militia destroyed his village in Chad. Now living in an IDP camp in Goz Beida, Chad, Saboune opened a shop with the help of World Concern's Cash for Work program, which is funded by USAID. He supports 13 children, and his business employs seven other people.

Photo: Derek Sciba/World Concern

efficiently, despite the results of the past 50 years. Others say we simply can't afford to be generous in this difficult economy. Yet, ODA represents a tiny fraction of government spending in the U.S. and other wealthy nations. Reducing aid levels will undermine global stability, limit the growth potential of the world economy, and affect the livelihoods of millions of the poorest people.

The simple fact is, aid works, and I believe we can build on the generosity, knowledge, and lessons learned over the last half-century to create even more effectual aid programs. Aid agencies in rich countries, such as the United Kingdom's Department for International Development (DFID) and, more recently, USAID, are seriously

re-examining their priorities and the effectiveness of their strategies and partnerships.

But aid is only part of the story. It's important for policymakers to understand that rich countries are not shouldering the burden of helping the poor all by themselves. Right now, there are more new resources available for development than ever before, and I'm optimistic about the progress we can make if we combine these resources in innovative ways.

A number of rapidly growing countries, international NGOs, and philanthropic organizations have emerged over the last decade, injecting much-needed money, skills, and new ideas to complement the successful efforts of traditional donors.

The private sector is getting increasingly savvy about applying its capacity for innovation to development programs. Meanwhile, a growing number of poor countries are taking a more active role in charting their development path. I'm excited about the possibilities offered by these shifts.

Several years ago, Melinda and I decided to devote our full-time efforts to global health and development, and improving education in the United States, because we saw the potential for impact. Today, I'm more convinced than ever that investments in development can make a huge difference.

Last November, I was invited to speak to G20 leaders at the Cannes Summit about powerful innovations such as new seeds and vaccines and new ways to deliver them. Building on the report I submitted to the G20, this essay explores a number of innovative strategies that can enable us to make meaningful progress on the UN's Millennium Development Goals and, most importantly, help the poorest countries feed, educate, and employ their people.

Tapping a Growing World of Expertise and Resources

The knowledge and skills of rapidly growing countries represent an important new development resource. Countries such as Brazil, China, India, and Mexico are in a great position to work with poor countries because they have recent experience reducing poverty within their own borders. Having successfully navigated the development process, these countries have a sophisticated understanding of what poor countries need and the technical capabilities to innovate to meet those needs.

I'm particularly excited about the use of "triangular partnerships" among rapidly growing countries, traditional donors, and poor countries that combine the resources, skills, and knowledge

each party is best equipped to contribute. In the long run, I believe this approach could accelerate innovation in many key areas of development, including agriculture, health, education, governance, and infrastructure.

One great example is the successful development of a vaccine for meningitis A, a major cause of illness, disability, and death in Sub-Saharan Africa. After the largest meningitis epidemic in African history killed more than 25,000 people in the mid-1990s, African health leaders asked for a better weapon to fight such outbreaks. The World Health Organization and the international nonprofit PATH created a partnership with the for-profit Serum Institute of India to develop the first-ever vaccine specifically for poor countries. To manufacture the vaccine at the target price of 50 cents a dose, the Serum Institute obtained raw materials from a Dutch biotech company and arranged a technology transfer from the U.S. Food and Drug Administration.

The resulting MenAfriVac vaccine was developed, tested, and produced in less than half the time and less than one-tenth the typical cost of bringing a new vaccine to market. When it was launched in late 2010, extensive government education campaigns helped build trust and awareness. To date, 65 million people have been vaccinated and already there has been a dramatic reduction in death and illness. Over the next 10 years, research shows, the vaccine could prevent more than 1 million cases of meningitis A, and \$300 million that would otherwise have been spent on diagnosis and treatment will be freed up for other development needs.

Brazil's work with Japan to help poor farmers in Mozambique grow soybeans, rice, and other crops is another impressive example of the power of triangular partnerships. Thirty years ago, Japan helped Brazil adapt the soybean to grow in its



USAID is supporting the electrification of rural schools in Afghanistan through projects like the Afghanistan Clean Energy Program, which created a 2-kilowatt solar-powered system for Shaheed Mahmoodi High School in Band-e Amir National Park in Bamiyan Province. | Photo: Robert Foster/Winrock International

tropical savanna, and Brazil soon became one of the world's largest producers of soybeans. Now, Brazil is helping Mozambique—one of the poorest countries in the world—adapt soybean, rice, and other crops to grow in its savanna. Japan is helping Mozambique upgrade its port, road, and rail infrastructure to make it easier for farmers to export their crops.

In recent months, the foundation has signed agreements with both Brazil and China to advance other potentially game-changing partnerships. Our goal is to encourage these countries to apply their world-class expertise in agricultural research and their growing strength in the health sector to the needs of poor countries.

In China, we are working with the Ministry of Science and Technology to jointly fund the development of high-yielding staple food crops, making it easier for small farmers in poor

countries to grow and sell a surplus. This builds on great progress we're already seeing on the Green Super Rice (GSR) project—a partnership between the Chinese Academy of Agricultural Sciences and researchers and seed suppliers in 15 countries in Africa and South Asia. The GSR project is key to increasing food security in Africa, where rice is a staple but yields are extremely low. In just two years, the GSR partnership has led to more than 20 new varieties—currently being tested prior to release—for their ability to withstand drought, salty soils, submergence, and disease. GSR has also trained nearly 500 technicians and researchers in cutting-edge rice breeding and seed production technologies.

There are also opportunities to form partnerships with manufacturers in China that could make important vaccines more cheaply than they are available today. For example, in the final push

to eradicate polio, we believe Chinese manufacturers will be able to provide new, high-quality polio vaccines at prices that are affordable for the eradication program.

Our agreement with Brazil's Ministry of Health is built on the same principles. Brazil can play an important role in furthering research to better diagnose and prevent tuberculosis (TB). TB still kills 1.5 million people a year. Rapid, accurate, and inexpensive detection remains difficult. And a growing number of the nine million new active cases each year are resistant to existing drug regimens. Brazil is piloting a promising new test—GeneXpert—in two Brazilian cities. According to initial research, GeneXpert is 95% accurate, can detect TB in less than two hours, and is capable of identifying cases that are resistant to certain TB drugs. The results of these pilots could help poorer countries with TB detection. Brazil is already working with Mozambique, where the TB rate is high and on the rise, to build lab capacity to improve TB diagnosis.

In another potentially significant partnership, Bio-Manguinhos, a Brazilian immunobiological research institute, is working with partners to explore novel technologies to manufacture proteins for vaccines that could prevent yellow fever and other diseases such as malaria and human hookworm. These partnerships are still in the early stages, but I'm positive about the solutions they will produce in the near future. The rapidly growing countries have a combination of knowledge and technical capacity that the world has never seen. Tapping into that for the benefit of poor countries is one of the most important things we can do.

Harnessing Private-sector Investment

Drawing on the expertise, resources, and goodwill of the private sector is another huge opportunity,

and a great example is the newly announced partnership among 13 pharmaceutical companies; the World Bank; the governments of the United States, United Kingdom, and United Arab Emirates; our foundation; and a number of endemic countries struggling under the burden of neglected tropical diseases (NTDs). These parasitic and bacterial infections—transmitted through insect bites, worms in the soil, and other means—are sapping the health and strength of a billion people, half of them children. Although many organizations and pharmaceutical companies have tried to tackle various NTDs, their efforts have often been siloed and of limited effectiveness due to critical gaps in drug supply, distribution, and R&D.

The new partnership is designed to fill those gaps, improve coordination, and draw on the strengths of each participant. For example, five pharmaceutical companies are engaged in cross-company R&D to accelerate the development of an oral drug to kill adult worms that cause river blindness and lymphatic filariasis. Currently, no such drug exists—leaving a billion people worldwide at risk of contracting these extremely debilitating diseases. Once the new drug is developed, donor governments and organizations will work with endemic countries to distribute the drug and implement treatment programs. The aim is to meet the WHO goal of controlling or eliminating 10 NTDs by 2020. More broadly, this collaboration can serve as a model for involving the private sector to advance global development.

There is also growing interest in leveraging private investments for social enterprises, such as private health clinics and schools, and to help poor countries expand their infrastructure in both rural areas and fast-growing urban centers. Many rapidly growing countries have a large source of funds that could be tapped for this: sovereign wealth funds (SWF). An infrastructure fund financed by

just 1% of SWF assets would start at \$40 billion or more, and could exceed \$100 billion based on projected SWF growth over this decade. Given the scale of the infrastructure needs in poor countries—\$93 billion a year just in Sub-Saharan Africa—there is a compelling reason to mobilize this pool of savings for development.

An infrastructure fund must offer a market-related return while providing financing for poor countries on concessional terms. This means that donors and multilateral development banks need

Aid works, and I believe we can build on the generosity, knowledge, and lessons learned over the last half-century to create even more effectual aid programs.

to find creative ways—through guarantees, co-financing, and other mechanisms—to bridge the gap between the return that sovereign investors expect and the lower interest rates and extended maturities that borrowers need.

Another major source of private capital for development is diaspora communities, which contributed \$325 billion in remittances to developing countries in 2010. Reducing remittance transaction costs to an average of 5%—compared to the current average of roughly twice that—would free up \$15 billion that could be invested for development. Diaspora communities can also invest in bonds to finance infrastructure projects. Israel and India have already issued tens of billions of dollars of such bonds, and now Nigeria, Kenya, and the

Philippines are considering issuing their own. The African diaspora alone is sitting on an estimated \$50 billion in savings. There may be ways for aid agencies and development finance institutions in migrants' host countries to help make these bonds more attractive—by forming partnerships with banks from investors' home countries, for example.

Finally, there are innovative ways to incentivize R&D on new products. Several years ago, our foundation worked with partners to help create something called an Advance Market Commitment for a pneumonia vaccine. The vaccine didn't exist yet, but we guaranteed buyers for one as soon as it was developed. This commitment pulled in private-sector expertise, allowing a vaccine to be available much earlier. It is now being rolled out in 37 countries.

The theory behind the Advance Market Commitment—that the right incentives can speed the development of products where there has been a market failure—is not new. In the 1920s, the Orteig Prize spurred a flurry of research on aviation advances by offering \$25,000 for the first non-stop flight across the Atlantic. More recently, development of the first nongovernmental reusable spacecraft was a response to the \$10 million Ansari X PRIZE. Both led to private-sector R&D investments far exceeding the value of the prize itself.

This concept of pull mechanisms has real promise, especially to encourage innovation in agricultural technologies. The G20 has shown keen interest in exploring this approach, and a group of committed donors, led by Canada and including our foundation, is examining potential pilots with an aim toward announcing several this year. In my report to the G20 last November, I also proposed that countries could put together a list of the highest-priority innovations needed for development. Going through the process of systematically identifying the most important breakthroughs would



Indonesian primary school students read in their school library. USAID's 2011-2015 education strategy includes a focus on improving reading skills for 100 million children in primary grades. | Photo: USAID

serve much the same purpose as the X PRIZE and could really catalyze innovation.

I spent most of my career in the private sector and am a big believer in its ability to innovate. If we can keep finding ways to match the private sector's capacity for innovation to the problems of the poorest people, we can really accelerate the development process.

Mobilizing Domestic Resources

By far the largest source of financing for development will continue to come from developing countries themselves. Many poor countries could pay for more essential infrastructure such as roads, schools, and health clinics if wealthy countries encouraged greater transparency in agreements involving natural resources and best practices in

budgeting, planning, and tax collection.

Today, billions of dollars are wasted or misappropriated because of the way contracts to extract oil, gas, and minerals are negotiated, written, and administered. In Uganda, for instance, it is estimated that at peak production, oil reserves would generate \$2 billion per year. In a country with a national budget of \$3 billion, that amount of oil revenue would have a huge impact on the government's ability to address the needs of millions of poor Ugandans. However, citizens have no insight into the country's oil-leasing arrangements, and, as a result, Ugandan citizens have no means to protect their interests.

The Extractive Industries Transparency Initiative (EITI) is a step in the right direction. In Ghana, it was revealed through EITI that mining

companies were paying an average royalty of just 3%. Civil-society groups worked with government leaders to set a 6% minimum royalty for new projects. The problem is that EITI is a voluntary initiative, and only five African countries are currently compliant, though more are working toward it.

Wealthy countries can also help by passing legally binding transparency requirements for mining and oil companies listed on their stock exchanges, to ensure that natural resources are well managed. Another idea that makes sense is a natural-resource charter that governments can adopt to encourage appropriate management and transparency of land, timber, and other natural-resource-related deals

Simply collecting taxes more effectively under existing systems would also make a big difference. Tanzania, for example, increased its tax revenue from 10% to 16% of gross domestic product (GDP) between 1998 and 2008, generating an additional \$2.2 billion annually. According to the International Monetary Fund, basic tax reforms throughout Sub-Saharan Africa would raise at least \$20 billion a year at today's GDP.

South Africa is providing leadership in this area, working with several neighboring countries on the Collaborative Africa Budget Reform Initiative (CABRI), which brings together senior budget officials from African ministries of finance, planning, and development to share knowledge.

These domestic resources will make the biggest difference if they are directed toward poverty-reducing priorities such as agriculture and health, which have a proven track record in terms of development impact. According to the World Bank, growth in the agricultural sector reduces extreme poverty more than growth in any other sector. In 2003, African leaders signed the Maputo Declaration, pledging to increase spending on agriculture to 10% of national budgets as part of the Comprehensive Africa

Agriculture Development Programme (CAADP). So far, eight countries have reached that benchmark—an important indicator of progress.

The benefits of investments in health are incredibly far-reaching. Disease saps the greatest resource that poor countries have available—the energy and talent of their people. When parents know their children are likely to survive, they choose to have smaller families. As a result, they're better able to feed and educate their children—which kicks off a virtuous cycle of productivity and economic growth. In 2001, as part of the Abuja Declaration, the heads of state of the African Union countries promised to allocate at least 15% of their budgets to improving health. So far, however, only two countries have met their pledge.

Governments can also increase their impact by building the capacity to evaluate their development spending. One pioneer in this area is Mexico, which established a National Council for the Evaluation of Social Development Policy (CONEVAL). CONEVAL publishes annual performance reviews for major government programs and measures progress toward national development targets. Similar bodies are taking shape in Argentina and India. Wealthier countries could extend their leadership in this area by forming a public-private partnership to help developing countries conduct cost-benefit analyses—real-world comparative studies that evaluate the most effective ways to tackle development. A partnership modeled on CONEVAL could help address common methodological issues and set benchmarks so findings would be more easily comparable across countries.

Rethinking Development Aid

Although I'm excited about the growing investments poor countries are making in their own development, I am also convinced of the need for

wealthy countries to continue investing in ODA. Today, it accounts for about 1% of public spending in the United States and most other donor countries. That amount of money isn't causing the world's fiscal problems, and cutting back on ODA isn't going to solve them. Aid is a small investment that generates a huge return.

Few would argue, though, that ODA investments can't be improved. In the United Kingdom, DFID undertook a top-to-bottom review that looked at where aid was most needed and where it would have the greatest impact. As a result, DFID reduced the number of countries where it concentrates resources from 43 to 27. The agency also looked at the impact and value of its partnerships with global development agencies. This led to the elimination of funding for the least-effective agencies, requests for improvements from others, and an increase in funding for the best-performing organizations—such as the GAVI Alliance for vaccinations; United Nations Children's Fund; and the Global Fund to Fight AIDS, TB, and Malaria.

USAID recently launched USAID Forward, an ambitious reform effort. This is a big challenge for an organization that has been saddled with many responsibilities, but has not always had the leadership, authority, resources, or flexibility needed to implement meaningful changes. I know Raj Shah, the administrator of USAID—he used to work at our foundation—and I admire his commitment to creating a coherent vision and strategy. These efforts to increase transparency, improve monitoring and evaluation, and develop more innovative needs-based aid strategies are definitely a step in the right direction.

The foundation recently joined with USAID and others to fund a program called Saving Lives at Birth, which has a goal of significantly decreasing maternal and newborn deaths in poor, rural areas. Each year, 150,000 women and 1.6 million

children die during the critical period from the onset of labor through the first 48 hours after birth. In Sub-Saharan Africa, women are 135 times more likely to die during childbirth than women in developed countries. Many of these deaths could be avoided, but we need better tools to prevent, detect, and treat maternal and newborn problems. The idea behind Saving Lives at Birth is that researchers with great ideas about how to solve these specific problems get small grants to see where those ideas lead. This is the kind of focused, innovative approach that can generate breakthrough solutions.

Effective aid focuses in three key areas:

- Programs that contribute to the achievement of the Millennium Development Goals and concentrate on the countries that most need assistance
- Easy-to-understand, real-time information about programs that enables the development community to analyze what's working and what's not
- Evaluation of the impact of development programs so we can sort through various approaches and gradually get better at the entire enterprise

There are major development programs that meet these criteria. In 2011, a number of donors stepped up to meet the fundraising goal set by the GAVI Alliance, the organization responsible for helping poor countries buy and deliver vaccines. It was one of the most inspiring moments in my career at our foundation. Vaccines are phenomenally cost-effective. And because of GAVI, the world will bring the newest vaccine technology to almost all children right away, rather than making the poor wait, and die, for 20 years before the innovation trickles down.

The number of lives saved, as impressive as it will be, doesn't capture the full benefits of vaccination. Disease disables many more children than it



Pupils sit in class at Olympic Primary School in Nairobi. An estimated 79,000 teachers are needed to reach the internationally recommended teacher to student ratio of one to 35. In many Kenyan public schools there are more than 50 students for every teacher. | AFP Photo: Simon Maina

kills. Take the example of diarrhea. It kills about 1.5 million children every year, but it affects hundreds of millions more. Frequent bouts of diarrhea make it harder for children to absorb nutrition, which interferes with their mental development. There is now a vaccine for rotavirus, the leading cause of diarrhea, and GAVI will make sure it is given to hundreds of millions of children. This is a model of aid effectiveness.

China signing on to the Busan Partnership for Effective Development Cooperation is another sign of progress. It was the first time that one of the rapidly growing countries has pledged itself to the principles that traditional donors agreed to in 2005. We still have a way to go before everybody adopts best practices. Participants couldn't agree on new indicators of aid effectiveness or a monitoring system. It will be important for the United States to play a leadership role in forging a meaningful monitoring

system that is flexible enough so that it makes sense in the diverse development arena but also rigorous enough that it guarantees better results.

From Technology to Philanthropy

People often ask what prompted Melinda and me to start second careers in philanthropy. Growing up, I saw both of my parents deeply involved in community and philanthropic activities. My dad did a lot of pro bono legal work, helped establish legal services for the poor, and campaigned for better school funding. My mom worked tirelessly on issues affecting children, was the first woman to chair United Way's national executive committee, and as a University of Washington regent in the mid-1980s led the effort to divest the university's holdings in then-apartheid South Africa.

