

FRONTLINES

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NOVEMBER/DECEMBER 2011



A NEW MODEL TO
FEED THE FUTURE

- > TWO SIDES TO ACTION
IN THE HORN OF AFRICA
- > USAID AT 50

50th Anniversary/Food Security Edition



INSIGHTS

From Administrator Dr. Rajiv Shah

FIFTY YEARS AGO, President John F. Kennedy called for the creation of an agency dedicated to saving lives, building partnerships, and promoting peace and prosperity in the developing world. He believed that advancing opportunity and freedom to all people was central to America's own security, prosperity, and national conscience. Today, President Barack Obama and Secretary of State Hillary Rodham Clinton have echoed President Kennedy's call with strong leadership and incredible commitment to development as a key pillar of our national security.

Since its creation, USAID has worked on the frontlines of poverty and conflict, supporting communities and countries to build a better future. In the past five decades, the Agency has graduated over 30 countries from assistance to partnership. From Brazil to Poland to Indonesia, developing nations have transformed into stable and prosperous countries, vibrant trading partners, and foreign assistance donors. These countries serve as beacons of hope for people striving for democratic political systems, free economies, and respect for their human rights.

The critical work of USAID enables these peaceful transitions, helping to prevent and end conflict around the

world today so we do not have to deploy our troops tomorrow.

Because global development is so important to our national interests, we have instituted a series of reforms to change the way we do business—with new partnerships, a greater emphasis on innovation, and a relentless focus on real results.

As we continue to shape a brighter future for generations to come, we must re-dedicate ourselves to continually improve the way we work and strengthen our capacity to deliver meaningful results for people around the world and at home.

NOWHERE TODAY IS the challenge of hunger and food security more critical than in the Horn of Africa. As many of you know, the worst drought in 60 years has put more than 13.3 million people, especially women and girls, at severe risk. That is larger than the populations of New York City and Los Angeles combined.

In Somalia, where decades of civil war and disorder have contributed to the complete breakdown of governance, drought has led to famine. Within the next three months, 750,000 Somalis are likely to die if they don't get additional assistance—assistance that is being blocked by Al-Shabaab and other groups in the region.

As the single largest humanitarian and development partner in the region, the United States is supporting life-saving aid for millions of people, including food, water, and medical services. And though the American people will always provide aid in times of urgent need, emergency assistance is not a lasting solution.

The reality is we must do more to prevent these crises in the first place. That is why President Obama launched a global food security initiative called Feed the Future to help countries develop their own resilient agricultural sectors and food systems so they can feed themselves over the long term.

Through Feed the Future partnerships and investments, vitamin A-enriched sweet potatoes are now reaching malnourished children in Uganda and Mozambique. In regions vulnerable to drought—like the Ethiopian highlands—we are particularly focusing on drought-resistant crops and improved water management.

In August, I visited the Dadaab refugee camp in Kenya with Dr. Jill Biden and former Sen. Bill Frist (R-Tenn.). I met families who had to leave behind their homes, their countries and—in some cases—faced the impossible choice of leaving behind their children, who were too weak to survive the trek. Families are facing this reality every day in the Horn—a reality made even more heartbreaking by the fact that it doesn't have to be this way.

Through Feed the Future, we can help ensure countries sustainably develop their agricultural infrastructure and diversify their economies so they never succumb to another drought again. And we can help lift 18 million people, including more than 7 million children, out of hunger and poverty forever. ■

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“I realize that there are among us those who are weary of sustaining this continual effort to help other nations. But I would ask them to look at a map and recognize that many of those whom we help live on the ‘front lines’ of the long twilight struggle for freedom—that others are new nations posed between order and chaos—and the rest are older nations now undergoing a turbulent transition of new expectations. Our efforts to help them help themselves, to demonstrate and to strengthen the vitality of free institutions, are small in cost compared to our military outlays for the defense of freedom.”

—John F. Kennedy, Special Message to the Congress on Foreign Aid, March 13, 1962

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In this issue, all stories with a “First Person” banner are excerpted from a 50th anniversary retrospective compiled by career Foreign Service Officer Janet Ballantyne.

Cover: A young boy stands amid a thriving cassava field in the Democratic Republic of Congo. The field includes several disease-resistant varieties of the country’s staple food.

Photo by Alain Mukeba, USAID

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Passing the Torch

Long-Serving Education Officer Reminisces over his Career at USAID

By Rina Dhalla

Hal Freeman, 80, began a long and distinguished career as an education Foreign Service Officer (FSO) for USAID and its predecessor agency 53 years ago. This career took him to Indonesia, Pakistan, Laos, Tunisia, Barbados, the Philippines, and Washington. Recently, Rina Dhalla, a presidential management fellow in the Agency's Office of Education, had the opportunity to speak with him about his career, his passion for education, and his advice for the latest group of FSOs heading into the field.

HAL FREEMAN was already immersed in the field of education—first as a high school teacher, and on track to becoming a principal. After obtaining a master's degree in education administration and supervision, he found out through a contact at the State Department that USAID had started a new program for junior officers.

"The year was 1957," he reminisces. "Education officers in missions at that time were career professional educators, all of whom were not the management, but rather the technical type."

There were about six or seven technical specialists working in missions—with impressive backgrounds. They had been professors, deans of schools, superintendents, and chief state school officers. The Agency was looking for bright young people with three to five years of teaching experience and a master's degree to work alongside such experienced technical specialists. The

theory was that younger officers were more adaptable to cultural factors, travel, and hardship. They could develop camaraderie with local people.

1957–1959

Freeman's first assignment was in Thailand, where he was the only young officer in the education team. The experienced FSOs took him under their wing. He pauses and reflects, "I learned more from working with these people than what I would have learned from 30 years teaching experience."

One of the main projects Freeman worked on in Thailand was a project on education development in a handful of provinces—four elementary schools, two secondary schools, and one teacher training school. This project stands out in his mind because they "worked side by

side with all levels of the Thai Ministry of Education."

He adds: "What made our work successful was our willingness to put ourselves in the Thai Ministry of Education's shoes. The ministry had its own internal dynamics and we [USAID] had to merge what we thought needed to be done with their way of doing things and what they wanted to accomplish. This way we were able to find the middle ground."

As an aside, Freeman posits that those projects where technical experts moved ahead more or less on their own to "get something done" were often not sustainable—after the technical experts left, much of his work would be dropped.

"Why?" he asks rhetorically. "Because, however qualified the officer, the people of the country did not think of his work as *theirs*. It took a lot longer for people to say it was their project, theirs... and it paid off in the long run..."

Freeman finishes relaying his experience in Thailand with an observation: "The Thais are unique because they learned how to take the ideas of outsiders and adapt those ideas to their political and cultural situation. They wouldn't just follow in the precise way USAID wanted."

In my mind, this characteristic does not seem to be uniquely Thai. It did, however, sound like a goal we should all strive for at USAID—to enable developing countries and their people to own and craft their own solutions. It should be our job, as development professionals, to steer them in the right direction, which is the path of their choosing.

GO ONLINE

**to read more about
USAID's new
Education Strategy**



Meo tribe children and Hal Freeman, right, look at textbooks provided by USAID in Laos. In the background, a parachute serves as a roof.

1976–1978

“What was your favorite place to work, and why?” I pose to him.

“Pakistan, without a doubt,” he answers. [Freeman headed the Near East/South Asia Education Program in Washington from 1970-1976 before heading to Pakistan.] “The guys in the Ministry of Education planning unit were dedicated, bright people who cared about their country’s development and worked around the clock. I had the greatest joy working with them. [Prime Minister Zulfikar Ali] Bhutto had just been assassinated and General Zia [Muhammad Zia-ul-Haq] had just taken over. In the ‘70s, Pakistan had a large population, yet only about 20 percent of boys and 7 percent of girls were in schools.”

Freeman spent two years developing a rural primary education program with a focus on female education. “We almost had the signature on the dotted line when the issue of nuclear proliferation

came up—to put it lightly—and we had to close the program before it even began. Any ongoing projects could continue but no new programs could get started,” he says. Freeman persevered and worked with World Bank mission staff to adopt the program and carry it through for several years.

Initiating such a program in a conservative society was challenging. The education team theorized that supply could create demand and that, if they supplied the teachers and the classroom, 40 to 50 percent of the women would go despite society’s perceived restrictions. Female teachers came from urban areas and were provided dormitories, so they could teach in rural areas. On the weekend, the teachers would go back to their cities.

As a complement to the traditional classroom in schools, the team also designed the project to enable some “schools” to be conducted in women’s homes. Many rural mothers were more

likely to bring their daughters to another women’s home than to a formal school, just like 18th century English dames schools.

“In light of all the types of development USAID does, why is education important?” I ask.

“The effect over time of having a literate workforce is undeniable,” he responds. “Education yields trained men and women who contribute to society in the workplace and in families through, for example, health and family planning—waiting longer to have children and spacing them out so as to make time for a career. There is a broader effect than learning ‘the three Rs.’”

Education wasn’t the focus in some missions. Mission directors cared about infrastructure—roads and dams—and short-term gains. A critical aspect of Freeman’s job was to advocate for education, despite its long-time horizon. There was also a difficulty in not swaying to the fads in education, but rather, to determine critically what the country needed the most, and what could be achieved, given the ministry and host country leadership interests. That could mean basic education, workforce development focused on technical skills or higher education.

“What was the best thing about being an education officer?” I ask.

Freeman responds: “It was an exciting career, working with top leaders of education in a country, the intellectual atmosphere, USAID’s dedicated staff, and those on the forefront of knowledge.”

Freeman provides this advice to new Foreign Service Officers: “Because an officer is helping a country develop, it is important to be eyes wide-open, not dewy-eyed. Listen and learn from your host country counterparts.” ■

From Famine to ***Feast in Brazil***

By Isadora Ferreira

Decades ago, Brazil was facing rapid population growth and a food crisis. Today, it is the third largest agricultural producer in the world. See how, with USAID support, the country was able to transfer knowledge from scientists to farmers and develop a successful, sustainable agricultural industry.



Brazil is one of the world's largest producers of grains and oilseeds, thanks to Embrapa, which received USAID support.

CONSIDERED ONE of the fastest growing economies in the western hemisphere, Brazil is currently the third largest agricultural producer in the world. The country produces about 150 million tons of grains and oilseeds annually. Thirteen million tons of meat are sold, and national production records are outdone year after year.

Brazilian agriculture has not always been such a booming industry. In the 1970s, education, health, and food security were major challenges despite strong economic growth. Rapid population growth increased the demand for food, creating a gap between what was needed and what was produced. In 1972, the Brazilian Agricultural Research Corporation, better known as Embrapa, was created to overcome the food supply crisis. The goal was to develop agriculture in the country through the generation and transfer of knowledge from scientists to farmers.

The U.S. Government had been working in partnership with the Brazilian Government, through USAID, since 1961 to promote Brazil's development in areas such as education, health, agriculture, sanitation—and to improve public administration.

As part of its overall strategy in the country, the Agency invested in Embrapa in its first years of operation. USAID's perception at the time was that it was worth investing in an activity that might produce slow results, but have a lasting impact.

Eliseu Alves was the second president of the institution between 1979 and 1985. Still working at Embrapa, he serves as the entity's living memory and talks about the priorities during the first years. "USAID played a key

Photo by Isadora Ferreira, USAID

role in modernizing agriculture in Brazil by supporting Embrapa during a critical period in the first years of operation. This support was aimed at two areas: the training of human resources and the formation of the institution's physical capital, including laboratories and research centers," he explains.

In addition to direct support for professionals who made up Embrapa's technical staff, USAID supported two public universities in Piracicaba and Viçosa, helping to strengthen their agricultural science courses. Four decades later, both schools are now agricultural knowledge centers in Brazil and worldwide.

In the 1960s and 1970s, USAID also promoted the exchange of Brazilian and American scientists to bring the most advanced techniques of cultivation to Brazil. The investment has paid off.

Though it started with about 950 people on its payroll, currently, Embrapa has over 9,000 employees, of whom 2,215 are researchers. Of these, 18 percent have master's degrees, 74 percent have doctorates, and 7 percent have post-doctorate degrees. In 1972, 93 employees had master's and doctorate degrees.

Embrapa currently conducts research and provides technical knowledge to farmers in 45 research units throughout the country. Agricultural

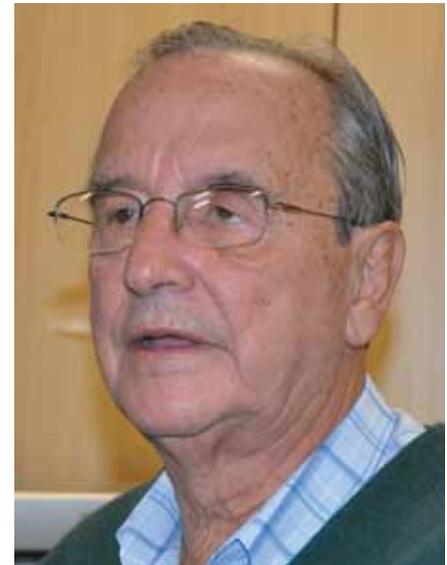


Photo by Isadora Ferreira, USAID

Eliseu Alves, the second president of Embrapa, says USAID played a major role in strengthening Brazilian agriculture.

producers growing coffee, cotton, beans, soybeans, cattle, and corn have massively benefited from this research. Since 2000, every dollar invested in Embrapa has translated into \$10 in agricultural output.

AS A RESULT OF Embrapa research, Brazil is today a major food exporter. From 1975 to 2009, the supply of beef and pork multiplied four times. In the same period, milk production rose from 2.1 billion gallons per year to 7.03 billion gallons, and the production of vegetables rose from 9 million tons to 19.3 million tons per year. All this was achieved without any large increase in the cultivated areas. In 1980, the cultivation of grains and oilseeds in Brazil occupied 40 million hectares and produced 50 million tons per year. Today, Brazil produces 160 million tons on 50 million hectares.