At Microsoft, we established one of the first philanthropic programs in the high-tech industry,

and I learned a lot about how Microsoft could use its technology, expertise, and resources to advance social and economic development.

Community service was also an important part of Melinda's upbringing, so when we got married in 1994, we started thinking about how we could give back much of the wealth Microsoft was creating and where it could have the greatest impact. We came across a newspaper article that talked about a handful of preventable diseases responsible for most childhood deaths in poor

Aid is only part of the story. It's important for policymakers to understand that rich countries are not shouldering the burden of helping the poor all by themselves.

countries. One of them, rotavirus, was killing half a million children a year. We were shocked, and started asking how a disease we had never even heard of could be killing so many children. This question eventually led us to invest in developing a rotavirus vaccine. And that experience helped us really understand what can be accomplished through effective partnerships and innovation.

In 2006, our friend, Warren Buffett, decided to pledge a significant amount of his personal wealth to the foundation. Over the next couple of years, Melinda and I decided that the most important contribution we could make was to get involved full-time in the work of the foundation and in making sure that people know the real story

Pakistani mother Mozamman holds her 2-year old twin sons Amanollah (R) and Samiollah (L) at her house in a poor neighborhood of Islamabad on July 21, 2010. Pakistan, population approximately 170 million, has in the last decade achieved an annual population growth rate of under 2%.

AFP Photo: Behrouz Mehri

about the impact of development programs.

It's popular these days in certain circles to discredit aid as inefficient, wasteful, and unnecessary. My experience, and the evidence, proves that is not the case. Aid is an important part—but only one part—of a 50-year record of improving the lives of the poorest. Scientific and technological innovations have enabled us to create vaccines that have saved billions of lives and alleviated an enormous amount of human misery. Higher-yielding seeds have fed starving children, improved the health of millions, and lifted countries from poverty.

But there is more work to be done. A malaria vaccine in Sub-Saharan Africa would dramatically improve the economic outlook there. More types of hearty, productive seed varieties are desperately needed and will save lives in many countries, nourish children, and guarantee food security for the world. There are all sorts of new resources we can draw on to continue the progress of the past—and speed it up.

By continuing to invest thoughtfully and strategically in innovative partnerships, scientific research, and new delivery mechanisms, we can keep shrinking the number of countries where aid is needed—eventually to zero.

Bill Gates is the chairman of Microsoft, U.S.A. and the co-founder and co-chair of the Bill & Melinda Gates Foundation. The views expressed in this essay are his own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.



The Unprecedented Gains in Global Development and New Directions for Development Assistance

We live today in the era of the fastest and broadest development progress in the history of the world. Never before have there been such rapid reductions in poverty, increases in income, improvements in health and education, and shifts toward democracy among low-income countries as we have witnessed since 1960, and especially since 1995. But at the same time, many other countries (and regions within countries) continue to make little or no progress at all.

In the midst of these changes—and partly because of them—the global context for development is changing rapidly. Private capital flows to developing countries have grown enormously, there are far more democracies with more capable and accountable governments, cell phones and other technologies are creating tremendous new opportunities, and a plethora of new donors and foundations have entered the scene. But significant new challenges are arising, especially around growing pressures from demographic shifts, resource demand, and climate change.

These shifts have profound implications for development organizations. What worked in the past may not be appropriate in the future. Development agencies must evolve as quickly as developing countries themselves in order to continue to be effective in supporting and accelerating development progress.

Global Development Progress, 1820–2012

Up until around 1820, the world was a very poor place, with little development progress as we think of it today. Almost everyone—except a few large landholders and those connected to royalty—was poor, illiterate, and vulnerable to disease. Fully five of every six of the world's one billion people lived on incomes less than \$1 a day (in today's money), and—shockingly—average life expectancy was a mere 27 years.¹

¹ François Bourguignon and Christian Morrison, "Inequality Among World Citizens: 1820-1992," *The American Economic Review* 92, no. 4 (September 2002), 727–744.



Pakistani farmers pack oranges at a shop in Barkot, a village in the Swat Valley, on December 23, 2010. In 2009, Pakistan launched a major offensive in Swat to clear the valley of Taliban and restore government control. | AFP Photo: Farooq Naeem

But over the next 140 years, the impacts of the Industrial Revolution, new technologies, and the opening of trade routes began to kick in. By 1960, global income had increased more than fourfold, and life expectancy had climbed to 55 years. The share of the world's population living on less than \$1/day had dropped from 85% to less than 50% (even though the absolute number had grown to 1.3 billion because of population growth). However, impressive as they were, these gains were concentrated heavily in Europe, North America, Japan (until World War II), and a few other isolated pockets such as Australia and New Zealand. Outside of these places, the world of 1820 remained largely unchanged.

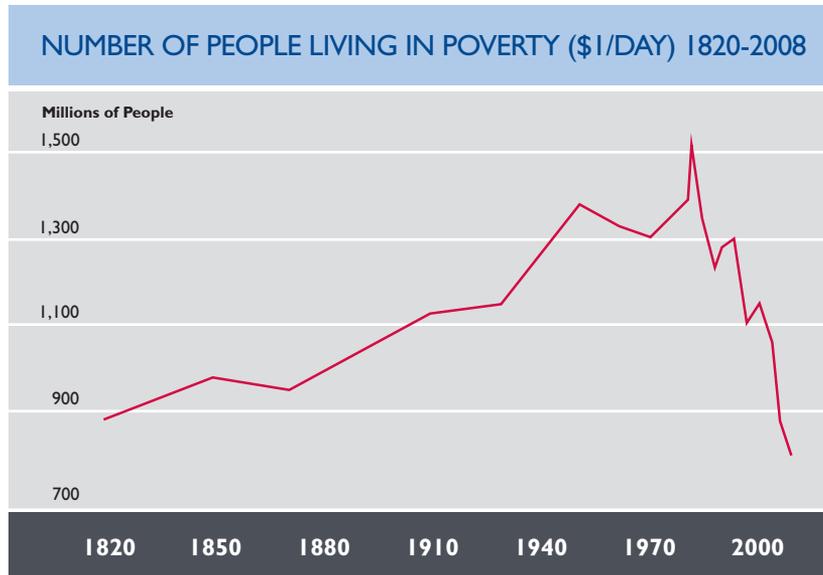
But then the great era of global development began. With the end of World War II came the beginning of the end of old colonial

relationships, the rise of independence movements, increased global trade and integration, and the spread of new technologies such as vaccines and new seeds and fertilizers. A growing number of low-income countries began to achieve rapid growth and poverty reduction. The progress was centered in East Asia, as countries deepened their trade and integration with a resurgent Japan and with the United States. In 1980 the re-awakening of China opened vast new opportunities for one billion of the world's poor, and India began to surge in 1990.²

² Charles Kenney brilliantly discusses recent development gains in his book *Getting Better: Why Global Development Is Succeeding—And How We Can Improve the World Even More* (New York: Basic Books, 2011). For an earlier discussion of these gains, see Steven Radelet, "Supporting Sustained Economic Development," *Michigan Journal of International Law* 26, no. 4 (2005), 1203–1222.

Time-series data for poverty over a 188-year period. Extreme poverty steadily increased until 1981 but has dramatically decreased since then.

Source: For 1820–1992, François Bourguignon and Christian Morrison, “Inequality Among World Citizens: 1820–1992,” *The American Economic Review* 92, no. 4 (September 2002), 727–744; for 1981–2008, World Bank Development Research Group, *PovcalNet*, online poverty analysis tool, accessed March 2012.



Contrary to popular perception, development gains were not solely confined to Asia. Between 1960 and 1995, 31 developing countries from all around the world—accounting for more than half of the world’s population—achieved greater progress than during any other period in history when compared with similar groups. Each grew fast enough—at least 2.2% per person per year (equal to the long-term growth rate of the United States)—that real incomes at least doubled over those 35 years, and in most cases, grew by much more. Across these 31 countries, average real incomes more than tripled, life expectancy rose from 51 to 66 years, and infant mortality fell dramatically from 117 to 41 per 1,000 live births.

But 1960 to 1995 was only a prelude. Since the mid-1990s, both the pace and the breadth of global development progress accelerated even more. The big change came with the end of the Cold War and the collapse of the Soviet Union. Strong forms of state control and socialism lost credibility, authoritarian dictators began to disappear in favor of democratically elected governments, and more countries began to integrate with

the global economy. Development progress spread more widely to Eastern Europe, Central Asia, Latin America, and Africa.

Since 1995, 73 developing countries have exceeded an income growth benchmark of at least 2.2% per person per year—more than double the number of countries compared to the preceding 35 years. In just 15 years, real incomes in these countries have increased 60%, infant mortality rates have plunged 35%, and gross primary school enrollment rates jumped 13%. And democracy is much more widespread. In Sub-Saharan Africa alone, the number of democracies has grown from 3 in 1989 to more than 20 today.³

The most dramatic change is in global poverty. Even as the *share* of the world’s population living in poverty began to decline after the Industrial Revolution, the *total number* continued to rise alongside population growth. But this pattern began to change, first temporarily in 1960, and then very

³ Steven Radelet, *Emerging Africa: How 17 Countries are Leading the Way* (Washington, D.C.: Center for Global Development, 2010).

dramatically in 1980 in what must be considered one of the great changes in human history. After rising steadily alongside global population growth, the number of people living on less than \$1/day fell from 1.5 billion in 1981 to 800 million in 2008, a drop of nearly half in just 27 years.

Despite these tremendous gains, the global development picture is far from universally positive. While many countries have made great progress, many other countries (or regions within countries) have made little or none, with stagnating or declining incomes and little change in poverty. While the number of people living on less than \$1/day has fallen sharply, there are still 800 million people living on such meager incomes, and nearly 2.5 billion that live on less than \$2/day. And while democracy has swept across developing countries like never before, the gains have slowed in recent years, and many countries still live under tyranny, dictatorship, or in the midst of conflict. Sadly, some of the world's most difficult development challenges have not yet been tackled.

New Forces at Work

While understanding the past is important, our real concern must be with the future. New forces are rapidly changing the global context for development. Future success will depend on understanding the past, but even more so in taking advantage of new opportunities and preparing to meet emerging threats and challenges. Six key dimensions of the changing global context stand out.⁴

First, as outlined above, there are enormous and growing differences in development performance across countries. Some countries are growing rapidly, some moderately, and some little at all. The high-performing group has an expanding

middle class, higher saving rates, larger markets, more government revenue, and more trained and capable workers. They have become much more attractive destinations for foreign investors. But at the same time, other countries remain stuck with slow growth, weaker investment environments, stagnant revenue and saving, few new economic opportunities, and often greater conflict.

Second, democracy has expanded rapidly, especially following the end of the Cold War and collapse of the Soviet Union. Democracy emerged in countries as diverse as South Korea, Indonesia, Poland, South Africa, Ghana, Brazil, and El Salvador. The shift is monumental: never before in history have so many low-income countries attempted to become democracies in so short a time. To be sure, these democracies are fragile and far from perfect. But as anyone with a sense of the history of the United States and Europe knows, building a representative, effective, and accountable democracy is an enormous challenge, where progress can be measured only over decades. This rise in democracy is critically important in its own right, but it also creates vital opportunities for strong partnerships based on country-led development approaches that reflect the voices and aspirations of the citizens of developing countries.

Third, in just six years between 2001 and 2007, net private capital flows to developing countries grew sevenfold from \$152 billion to \$1.1 trillion. This capital comes in many forms, including direct investments in plants and factories; portfolio investments in new stock markets, bonds, and debt instruments; and remittances from diaspora. Investors are arriving from around the world, including middle-income emerging economies such as China, India, Malaysia, Brazil, Russia, South Africa, and many others. These capital flows create some risks, but overall create huge new opportunities for job creation, skills transfer, and growth in developing countries.

⁴ For a discussion of some of these trends, see *USAID Policy Framework 2011–2015*.

Fourth, new technologies have led to much greater global integration. Cell phones have become ubiquitous in developing countries, and Internet access is growing quickly. The cost of shipping goods and moving people is far lower than just 20 years ago. In the most remote corners of the countryside, cell phones relay price information, transfer funds, and enable health workers to monitor patients. Virtual libraries, global research networks, and open-source software applications are giving communities new access to the world's knowledge and technical tools. These technologies are creating new economic opportunities, helping to deliver basic services, facilitating political debate, and improving transparency and accountability, all of which strengthen the prospects for continued progress in many low-income countries. And their influence will only grow in the years to come.

Fifth, pressures are growing from demographic trends, resource demand, and climate change. By 2050, the world's population will grow to around 10 billion people, with most of the new people in developing countries, and more specifically, in urban areas of developing countries. Under current trends, by 2050 about 57% of the world's population will live in urban areas, up from 50% today. The combination of more people and higher incomes will put greater pressure on the planet. Demand for critical resources—especially water, land, and energy—will grow rapidly. Global demand for food and water is likely to increase by 50% in just the next 20 years. Climate change will only add to these challenges. Skillful resource management and investments in agriculture and food security will become all the more important, whether from local governments, private actors, or donor programs such as the U.S. government's Feed the Future Initiative. Investing in, developing, and adapting new technologies will be crucial, and educating, training, and providing

opportunities for youth will be central to transforming the challenge of the “youth bulge” into an opportunity for robust growth and development.

Finally, there are far more local and international development organizations, donor agencies, foundations, philanthropists, church groups, private companies, and NGOs involved in development than just 10 years ago. China, India, Korea, Saudi Arabia, Kuwait, Brazil, and several other countries have become donors. New international agencies such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria and the Global Alliance for Vaccines and Immunizations have become major players. Whereas 20 years ago there were only a handful of major foundations working in development (including the Rockefeller, MacArthur, and Ford Foundations), today there are dozens more providing important support and advice, including the Bill & Melinda Gates Foundation, the Hewlett Foundation, and many others. These new organizations provide exciting new opportunities for partnership, leveraging, learning, skills transfer, and funding for development activities.

New Directions for Development Assistance

What do these changes mean for development organizations? How can donor agencies be most effective in helping to sustain and expand development progress in a rapidly changing world, especially in a time of tight budgets? To be sure, the most important forces that will determine future development success are the choices and actions of the leaders and citizens of developing countries. Development organizations can continue to play an important supporting role, as they have in the past. But these global changes suggest both that some older approaches may no longer be appropriate, and that there are new opportunities for innovative approaches in the future. Development



Tamale Implements is a manufacturer receiving assistance under President Obama's Feed the Future Initiative to build agricultural tools that meet local farmers' needs. | Photo: Alda Kauffeld/USAID Ghana

organizations must evolve just as quickly as developing countries to remain effective. They must re-orient themselves for this new world. There are five important ways in which they should do so:

Develop innovative ways to work with the private sector and encourage private investment. Foreign assistance was conceived largely as a substitute for missing private capital, aimed at filling “gaps” in savings or scarce foreign exchange. But as domestic economies have grown and foreign investors have become more interested, today there are billions of dollars more in private investment in developing countries. And there could be more, but many investors hesitate because perceived risks remain high. Except in the poorest and most isolated countries, development assistance can no longer be seen simply as a substitute for missing private capital: It must be

seen as a tool to stimulate, facilitate, and leverage private investment.

One way is through creative risk-sharing or co-investing. USAID's Development Credit Authority (DCA), for example, provides guarantees to local banks to encourage them to provide loans to promising local enterprises. Historically, more than 98% of the loans covered by DCA have been fully repaid, and the cost of the 1.75% default rate has been more than recovered by the small fees it charges partner banks. Through DCA, USAID has helped stimulate approximately \$2.3 billion in private-sector loans for more than 100,000 entrepreneurs in sectors ranging from clean energy to health to agriculture. Similarly, the U.S. Overseas Private Investment Corporation and the International Finance Corporation provide financing, guarantees, and other services to support private investors.

These kinds of approaches need to be shaped in creative ways so that they encourage new investment through risk-sharing instead of substituting for private capital. They can explore new ways to take on risks through subordinated debt, equity, or specific risks, such as helping investors exit during major market meltdowns or in the face of major adverse policy reversals. These tools also can be better integrated with other development initiatives, such as encouraging private investment in agriculture as part of Feed the Future. Similarly,

To be sure, the most important forces that will determine future development success are the choices and actions of the leaders and citizens of developing countries.

donor agencies can help reduce risks by covering the costs of due diligence, environmental and impact assessments, and other up-front costs that investors must bear long before they decide whether or not to actually invest.

At the same time, donors can work with governments and private investors to help identify and remove roadblocks and obstacles to investment. They can help facilitate discussions and provide analysis aimed at improving the investment environment. In this way, small investments by donors can help encourage much larger private investments that will allow private capital to work as intended in creating jobs and raising incomes.

Development agencies also can be more proactive in working with investors to encourage stronger

supply-chain linkages. They can help local farmers and businesses with marketing, quality control, sourcing of inputs, or meeting basic labor or environmental standards in order to stimulate sales. For example, in 2011 USAID announced a new partnership with PepsiCo and the United Nations World Food Programme (WFP) to scale up best practices and help build long-term economic stability for smallholder chickpea farmers in Ethiopia. PepsiCo and Ethiopian partners, including Omega Farms, the Ethiopian Institute of Agriculture, and the Ministry of Agriculture, are working with farmers to demonstrate increased yields and improved chickpea quality. As PepsiCo grows its business in chickpea-based products such as hummus, it expects to source some of its global supply from Ethiopia. WFP is exploring the feasibility of sourcing these chickpeas for the ready-to-use supplementary food that they are developing with support from PepsiCo Foundation. In this way and others, development assistance can help farmers build the knowledge and capacity to participate in global supply chains.

Work more closely with other new development partners. The emergence of new development partners is both an opportunity and a challenge. The opportunity is clear—they bring new skills, perspectives, experiences, ideas, and funding. The challenge for developing countries is how to coordinate and collaborate with so many new organizations, especially since they operate in different ways and do not all emphasize the same priorities. For traditional donors with established mechanisms, the challenge is to creatively and collaboratively work with new organizations that operate in different ways and that may not emphasize the same priorities, such as around governance.

At a minimum, traditional donors need to coordinate much more closely with the emerging donors from China, India, Korea, Brazil, and other countries. This is especially important *because* they

do not always share the same priorities. Too often, traditional donor groups leave out the new players and miss opportunities for collaboration and dialogue. Sometimes coordination means working together to share risk, leverage investments, or otherwise combine forces when donors and host governments share objectives. For example, one partner might fund a rural road, and another might invest in agricultural extension in communities living on the road. Sometimes, coordination means working separately with a clearer division of labor—for example, with one partner working on health and another focusing on education. But as traditional donors face constrained or even shrinking budgets, it is imperative that they re-think aspects of their business model and find ways to work much more innovatively with new partners to maximize the impact of their investments.

Invest more in technology. It is impossible to see how developing countries can meet the challenges of widespread disease, climate change, and pressure on food supplies from growing populations except through the development and dissemination of new technologies. Aid agencies have a long history of investing in both development and dissemination of new technologies, including the seeds and fertilizers as part of the Green Revolution, Oral Rehydration Therapy, or, more recently, immunizations for meningitis A and other diseases. These investments have reaped huge returns.

To meet the world's challenges in health, education, agriculture, renewable energy, and banking, development agencies must forge new partnerships with universities, foundations, private companies, local entrepreneurs, and others to develop new technologies, and with local actors to effectively disseminate both new and existing ones. This will require new types of relationships, incentive structures, funding, crowdsourcing techniques, and knowledge sharing. It will require new thinking

about development agencies contributing to market-demand analysis, product analysis, or venture funds to support innovative entrepreneurs; and working with church groups, faith communities, and civic organizations for greater dissemination. It will require encouraging people to take risks and providing support when some investments fail.

Work in closer partnership with and invest in governments in emerging democracies.

Although it is easy to find flaws and weaknesses in the new emerging democracies, there is no question that most are far more open and accountable than their predecessors. The appropriate model for donors working with dictatorships is not applicable for more democratic and accountable governments, even flawed ones.

The push toward more “country-led” strategies over the last decade is not just a fad. It is driven by, and makes most sense with, more democratic and accountable governments. It will make even more sense in the future as the emerging democracies continue to strengthen their governance and build capacity. These governments must play a much stronger role in setting priorities, developing strategies, evaluating programs, and accounting for results. Doing so makes sense not just because it will lead to stronger results, but also because democratic governments—rightly—demand it. Donors must explore creative ways to invest more in building institutions and systems in these countries, and to utilize these systems for their investments. Too often, donors have used parallel systems, which may make sense in less accountable governments, but may have inadvertently weakened governments by hiring away some of the strongest personnel.

Strengthening local systems requires using them. Broad-based budget support may be appropriate in some circumstances, but not always, because it does not necessarily create the best



A man working with a temporary employment program funded by USAID and operated by the Cooperative Housing Foundation moves rubble near the sea in Carrefour, Haiti, on February 15, 2011. | Photo: Kendra Helmer/USAID

incentives for continued institutional strengthening. Donors and partner governments have only begun to scratch the surface on innovative approaches, but there has been some progress. For example, USAID is piloting new approaches based on public financial-systems assessments and reimbursements for agreed expenses, among other mechanisms. A USAID team conducts an assessment of financial management and auditing systems in government ministries. If—and only if—they meet basic standards, USAID and the government negotiate a partnership agreement in which the government commits to implementing policy changes and investing in certain areas (for example, purchasing anti-malaria bed nets), and USAID commits to reimbursing them for certified expenditures. As a potential next step, USAID is exploring the possibility of creating even stronger incentives by mutually committing that, as the

governments take concrete steps to measurably improve their financial systems, USAID would commit to using those systems more. Each key step to strengthen the system would be matched with a step to use it more. To work, this process must be augmented by technical assistance and training to assist countries in continuing to build their systems.

This approach echoes other new ideas, such as output-based aid and cash on delivery, although it focuses more directly on institutions and systems. Development organizations need to imagine new approaches that focus not only on *what* they spend our funds on, but *how* they spend them in order to build systems and institutions that can sustain results over time. Of course, it is not all about investing in governments. Donors must also invest in local universities, NGOs, civil-society organizations, and businesses. But in the

emerging democracies, it is particularly important that we invest in government institutions to support and sustain the spread of democratic and accountable governments.

Use different approaches in different country contexts. One of the clearest trends in recent decades is the growing divergence across developing countries. Many countries are emerging democracies, but others are not. Conflict has subsided in many countries but continues in others. Many more countries are growing rapidly, while others remain left behind. Capacity and competence has grown markedly in some countries, while in others, there has been little change.

Whereas 20 years ago donor agencies could rely on a small number of standard approaches, today's landscape calls for a much more diversified tool kit. Government-led strategies might make sense in democracies, but less so in dictatorships. Using local systems is appropriate only where they meet basic standards, but not otherwise. Larger and longer-term commitments are appropriate where countries have a record of achievement; smaller and shorter commitments would be better elsewhere. Partnering with NGOs makes sense in almost all countries, but which countries and how to partner differs widely.

Creating tailored approaches takes work. It is much easier to have a small set of standard operating procedures that apply across all countries. But a single recipe typically means creating a system that works in the weakest and riskiest environments, which in turn constrains opportunities for success elsewhere. Exactly what the range of tools and approaches would be should vary by donor and country, but some broad guidelines seem sensible. The better governed and more accountable the government, the more governments should be in the lead in setting priorities and designing strategies and programs; the more funds should be

invested through government systems; the larger and longer-term the commitments should be; and the more the focus should be on achieving broader, longer-term results. In less-well-governed countries, the opposite holds—less government leadership in setting priorities, less invested in government systems, shorter and smaller commitments, and more focus on achieving quicker and measurable discrete results to demonstrate progress.

The rapidly changing global development environment is creating vast new opportunities and challenges. Development organizations must evolve just as quickly to further stimulate private-sector investment, work effectively with new partners, find new ways to deliver services,

Donors and partner governments have only begun to scratch the surface on innovative approaches, but there has been some progress.

create true partnerships with emerging democracies, and invest in new technologies. Making these changes will not be easy, but they will be crucial for making development assistance even more effective in sustaining the progress of recent years, combating poverty, and widening the circle of development and prosperity around the world.

Steven Radelet is the Chief Economist at USAID. The views expressed in this essay are his own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

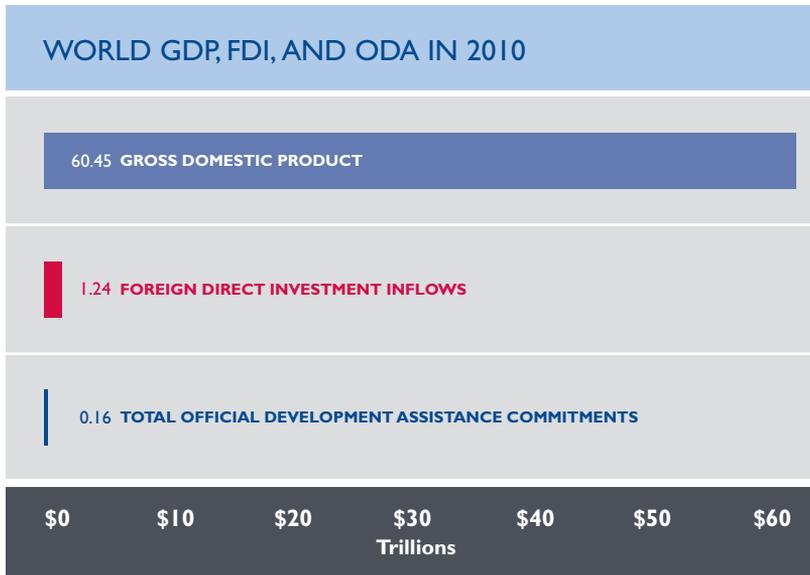
Reclaiming Economic Analysis

Development assistance has the ability to break open markets, expand trade, improve human capital, and lift the world's most vulnerable from poverty and disease. Foreign aid is, however, a mere drop in the bucket compared to global gross domestic product (GDP) or even foreign direct investment flows. In order for development practitioners—from government bodies like USAID to independent foundations and donors—to truly make a difference, foreign assistance must be used to leverage private-sector funds and open paths to untapped markets.

In the long view of development, decisions made by government practitioners and their private-sector partners today will help determine if developing economies are competitive into the future. The quality and nature of the programming delivered to farmers, firms, and (potential) employees today will determine whether their businesses can be competitive in regional and global markets, hire more and qualified workers, and contribute to the expansion of national GDP over the next decade. But how do development

practitioners accurately forecast needs to ensure that limited foreign assistance is being used in the most efficient and sustainable way—that our programs get the most bang for the buck? One answer is economic analysis.

The tools in the economic analysis toolbox are expanding. We have at our fingertips old workhorses like cost-benefit analysis (CBA) and cost-effectiveness analysis (CEA)—and newer tools, including growth diagnostics and randomized controlled trials. These tools can direct practitioners to the most promising and sustainable paths to development. They ensure that we use scarce funds to benefit the poor by intervening where necessary and leveraging private funds and untapped sources of capital whenever possible. More importantly, in a time of dwindling resources, economic analysis helps to identify sustainable interventions and estimate the optimal amount of assistance needed to achieve results at a project level. Economic analysis can never be a crystal ball that absolutely predicts whether project interventions will be successful, but it does help donors and implementers



Development assistance is small compared to total foreign direct investment (FDI) inflows, and just a fraction of world gross domestic product (GDP).
 Source: World Bank, UNCTAD, and OECD

make educated decisions about where and how to invest resources.

How Do We Make Our Investments Sustainable?

Cost-benefit analysis is currently the most useful tool for robust project design and sustainability. CBA tallies the costs and benefits of a given activity or investment to determine if the latter outweigh the former for relevant actors (that is, farmers, government, firms) and for the economy as a whole. The tool is data-intensive and requires meaningful collaboration between donor staff (project managers, field experts, economists, and other specialists), government counterparts, implementing partners, and the individuals who eventually benefit. This tool gives us the ability to identify who gains (or loses) from a project and by how much. Moreover, it is a powerful way to consider impacts disaggregated by gender, poverty status, ethnic group, or other characteristics of interest.

Perhaps equally important, agencies like USAID can use CBA to illuminate and improve the sustainability of our investments. This analysis rests on three elements: time, technology, and leveraging the private sector.

Time. CBA structures costs and benefits as flows over time. For a farm- or firm-level activity, this would entail:

- Considering how a project will change farm or firm incomes over the next 5, 10, or 20 years
- Identifying gaps or mismatches between expenditures and revenues
- Predicting when farmers or firms will face a shortfall and need access to credit

CBA helps to determine when a larger grant or loan is necessary to make a project viable, or to set project targets based on realistic adoption rates. As a result, CBA enables us to estimate whether a business assisted through our intervention will be able to compete independently in markets into the future.

Technology. Higher-capacity computers, readily available software tools, and a universe of data sources on the Internet have made CBA a more powerful tool. Analysts can produce models much more quickly and simply than was possible 30 years ago. With the click of a few buttons, it is possible to obtain field data without traveling thousands of miles. With a few more clicks, assumptions shift ever so slightly to calibrate project outputs and impacts. This allows us to isolate the factors that will have the greatest impact on a project's success or failure. For example, by recognizing that seed prices are extremely volatile, we can calculate how that volatility might affect (positively or negatively) a farm-level intervention. As technology improves and increasing volumes of data are publicly available, cost-benefit analyses should become less expensive and faster to produce.

Private sector. The resurgence of CBA aligns with a transformation in development—the recognition of the role and scale of the private sector. As private investment flows dwarf official development assistance, the case for targeted investments by donors such as USAID to leverage and catalyze private investment becomes even stronger. USAID seeks to match funds, or bring business-minded actors into schemes to increase the sustainability of agricultural production. CBA can incorporate the role played by agribusiness firms or private donors and determine just how much donors need to invest to achieve the desired impact. CBA can even identify cases in which there is no need for donor funds at a project level, directing resources toward policy change or investments in a different value chain.

Reclaiming Economic Analysis

USAID, like many donors, embraced CBA throughout the 1960s, '70s, and early '80s. During

the Agency's infancy, renowned economists like Arnold Harberger helped pioneer the application of CBA in project design. The World Bank and, more recently, the Millennium Challenge Corporation have applied CBA insights into their project designs. But in the mid-1980s, the use of CBA withered and was lost from the Agency's toolkit.

USAID began to re-establish CBA several years ago, just as a new emphasis on evidence-based programming, structured project design, and rigorous evaluation re-emerged within the Agency. The Office of Economic Growth began to train economists in CBA in 2010, then the guidance on project design was revised, and a USAID Evaluation Policy followed in 2011. Over the past three years, USAID has trained more than 100 staff and recruited Juan Belt, a retired Foreign Service officer and leading expert in CBA, to push forward these efforts.

The Bureau for Food Security has seized on CBA to improve project design, identify critical variables for monitoring and evaluation, and communicate the impacts of Feed the Future investments. Twenty focus countries are currently using these models to design better, more effective programs and ensure that USAID funds are applied to activities with the greatest possible development impact. Results from models already submitted have allowed USAID field missions to identify exaggerated costs, to recognize that grant sizes were mismatched with recipient needs, and to change the structure of planned partnerships to ensure sustainability.

Moving Beyond Markets

CBA is a powerful tool, but not always appropriate. Costs can almost always be monetized; benefits often cannot. For example, how much is it worth to reduce malaria prevalence by one percent of the population? What is the value of one

acre of rainforest protected? What is the welfare impact of improving care for children and the elderly, and what are the real costs for labor typically provided by women at no charge or non-market rates? The answers to these questions are not straightforward, particularly when markets cannot price the outcome we desire. However, by defining a goal such as preserving rainforests or preventing malaria, we can compare costs to determine which intervention is the most cost effective. Human capital and natural resources are two critical components of markets, and we need to understand the impact of our investments on those resources even if markets cannot (or can only imperfectly) value them.

CEA can be applied to identify the most sustainable interventions for a desired outcome—when an intervention is simply too costly for a host country to maintain after donor support is withdrawn or where lower-cost, more appropriate technologies could be applied. With the power of such insights, we can help countries build their economies, make best use of natural resources, and increase workforce quality so that they may compete in global and regional markets.

Frontiers in CBA/CEA Development

Cost-benefit and cost-effectiveness analysis tools are hardly new; they trace their origins to 19th century France. So how can they be innovative? What's so revolutionary about their application within development agencies? Two issues are at the fore.

First, innovative thinking is needed to analyze interventions where the benefits cannot be counted, much less monetized. Development practitioners struggle with these issues: How do we quantify civic engagement or security? What is a “unit” of democracy? Is there a right way to

count policy reform or private-sector engagement? Certainly rigor is still required to ensure we are making sound investments, and the next frontier in economic analysis will harness CBA and CEA to improve outcomes.

Second, donors should refine CBA and CEA to incorporate emerging development research. For example, as researchers find increasing evidence that gender inequality impedes economic growth, CBA models can be expanded to more precisely estimate the value of investments targeted to poor women. Similar extensions would apply to research on other target beneficiaries, such as youth, the disabled, refugees, or war veterans.

Where Do We Go From Here?

Inspired by the experiences of the Millennium Challenge Corporation, World Bank, and others, USAID has experienced a renaissance in the use of evidence-based programming. The Agency is integrating thoughtful project-design, rigorous cost-benefit and cost-effectiveness analysis, and monitoring and evaluation to ensure that scarce development dollars are well spent to achieve real, meaningful, and sustainable impact.

USAID is making clear what we can achieve when public funds leverage private investment and focus on bringing lasting change to enable the firms, factories, and workers of developing countries to be competitive in markets in the coming decades.

Rachel Bahn and Sarah Lane are economists in USAID's Office of Economic Growth. The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

Transformational Incentives for Innovation and Aid Effectiveness: Pull Mechanisms, Contests, and Prizes

Economic transformation is possible. Step changes in growth can be triggered by new incentives that attract entrepreneurs, investors, and consumers to adopt successful innovations. Prize contests are a time-honored funding instrument used to spur change, focusing attention and resources on key constraints at the development frontier. The ancient Greeks and Romans sponsored contests to improve chariots and horsemanship. In the 18th and 19th centuries, contests inspired improvements in navigation and food storage, and in the 20th century, they promoted commercial aviation. Today, we have the measurement methods and communications technology to design increasingly effective contests for a wider range of objectives.

Contests and prizes can accelerate development in part by pulling resources toward results, as opposed to pushing inputs. Recent examples

include the Advance Market Commitment¹ for vaccine purchase and the Cash-on-Delivery² aid for schools advocated by the Center for Global Development. Contests can also facilitate open innovation, attracting ideas from visionaries in society at large, as opposed to stovepipe R&D programs within a single organization. The power of pull mechanisms and open innovation to transform economic life was dramatized in 2004 by the Ansari X PRIZE for the first civilian space flight, whose \$10 million award attracted many times that investment to scale up the prize-winning technology. Since then, prize contests have been

1 Ruth Levine, Michael Kremer, and Alice Albright, *Making Markets for Vaccines: Ideas to Action* (Washington, D.C.: Center for Global Development, 2005).

2 Nancy Birdsall and William Savedoff, *Cash on Delivery: A New Approach to Foreign Aid* (Washington, D.C.: Center for Global Development, 2011).

This essay builds on research originally conducted in 2007–2008 as part of the author’s USAID-funded Linkage project with the International Food Policy Research Institute, summarized at <http://sites.tufts.edu/willmasters/research/prizes>.



Pakistani technicians install a wind turbine on the subtropical island of Kharochhan, couched in the cyclone belt of the Arabian Sea. This tiny island is light years ahead of the country, powering homes and businesses with wind turbines, saving the ecosystem and improving residents' quality of life. | AFP Photo: Rizwan Tabassum

increasingly used by governments, philanthropies, and private firms, including Innocentive.com, NineSigma.com, and Hypios.com.

The U.S. government's use of contests was spurred by President Obama's September 2009 *Strategy for American Innovation*, then endorsed by the Congress in December 2010 through passage of the America COMPETES Reauthorization Act. As of March 2012, the official Challenge.gov clearinghouse hosted 163 competitions sponsored by 41 departments and agencies, including 2 contests developed by USAID. Other international development agencies are actively seeking new contest designs, with the World Bank's Agricultural Pull Mechanism Initiative, launched in late 2011, as one of several pioneering initiatives.

The Transformational Power of Proportional Incentives

In well-designed contests, one dollar in prize money attracts many dollars' worth of effort toward the desired results. This economic leverage is not magic: It rests on the information provided by the contest about which innovations work best, for whom, under particular conditions. Contestants typically put more effort into the contest than they can win in prizes because the competition results are themselves valuable, revealing hidden information about relative performance for potential investors and adopters to scale up prize-winning approaches.

Contests designed to spur agricultural development were recently reviewed by the Center for Global Development in a report that contrasts

traditional lump-sum prizes with new contests that would offer proportional rewards.³ A proportional-prize contest is designed to mimic private-sector competition for market share. This type of contest offers market-like incentives by specifying a way to measure success, and a sum to be divided among contestants in proportion to their share of measured achievement. With proportional rewards, every contestant is paid according to their relative success (unlike traditional contests), while the funder specifies when and how much their total payment will be (unlike Advance Market Commitments or Cash-on-Delivery aid). The approach requires only that achievements be measured by some common yardstick. The unit of measurement can vary, allowing contest sponsors to create a market for the achievement of any measurable goal.