This productivity gain is directly related to the new techniques introduced in Brazil through Embrapa and the agriculture schools.



Photo by Isadora Ferreira, USAID

Brasília's food distribution center: Embrapa improved the production and the distribution of food in Brazil.

“The steady and strategic investments made in Embrapa increased agricultural production, which not only advanced food security, but also improved Brazil’s balance of payments. We used to import food, and now we are one of the world’s largest exporters,” explains agronomist Fabiano Toni, professor at the Center for Sustainable Development of the University of Brasilia. “The fact that we did it without expanding the cultivated area shows the importance of agriculture intensification to reduce pressure on Brazil’s natural resources,” he says.

Today, Embrapa has bilateral agreements with 56 countries and 89 foreign institutions. Their methodologies are being shared with countries facing similar food-security and nutrition challenges.

For example, since January of this year, Embrapa has partnered with the University of Florida and Michigan State University—with support from USAID and the Brazilian Cooperation Agency—to promote food security and nutrition in Mozambique by strengthening policies for small-scale agriculture and school meals.

Alves thinks the same strategies that pulled Brazil out of its food crisis will work well in Mozambique. “The general principles that helped Brazilian agriculture are the same worldwide and will certainly help Africa. Our experience can be very useful in Mozambique because the challenges there are the same we faced—a lack of technical knowledge, well-trained human resources, and institutional capacity,” he explains.

In a sense, the Brazilian model of success is one that the U.S. Government is trying to emulate in several

other developing countries through the Obama administration’s Feed the Future initiative.

“To achieve large-scale country transformation, it is essential to have strong government commitment to agriculture development, robust private sector participation, and coordination of various actors and efforts,” says Paul Weisenfeld, who heads up USAID’s Bureau for Food Security, which leads Feed the Future. “With good governance and development investments, sustainable outcomes can be achieved. Working in a select group of focus countries with a strong potential for agriculture-led growth, Feed the Future hopes to see some of the same successes achieved in Brazil.”

Back in the 1960s, Brazil was one of the largest recipients of development assistance provided by USAID. Fifty years later, Brazil is partnering with USAID to provide assistance to other countries in the developing world. Four decades ago, Brazil had a \$45 billion gross domestic product (GDP). Brazil now has a \$2,087 billion GDP, and in just three years, will join the ranks of wealthy countries that have played host to soccer’s biggest attraction: the World Cup. The event will be a warm-up of sorts for the Olympic Games to take place there two years later.

Brazil’s experience is not just a success story—it’s a global model for securing a country’s future. And for Brazil, it’s looking brighter every year. ■



Photo by Isadora Ferreira, USAID

Tropical fruit production was professionalized and now is one of the major economic activities in Brazil’s semi-arid region, one of the poorest regions in the country.

Feeding the Future

by Documenting the Past



Interns from the Al-Korna Agricultural Technical School in Luxor, Egypt, learn about colored pepper cultivation for export at Al-Heba Farm, Wadi El-Natroon, from their teacher Hamdy Hamed.

Photo courtesy of USAID

By Anne Williams and Philip Steffen

OVER ITS first half century, USAID has been at the forefront of agricultural development as a driver of economic transformation and growth. Operating in more than 100 countries spread out around the world, the Agency has tailored its work in agriculture to fit the needs of specific countries, and has done some remarkable things.

Though the list of achievements is long, USAID has traditionally focused more on “doing” development than documenting its successes in concrete and specific terms or telling its story. In the same vein, the decentralized

nature of the Agency has contributed to the difficulty of telling this story. “Many of USAID’s achievements in agriculture have been undocumented, unrecognized, or simply forgotten,” says Emmy B. Simmons, former USAID assistant administrator of the Bureau for Economic Growth, Agriculture and Trade.

To ensure the Agency is learning from the past, including mistakes, and building on successes, USAID’s Legacy in Agricultural Development (ALAD) was launched at the end of 2010. Through a nine-month process of interviews, document searches, and peer reviews, the project has

identified major themes and achievements that reflect broad successes, as well as lessons learned over the past 50 years.

Having documented key USAID achievements in agricultural development—through a report and information sheets—ALAD is ready to tell this story to the American people. This fall, the products will be accessible at www.agrilinks.kdid.org.

After the global food price crisis of 2007-2008 increased the number of hungry people around the planet by an estimated 75 million, governments, donor agencies, and research networks around

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for more information
on *Feed the Future*

the world started showing new interest in agriculture's powerful contributions to expanding economic growth and reducing poverty. Agriculture is making a comeback in the Agency and mission programming.

While the ALAD project helps to tell USAID and the larger global development community where the Agency has been, it can also help point the way to where it is going through new efforts like Feed the Future, the U.S. Government's global food security initiative.

One of ALAD's success stories focuses around Egypt's fruit and vegetable trade. For decades, Egypt's horticulture exports idled in neutral, averaging \$150 million per year between 1975 and 2002. But by 2008, the value of Egypt's fruit and vegetable exports increased more than sixfold—to \$1 billion per year.

The increase was made possible in part through decades of USAID technical support to the country. The Agency's contributions included helping to establish the Horticultural Export Improvement Association and the perishable terminal at Cairo International Airport, strengthening agricultural research capability, promoting policy reform, and enhancing the market for business development services.

Today, Egypt is the third largest exporter of fresh fruits and vegetables on the African continent, supplying 14 percent of the total fruit and vegetable exports.

This is not to say that USAID's agriculture work in Egypt is complete. Agribusiness and food production remain a key aspect of Egypt's economy and a means for broadening prosperity. Working with 117 agricultural technical schools with more than

160,000 students, USAID, its implementing partners, the Midwest University Consortium for International Activities (MUCIA), and the Government of Egypt are building the skills demanded by Egypt's commercial farming sector.

"Egypt is experiencing unprecedented change," says USAID/Egypt Mission Director Walter North. "Our work is preparing Egypt's youth to build a world-class commercial farming sector in some of the poorest, most remote parts of the country."

PRESIDENT BARACK Obama's Feed the Future initiative, led by USAID, seeks to help developing countries achieve the kind of agricultural success accomplished in Egypt and elsewhere through country-owned, country-led strategies.

For example, Kenya—a regional leader in both dairy and horticulture—is a Feed the Future focus country and is an example of how the Agency can use lessons learned from Egypt for the benefit of other countries. Feed the Future's goal for Kenya is bold: to help 3 million Kenyans exit poverty by 2015—550,000 of whom will benefit from USAID's contribution.

Kenya's agriculture sector shows substantial potential for growth, and, therefore, a path out of hunger and poverty for millions who live there. With the largest dairy herd in East and Southern Africa and a relatively well-developed industry, Kenya is poised to meet the growing local demand for milk as well as target the regional market.