Real-life markets often involve the accumulation of achievements, each paid in proportion to results. For example, the stock market pays investors in proportion to a firm's market capitalization and dividends, as informed by externally audited earnings in a wide variety of enterprises. Proportional prize contests can create new markets of this type, as long as each increment is measurable and additional to other successes. Like a stock market, the initial funds at stake are important, but their transformational power comes from revealing credible new information about relative performance that inspires others to invest and scale up success.

How a Proportional-prize Contest Would Work

Creating a proportional contest starts by defining a measurable target—for example, value created by newly adopted agricultural innovations or

³ Kimberly Elliott, "Pulling Agricultural Innovation and the Market Together" (Center for Global Development Working Paper 215, June 2010), http://www.cgdev.org/files/1424233_file_Elliott_Ag_Innovation_FINAL.pdf.

educational methods substantiated by an auditable form of impact data, such as controlled trials and adoption surveys. Multiplying gains per unit by the number of units gives an impact estimate. Where each innovation fills a different niche, these can be summed, revealing how much each has contributed to total measured achievement. To receive a share of prize funds, each innovator's impact data would have to be submitted for external audit, just as a stock market requires listed firms to use licensed auditors. The prize sponsor would specify the total funds and date of payment, for example \$10 million to \$20 million to be paid out annually on December 15. A contest secretariat would solicit applications and audit the data by visiting trial sites and survey locations before rewards are paid. Eligibility for prize rewards could be restricted, but a contest open to all innovations that improve agriculture in Africa would capture the widest range of successes.

To qualify for award funds, organizations would submit data from at least one controlled experiment to show gains per unit, and at least one survey to show the extent of adoption, documenting the value of a specific technique as it spreads. Applications could be invited from any private firm, public agency, NGO, or partnership able to demonstrate the value of any proprietary or public-domain innovation that they have helped to develop and disseminate. Contest sponsors would employ an independent secretariat to solicit submissions, visit field sites to audit the data, and compute measured value. Prize rewards would then be paid to each applicant in proportion to their share of total measured gains.

If the total prize fund were \$10 million or \$20 million per year, each applicant would receive a royalty-like payment per unit of measured gain that is a small but highly visible new incentive for success. The payment would serve as an audited



Indian children eat at their temporary shelter on the side of the road in Hyderabad. Is it possible to live on 50 U.S. cents per day in India without being considered poor? India's national economic planning commission recently backed away from redefining the poverty benchmark. | AFP Photo: Noah Seelam

track record of achievement, demonstrating to other investors and adopters evidence of each prizewinner's recipe for success. Whatever the origin of success, knowing how, where, and for whom each intervention worked makes it possible to replicate and sustain each achievement.

Existing contests have not yet used proportionality, preferring the traditional approach of a fixed sum paid to the first or best entrant, plus any runner-up awards. A natural progression toward market-like incentives would be to pay in proportion to success, wherever auditable data on increments of achievement could be obtained. Agriculture and education are the most appropriate fields for such proportional prizes because

progress depends on a continuous flow of many innovations tailored to specific locations, times, and people—and controlled trials and adoption surveys are already routinely conducted to guide the programs of today.

Why the Proportional Approach Is Needed

Under current circumstances, impact data on alternative approaches to improving agriculture and education are rarely comparable and almost never externally audited. As a result, it is very difficult for an investor, adopter, or donor to compare their options. Funding decisions are made subjectively, based only on proposals that cite past successes

and impact assessments in ways that can rarely be compared. Proportional-prize contests would help solve the information problem by generating credible, comparable performance data to guide further spending, informing both public agencies and private investors about what works best, where, and for whom. Such contests would be effective on the development frontier, where the central challenge is to identify and scale up recent, localized successes, which typically involve some combination of proprietary innovations with public-domain resources and ideas. A proportional contest can be open to both kinds of achievement, as well as partnerships and hybrid social enterprises under any type of intellectual property. Only outcome data is revealed, and results are externally audited to permit credible comparisons among the solutions.

Not all situations are suitable for proportional prize contests. Where goals are not measurable, more subjective allocation methods are preferable. Where the goals are measurable but not additional to one another, then a traditional lump-sum fixed prize would be preferable. And where past successes are scarce, more basic research would be needed to get started. But for agricultural development, education, and perhaps other fields, circumstances are now well suited for the introduction of contests with proportional payments.

How New Contest Designs Can Improve Aid Effectiveness and Spur Innovation

The speed and extent of economic transformation depends on how quickly successful new solutions to important problems can be identified and scaled up. Pull mechanisms for open innovation offer a major step forward in incentive design, enabling governments, philanthropists, and private firms to specify desired outcomes and pay for success. Proportional contests, in which many successful

A resident of Kaedi, in the drought-stricken South of Mauritania, is unable to find pasture for his cows. In a joint statement on February 15, 2012, USAID and other major donors called for urgent assistance to West Africa's drought-hit Sahel region. | AFP Photo: Pablo Tosco/Oxfam

contestants would receive a share of the prize fund in proportion to measured gains, offer market-like adaptation of pull mechanisms for sectors such as agriculture, where success is incremental and location-specific.

In well-designed contests, one dollar in prize money attracts many dollars' worth of effort toward the desired results.

The economic leverage by which small prizes attract large efforts comes from revealing hidden information about what works, where, and for whom. Proportional prizes will lead innovators to assemble existing and new data about their results, for audit by a credible secretariat, documenting the flow of prize-winning innovations to be scaled up by investors and adopters. Contests that reveal success have the power to create new markets, transform the development frontier, and fuel sustained growth where it is most needed.

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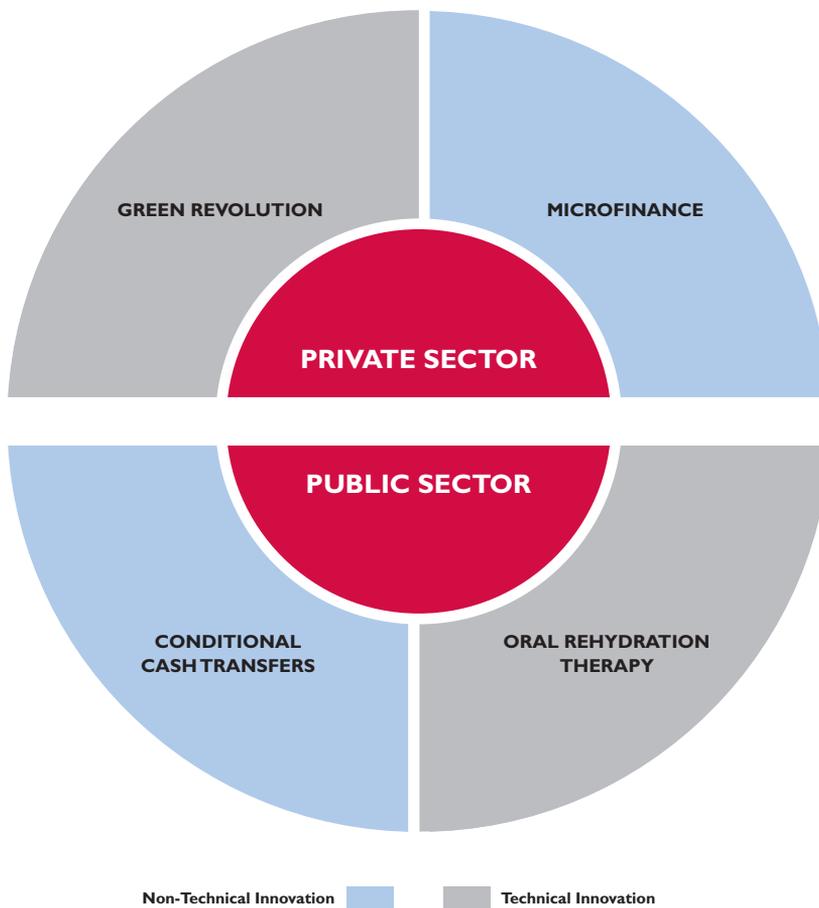
Linking Innovation and Evidence to Amplify Development Impact

In all aspects of life, we often stumble either upon or through methodical collaboration to discover unexpected solutions that change the course of our lives or the history of a people. Polio vaccines, broadband Internet, and new high-yield cereals are all examples of game-changing innovations that are significantly improving the health and prosperity of people around the world. Contemporary development thinking is characterized by a push for innovation but also for accountability, cost-effectiveness, and evidence. In this essay, we discuss the role of evidence in innovation. Evaluation is often thought of as a task for the end of a project. We think it should also be seen as a stage in the innovation process, similar to beta-testing in software development. Innovation should include an iterative process of piloting, testing, refining, retesting, and scaling. Efforts to invest in innovation need to be tempered and disciplined by gathering evidence on what is working and what is not so that failures can be modified or abandoned, and potentially transformative approaches can be refined and scaled.

Innovation in Development Successes in Innovation

There have been many dramatically successful innovations in global development. Some involve new technologies, while others involve innovations in systems and service models. Some innovations have scaled via private-sector commercialization, while others reached widespread adoption through the public sector. It is worth considering several examples of each pathway to scale as shown on the next page.

The Green Revolution: In the 1960s and early 1970s, many observers predicted massive famines in Asia, believing that food supply could not keep up with population growth. The predicted famines were in part averted by the development of new high-yield seeds that increased agricultural production across the region. The Green Revolution seeds were developed with financing from the Rockefeller Foundation, the Ford Foundation, USAID, and others, but production of the seeds is now sustained by the private sector.¹



There are multiple pathways to scale, as demonstrated by the major development innovations illustrated here. Some were brought to scale via public-sector adoption, while markets and the private sector catapulted others into wider use.

Source: Michael Kremer/
Maura O'Neill

Oral Rehydration Therapy: Diarrhea, one of the leading killers of children in the developing world, is responsible for millions of deaths each year. Historically, severe diarrhea was treated with the administration of intravenous fluids, but since this method is costly and requires trained medical personnel, and because diarrhea can quickly cause fatal dehydration, the vast majority of children do not receive the treatment. Oral Rehydration Therapy (ORT), which is a solution of salts and sugars that a patient ingests orally, was developed as a low-cost

alternative treatment that could be administered at home. It was promoted by some doctors as early as the 1950s but was not used on a widespread basis. Clinical trials in the 1960s financed by USAID helped establish the physiological case for ORT, and in 1971, it was used to treat 3,000 patients in Bangladesh refugee camps. The death rate from diarrhea amongst ORT-treated patients dropped to 3.6%, well below the average 30% of those treated by intravenous fluid.² Subsequently UNICEF,

1 Peter Hazell, “The Asian Green Revolution,” International Food Policy Research Institute Discussion Paper 00911, November 2009.

2 Richard Guerrant, Benedito Carneiro-Filho, and Rebecca Dillingham, “Cholera, Diarrhea, and Oral Rehydration Therapy: Triumph and Indictment,” *Clinical Infectious Diseases* 37, no. 3 (August 1, 2003), 398–405.

USAID, other donors, and national governments put forth a major effort to scale the approach worldwide. ORT is now used to save an estimated two million lives every year, at a reduced treatment cost of \$6 per treated person per year.³

Microfinance: Traditional financial services are inaccessible to most of the world's poor. Dr. Muhammad Yunus founded Grameen Bank in 1983 to provide microcredit to the rural poor in Bangladesh. This effort provided small loans to poor borrowers who typically lacked collateral, steady employment, and a verifiable credit history, excluding them from traditional loans. Since then, the group-based microcredit model and other services have been scaled worldwide to at least 1,084 microfinance institutions in 2009 serving 74 million borrowers with \$38 billion in outstanding loans and 67 million depositors banking \$23 billion.⁴

Conditional cash transfers: Conditional cash transfers, initially piloted in Mexico, have been widely adopted by national governments. Mexico has traditionally had a patchwork of social programs, some of which were used as a source of political patronage. In 1994, Mexico's Ministry of Finance and Public Credit introduced PROGRESA, an innovative conditional cash-transfer program that provided payments to poor women who ensured their children obtained basic preventive health care and attended school regularly. A randomized control trial of the program, which compared a randomly selected treatment group to a randomly selected control group, much like a clinical trial in medicine, showed that

PROGRESA reduced childhood illness by 12%⁵ and increased school enrollment by 10% for boys and 20% for girls.⁶ The combination of strong evidence from a rigorous trial and a demonstrated track record of operational success in running the program at scale led subsequent governments in Mexico to expand the program. Since then, the governments of 30 other countries have elected to adopt the conditional cash-transfer approach.

In each case, the benefits from developing a particular innovation extended far beyond a single country or organization. From the standpoint of economic analysis, this result indicates that no single country or private investor will have socially appropriate incentives to invest in innovation. This market failure provides a rationale for international organizations or donors to promote and invest in innovation that might benefit the developing world.

Yet, at the same time, there are many cases of failure. Some risk is inevitable with innovation. Unfortunately, there are all too many cases in which donors have continued to throw good money after bad, or not performed basic due diligence. The water-fetching merry-go-round PlayPump[®], for instance, was designed to draw water from deep wells when children pushed a large revolving wheel meant for play. The program launched with a \$16.4 million campaign in 2006.⁷ By 2009, hardly any pumps were still in operation.⁸

3 Ruth Levine, and What Works Working Group, *Millions Saved: Proven Successes in Global Health* (Washington, D.C.: Peterson Institute, 2004).

4 Microfinance Information Exchange, Inc., "The MicroBanking Bulletin," no. 19, 2009, www.themix.org/publications/microbanking-bulletin/2009/12/mfi-benchmark-analysis-microbanking-bulletin-december-2009, accessed March 29, 2012.

5 Paul Gertler, "Do Conditional Cash Transfers Improve Child Health? Evidence from PROGRESA's Control Randomized Experiment," *The American Economic Review* 94, no. 2 (2004), 336–341.

6 T. Paul Schultz, "School Subsidies for the Poor: Evaluating the Mexican PROGRESA Poverty Program," *Journal of Development Economics* 74, no. 1 (June 2004): 199–250.

7 Clarissa Brocklehurst and Peter Harvey, "An Evaluation of the PlayPump[®] Water System as an Appropriate Technology for Water, Sanitation and Hygiene Programmes," UNICEF, October 2007.

8 Amy Costello, "Troubled Water," *Frontline/World* video, Boston: WBGH Educational Foundation, 2010, www.pbs.org/frontlineworld/stories/southernafrica904/video_index.html, accessed March 29, 2012.



Ethiopian entrepreneur Bethlehem Tilahun Alemu (left), checks a pair of sandals on September 18, 2009, at her workshop in Addis Ababa. Using recycled tires and brightly colored fabrics, Alemu’s company, SoleRebels, manufactures shoes now sold around the world. | AFP Photo: Aaron Maasho

Likewise, the “One Laptop Per Child” campaign, launched in 2008 and initially supported by private companies as well as the United Nations Development Programme, aimed to create affordable educational devices for use in the developing world, most notably a \$100 laptop. The laptops were sold to governments, to be distributed through the ministries of education. But the program was plagued by a host of issues: full implementation, meaning one laptop per child, would require obligation of some countries’ entire education budget to purchase the technology. This investment was difficult to justify when more cost-effective tools were available to achieve the same expected outcomes on learning. Beyond

cost, it was not clear whether laptops were the most pressing investment, or if they would be useful educational tools in countries where basic educational infrastructure is lacking. Finally, the campaign lacked the resources to provide the necessary complements: educator training, software and digital content, and maintenance and support. These popular programs and failed experiments point to the clear need to carefully design mechanisms for supporting innovation in development to ensure that efforts to innovate incorporate careful consideration of appropriate design, demand, cost, and sustainable distribution models.

Failure is a necessary part of discovery in development as it is in pharmaceutical therapies

or information technology breakthroughs, and it often leads to a next iteration that proves highly successful. The key is whether the innovation is tested and evidence garnered early on so investments whose results are not cost-effective are either tweaked for optimal results or diverted to more promising ventures.

Mechanisms for Supporting Innovation

Different approaches to supporting innovation are needed depending on the context. In cases where the innovation requires considerable research and development for scientific or technological breakthroughs, a combination of “push” funding and “pull” funding is useful. Push funding finances inputs into the research process; for example, the National Science Foundation and National Institutes of Health provide grants for research based on a system of peer review.

In developed countries, push financing is typically complemented by the “pull” of a market that incentivizes private firms to develop usable products from which they will make a profit. However, this incentive is often missing for products that have a primary market in the developing world, such as a new disease-resistant cassava variety, because the potential market (and ability to pay) is not clear. One approach to catalyze pull funding in these cases is to use advance market commitments (AMCs), which pay based on results. The pneumococcal AMC, for instance, is a funding mechanism that rewarded vaccine developers for producing affordable pneumococcal vaccines that protected children against strains common in developing countries. Pneumococcal disease causes a half million children under 5 to die each year worldwide, making it the leading vaccine-preventable cause of death among young children. Under this mechanism, vaccine developers only received payment if they achieved pre-specified

technological goals and if countries ordered the vaccines. Based on the recommendations of a 2005 report from the Center for Global Development, an international AMC fund has incentivized the delivery of vaccines, and multiple producers are now manufacturing qualifying vaccines, which are reaching some of the world’s poorest children.

In other cases, the innovation is not a new technology, but rather, a new approach that can be scaled up privately, such as with microfinance. Once an approach is successful, it can be scaled by hundreds or thousands of different organizations, but first it must be piloted, which will likely require trial and error to refine the model. Spillovers to other firms and the inability to

Failure is a necessary part of discovery in development and it often leads to a next iteration that proves highly successful.

appropriate the full return resultant from creating a successful business model can create a case for public support at this initial stage. How can donors support the initial development costs for promising projects that will be taken up by the private sector without subsidies turning into indefinite commitments that drain taxpayer funds and starve more promising projects of support? Before providing more than exploratory pilot-stage financing, donors should require initial market signals showing that customers would be willing to buy at a price that substantially covers costs, and that private investors would be willing to take a stake. Stronger market

signals as well as prima facie evidence of development impact should be required for continued or higher-level support.

Finally, in other cases, innovations are not technological and would require sustained support from public-sector funders such as donors or country governments. For example, consider a new method of teaching third-grade math in public schools to improve learning. Governments and donors have a natural role to play in promoting this type of innovation because it is particularly difficult for private investors to reap the social benefits from developing more effective and less expensive ways for governments to operate. However, the challenge for donors of supporting promising innovation while avoiding the trap of sinking large sums into failures or fads has to be faced without the useful discipline of a competitive market. While failed experiments in the domestic arena may generate political consequences, that chastening process is much more complicated in foreign assistance. Thus, it is incumbent on foreign aid donors to be realistic about the testing methods and the experimentation needed with new approaches and critically examine progress when investing in the latest innovations. Donors can manage the risk of investing in innovation by seeking rigorous evidence that a particular approach is achieving the desired impact before investing at scale. This will help protect governments and donors from the all-too-common problem of investing massive sums in new fads that sound good or have early promising results, but turn out to be unworkable, ineffective, or unable to scale.

Evidence from Randomized Evaluations

As discussed above, in the case of technological innovation, support can be provided on the basis

of hitting technological benchmarks or finding users. In the case of innovations that will scale through the private sector, the ability to find paying customers and investors willing to finance capital requires a market test. However, in the case of innovations in public-sector practice, these tests are not present, so rigorous collection of evidence on ultimate impact becomes critical. If a solar lamp is selling in off-grid villages at a price sufficient to cover the cost of manufacture and distribution, there is a strong prima facie case that its development impact is strong, so it may be unnecessary to prove that it is raising test scores by helping children study at night. But before a government trains all its teachers in an innovative new math curriculum, it should rigorously test whether it will improve learning outcomes. In Silicon Valley, the business model of new companies usually changes multiple times before a profitable, scalable pricing and distribution system is perfected. It should be expected that this will also be the case in development and thus planned for.

In the past 15 years, there has been a movement to use randomized control trials to measure the impact of new approaches to address development challenges with a treatment group and a comparison group, as in a medical trial. This is in part because it is often difficult to isolate the impact of programs from those of confounding factors. For example, if schools that adopt a new math program see better outcomes for their students, it might simply be because there are better teachers in the schools—not because the program itself is working. With a randomized control trial, randomized assignments would determine which schools would receive the new math program, the same way randomized assignment occurs in a medical trial. The results would then provide evidence that any effect was a direct consequence of the intervention and nothing else. In many cases,

these findings have been used not just to establish the impact of existing approaches, but also to beta-test new, innovative approaches.

We now have evidence that a number of new approaches can have a dramatic impact. Some examples:

Effective HIV/AIDS education: An evaluation in Kenya found that informing teenage girls that men in their 20s or older are more likely to have HIV than younger men reduced the number of pregnancies with older men by 65%, with no corresponding increase in pregnancies with younger men. The program cost just \$1 per student.⁹

Combining vaccination with nutritional programs: Vaccines are among the most cost-effective health strategies available. Yet there are areas with very low vaccination rates, in part because the benefits are not immediately visible. An evaluation in India found that when a nutritional program provided one kilogram of lentils together with vaccination, full immunization rates rose from 5% to 35%. By encouraging more families to attend immunization clinics, these incentives can even reduce the per child cost of vaccinations.¹⁰ This research could also indicate that sometimes combining items that people place higher value on in the short run (food) with items that provide long-term benefit (vaccines) can produce better results.

Remedial education programs for basic skills: Many children in developing countries fall behind in school and find it difficult to catch up.

Concentrating on basic skills can prove remarkably effective. Evidence from a randomized control trial shows that children who attended a pilot version of the after-school “Read India” program for just three months jumped from simply recognizing letters to reading entire paragraphs on their own, at a cost of no more than \$2.25 per student, per year.¹¹

On the basis of these types of randomized experiments, there is now strong evidence of impact for a range of approaches, including commitment savings accounts, support for microenterprise, providing iron and vitamin A supplements through schools, providing school and child-level report cards, community-based monitoring of primary healthcare providers, publicizing findings of random audits to reduce corruption, and more.¹²

This type of evidence can also help induce governments to adopt and scale successful approaches, but operational models that take effort to build and outreach and dialogue with policymakers are also needed. The spread of conditional cash transfers involved both rigorous testing and accumulation of evidence and years of sustained work on an operational model by a dedicated team from the Mexican government. The Inter-American Development Bank and World Bank put forth a major effort to disseminate the results and work with policymakers in other countries beyond Mexico to adapt the program to their needs and to help finance programs and further evaluation.

This combination of rigorous evidence and work to develop operational models also led to the scaling of the highly cost-effective deworming effort that began in Kenya. Many kids miss

9 Esther Duflo, Pascaline Dupas, Michael Kremer, and Samuel Sinei, “Education and HIV/AIDS Prevention: Evidence from a Randomized Evaluation in Western Kenya,” The World Bank Policy Research Working Paper Series, October 1, 2006, econpapers.repec.org/paper/wbkwbrwps/4024.htm.

10 Abhijit Banerjee, Esther Duflo, Rachel Glennerster, and Dhruva Kothari, “Improving Immunization Rates through Regular Camps and Incentives in Udaipur,” 2004–2007, www.povertyactionlab.org, accessed March 29, 2012.

11 Esther Duflo and Rachel Glennerster, “Read India: Helping Primary School Students in India Acquire Basic Reading and Math Skills,” 2008–2010, www.povertyactionlab.org, March 29, 2012.

12 For more details on these approaches and the underlying evidence, see the DIV Annual Program Statement, available at <http://idea.usaid.gov/organization/div>.



Immigrants follow a computer class at a Catholic mission in the port city of Nouadhibou, Mauritania. Nouadhibou is a departure port for migrants, often illegal, seeking passage to the Spanish Canary islands.

AFP Photo: Seyllou

school for reasons that include family needs, work, menstrual cycles, and apathy. An evaluation of an NGO-run deworming program in Busia, Kenya, showed that a program to distribute a pill that eliminated intestinal worms (once or twice per year) decreased student absenteeism by 25%, making it one of the most cost-effective ways of increasing school attendance.¹³ Children were too often missing school because they were sick. Scaling this approach throughout Kenya required:

- Combining evidence with a concerted effort by

researchers and practitioners to work with the media, senior civil servants, and political leaders to spread awareness of the problem

- Raising funds to cover the start-up costs of new programs
- Working together with mid-level Kenyan civil servants to undertake the practical tasks needed to operationalize a scaled-up program

Senior civil servants and political leaders in Kenya committed government funds to implement a national program, and Kenya has since dewormed 3.5 million children. Based on the success of this work, the government of Bihar, India, recently launched a school-based deworming campaign reaching 17 million children. The

¹³ Edward Miguel and Michael Kremer, "Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities," *Econometrica* 72, no. 1 (January 1, 2004), 159–217.

Children's Investment Fund Foundation, Douglas Marshall Foundation, and USAID just announced a partnership to scale the intervention up throughout Kenya and to begin preliminary work in three other countries.

In each case, successful scale-up involved close cooperation and coordination between practitioners and academics to try new approaches, carefully evaluate the results, and develop cost-effective, operational, scalable models. A key insight from these examples is that focused, concentrated, and sustained effort is required not only to develop new innovations, but also to engage in an ongoing dialogue with key policymakers and undertake a process of evidence-based trial and error to adapt and refine ideas to the point where they can be widely adopted.

The Staged Financing Model

How can we apply these experiences to develop, test, and transition to scale other innovations in global development? One approach development agencies can take is to offer staged financing for applicants with innovative concepts. The first stage would provide seed funds to support initial research and design, small-scale pilots and field testing, and initial focus groups or stakeholder consultations to establish viability (that is, technical, organizational, distributional, and financial) and user adoption rates. The second financing stage would support rigorous testing to assess impact at a larger scale. In the case of projects that would receive sustained public support, it would be critical to establish rigorous evidence of cost-effectiveness. For successful innovations expected to achieve widespread adoption through private-sector commercialization without long-run support from donors, government, or philanthropy, the needed evidence differs. Successful innovations would have to provide evidence such

as profitability, beneficiary demand, willingness to pay for the product or service, later-stage leverage from private-sector investors, government receipt of associated tax revenue, and development outcomes. The third financing stage would provide support for replicating the approach and transitioning the most successful projects to

Donors should require initial market signals showing that customers would be willing to buy and private investors would be willing to take a stake.

scale. In this third stage, operational challenges for scaling would be identified and addressed, potentially including additional trials of alternative approaches. This stage would involve in-depth and ongoing consultation with the organizations that will ultimately scale up the program to understand their needs.

USAID created Development Innovation Ventures (DIV) to operationalize this model of staged financing. DIV aims to identify, develop, test, and scale innovations that prove (through rigorous testing) to be cost-effective and scalable approaches to development challenges. DIV does not support major new science and technology research, such as the development of new vaccines, but helps support other new approaches with direct application to development challenges that are designed to scale through the public or private sectors. DIV's portfolio includes innovations designed by development economists, business and

NGO leaders, and award-winning start-up social enterprises. As host countries, the private sector, bilateral or multilateral development agencies, or others adopt the proven interventions at scale, these approaches will no longer require support from DIV.

Cost-effectiveness is a key metric for success and, ultimately, cultivating funding for innovations that are likely to be publicly provided. For some projects—for example, those targeting improved agricultural productivity—cost-effectiveness can be assessed through cost-benefit or net-present-value calculations. For projects in other sectors, the project application must include some other means of assessing cost-effectiveness. Thus, for example, a health application might use a cost per Disability Adjusted Life Year metric. Or a program designed to reduce school dropout rates might use an estimated cost-benefit calculation based on estimates of the returns to education. In such cases, a short-run impact evaluation funded in the second stage might examine only dropout rates, but as part of later scale-up funding, the application would be expected to validate impacts on wages that were only estimated in the initial evaluation.

Examples from the DIV portfolio help illustrate the potential for the DIV model to help beta-test and scale successful development solutions. The following descriptions are illustrative of the model's application in both the public and private sector:

Maternal health: Post-partum hemorrhage is the leading cause of maternal mortality, responsible for the deaths of 140,000 mothers per year worldwide.¹⁴ Balloon tamponades can save a woman's life 76% to 100% of the time, depending

on the design.¹⁵ However, with current costs ranging from \$77 to \$312 for a single-use tamponade, they are prohibitively expensive for widespread use in developing countries. DIV is supporting the Program for Appropriate Technology in Health (PATH) and Health Tech's development of a balloon tamponade that, at less than \$10 per device, would be more affordable in the developing world. The tamponade could stop hemorrhage and control uterine bleeding for as much as a 97% reduction in cost.

Sustainable sanitation in urban slums:

Across the world, 2.5 billion people lack access to basic sanitation. The resulting infection from contact with human waste contributes to the global burden of diarrheal disease and claims the lives of nearly 1.6 million children each year.¹⁶ DIV's investment in Sanergy, a start-up company in Nairobi, is piloting their network of pay-per-use latrines in urban slums. The sanitation centers are franchised to local entrepreneurs, who earn income through usage fees, membership plans, and sales of complementary products. The company collects the waste daily to process as commercial-grade fertilizer and biogas, which can be sold for a profit.

Election fraud: Researchers from the University of California, San Diego, used funding from DIV to evaluate how Afghan candidates and polling officials reacted to the knowledge that their vote counts would be photographed and compared to the final vote tallies in the capital. The results showed a 25% reduction of votes for the candidate most likely to influence the count and a 60%

14 "ACOG Practice Bulletin: Clinical Management Guidelines for Obstetrician-Gynecologists Number 76, October 2006: Postpartum Hemorrhage," *Obstetrics and Gynecology* 108, no. 4 (October 2006), 1039–1047.

15 C. Georgiou, "Balloon Tamponade in the Management of Postpartum Haemorrhage: a Review," *BJOG: An International Journal of Obstetrics & Gynaecology* 116, no. 6 (May 1, 2009): 748–757.

16 *Diarrhoea: Why Children Are Still Dying and What Can Be Done* (Geneva: United Nations Children's Fund/World Health Organization, 2009).

reduction in the theft of vote tallies and other election materials.¹⁷ Following the evidence of the approach's success in Afghanistan, a second trial of the technology in Uganda met with similar success, and a private global telecommunications firm plans to expand the approach to some upcoming high-profile elections.

Road safety: Worldwide, road accidents are the leading cause of death for young adults, claiming the lives of more than a million people each year. Traffic and road safety enforcement in developing countries is often corrupt and

The business model of new companies usually changes multiple times; it should be expected that this will also be the case in development and thus planned for.

inefficient. Commercial minibuses account for a large share of traffic and accidents in many of the poorest countries. Putting small stickers in minibuses encouraging passengers to “Stand up! Speak up!” against reckless driving reduced insurance claims by more than 50% in a pilot in Kenya.¹⁸ With DIV funding, the researchers will expand the pilot to reach approximately 10,000

¹⁷ Michael Callen and James Long, “Institutional Corruption and Election Fraud: Evidence from a Field Experiment in Afghanistan,” University of California Institute on Global Conflict and Cooperation, 2011.

¹⁸ James Habyarimana and William Jack, “Heckle and Chide: Results of a Randomized Road Safety Intervention in Kenya,” *Journal of Public Economics* 95, no. 11–12 (December 2011), 1438–1446.

Indian residents collect drinking water from a tanker supplied by the municipal water works in Bolkapur Colony of Hyderabad on May 6, 2009. More than 250 people in Bolakpur Colony fell sick when sewage contaminated the local drinking water pipeline, and five died. | AFP Photo: Noah Seelam

minibuses in Kenya and rigorously evaluate the program to determine how messages can be most effective in reducing accidents.

Evidence-based innovation offers—and DIV is designed to assist with—the iterative process of seeking and adapting to lessons learned. DIV’s staged financing approach allocates resources in lockstep with the amount of evidence of impact demonstrated by a solution and helps scale only the ones that are proven to work. By supporting breakthrough innovation while prioritizing evidence, DIV has the potential to change millions of lives at a fraction of the usual cost and be an important development innovation in the field.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.



Gender Equality and Women's Empowerment: Central to the New Development Enterprise

2011 was a milestone year as major international organizations firmly acknowledged the centrality of gender equality to development outcomes. In March 2011, the Food and Agriculture Organization issued the first-ever *State of Food and Agriculture on Women and Agriculture: Closing the Gender Gap for Development*. The report marshals new economic evidence and analysis to argue that one of the key reasons agriculture is underperforming in many developing economies is that women do not have equal access to the resources and opportunities they need to be more productive. Closing this resource gap, the report argues, will increase agricultural output in developing countries by 2.5%–4% and reduce the number of undernourished people in the world by 12%–17%.¹

In September 2011, the World Bank released its first-ever *World Development Report (WDR)* on gender equality and development, reiterating the

key message that gender equality is smart economics. Gender equality has long been recognized as a core objective in its own right, but the WDR notes that it also raises productivity and improves other development outcomes, such as life prospects for the next generation and the quality of policies and institutions.²

While the report makes a strong business case for gender equality, it also acknowledges that economic growth is insufficient to improve women's lives and reduce gender gaps. Rapid economic growth has, in some circumstances, even exacerbated gender inequalities. The report identifies “sticky” (that is, persistent) gaps in health and education, discrimination in the workplace, underrepresentation of women in governance structures, and lack of property rights in many countries. For instance, maternal and child mortality rates remain unacceptably high in countries that have made huge economic progress, such as India and

1 *State of Food and Agriculture: Women in Agriculture* (Rome: FAO, 2011), 43.

2 *World Development Report 2012: Gender Equality and Development* (Washington, D.C.: World Bank, 2011), xiii.



Players of ARV (anti-retroviral drugs) Swallows during a practice session at Zinyengerere Government School in Epworth, Zimbabwe on June 28, 2010. ARV Swallows is one of 16 teams in an HIV-positive women's league formed by veteran football administrator Chris Sambo. | AFP Photo: Desmond Kwande

China. Women now represent more than 40% of the global workforce, but they are more likely than men to engage in low-productivity and labor-intensive activities and to earn less for the same work, even with equivalent education and training. They are also less likely to own or control key assets like land and housing. And they are still largely responsible for unpaid household work.³

Other imbalances also persist. For example, women remain dramatically marginalized in peace processes. The United Nations has found that women comprise less than 10% of peace negotiators and less than 3% of the signatories to peace agreements. That exclusion has had

consequences: post-conflict recovery programs and disarmament, demobilization, and reintegration programs often fail to differentiate between the needs of male and female former combatants in their design. Moreover, critical issues are often overlooked. For example, of 300 ceasefire accords, power-sharing arrangements, and other peace agreements negotiated since 1989, just 18 of them—only 6%—contain even a passing reference to sexual violence.

So why do these gaps remain? Gender equality advocates and others have, for decades, been calling for a fundamental shift in the approach to development and working to alter the distribution of power, opportunity, and outcomes for women and men. Yet innovations have proven difficult to

³ *World Development Report 2012*, 3-17.

translate into practice at the scale required to bring about profound change. In light of the increasingly compelling evidence that we need to do a better job, how can we best improve our approach to achieving gender equality and women's empowerment?

Analysis and field experience reveal critical lessons that must shape strategy, program, and project design. These lessons are simple, practical guideposts to help move us forward:

It's about women and men. Too often, the commitment to gender integration means a focus solely on women or simply on creating balanced male-female representation in an institution's staff or among program beneficiaries. This will not work. Advancing gender equality and empowering women depends on engaging men and women in strategy and program design and implementation. Sexual violence will not disappear until male allies, perpetrators, and victims are partners in solving the problem. Women's experience, perspectives, and priorities will not be respected and heard until their male counterparts in societies and communities value and seek their views.

Similarly, advancing whole societies through strategies that promote gender equality will succeed only when focused on the needs and priorities of women and men. Projects to promote women's economic well-being through employment and small business development will have the greatest durable, positive results when structured so that men see the benefits to themselves and the well-being of their households. Education programs can only meaningfully engage students when cognizant that young boys have fallen behind in some places and young girls in others.

Broader societal transformation is key. Often we focus on individuals' beliefs and attitudes when we think about addressing gender bias. Although individual perspectives matter, they are

reflective of broader social norms that assign specific roles, rights, and responsibilities to men and women. In turn, those beliefs often are reinforced and institutionalized by laws, institutions, customs, and market forces (such as employer hiring practices) that can inhibit access to opportunities, control over resources, and voice in decision-making. For example, the subordinated view of women is often reflected and reinforced by legal limits on their rights to borrow money, inherit property, and own land. Occupational segregation in markets reproduces norms about who is responsible for care and housework. Reducing gender inequality on a large scale will require broader transformations in societal attitudes and the way those attitudes are reflected in laws, institutions, and markets.