Kenya's horticulture industry is also an established leader among African suppliers of fresh produce to Europe. Known for their competitiveness, Kenya's producers—including women,

During its first 50 years, USAID has:

- helped millions of households secure access to land and other resources;
- mobilized science and technology (both conventional and biotech approaches) that tripled yields for the basic food crops;
- built dozens of agricultural education institutions overseas and trained thousands of foreign students in the United States, creating lasting agricultural capacity in developing countries;
- invested in job-creating small and medium rural agricultural enterprises and value chains;
- expanded global and regional agricultural trade opportunities and helped agricultural exporters comply with food quality and safety standards;
- integrated environmental and natural resources management into agricultural practices and livelihoods.

a particular focus for Feed the Future programming—are in an excellent position to capture the emerging global demand for new value-added products as well as the local and regional fresh market valued at more than \$2 billion.

Work in these sectors is important because both horticulture and dairy will be critical commodities in smallholders' diversification out of maize in Kenya—a crop that is grown by 98 percent of the rural farm households and makes up a large share of

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Transmigrational Diplomacy

By Jack Sullivan

Jack Sullivan has been involved in international development for over 40 years. He was head of the House Foreign Affairs Committee staff for USAID authorization and oversight, USAID assistant administrator for Asia and the Pacific, and a consultant to USAID as well as other development organizations and governments. He has worked in 64 countries worldwide.

DURING THE second Bush Administration it became fashionable in the State Department to talk about “transformational diplomacy.” Secretary of State Condoleezza Rice defined the term in January 2006 this way: “To work with our many partners around the world to build and sustain democratic, well-governed states that will respond to the needs of their people—and conduct themselves responsibly in the international system.”

Long before some Foggy Bottom wordmeister thought that one up, as assistant administrator for Asia, I was involved with an event that can best be described as demonstrating “transmigrational diplomacy.”

The story begins in 1977 when the Carter Administration determined to reestablish a foreign assistance relationship with India. Secretary of State Henry Kissinger had broken off the

aid relationship in 1971 in retaliation for the Indian military backing Bangladesh’s break from Pakistan.

President Jimmy Carter and his top advisers were India-philes but in the Congress there was an evident reluctance to renew development aid to India. The word from Capitol Hill was that assistance programs could be resumed, but the Indian Government would have to formally request them.

On the Indian side, officials were still miffed about the earlier cutoff. The word from New Delhi was that no request would be forthcoming and that the United States would have to take the first step and offer aid; only then would the government decide whether to accept it.

In other words, it was a perfect dilemma.

Into this situation I stepped, along with the new head of USAID, John Gilligan. One dark and rainy night in

1978, the two of us were whisked in a U.S. Embassy car to the New Delhi residence of the India Prime Minister Morarji Desai. Desai was a longtime politician and part of Mahatma Gandhi’s inner circle. He had broken with the Indian National Congress Party to found his own political grouping and served as prime minister from 1977–1979.

Greeted by Desai’s aides, we were strictly advised that our meeting would be no longer than 15 minutes—and that we would be timed to the second. Soon after we were seated, Desai appeared without any aides and bid us be comfortable. I found that difficult given the standoff that the meeting might produce. Gilligan was more relaxed, however, and began a genial theological discourse comparing Hindu and Christian religious thought. Desai responded enthusiastically and soon the two were deep in an animated conversation on comparative religion. Five minutes went by.

The conversation began to focus more particularly on the transmigrational of souls. At some length Desai explained the Hindu view; Gilligan responded with the Christian perspective, again in detail. They saw some similarities. Another five minutes flew by.

I could feel the cold sweat beginning to run down my sides. Transmigration continued to dominate the dialogue as both participants seemed to be warming to the subject even more intensely. A voice inside my head began to shout: “Time, time, time!”



Photo by U.S. Army Signal Corps

India Prime Minister Morarji Desai with U.S. President Jimmy Carter

Barely a minute remained when Gilligan broke off the theological discussion and asked abruptly: “If the United States were to offer foreign assistance, would you be willing to take it?”

In a Zen-like response, Desai replied, “If we were willing to take it, would you offer it?”

Barely perceptible affirmative nods ensued simultaneously on both sides.

Satisfied that the Gordian knot had been cut, Gilligan immediately stood up, shook Desai’s hand, told him we would meet with his top government officials the next day to hammer out the details, and we left. Fifteen seconds remained. We did not look back.

We resumed a full-fledged program to India in a matter of weeks, which continues to this day. Transmigrational diplomacy had proven its worth. ■

Feeding the Future

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households’ crop income. Like what was done in Egypt, USAID, through Feed the Future, will help the initiative’s focus countries increase their agricultural productivity and profitability to achieve the same kinds of agriculture and trade gains that will help rural households increase their income, nutrition, and food security.

It is often said that USAID works to create the conditions for countries to graduate from aid to trade. That’s a major goal of Feed the Future as the U.S. Government works to alleviate global hunger and poverty. Rob Bertram, director of the Agricultural Research and Policy Office in USAID’s Bureau for Food Security, sums it up: “The ALAD project, in its review of 50 years of USAID progress in agriculture thus far, helps us to appreciate that journey and celebrate our many successes along the way.” ■

***More about ALAD:** The first phase of the ALAD work, with a retrospective on USAID’s achievements and lessons learned culminating in a report and information sheets, is scheduled to wrap up in fall 2011. But telling USAID’s story remains a work in progress. Anyone interested in providing documentation of what USAID has accomplished in the past five decades should contact Phil Steffen and Anne Williams, ALAD activity co-managers, at psteffen@usaid.gov and awilliams@usaid.gov.*

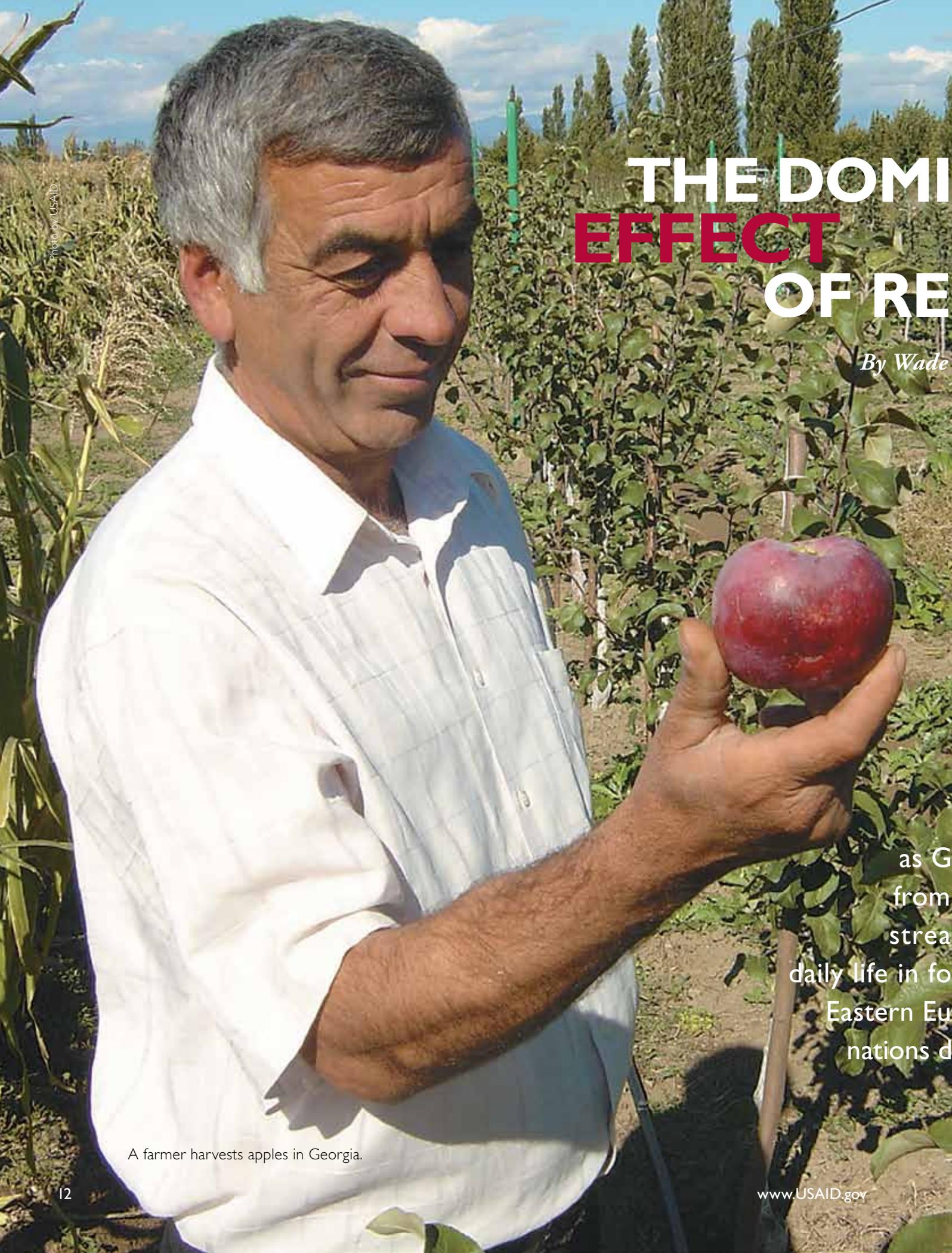


Photo by USAID

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A farmer harvests apples in Georgia.

NO FORM

Channell and Elisa Walton

Today, countries such as Georgia are benefitting from a model that helped streamline business and reform former Central and Eastern Europe communist economies decades earlier.

IN THE Republic of Georgia of just a few years ago, McDonald's wasn't a fast-food restaurant. The journey from production to plate used to be arduous and long. Along the Georgian border, McDonald's trucks could be spotted languishing—sometimes up to two or three days—waiting for customs officials to inspect and clear their cargo.

The process was as arbitrary as it was frustrating: “You could never say which terminal was better or worse. All were the same: a long physical inspection process, poor professionalism, flourishing bribery, and a permanent wasting of time and nerves,” according to Tamaz Megrelishvili, purchasing manager of McDonald's Georgian franchises and T&K Restaurants LTD.

Now, a series of customs reforms by the Ministry of Finance and the State Revenue Service have expedited clearance procedures, in part by promoting an efficient allocation of state resources. The physical inspections previously undertaken on all shipments were replaced by an automated, risk-based system to identify suspect cargo—with now only the 15 percent of cargo flagged as risky receiving physical inspections. By eliminating

unnecessary inspections, this process has also reduced opportunities for corruption.

The new system is straightforward, which allows managers like Megrelishvili to plan ahead of time: “When the cargo reaches the terminal, I can fix precisely the timeframe of all operations to be undertaken after the clearance process. Loaders, who waited for cargo in the garage for hours, sometimes even for days, can now enjoy a normal work schedule and go home in time.”

In addition to the personal benefits for managers and loaders alike, the savings for businesses add up to an estimated \$90 million annually.

The new customs regulations are just one of the many reforms that have moved Georgia from number 112 to number 12 out of 181 countries ranked by the World Bank in its annual Ease of Doing Business survey, all in the span of four years. The transformation was called “unprecedented” by World Bank economist Simeon Djankov. Georgia is now ranked as having a more attractive regulatory climate than France, Germany, and the Netherlands.

Other results of this transformation include more efficient hospitals, gas pipelines to heat remote villages, and a range of improvements to make government offices more responsive to citizens. In Zugdidi, in western Georgia, local officials and a construction company were finally able to build a children's playground after regulations and paperwork were simplified.

“The commitment of the Government of Georgia was a key factor in the impressive impact of this project,” says David Gosney, who directed the Office of Economic Growth in the Tbilisi mission during the project. “The Government worked with us at every step, from initial project design, through implementation, and even design of the follow-on project. It wasn't always



A watermelon stall in Tbilisi, Georgia. Many small businesses in Georgia have benefitted from reforms that streamlined business and property registration, and improved business regulation.

easy finding the balance between pre-determined performance targets and the flexibility to respond to real-time, changing needs, but working directly with the prime minister's office helped us prioritize based on political will.”

USAID provided comprehensive technical and material support for the process. For example, the Agency brought in tax experts to simplify the filing system only once the government was in a position to act. USAID also provided analysis, proposals, and implementation assistance on laws, regulations, and institutional capacity building in support of Georgia's dynamic reform agenda.

The rapid progress seen in Georgia had another element as well—years of experience and knowledge from USAID's work in other parts of Central and Eastern Europe. Beginning with the earliest programs just after the fall of the Soviet bloc, USAID and its partners have built a deep bank of expertise that yields positive impacts around the world today.

Both Poland and Hungary have inspired the successful package of business, legal, and institutional reforms implemented in Georgia. While Hungary transitioned gradually to a more market-oriented system, known as “goulash communism,” Poland took a dose of “shock therapy”—unleashing market forces soon after the first opposition government in the Eastern bloc took over in August 1989. The Balcerowicz Plan, named for Poland's visionary finance minister, eliminated price controls, abolished preferential credits for state-owned companies, and allowed companies to declare bankruptcy, among other measures.

“Nineteen eighty-nine marked the beginning of a new era. It was completely unexpected, and there was no road map for transition. In the midst of all the hope and confusion, USAID had to rethink every approach. That investment is still paying off in the work we do today,” said Paige Alexander,

assistant administrator for USAID's Bureau for Europe and Eurasia.

Poland and the other former planned economies, emerging from economic stagnation in the 1980s, needed market-based structures, institutions, regulations, and private-sector businesses. The United States contributed to the process through the 1989 SEED (Support For East European Democracy) Act passed by the U.S. Congress with bipartisan support. The law provided for critical assistance to promote democracy and economic reforms throughout Central and Eastern Europe.

“From late November—when the SEED Act was passed—through Christmas we were working night and day,” said Donald Pressley, former USAID mission director in Poland. “We had six weeks left in 1989 to develop a plan.”

By December, Poland was suffering from hyperinflation, a currency that could not be converted, and an inefficient economy with subsidies amounting to 15 percent of the gross national product. All governmental services were centralized, but the system had broken down and social benefits were deteriorating; the regulatory framework and financial infrastructure were also weak. The economy struggled due to a lack of trained entrepreneurs with adequate access to credit as well as an industrial sector incapable of adapting to the new conditions of a market economy.