Success will require integrating attention to gender in all programs...and some strategic investments for women. Efforts to advance gender equality and women's empowerment must be woven into sector programming to succeed. While some may assume that certain areas, such as macroeconomic or growth policy, are gender neutral, there is now a large body of evidence showing that gender gaps in education reduce growth in some countries and gender gaps in labor markets facilitate growth elsewhere. Economic growth programs must ensure that benefits accrue to men and women to have an impact that promotes long-term, broad-based sustainable development. Health programs will only reach men and women if they are designed with an awareness of the different schedules and clinical needs of males and females, among other issues. Elections will only enfranchise men and women if they are planned and carried out in ways that reach potential voters using the different communications technologies men and women can access—and if polling places are situated in places accessible to men and women

given their habits, schedules, and norms that may restrict mobility.

At the same time, some of the challenges women and men face are unique and will require tailored and dedicated programs. Combating and assisting victims of gender-based violence, for example, can require specifically targeted interventions. Programs to elevate the voices of women leaders in peace processes or governments will often necessitate a concerted effort focused on females. Successfully achieving gender equality and women's empowerment must involve a two-track strategy—one that integrates these objectives into sector programming and makes strategic investments for female empowerment where necessary.

Technology can help or hurt. Technology is increasingly looked to as a means for moving societies forward rapidly. And it can be an incredible tool. In places like Afghanistan and Kenya, mobile banking already has dramatically reduced losses in income due to corruption. Internet and communications technology enabled social movements to push for democratic change in the Middle East and North Africa. At the same time, if we aren't careful, technology can exacerbate the divides between the "haves and the have-nots," the rich and the poor, men and women. The gap between male and female access to mobile technology provides a perfect example of the risk; in low- and middle-income countries 300 million fewer women than men own mobile phones.⁴ In seeking to harness the power of mobile networks, we must recognize that the gender gap means women will often not benefit equally from those interventions. Similarly, unless that gap in ownership is closed, we must understand that using this technology risks leaving women farther and farther behind.

⁴ GSMA Development Fund, *Women & Mobile: A Global Opportunity* (London: GSM Association, 2011).



An Afghan girl looks at the camera during a Women's Day ceremony held by the All Afghan Women Union in Kabul on March 8, 2009. Around 200 Afghan women gathered to celebrate International Women's Day and shouted "We want peace with justice." | AFP Photo: Massoud Hossaini

Data and information are critical. The only way to know if projects and programs are effectively serving men and women and reducing gender gaps is to have data that is sex-disaggregated and can be used to construct indicators that measure change in both absolute levels and women's status relative to men's. Today, basic data gaps exist on project beneficiaries; but there also are myriad larger questions for which we don't have answers:

- Are strategies that focus on promoting gender equality and empowering women more or less effective in promoting agriculture sector growth, poverty alleviation, and reductions in malnutrition?



An Indian woman carries a pot of water from a well in the village of Kayla, India. The government has made progress in the supply of safe water to its people, but gross disparities in coverage persist. The World Bank estimates that 21% of communicable diseases in India are related to unsafe water.

AFP Photo: Sam Panthaky

- Which types of interventions are more effective at improving learning and school completion rates for girls and boys?
- Are women and men benefiting equally from projects in governance, security-sector reform, or other sectors?
- Have there been unforeseen negative consequences for men or women as a result of our programs, such as displacing women from access to resources or assets, increasing the unpaid work or caregiver burden of females relative to males, or increasing the risk of gender-based violence? If so, how widespread are those consequences?

Without that basic information, it is impossible to know the extent to which gender gaps are being reduced and women empowered, how effectively that is being done, and with what effect on overall development results. A fundamental, foundational building block to success—and to awareness of that success—is quality data and information.

Women must benefit from and be active partners in the development process.

Historically, the foreign assistance community has focused on serving the needs of the poor and underprivileged. As a result, our ability to meet the needs of women has improved. But recognition and engagement of women as critical partners in development and decision-making lags behind. Though we seek increasingly to involve stakeholders in designing, implementing, and evaluating strategies and programs, we often fail to leverage

the insights and talents of women in civil society, government, and communities. For example, though the vast majority of adult refugees and displaced people are often women, decision-making structures and camp committees are regularly dominated by men. That is to our own detriment, as women's perspectives and approaches to problem solving are often unique and also necessary to ensure more effective and responsive governance.

Most importantly, broader transformation of the modern development enterprise will require a full appreciation of the most important lesson:

It's about solid development outcomes that improve lives for all with rights and dignity. Gender equality and women's empowerment are critical goals unto themselves. At the same time, pursuing equality and empowerment translate into successful and sustainable development. Our foreign assistance will achieve less until we are better able to weave effective strategies for promoting gender equality and women's empowerment into all that we do.

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Faith Communities: The Untapped Resource for Development

Engaging, Equipping, and Mobilizing Untapped Resources

Celeste doesn't know much about foreign aid or development, but she's an expert on hunger, stigma, and disease. Sitting alone on a hand-woven mat in the African sun, Celeste is covered with lesions, having been expelled from her village due to her HIV-positive status and waiting for death.

Down the road, a local church resonates with the sound of 50 people singing, clapping, and dancing. The pastor preaches passionately to his small congregation about Jesus' call to care for the poor and hurting in His name. A church member leaves the exuberant worship service and makes her way toward Celeste's mat under a tree. Soon, Celeste will feel the volunteer's soothing touch, receive needed medications from a church-based clinic or a government hospital linked to the local congregation, and begin to rebuild her life.

This church member does not have a medical degree—in fact, she is just learning to read and write—but she understands community

development because her church has provided extensive, yet simple, training in how to be a volunteer community health worker. The humble church member calls herself a “Community PEACE Servant.” She represents more than 3,000 volunteers in the Western Province of Rwanda who are improving health, influencing development, reducing poverty, and changing the world, one family at a time. More than 22,000 home-health visits will be made in this rural region this month because churches are taking the lead. Empowered U.S. and indigenous churches are connecting with each other and partnering with governments and other organizations to engage and equip ordinary people in local churches to actively address development issues in the lives of real people everywhere.

Defining the Problem

If the U.S. public is to be engaged in development issues, global problems—as well as practical solutions—need to be communicated and discussed in ways that make sense to the average person. The PEACE Plan aims to do just that, by identifying



Indian nursing students hold a candlelight vigil to mark World AIDS Day in Amritsar on December 1, 2008. In the 25 years since the first case was reported, AIDS has killed 25 million people, and infected 40 million more. | AFP Photo: Narinder Nanu

the development issues that affect billions of people—the global “giants”—and proposing real-world answers.

The first global giant is *spiritual emptiness and lack of reconciliation*. Billions of people live without hope and purpose. They have little to live on and even less to live for. Their lives lack meaning. Conflict—on a personal, as well as tribal, national, and global level—is an ever-present reality. Millions of men and women who are searching for spiritual hope and reconciliation have made *The Purpose Driven Life*, translated into more than 100 languages, a bestselling book for 10 years. People are hungry for purpose and reconciliation at all levels.

The second global giant is *egocentric leadership*. Egocentric leadership cares more about maintaining popularity than eliminating poverty, more about status and success than serving

others, more about winning than wiping out illiteracy, more about preserving power than preventing diseases, more about controlling people than caring for them. There is a severe shortage of servant leadership on our planet. Instead, many self-centered and even corrupt leaders in both public and private sectors use their power to serve themselves instead of for the good of those who need help the most.

The third global giant is *extreme poverty*. Three billion people—half of our world—live on less than \$2 a day. More than one billion live on less than \$1 a day. One-sixth of the world’s population lives in slums and in grinding, dehumanizing poverty.

The fourth global giant is *pandemic disease*. Although a cure is yet to be found for the 33 million people infected with HIV/AIDS worldwide, billions of others still suffer from diseases we

learned how to cure or prevent in the 19th and 20th centuries. Even though Teddy Roosevelt was the U.S. President when an approach to end malaria was developed, 300 million people will suffer from malaria this year. Three thousand children will die today—and every day—because of a simple mosquito bite.

The fifth global giant is *illiteracy and a lack of education*. Half of our world is functionally illiterate, with 70% of the population members of primarily oral cultures. What hope is there for these fellow human beings in the 21st century's global economy if they cannot read and write?

The PEACE Plan

The PEACE Plan's approach to these five Global Giants is simple but effective: plant and partner with churches that promote reconciliation, equip servant leaders, assist the poor, care for the sick, and educate the next generation. While some may scoff at this kind of simplicity, the need for greater engagement from the faith community in these gigantic development issues begs for a simple framework that compels and facilitates action.

The PEACE Plan frames problems in accessible terms, summarizes the challenges and opportunities, and offers a process whereby ordinary people in churches all around the world can act in their own communities while working together to provide human resources and human capital. It connects U.S. churches to indigenous churches through a network that mobilizes ordinary people who would not otherwise be involved in development.

The PEACE Plan emerged in 2003 from Rick Warren, Founder and Senior Pastor of Saddleback Church in Lake Forest, California. With a 23-year history of training global church leaders in 162 countries, Pastor Warren became convinced that global transformation was going to happen only if local churches and congregations were activated,

engaged, and equipped. He believed that local churches and indigenous faith congregations were the keys to radical change.

Attempts by the public and private sectors have failed to address adequately these global giants. Even the best efforts of the United States, the United Nations, philanthropic organizations, and multinational corporations have not been enough. But there is hope for change: A grassroots partner is already in place around the world—the faith community.

Accessing Every Solution: The Faith Community as a Surprising Partner in Development

Global crises require accessing and engaging every equipped partner. Just as a stool requires three legs to endure as a successful seat, the best efforts to meet global development needs require contributions from three sectors to endure as a successful intervention: public (governments), private (businesses), and—the missing component—faith (local congregations).

The first sector, government, represents an agenda-setting and permission-giving role. Government policy, regulations, and requirements can make it easy or difficult to help those in need. But with increasingly unstable global economies and shifts in administration, no government can adequately or consistently tackle the world's development problems.

Business, the second sector, provides the expertise and capital particularly needed to address the global giants of poverty, disease, and illiteracy. If money alone were the solution, however, we would have seen an end to these crises long ago. Expert knowledge and skill are limited in scope and require a system of distribution.

Even if every dream imagined by USAID and other global organizations and sovereign countries

were fully funded, the question would remain, “How will the resources be distributed? Who can originate, collaborate, and implement the plan?”

The third sector—the faith community—is the final leg that provides the stability.

The only organizations with large enough volunteer labor forces and distribution networks to tackle the global giants are the Christian church and other faith communities—the grassroots fellowships found in every community and village around the world. With billions of members distributed in nearly every community in the world, this network of congregations is a sleeping giant waiting to be mobilized.

The Church’s Unique Resources

What sets the church and other faith communities apart from other relief organizations?

First, *the church has a history of caring*. The church is motivated by the central teaching of Jesus Christ to “love your neighbor as yourself” (Matthew 19:19). This mandate to love goes beyond altruism. It is well documented that 40%–60% of all health-care institutions and schools around the world were first started by people of faith. And in most villages, congregational leadership is trusted far more than any government or NGO staff.

These are difficult economic times, and the mood of some U.S. citizens is reflected in a recent Gallup poll reporting that 59% of Americans favor cutting U.S. foreign aid.¹ When asked to estimate the percentage of the U.S. federal budget allotted to foreign aid, the polled subjects’ median estimate was 25%. When asked what they considered to be an appropriate level of spending for foreign

aid, they responded 10%.² According to the U.S. Census Bureau, the United States spent only 1% of the federal budget on foreign assistance³—or perhaps as much as 2.6%, if one looks at the amount as a share of only the discretionary portion of the budget.⁴

While sluggish and stagnant economies, austerity measures, and political reality are placing pressure on foreign aid spending, faith communities continue to ignite passion for assisting others in need. Their compassion remains steady in the face of uncertain economic times because of their deep convictions about caring for the most vulnerable among us.

Second, *churches have the largest cadre of volunteers*. The greatest untapped resource in global development sits in the pews, dances in the aisles, or gathers in some form in every church or faith congregation around the world. The global church is larger than any government or nation. If just half of the people in churches worldwide were mobilized, there would be a contribution by more than 1 billion volunteers. The U.S. church is uniquely poised to equip and empower ordinary, average people to address health and education needs worldwide through training and mentoring volunteers in local churches abroad.

Most models of church-to-church engagement have focused on sending only financial resources. For transformation to occur, however, volunteers from all over the world will need to cross borders to assist one another. Additionally, instead of using a transactional form of engagement through projects that leave people in local churches doing

1 Frank Newport and Lydia Saad, “Americans Oppose Cuts in Education, Social Security, Defense,” *Gallup/Politics*, January 26, 2011, www.gallup.com/poll/145790/americans-oppose-cuts-education-social-security-defense.aspx, accessed March 30, 2012.

2 “American Public Opinion on Foreign Aid,” World Public Opinion.org Questionnaire, November 30, 2010, www.worldpublicopinion.org/pipa/pdf/nov10/ForeignAid_Nov10_quaire.pdf, accessed March 29, 2012.

3 “U.S. Foreign Economic and Military Aid Programs: 1980 to 2009,” U.S. Census Bureau, The 2012 Statistical Abstract, Table 1298, www.census.gov/compendia/statab/2012/tables/12s1298.pdf, accessed March 29, 2012.

4 Newport and Saad, “Americans Oppose Cuts.”

nothing while U.S. volunteers offer services, a new model that empowers the local community church member is needed. A U.S. volunteer will teach, support, and enable a person in a local church to achieve results that validate the local church as the hero, *not* just the individual.

Third, *churches can provide universal distribution*. There are more local churches scattered around the world than all the franchises of Starbucks, Walmart, and McDonalds combined.⁵ The church has survived in the face of wars, famines, floods, and nuclear bombs. It is present in refugee camps, prisons, jungles, and dungeons. The faith community is both the oldest entity and ubiquitous; in many parts of the world, the church is the only civil-society infrastructure in existence at the grassroots level.

As we consider the global giants of spiritual emptiness, egocentric leadership, extreme poverty, pandemic disease, illiteracy, and a paucity of education, it is clear that a major hindrance to alleviating the suffering is a lack of dependable distribution channels. The problem is not a shortage of money. Money flows to good ideas. It's not a lack of medicine. We have medicines for all of the major diseases in the world. The problem is distribution. Even if a cure for HIV and AIDS were available tomorrow, distribution to those in need would be a hurdle of tremendous proportion because governments, businesses, and NGOs do not have the necessary grassroots network.

What then is the barrier to accessing the distribution network inherent in the faith community? We can only speculate, but perhaps there is a fear of working with churches and people of faith. But if people of faith—whether Christian, Muslim, Buddhist, Hindu, Jew, or any other

faith—are required to set their religion aside in order to participate in humanitarian projects, then a great percentage of the world's population will be eliminated as links in this vital chain of distribution. Equal partners in a society must discover how to work for the good of all without expecting unanimity on every topic. We don't have to see eye-to-eye to work hand-in-hand.

The Faith Community as Mobilizers

Communities of faith understand how to engage, equip, and mobilize their members as they gather weekly to worship. Historically, ordinary people in faith communities everywhere have been mobilized to contribute to relief and development efforts. Even if their attempts have not always been well informed, guided by best practices, or effective in their outcomes, improvement and progress were often the goal. Current undertakings in relief and development stand in contrast to past efforts in their size, scope, and effectiveness.

Advances in development approaches include those for child welfare. This is a natural interest for the faith community because we are commanded to care for orphans and widows. The church has accessed evidence-based data that demonstrate the deleterious effects of institutional care on children. As a result, it has become a significant opponent of institutional care and a mobilization leader for efforts to provide a legal mother and father for every orphan, changing the children's status from orphan to son or daughter. Adoption is encouraged by a family in the country of origin, and by opening doors for international adoption.

Consider Saddleback Church's goal to send members to every nation on earth with the message of God's grace. More than 14,000 of its own members—all self-funded—have gone to 194 countries through The PEACE Plan. No other single entity has ever mobilized so many unpaid,

5 Beliefblog, "My Take: Church is world's most powerful weapons against AIDS," blog entry by Rick Warren, July 3, 2011, <http://religion.blogs.cnn.com/2011/07/03/my-take-church-is-worlds-most-powerful-weapon-against-hiv-aids/>, accessed April 17, 2011.

self-supporting volunteers to as many countries in less than a decade.⁶

The lessons of the Indian Ocean Tsunami in 2004 and of Hurricane Katrina are noteworthy. It quickly became clear that the Christian community mobilized their churches, both local and from outside of the area; provided significantly more volunteers; and stayed longer than other organizations—including well known ones like the Red Cross. Churches and their volunteers are still at work in these areas, long after the initial disasters took place. Anyone can help, but faith communities give hope: Our job is never finished.

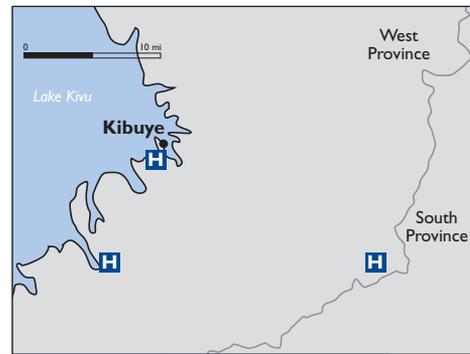
A Look at Rwanda

Steven Radelet, in *Emerging Africa: How 17 Countries Are Leading the Way*,⁷ has attributed development success to five fundamental changes that are at work: the rise of democracy, implementation of sensible economic policies, improved relations with the international community, the spread of new technologies, and a new generation of leaders.

A sixth component is alive and well in Rwanda. With a network of hundreds of churches, a PEACE model of partnership and empowering people in local churches is effecting change.

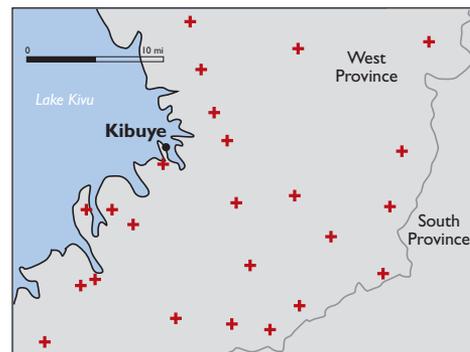
While others argue that conflict, harmful economics, poverty, hunger, and disease pose substantial development problems, they simply cannot be resolved with money or volunteers alone; Rwanda seems to be finding a way to thrive by mobilizing volunteers.

Using Rwanda as an example, the illustrations at right graphically depict the potential that the faith communities have to deliver much-needed development efforts—in this case, basic health care. The inequity in development is partially



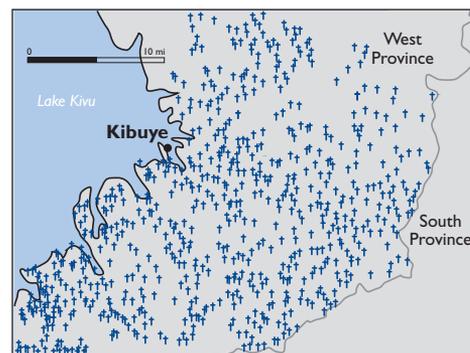
AREA HOSPITALS

In Rwanda's Western Province there are three hospitals serving 500,000 people.