To help Poland achieve the double transition from a centrally planned economy to a private-sector led competitive economy, and from a society ruled by a single-party political structure to a vibrant participatory democracy, USAID worked in partnership with the Polish Government. The Agency provided technical advice and

other support as Poland's leadership privatized state-owned enterprises, and improved the regulatory and institutional environment in which businesses and civil society operate.

Over the next years, USAID supported Poland's ambitious efforts to restructure public debt, private banks, and set the flailing economy on a stronger macro-economic footing. Poland worked with USAID, other U.S. Government agencies, and other development partners to pull itself out of recession and fundamentally transform its society and economy.

DURING that time, USAID also worked directly with the Polish private sector to reinvigorate the economy. Private businesses needed financing to grow and adjust to the new market realities, and USAID/Poland responded to this need by creating a fund to provide loans to viable businesses. The Polish-American Enterprise Fund, established in 1989, was a commercial venture, started with sufficient capital to cover operating costs, but structured to earn enough income to become self-sustaining.

For businesses with little experience in a market economy, USAID helped entrepreneurs develop business skills—marketing, management, finance, and a host of other fundamental abilities.

Says Eric Postel, assistant administrator for USAID's Bureau for Economic Growth, Agriculture and Trade: "When Poland began down the reform route in 1989, there was no clear path to move from a command economy to a market system. Thanks to the thoughtful and successful efforts of

our Polish counterparts, our own staff, and our donor partners, combined with a willingness to rethink and rework approaches, the path for future reformers has become clearer. Our work made a difference for Poland, and the lessons learned continue to provide a foundation for improved assistance."

And what a difference—Poland is now a member of the European Union.



A woman harvests potatoes in the Shida-Kartli region of Georgia.

"One of the major lessons from our work in Eastern Europe was the importance of the laws, regulations, and institutions that underpin a well-functioning market economy," notes Nick Klissas, USAID senior commercial law adviser.

Poland served as the starting point for USAID's well-established Commercial Legal and Institutional Reform (CLIR) programs and tools. Frustrated with slow progress in the early years of reform, the Agency developed analytical tools for identifying constraints to growth in the commercial sector, moving beyond laws—which often were

passed but not implemented—to the government and private sector institutions crucial to success.

Building on the first CLIR analysis conducted in Poland in 1998, USAID has now developed a series of policy environment diagnostics, including a gender-sensitive agricultural policy tool used in the Feed the Future initiative, the Obama administration's global food security effort, led by USAID. Tools born in Poland have since been adapted and used on every continent.

"USAID's ability to learn from the past has paid off," says Jock Conly, acting mission director for Georgia. "What took 10 years in Poland took only four in Georgia."

USAID/Georgia is currently implementing the Economic Prosperity Initiative, a project that focuses on accelerating growth in the private sector to help create a brighter economic future for all Georgians. And lessons of Georgia—flexibility in design, direct support to country-owned initiatives, and increased private-sector partic-

ipation in policy—will inspire the next generation of reforms.

When Taniel Chanturia, one of Georgia's most renowned poets, wanted to publish his poetry, he found out that he had to register as an individual entrepreneur first. Instead of the nightmare experience he expected, he was helped in no time—and with no bribe—thanks to the streamlined tax registration process. It was "a fairy tale" according to Chanturia. "A couple of years ago it would have taken all my lifetime, nerves, and half of my honoraria." ■

Testing Democratic Waters in Honduras

By *Richard Martin and Robert Murphy*

Richard Martin began his career as an education adviser in the Bureau for Latin America and the Caribbean. He served in several overseas USAID missions including Honduras, Egypt, and Peru. Since his retirement in 2008, he has worked as a consultant on a number of USAID programs. Robert Murphy was a Peace Corps volunteer in Nepal and worked as a USAID personal services contractor in Peru, Nepal, Honduras, Guatemala, Bosnia-Herzegovina, and Panama.

NINETEEN eighty-five was an important year for democracy in Central America. The Marxist Sandinista revolution had taken control in Nicaragua and the United States was determined that neighboring countries would not follow suit. To promote its priorities in the area, the United States launched a program of military and development assistance in Central America, including the establishment of modern democratic processes and institutions.

Honduras was a keystone of this strategy. It had a tortured history of coups and dictatorships, exacerbated by its position as a banana republic that had often been manipulated by foreign economic and political interests. Honduras' long border with Nicaragua invited cross-border subversion, even possible invasion. Poverty

and a disaffected population created the conditions for revolution.

Honduras at the time was governed by President Roberto Suazo Córdova, whose regime was characterized by incompetence and corruption. Hondurans were pretty much resigned to the likelihood that Suazo or a surrogate would be perpetuated in power through a fraudulent electoral process of some kind. There was no tradition of transparent elections, and cynicism ran deep. A rigged election would discredit democracy and set back U.S. objectives in Central America.

The U.S. Government therefore decided to take the risk of becoming directly involved in the upcoming Honduran presidential election, hoping that an honest election would make the citizens feel empowered and install a government committed to social and economic development. The

United States and its style of representative democracy would gain credibility in Honduras and throughout Central America, and other important development and security priorities would be advanced.

U.S. Ambassador John Ferch and USAID/Honduras Mission Director Anthony Cauterucci decided that USAID should take the lead in the effort to assure the efficiency and transparency of the election. They approached the National Election Tribunal (TNE) and agreed that USAID would provide ballot paper, clear plastic ballot boxes, ink, printing services, a signature machine for the ballots, and election observers. To implement this high-profile, politically critical assistance, Cauterucci chose Bob Murphy, who was a contractor working on a special USAID initiative in the eastern region of Honduras.

Bob was a trusted USAID veteran, a good Spanish-speaker, and knew how to make things happen. What he was not was an expert on international donor support for elections; his electoral experience amounted to voting. He immediately went to work researching requirements and initiating procurements.

A signature machine was urgently needed to put the TNE official signature on every ballot, as required by the Honduran Constitution. Bob located a machine that met the technical and legal requirements, placed the order, and traveled to Miami to pick it up. The machine was there waiting for him, but the supplier insisted on payment paperwork that USAID/Honduras had

not provided. After several fruitless phone calls, Bob finally bought the signature machine himself. He charged it to his American Express card, carried it back to Honduras on the plane, and settled up later with the USAID comptroller. Disaster was averted and the TNE went to work producing the ballots with the required signatures.

But another disaster was just around the bend. Long-lasting ink had to be at every electoral table; voters were required to dip a fingertip into the ink, leaving a long-lasting stain and making it impossible for dishonest voters to attempt to vote repeatedly at multiple polling stations on Election Day. After much research and consultation, Bob found that the recommended ink formulation contained silver nitrate, a chemical used in photographic paper that turns black when exposed to light. It deeply stains the skin and is difficult to wash off. Bob ordered 8,000 bottles—two for each of the 4,000 electoral tables throughout the country.

When the shipment of ink arrived, there was no place to store it. Normal commercial storage sites and the Government of Honduras—including the TNE itself—wanted nothing to do with it. They feared that it would be tampered with as part of the expected electoral fraud, and that those responsible for storage could be implicated. Nobody would take the ink. In the end, the 8,000 bottles wound up in Bob's house in Tegucigalpa. One day, he decided to have a look at the ink and opened one of the boxes stacked in his house. He got two big surprises.

First, he was shocked to find that all 8,000 ink bottles were labeled with a skull and crossbones, indicating that they were poison. Upon investigating, he was told by the supplier that the



Children involved in a USAID democracy program sing the Honduras national anthem. The Agency has supported democracy programs in Honduras for five decades.

silver nitrate in the ink, if ingested (as opposed to having ones finger dipped in it), was potentially carcinogenic.

Obviously, the consequences of this label were potentially disastrous. Voters would see it and be afraid to vote; rumors would quickly spread that the government had supplied poisonous ink to scare off voters. When word got out that the United States had supplied the ink, the reaction would be even worse. The election would almost certainly fail and the image of the United States would go down with it.

In an effort to salvage the situation, Bob organized an emergency label-changing operation. A few friends along with their spouses and kids agreed to help. An assembly line was formed one Saturday morning on the patio of Bob's house. Ink bottles were removed from their boxes and placed into boiling water to soak for a few minutes; the bottles were removed and the offensive labels peeled off; the bottles were dried, new labels reading "indelible ink" were

attached, and they were re-packed in their boxes.

After many hours of hard work, all 8,000 bottles had been re-labeled. Some ink had leaked into the water used to soak off the poison labels, and everyone went home with their hands and arms blackened by election ink that didn't disappear for days. Another potential calamity had been averted.

The second surprise was that the ink looked clear, colorless, and transparent—just like clean water. When asked, the ink supplier explained that the silver nitrate changes quickly to black when exposed to light and that no other colored pigment is needed. Not so in Honduras. Voters' suspicions of fraud would cause them to assume the worst—that water had been substituted for the ink. Clear, ineffective ink could make it easy for dishonest voters to vote repeatedly and throw the election.

Crisis meetings ensued at the embassy, the USAID mission, and the *continued on p. 30*

When You Can't See the Forest for the Trees...

By Vicky Fakan

A partnership between USAID and the U.S. Geological Survey develops an inexpensive and effective way to monitor the impact of forest-conservation activities.

USAID has long been a major actor helping to conserve Guinea's forest reserves, which replenish many of West Africa's life-sustaining waterways. Now, a recent partnership between USAID and the U.S. Geological Survey (USGS) can better measure just how well these efforts are working. Officials from the two agencies believe the system—which analyzes decades' worth of satellite data to measure impact—just may revolutionize forest and conservation monitoring worldwide.

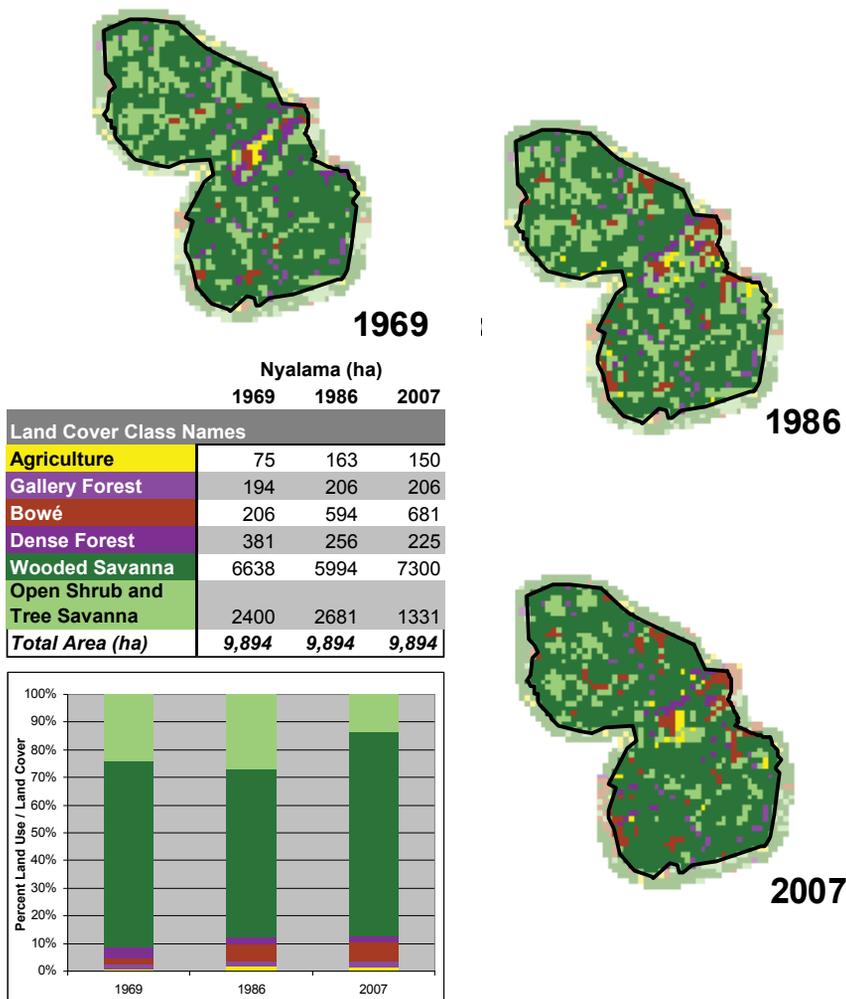
“Before this partnership, only about a third of worldwide forest conservation programs had monitoring and evaluation systems in place, so we have been unable to concretely track long-term improvements or setbacks,” said USAID/Guinea Mission Director Nancy Estes. “The use of remote sensing technology is revolutionary because it has creatively solved the problem and allows us and our Guinean partners to see with our own eyes the results of our work in preserving Guinea's forests.”

For 18 years, USAID has pioneered conservation by increasing the involvement of local people in the management

of four of Guinea's forest reserves, which cover more than 350 square miles. This approach decentralizes control from the Guinean Forestry Department to local communities,

whose welfare depends on ensuring that their environment is managed sustainably.