AREA HEALTH CENTERS

Medical coverage is expanded through approximately 20 health clinics.



PROTESTANT & CATHOLIC CHURCHES

The potential for accessible primary health care is vastly improved by engaging more than 728 churches.

⁶ *To Every Nation: The Story of One Church Going to Every Nation by 2010*. (Saddleback Church, 2010) iv, vii.

⁷ Steven Radelet, *Emerging Africa: How 17 Countries Are Leading the Way* (Washington, D.C.: Center for Global Development, 2010).

defined by lack of access to resources. When faith communities are engaged, access becomes optimized and obtainable, even in the most rural areas.

The Western Rwanda Healthcare Initiative has been a startling example of the power of engaging the faith community in development. At the heart of the effort is The PEACE Plan at work in the community, mobilizing ordinary church members to engage in addressing and solving local problems.

Beginning with two U.S. church volunteers providing healthcare training to 28 Rwandan church volunteers in July 2008, the initiative has grown to 3,000 Community Healthcare Volunteers—with a trajectory of more than 7,000 volunteers by the end of 2012. Volunteers carry caseloads of seven homes each, to which they make regular home healthcare visits and, as appropriate, teach basic hygiene, distribute medication, and provide HIV teaching and referral. To date, 137,000 people have been positively affected through this local church program. Furthermore, this program is now being implemented in the other four provinces of Rwanda, ensuring a lasting and comprehensive influence on the health of the nation.

The reproducibility and scalability of this program is due to adherence to the “biological approach” set forth by Daniel Taylor and Carl Taylor of Johns Hopkins University:⁸

The Biological approach not only seeks solutions adapted to cultural, economic, and ecological realities, but also supports those solutions so that they expand rapidly. It does require, however, changes in behavior that are atypical for most officials, experts, and donors; and an intentional enabling of community empowerment so that people can rise to their new opportunities.

⁸ Daniel Taylor-Ide and Carl Taylor, *Just and Lasting Change: When Communities Own Their Futures* (Baltimore: Johns Hopkins University Press, 2001), 61.

Church-based development excels in empowering communities because its holistic approach to training incorporates renewal in both mindset and behavior—the “biological” model of Taylor and Taylor applied.

This is not to glibly offer that the church can work alone. It does illustrate that equitable development requires access to care. Mobilizing the church and faith community to effect change is the method by which every person can most assuredly have access. In The PEACE Plan model, aid is based on ownership by the local church, with transparency and sustainability as keys to success.

Moving from Relief to Development

U.S. churches do well at providing funds and advocacy for appropriate government financial aid allocation. They also give generously to causes in the developing world based on an apparent belief that funding will solve the problems they observe and about which they are passionate. What often gets missed is the immense influence and untapped resources that are alive and well in the global church community—and their ability to be an integral part of the solution to the global giants.

The PEACE Plan is redirecting these relief-focused efforts to positively affect and implement developmental strategies that empower local communities and bring fiscal responsibility and mutual accountability into play without being paternalistic. Instead of traditional relief measures, which are frequently externally driven and promote unsustainable dependency, development is advocated with a focus on long-term results. The PEACE Plan’s church-to-church training approach allows for contextualization and indigenous understanding of problems, and for enabling local communities to address their own development needs, while continuing to access and utilize the time, education, and resources within the American church.

The effort to move the American church from relief agents to catalysts in development is the distinction that sets apart The PEACE Plan from previous mission efforts. Instead of encouraging global churches to passively receive assistance for survival—assistance that often contributes to

Mobilizing the church and faith community to effect change is the method by which every person can most assuredly have access.

the dehumanization of the recipient and political corruption in the region—the faith-based community is now expertly engaging, equipping, and mobilizing people and resources to provide care while also advocating for appropriate U.S. policy and intervention.

The Church as a Critical Partner

Every member of an American church or faith community has a role to play in global development. Engaging the time, resources, and expertise of ordinary church members in partnership with the global church is the core of the church's message—to utilize individual gifts for God's purposes in the world. Directing these gifts to effect development is simply a matter of connecting local U.S. churches and resources to empower and mobilize the people in churches globally to address development needs. ThePEACEPlan.com does just that, working to make these vital connections through its extensive church-to-church network.

Odeth, an engaged, equipped, and mobilized Rwandan Community Peace Volunteer, was

recently chosen as the spokeswoman for many of the other trained volunteers. She approached one of the lead trainers and told him that the group had decided to change its name. The trainer was apprehensive, uncertain if this was a sign of unhappiness within the volunteers. But his fears were alleviated as Odeth said, "We no longer want to be known as Community Peace *Volunteers*; we want to be called Community Peace *Servants*. A volunteer can quit anytime, but we're servants of God; we can't quit."

Odeth—like millions of other dedicated members of faith communities around the world—is a powerful reminder of the strength, the vitality, the commitment, and the effectiveness of average men and women who become engaged in development where they live.

The hope and care that people like Celeste have received can be made available to the impoverished, ill, and hurting around the world by unleashing volunteers within the church. The local church and faith-based communities are critical partners in development, strategically poised to impact the world's most pressing problems—the global giants—through engaging, equipping, and mobilizing the untapped resources of the faith community.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

The Survival Girls

In his 2006 TED Talk,¹ education expert Sir Ken Robinson relates a memory of the three kings in his son's preschool nativity play: one preschooler said, "I brought gold"; another, "I brought myrrh"; the third, "Frank sent this." Kids will give it a try if they don't know, Robinson argues, but somewhere in there, we begin stigmatizing mistakes, sanitizing potentially fertile community spaces out of receptivity to what renowned educator Paulo Freire calls "rupture," a "break from the old," which I interpret as those moments of weeping, the shouting, the fear, the mistake, the revelation of a personal shame, the outburst.² Robinson's story and Freire's term underscore one of the most important aspects of planning successful development efforts in the coming century, specifically, those targeted at youth in post-conflict zones: the "safe space" requisite for individual and communal

trauma recovery, which is in turn requisite for innovation and society-building by the people and for the people in developing nations.

Last year, in Kenya, I worked for the summer as a volunteer operational partner of the United Nations High Commissioner for Refugees. I mobilized a performance group in a Nairobi slum for Congolese refugee girls, most of whom are orphans and survivors of severe gender-based violence who didn't know one another before I began work with them. The Survival Girls, as they call themselves, not only created a piece of theater about gender-based violence for World Refugee Day 2011 but kept meeting while I was gone that fall, taking the initiative to:

- Create (and perform to much fanfare) a theater piece for AIDS awareness and another about the importance of education for girls
- Assign each other roles of public relations officer, secretary, treasurer, and president
- Start a website
- Apply for a loan of equipment from an aid organization to run a cyber café, which they hope can provide enough revenue to pay for their schooling

1 Ken Robinson, "Ken Robinson Says Schools Kill Creativity," filmed in 2006, TED video, posted June 2006, http://www.ted.com/talks/ken_robinson_says_schools_kill_creativity.html.

2 Myles Horton and Paulo Freire, *We Make the Road by Walking* (Philadelphia: Temple University, 1990).



Pakistani villagers carry water pots on their heads near a makeshift camp in the flood-hit Badin district on September 20, 2011. The historic monsoon rains affected millions, and shortages of clean drinking water led to outbreaks of acute illness. | AFP Photo: Asif Hassan

This self-sustainability makes a powerful case for the importance of safe space to youth empowerment. When I looked for the component of the Survival Girls project that led to such success, I saw it was connected to the process of working through trauma to a place of mental stability. That could only happen when the girls felt safe enough to begin to process what had happened to them. The Survival Girls taught me that safe space is a key part of community development in post-conflict zones and, therefore, in emergent democracies the developing world over.

The Survival Girls project grew out of a blurry beginning. All I knew when I got to Kenya was that I aimed to work with female refugees in the arts as an independent extension of the Great Globe Foundation, which brings theater workshops to Dadaab refugee camp, but other than that, I had

planned nothing specific, and this was intentional. I have participated in various development efforts over the last decade—from freedom of expression in Istanbul to a stint at a sustainable forestry NGO in central Russia—and the concept I found missing in most development projects was this: *innovation presupposes dysfunction*. It becomes relevant only when previous modes of operation aren't working anymore, or never did. What development documentation often lacks is permission for development workers to admit that their exact, backed-up-with-theory-and-research plan might not work on the ground. What the project then depends on, should things wander from the plan, is the worker's willingness to dance with things as they really are—to engage in the off-spreadsheet business of dealing with what's there—which, in development, is a largely *social* ability that is hard to budget

for. A Department of State official in Nairobi I spoke with put it this way: “If people proposing a project don’t have a full budget breakdown, I tell them, ‘Don’t waste my time. I need to know where American taxpayers’ money is going.’”

His words illustrate the conundrum often found in today’s community-development scenarios: Evidence-based planning is hard to argue with when it comes to getting your money’s worth, but it’s just as understandable that the we’ll-see-what-happens Survival Girls type of project can be successful too—particularly in environments for which we have little information to go on. For the first time in history, more people on Earth are young and urban than not. If there is a need for new policy structures in response to this unprecedented situation—and factors such as the Internet and the general interconnectedness and efficacy of non-state actors—we won’t find solutions in the policies of enforcement and isolation that worked (or didn’t) for former generations. I believe we’ll find it in, well, *less* structure—at least at first.

In Nairobi, I spoke with Kimberly Behrman, whose project at ZanaAfrica includes developing sanitary pads for girls who miss school because they don’t have them. “Some people ask us why we don’t have a reusable sanitary pad, because that would be more ‘green,’” she said, “and we explain that we simply *asked* the girls, and they don’t want pads they have to hang up to dry in front of everyone in the close quarters of the slums. The product wouldn’t be culturally viable.” We agreed how nice it would be if U.S. foreign aid were allowed more often to begin by “showing up, quieting down, and lending an ear” to communities there on the ground before writing a spreadsheet or report... before designing and implementing a project ostensibly meant to meet their needs.

Practically speaking, this calls for an investment in the social potential of aid workers—an

overhaul of development planning and implementation frameworks, so that *people* are initially invested in (not projects)—and for their aptitudes, not their budget breakdowns. An organization needs to trust the worker developing and putting a project into place to be sensitive and responsive to each unique community. In turn, the ideal development worker brings visibility to a community, offering its citizens the right to be seen and heard—and acknowledging their stake by creating a specific project in response to what’s been seen and heard.

Youth in the developing world are the future’s most important stakeholders. People under 30 make up 60% of the planet’s population, and 90% of the countries with largely young populations are in the developing world, where strife is more widespread. (Most, if not all, refugees, for example, are trauma victims, and there are at least 43 million of them, both young and old, concentrated in developing nations.) In post-conflict zones, entire communities are wrestling with the post-trauma experience—and within them, a great many young people. It will be difficult for a society of people to make strides forward if most people in that society are suffering from varying degrees of post-traumatic stress, which can erode one’s sense of context, consequence, and logic. Psychosocial support for youth is therefore of strategic importance to the economic and political longevity of developing countries in the coming century.

Understanding the burgeoning importance of youth to the structural integrity of governments worldwide, Secretary of State Hillary Clinton created a task force to look into youth affairs, directed by 24-year-old Ronan Farrow, and UN Secretary-General Ban Ki-moon focused renewed attention on youth in early 2012 in a speech outlining the actions he believes the global community must take over the next five years. I’m particularly interested in the connection between that structural integrity



Survival Girls rehearse for their performance in Nairobi's World Refugee Day Festivities, June 2011

Photo: Ming Holden

and the oft-dismissed term “safe space” because a successful development effort is a sustainable one, which allows for innovation—and innovation doesn't happen unless those who might practice it feel it is safe “to have a go,” as Sir Robinson puts it.

Strife-ridden societies don't come furnished with peaceful town squares, but that is not the kind of safe space I mean to describe here. I picture, rather, the Survival Girls and me sitting in a dirty corner of a church compound in that Nairobi slum, creating a temporary space from scratch with our presence—what humans can carry and give to one another just by being there. When youth sense community, they sense safety, and they sense *witness*—an audience, permission to ask for help, to let it out, to run the mile, to, in the case of the Survival Girls, dance and act the pain out onstage. And then? They're much more likely to move forward as healthy citizens, able to function and cope, to work hard and experience joy.

Youth are poised to be the source of either destructive or constructive political sea changes in the coming years. The Survival Girls are an example

of how important safe space is to the process of giving that youth a voice—a way out of trauma and into the mental ability to contribute to their communities and reform their societies. One way to do that is to invest in the social potential of aid workers to create safe space where previously “invisible” citizens can be sure that their preferences are the basis of changes made in their community. The reward for an American development and foreign aid policy that enables this kind of listening, this kind of safety, may actually be the greatest peace-building tool we have. The sea changes it encourages are those in the direction of peaceful, post-conflict society building by healthy, empowered citizens.

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Making the Case for Engaging America in Development

It was less than three decades ago that U.S. foreign policy was largely shaped by a world dominated by two opposing powers, the United States and the Soviet Union. Such a bipolar world was relatively simple. The USSR was dangerous, and the threat of miscalculation and nuclear war was a constant in our lives.

Paradoxically, the challenges of that era were more conventional and predictable than what we face today. Then, it meant maintaining the status quo, not upsetting the equilibrium, and keeping the superpowers at arm's length. Today, the old international order is undergoing a fundamental transformation, bringing forth a multipolar world fraught with unanticipated challenges and threats coming from every corner of the globe.

These complex challenges have come into full bloom in the first decade of the 21st century—global terrorism, pandemic disease, population pressures and migration, and climate change, to name but a few. These are challenges that cannot be solved using the tools and template of the last century. It has always been the case that the

United States' ability to influence global events depends as much on how we leverage the civilian tools of foreign policy as how we flex our military muscle, but that reality is more sharply in focus today than ever before.

Compounding the difficulty of trying to use the different instruments of foreign policy is a sluggish economic recovery and a budget environment steeped in perpetual and deepening crisis and increasing volatility. In such an atmosphere, leveraging these civilian tools—diplomacy and particularly development—is indispensable if the United States is to maintain its global leadership position.

Above all, having those tools available and sharpened for use requires policymakers in the executive branch to understand what motivates and restricts the Congress in the area of international affairs and how to justify to U.S. citizens the use of scarce resources for this purpose. Critical to any justification is a clearer understanding of the complex and opaque nature of foreign policy priorities, a greater appreciation of the return that Americans



A man builds a shack at the makeshift camp Champ de Mars in Port-au-Prince on January 27, 2010, about two weeks after the magnitude 7.0 earthquake that destroyed much of the capital and surrounding areas. The U.S. public responded rapidly to efforts to provide much-needed relief. | AFP Photo: Roberto Schmidt

receive on their investment, and what it means for the nation's economic and physical security.

Any assessment of the appropriate level of resources required for international affairs first requires a definition of what U.S. policy intends to achieve in the international arena. At its most basic level, foreign affairs resources are used to project military and civilian power to protect the safety of U.S. citizens at home and abroad. This includes responding to immediate threats as well as anticipating and countering the emerging ones and supporting alliances that contribute to shared security. In more nuanced ways, these same resources are utilized to protect U.S. economic interests, grow trade, and build markets.

Equally important, and differently from most other countries that dispense foreign assistance, the United States projects its values through interventions that promote democracy and human rights and assist people struggling from disease and natural disasters. The United States also provides assistance that reinforces and maintains peace between neighbors in many regions of the world. Many of the factors motivating these investments will remain in place for the coming decades. Some will diminish while others will grow in importance. But all play a part in defining how the United States maintains its global role.

President Kennedy crafted a structure for foreign assistance that endures today, 15 years

after an earlier President and Secretary of State designed the Marshall Plan to rebuild a Europe devastated by war and politically teetering on the edge of homegrown Communist party takeover. Like President Truman and General George C. Marshall before him, Kennedy recognized—in an age before cell phones, iPads, and the Internet—that our nation’s security was closely connected with the fate of others thousands of miles away. And in the years since the tragedy of September 11th, we have come to realize that distance from events in the poorest and most dangerous corners of the world provides no cushion for our safety.

The rest of the world looks to the United States, not only because of the wealth and power we possess but also because of our generosity and values—especially in times of crisis.

Even as U.S. investments in Iraqi and Afghan stability decrease, the threat of global terrorism continues. Though it suffers from greatly diminished resources and a decimated leadership structure, al-Qaeda and its allies need only willing recruits and a willing or weak state in which to prepare for future attacks. That fact has already drawn U.S. intervention in places like Yemen, Somalia, and Sudan. The goal of these interventions in these and other areas is to prevent global terrorists from threatening U.S. civilians without requiring large-scale military action. While military intervention may initially be

required, sustaining such interventions ultimately requires U.S. civilian initiatives like stabilization and economic assistance to replace military forces.

As a global power, the United States has a wide range of interests supported by the development of varied and complex relationships circling the globe. It faces profound opportunities and challenges in Asia, both in providing military support for regional allies, and developing key trade relationships that will add growth to the United States’ economy. Americans have interests in their immediate southern neighborhood, promoting beneficial trade links with Central and South America, combating drug cartels and countering the spread of anti-U.S. political ideologies. The United States targets assistance to Africa to combat the spread of diseases and stem civil conflicts that threaten to destabilize the region, as well as to develop trading relationships in a globally competitive environment.

These issues represent a portion of key U.S. interests that must be considered when deciding what resources should be devoted to international affairs. Investments in development programs that build institutions and support better local governance and economic growth among future trade partners yield benefits to U.S. long-term security. Greater public understanding of what U.S. policy intends to achieve, and what the international affairs budget represents, is vital in maintaining support for the resources needed to accomplish key goals.

But achieving such understanding and support is no easy task. The American public’s doubt about the value of foreign assistance is deep, but it is not new. Marshall designed and led one of the most recognized and well-regarded foreign assistance programs in U.S. history. In order to build public, media, and congressional support for what would arguably become the most successful

foreign policy initiative in the 20th century—the Marshall Plan—he acknowledged and understood this skepticism and proceeded to actively explain to the public why this plan was important to the future of the United States. The Marshall Plan Mission Statement captures that explanation and is a reminder of how U.S. support for foreign assistance was achieved in an earlier era:

To promote world peace and the general welfare, national interest, and foreign policy of the United States through economic, financial, and other measures necessary to the maintenance of conditions abroad in which free institutions may survive and consistent with the maintenance of the strength and stability of the United States.

What is less understood is the remarkable consistency in the core priorities of the international affairs budget since implementation of the Marshall Plan in the years following the Second World War. The dramatic changes in the landscape of foreign policy since then—the end of the Cold War; the spread of HIV/AIDS; severe food shortages; wars in Korea and Vietnam; conflicts in the Persian Gulf, Iraq, and Afghanistan; and the emergence of religious extremism—have brought with them new and shifting accounts in the international affairs budget. Yet U.S. foreign assistance remains as strategic as it is humane at its basic foundation.

Today, our motivation for providing resources to bolster economic growth in vulnerable countries and communities echoes the Marshall Plan's commitment to free markets and open societies in post-war Europe. It continues to promote peace and security, economic growth and stability, and democratic and humanitarian values abroad that are deemed vital to protecting U.S. interests at home. Although the United States has always recognized and genuinely acted on a moral obligation

to help the world's poorest, such aid is not solely given for charitable reasons. It is strongly motivated by the view that a nation with a clear development path will be a more reliable ally and a stronger trading partner, provide more opportunities for foreign direct investment, and be less likely to harbor terrorists.

To be clear, of all the motivations that drive our foreign assistance programs, none is more important for many U.S. citizens than the moral or altruistic argument: we give foreign assistance because we can and because we should. We give because giving is the right thing to do. It is a core value of the United States.

U.S. democracy and humanitarian assistance represents the building blocks of a U.S. value system that include beliefs in democratic institutions, human rights, and a moral obligation to help those in need. At its core is humanitarian assistance, which is grounded in the ability to assist those in crisis situations through international disaster, famine assistance, and food aid programs. The rest of the world looks to the United States for leadership, not only because of the wealth and power we possess but also because of our generosity and values—especially in times of crisis. When Pakistan is afflicted by floods, Sudan by drought, or when a tsunami washes over Indonesia, the United States ignores politics and extends a helping hand. And the U.S. commitment to democratic principles and institutions, seemingly a part of the national DNA, continues to be a significant part of international affairs priorities. Although this compassionate side of the American public may not always translate to support for funding for foreign assistance programs, it is a core value that is represented throughout much of our programs abroad.

Foreign assistance is much more than a one-way transaction—particularly in an increasingly



A mural painted on a USAID-funded transitional shelter in Delmas 62, Port-au-Prince, Haiti. Photos taken on Dec. 15, 2010. | Photo: Ben Edwards/USAID

globalized economy. Today's development work secures tomorrow's trading partners, who in turn create the demand for U.S. exports that ultimately creates U.S. jobs. A good example of this is South Korea, which, through most of 1950–1960 received the largest amount of U.S. foreign assistance and today is our seventh largest trading partner, with U.S. exports reaching nearly \$40 billion annually. As the middle class in the developing world expands (and 300 million Chinese and Indian citizens alone have moved into the middle class in the last decade), the impact will be felt here at home—not just on Wall Street, but on Main Street.

USAID Administrator Rajiv Shah puts it very succinctly: “By doing good, we do well.” Last year,

the United States exported a little more than \$1.25 trillion in goods and services. Half of those exports went to developing countries. That constitutes a \$600 billion piece of our economic well-being that depends on developing countries—not Japan and Germany, but the likes of Indonesia and Liberia. And 80% comes not from big corporations but from small and medium-sized businesses scattered across the United States.

There is a third argument beyond the moral and economic ones, and that is the national security case for continued global engagement. As the tragic events of September 11th demonstrated, failed states provide breeding grounds for extremism. Military leaders understand this, and also understand that development is a key pillar to

ensuring stability abroad and creating the conditions for Iraq and Afghanistan to have a stable, democratic government.

What this boils down to is prevention.

Prevention is always a tough sell, even when people talk about their own health. But it is especially tough in Washington. One can only imagine how differently events might have unfolded if greater emphasis had been placed on prevention in Afghanistan in the 1990s instead of leaving the Afghanistan-Pakistan border to become a training ground for al-Qaeda terrorists. Simply put, building more stable and healthy societies abroad contributes to a more secure United States.

This is why Robert Gates never missed an opportunity during his tenure as Secretary of Defense to remind people that, “development is a lot cheaper than sending soldiers,” and why the Commander of U.S. Forces in Afghanistan Lieutenant General John Allen said two years ago: “In many respects, USAID’s efforts can do as much—over the long term—to prevent conflict as the deterrent effect of a carrier strike group or a marine expeditionary force.”¹

Such sentiments may be understood by policymakers in Washington, but inevitably collide with harsh fiscal realities. Even as the international affairs budget is proposed by the President and approved by the Congress each year, the U.S. public and its elected leaders continue to be engaged in a debate that at its core is about defining national priorities. In addition to having fewer resources available to them as a result of the economic recession, U.S. policymakers are also compelled to confront an unsustainably large public debt, the accumulated result of decades of

deficits in discretionary spending and uncontrolled growth in entitlement programs.

In the current austere fiscal environment, all agency budgets are being constrained. Annual spending caps through FY 2021 were enacted as part of the Budget Control Act of 2011, which also called for further debt reductions to be offered by a special congressional committee and voted on by the full Congress. Although the special committee ultimately failed, efforts continue to rein in the deficit and slow the growth of the public debt. This is a process likely to take several years, during which the public and its elected leaders will ultimately be forced to make tough decisions about what areas of spending are more important than others.

Securing a high priority for international affairs funding has always been difficult at best, suffering from numerous inherent disadvantages. Among the hurdles is a series of enduring public misconceptions about the size and scope of the international affairs budget, and especially its foreign assistance components. These misconceptions include the following notions:

- **The international affairs budget makes up a large share of the U.S. budget.** A large share of the public believes the international affairs budget accounts for somewhere between 15%–25% of federal spending.² In reality it constitutes just 1% of the federal budget, and therefore can never be a major source of savings that legislators could use to balance the budget.
- **Foreign assistance has no real impact.** In reality, many economic and social indicators of country stabilization are improving steadily, such as better access to basic health care, food,

1 “Exclusive Interview with CENTCOM’s Lt. Gen. John R. Allen,” *Frontlines*, April/May 2011, http://www.usaid.gov/press/frontlines/fl_apr11/FL_apr11_ALLEN.html, accessed April 4, 2012.

2 “American Public Opinion on Foreign Aid,” World Public Opinion. org Questionnaire, November 30, 2010, www.worldpublicopinion.org/pipa/pdf/nov10/ForeignAid_Nov10_quaire.pdf, accessed March 29, 2012.

and clean water, education of women and girls, and leveling of population growth rates. The number of people living under the \$1.25 per day poverty line declined from 1.9 billion in 1981 to 1.3 billion in 2008, and under-5 mortality rates have fallen from 103 per 1,000 in 1980 to 47 per 1,000 in 2010.³ Moreover, the evidence of assistance helping propel countries such as Taiwan, South Korea, or Turkey onto a trajectory of spectacular economic growth is persuasive. But many U.S. citizens believe that all foreign aid is just wasted dollars. Slow and steady progress rarely makes headlines.

- **Foreign assistance is an endless drain on resources.** Again, the reality is that many aid recipients, such as India, Brazil, South Korea, and Poland, are now aid donors. Nonetheless, the large number of countries that receive assistance gives the impression that aid is a perpetual windfall for recipient countries.
- **Foreign assistance funds are handouts that don't benefit the United States.** Actually, only a small portion of U.S. assistance is cash transferred to foreign governments. Much of foreign assistance money is used to hire and deploy Americans to carry out development programs and incentivize local economic activity that often promotes trade with U.S. companies. This is not the prevailing image among the public.
- **Most aid is wasted.** This view is not much different from how the public views domestic spending programs. Nonetheless, the very fact that it is taxpayer dollars being spent abroad makes the “waste” argument more powerful and difficult to dispel.

Overcoming public misconceptions about

foreign affairs funding exacerbates the difficulty for those arguing international affairs deserves an equitable budget priority. Competition with domestic programs significantly disadvantages the international affairs budget when it comes to developing a domestic constituency for investing in foreign affairs. Most U.S. citizens have little direct knowledge of how foreign affairs funds are spent, and most have no direct contact with the U.S. professionals who carry out the civilian side of national security policy.

On the other side of the ledger, in recent years there has been a growing recognition and public acknowledgment by military leaders of the value of investing resources in foreign assistance, particularly development assistance. These military leaders have supported assertions made by civilian leaders that foreign affairs funding not only contributes significantly to U.S. national security but actually saves money in the long run by preventing military conflict, which is far more costly both in terms of human life and squandering resources.

Former Defense Secretary Robert Gates posed the question, “How do you prevent conflict; how do you create the conditions so we don't have to send soldiers?” His answer: “through development.” Secretary Gates went so far as to lobby directly for more funds for the Department of State in the 2010 budget. As reported in the *Marine Corps Times*, Senate Budget Committee Chairman Kent Conrad said Gates argued in a phone conversation with him that it was in the Pentagon's interest to have a healthier foreign aid budget. Underscoring the precedent-setting nature of the call, Conrad said, “I have never before in my 22 years on the Budget Committee had the secretary of defense call me to support the budget for the State Department.”

The current Secretary of Defense, Leon Panetta, has followed a similar line as his

³ *World Bank: World Development Indicators*, “Mortality Rate, Under 5 (per 1,000 live births),” <http://data.worldbank.org/indicator/SH.DYN.MORT>, accessed April 6, 2012.

predecessor, saying: “Our national security is our military power, our Defense Department, but it’s also our diplomatic power and the State Department.” Those words take on more significance in light of congressional action to combine the foreign affairs budget in a national security category with Department of Defense funding. Of course, Secretary Panetta has spoken out strongly against further deep cuts to defense spending. As the pressure to find budget savings mounts, and the funding comes from the same pot, he may be forced to defend his own budget over the needs of the Department of State. At less than one-tenth the size of the defense budget, the international affairs budget will always be overshadowed by its military counterpart. But with a continuing appreciation by military leaders of the important national security role of international affairs funding, and an explicit recognition by military leaders of the fact that investments in development and diplomacy save money over the long term, the foreign affairs budget seems better positioned to compete for scarce resources within the national security category than outside of it.

The Congress and the disparate array of aid agencies are facing the fierce headwinds of an unforgiving budget environment. Prudent decisions must grow from an understanding of what the international affairs budget entails and how each element connects with national goals. It is an understanding that must be informed by factual information that counters the widely held misconceptions that often poison perceptions of foreign assistance. Armed with facts and understanding, U.S. citizens and their elected officials can make intelligent choices about spending priorities. But it must be more than a debate over funding levels for specific agencies. It must also recognize and support the need to maximize the efficiency of every taxpayer dollar appropriated to each priority.

The focus has to be on how we can do development better. With the restraints of antiquated laws and a byzantine executive structure, U.S. foreign assistance programs have faced challenges, including lack of a single, defined vision; diminished capacity for monitoring and evaluating programs; wasteful regulations; and coordination issues among the 12 departments, 25 agencies, and almost 60 federal offices that administer foreign assistance.

It was with these challenges that the Modernizing Foreign Assistance Network (MFAN) was created. MFAN is a reform coalition comprising Washington’s international development community, including foreign-policy practitioners, policy advocates and experts, NGOs, and private-sector corporations. Its mission is to ensure that the United States plays a leading role in reducing global poverty while making our nation’s foreign assistance system more effective, efficient, and transparent. It does this by building on a bipartisan consensus for reform and working with the Administration, the Congress, and the development community to advance a reform agenda.

As MFAN impacts reform through education and advocacy, the government continues its own reform efforts, which began during the end of the Bush Administration under the leadership of USAID Administrator Henrietta Fore. Fore worked to gain support to establish the Development Leadership Initiative (DLI), which was the first initiative of its kind to enhance the Agency’s capability to effectively deliver U.S. foreign assistance and to increase its overseas presence in a manner central to achieving U.S. national interests.

In September 2010, President Obama signed the first Presidential Policy Directive on Global Development, known as the PPD. The President’s policy directive called for common-sense improvements to foreign assistance. Among them: making

sustainable economic growth the core goal of U.S. development activities, rebuilding USAID to lead U.S. development efforts, improving the process of country selectivity, and refocusing on accountability and transparency to show where our aid dollars are being spent. Most important, the PPD officially elevated development to a key pillar of U.S. foreign policy, alongside diplomacy and defense.

Other major reform initiatives are in various stages of implementation. In December 2010, the Department of State released its Quadrennial Diplomacy and Development Review to rethink the organization of assistance programs and agencies. The USAID Forward program is also working to retarget efforts on the most critical areas of U.S. interest overseas and to reorganize internally to meet those challenges more efficiently. USAID has hired 800 new professionals under the DLI, re-established its policy bureau and budget office, launched a strong monitoring and evaluation policy with a target of evaluating 200 programs this year, participated in far more National Security meetings, and initiated new implementation and procurement reforms.

The executive branch is not alone in “rethinking” foreign assistance. Although the Congress is a long way from passing legislation, there are proposals worth mentioning. Among them is the Global Partnerships Act of 2011 introduced by Foreign Affairs Committee Ranking Member Howard Berman (D-CA) to completely overhaul the foreign assistance system along the lines called for in the PPD and advocated by MFAN. Rep. Ted Poe (R-TX) has also crafted legislation to improve the transparency and accountability of U.S. foreign assistance.

These proposals include measures intended to increase the effectiveness of assistance dollars, provide greater transparency and accountability, increase efficiency, and leverage private-sector

involvement. Some of the efforts place emphasis on providing detailed information on the measurable impact of development projects to counter the perception that a large share of assistance money is wasted, and to better guide future investment.

The efforts are encouraging beginnings to transforming U.S. foreign assistance, but lasting reform will still require some heavy lifting.

Five key steps are necessary:

- There must be support for efforts to craft and pass bipartisan legislation that will modernize U.S. foreign assistance. For success to be possible, it is essential that the executive and legislative branches—with the support of the leadership in both political parties—collaborate on a robust reform effort. Ideally, legislation would entail a comprehensive overhaul of foreign assistance. More realistically, it will be done piecemeal, in smaller, easily digestible bites.
- The Congress and the Administration must empower USAID to once again assume its role as the lead development agency in an otherwise hopelessly fragmented system. Internal reforms, the DLI, and several consecutive years of critical budget increases have gone a long way toward restoring USAID’s capacity, but more needs to be done to revitalize the once-depleted Agency and elevate its role within the federal government. An empowered USAID would have the ability to lead all U.S. development assistance programs, participate as a formal member at National Security Council meetings, and fully oversee its policies and budget, including the implementation of more flexible hiring mechanisms.
- Foreign assistance programs must continue to give developing countries more ownership of and responsibility for their own development processes. This not only increases the impact of U.S. investments but also ensures mutual accountability for results. The establishment of



South Sudanese women carry water to their home across the fields surrounding Pariang in South Sudan's Unity State on June 23, 2011. Families recall fleeing for their lives when the remote town of Jau was targeted by army bombings that destroyed the market and scattered the terrified population. | AFP Photo: Phil Moore

the Millennium Challenge Corporation with its innovative country-led approach was an impressive first step in recognizing the value of country ownership for both the donor and the recipient. To further this progress, USAID (and other agencies) should work more closely with developing country stakeholders throughout the design, implementation, and monitoring of projects, build up local capacity—including local procurement—and collaborate with the Congress to reduce earmarks in return for greater transparency and accountability.

- We must look beyond aid alone and make better use of other development tools, including trade and partnerships with the private sector. Trade and development programs remain crucial for

developing countries to become fully integrated into the global economy, with exports now accounting for approximately 30% of their total GDP. USAID should continue and accelerate these efforts. Additionally, the U.S. private sector has the experience, capacity, and resources needed to help tackle development challenges and simultaneously open opportunities for U.S. exports. That potential must be unlocked through a stronger partnership between USAID (and other agencies) and the business community. It is a role USAID has not been comfortable with, but it is time for the Agency to recognize and learn to utilize the private sector's expertise. Examples exist, such as the World Bank's partnership with the global express-delivery industry

to help improve customs procedures in developing countries.

- Budget austerity also argues strongly for the need for better international coordination in the development arena to maximize the impact of such assistance. The number of international players in assistance programs, with potential conflict between short- and long-term development strategies, and often-divergent national goals, has always presented coordination challenges. However, the United States has engaged in a robust set of internal and external discussions on aid coordination. External discussions focus on how donors should coordinate their assistance, to what degree formulation and implementation of assistance programs should be driven by a recipient country, the relative value of bilateral programs and multilateral organizations, which were created as a means for nations to cooperate and partner on development priorities, and how to make greater use of public-private partnerships.

If these objectives can be achieved, they won't take us to the Promised Land, but they will make it much easier to secure sufficient resources for diplomacy, trade, and development. Resourcing our civilian capacity takes the burden for post-conflict reconstruction off our military. And using these tools to support indigenous economic growth will go a long way in creating the conditions where our aid is eventually no longer needed. Budget pressures cannot be wished away. The country will be forced to deal with them, but few of the reforms will be successful if they are not accompanied by adequate resources.

Fifty years after the birth of our foreign-assistance system, we are on the brink of imperative change. There is agreement by most stakeholders that U.S. foreign assistance reform must eventually take place not only as a result of budget

constraints, but as an irreplaceable—and more affordable—tool within our foreign policy and national security framework. In critical hotspots like the Middle East, programs that build democratic institutions, enhance trade capacity, and provide sustainable social and economic development are likely to be the most effective way to influence events and protect our interests. Indeed, they may be the only tools available.

There can be little doubt that foreign assistance is a cornerstone of both American foreign policy and national security. But there is also no doubt that these programs are widely misunderstood by the American public as to their size and distrusted by legislators as to their efficiency. Intelligent decision-making rests on a greater understanding of the goals, the component parts, and the outcomes of foreign assistance. The public must accept some responsibility in gaining this understanding and giving direction to their elected officials. Elected officials must continue the dialogue and respond accordingly by shaping assistance programs in the most effective and transparent manner possible. America's moral fabric, national security, and economic growth depend on doing no less.

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The views expressed in this essay are their own, and do not necessarily represent the views of the United States Agency for International Development or the United States Government.

“Creating space to evaluate and better understand key development trends is essential to adapt to the rapid transformations in the development landscape. Rather than chase the latest fad or jump between shifting priorities, we must seize pivotal opportunities that we know can leave behind generational legacies of success. To that end, USAID is engaging with the smartest, most innovative, and most experienced thoughtleaders and practitioners from around the world to stimulate debate around key development challenges and opportunities.

“We call this effort *Frontiers in Development*.”

— *Rajiv Shah, Administrator, USAID*

“In another decade, our countries should no longer be characterized by no connectivity, no roads, no hospitals, no schools, no water, no sanitation, no service delivery, no doctors, no lawyers, or no accountants because this would mean no economic or social development and a progression of all that fragility brings. No more time should go by when we do not focus on the very foundations that will build peaceful states.”

— *Emilia Pires, Finance Minister, Timor-Leste*