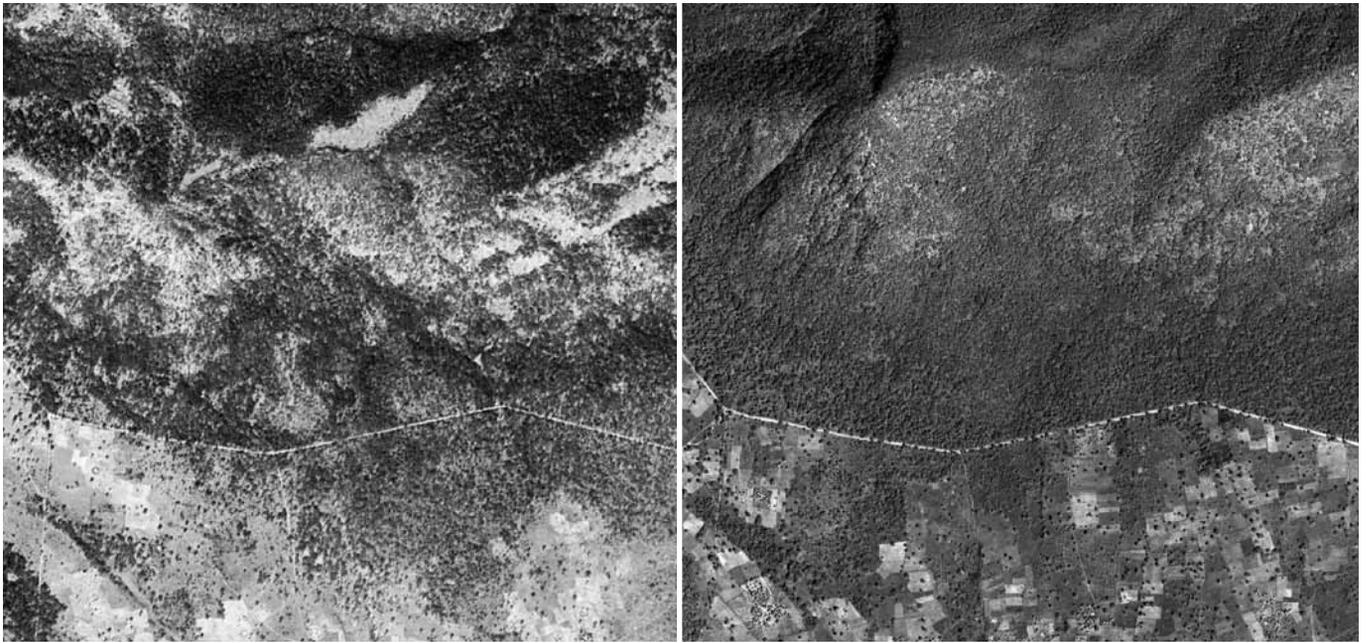
Although locals have great pride in the projects, it had always been difficult to concretely measure the extent and quality of the program's impact. “Early biodiversity programs did not undertake widespread agriculture or income surveys, nor were they able to invest in costly satellite surveys to run ongoing comparisons,” said Ibrahima Camara, USAID/Guinea's rural



Produced by: U.S. Geological Survey, EROS Center, Sioux Falls, SD, USA

Nyalama Forest Reserve: land cover in 1969, 1986, and 2007. Wooded savanna is the predominant forest type. It has remained intact, retaining its density and overall integrity. A minor level of cultivation within the reserve is permitted by the forest management plan, and its area has been stable since 1986.

Source: U.S. Geological Survey, EROS Center



This satellite image comparison of the southern part of the Balayan-Souroumba National Forest from 1967, left, and 2007, right, confirms that tree density has significantly increased over the years—a very positive development that is a testament of long-term successes in forest co-management. Areas that were once open (light tones, left image) are now quite wooded. Note also the complete respect for the forest boundary, demarcated by the road. The images cover an area about 4.2 kilometers wide. Image sources: Corona, left; WorldView I, right.

development specialist. Until recently, the impact has been hard to gauge.

The new collaboration between USAID and the USGS Earth Resources Observation and Science (EROS) Center in South Dakota is exploring a promising new way to assess the effects of conservation work by analyzing decades of satellite data in areas where USAID projects have been active.

FOR ALMOST 40 years, EROS, which has been working with Agency missions in West Africa since 1987, has collected and archived satellite images of the Earth's land surface. Its images, taken by civilian satellites, have traditionally been used for research and a wide range of environmental, development, and conservation purposes.

For example, the center has collected a series of images taken by NASA-

USGS Landsat satellites, which have a moderate spatial-resolution. That means viewers can't distinguish fine detail, such as single homes, on a Landsat image, but they can easily see large structures such as roads and areas of general urban development. "With these images, you can easily see the patterns of natural and human landscapes and where and how humans are impacting their environment," says Gray Tappan, a geographer with USGS.

Since 1972, users worldwide have been able to purchase Landsat images from the USGS EROS. In 2008, USGS decided to make its worldwide Landsat archive available to the public, at no cost. EROS now shares this treasure trove with policy makers, scientists,

educators, and significantly, development agencies such as USAID.

TO DETERMINE THE real impact of USAID's 18 years of co-management projects in Guinea, the USAID mission teamed up with EROS in 2008 to undertake some sophisticated before-and-after comparisons. Using 40 years' worth of imagery, including the Landsat series, the USAID-EROS partnership has successfully tracked how forest conditions

changed over time, both in the areas that received USAID assistance and in areas that did not.

All four of the forest reserves supported by USAID have shown remarkable progress.

The images show that in Nyalama Forest Reserve in northwestern Guinea,

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GO ONLINE

**to browse the
publicly available
EROS data**

“Democratic Heart in a Bolshevik Body”; Albania after the Wall

By Carol Adelman

Carol C. Adelman was a Foreign Service Officer for 12 years, serving as a program officer in Zaire (now the Democratic Republic of Congo) and then in the Office of Nutrition and Health of the Near East Bureau. She returned to USAID as a presidential appointee from 1988-1993, served as assistant administrator for the Bureau for Asia and Near East, and was serving as assistant administrator for the Bureau of Europe when the Berlin Wall fell in 1989.



Mother Theresa appears at a State Department ceremony hosted by Secretary of State James Baker, in background, Dec. 8, 1991.

HAD THE PRIVILEGE of serving as the assistant administrator of the Bureau of Europe when the Berlin Wall fell in 1989. From their rebirth as free nations, the countries of Central and Eastern Europe (CEE) were way ahead of many aid recipients.

The Czech Republic called for “trade not aid,” Poland was pushing us to move faster on privatization assistance, and Hungary’s small businesses were coming out of garages all over the country, where stealth entrepreneurs had been hiding them during the communist years.

We were able to help these countries quickly and efficiently due to new legislation, the Support for Eastern European Democracy, or SEED, Act of 1990, which allowed us to write our own streamlined procurement system; gave us the ability to work easily with small U.S. private institutions; and allotted one lump sum of money for all of CEE, thus eliminating country and functional earmarks and allowing us to distribute money based on performance, rather than entitlement.

My golden memory of these years is from Albania, a tiny country of fewer than 3 million people that had been ruled by the last Stalinist dictator, Enver Hoxha. The first USAID team to go there in 1991 came back with eye-opening stories of ether still being used in hospitals, of just 200 cars in the entire country, of dilapidated infrastructure, of the fanciest hotel in the capital city of Tirana offering its premiere guests hot water for one hour each evening, of political prisoners tossed into camps for



Photo by Chris Hill

Mother Teresa on a U.S. military plane blessing the first shipment of food aid to Albania.

complaining in bread lines or for listening to Voice of America—and being held there, along with their children, for two or three decades.

When James Baker—the first secretary of state to visit Albania—arrived in the summer of 1991, more than 50,000 Albanians were cheering like mad. In a country that had been completely repressed for a half-century, where the United States had been painted as the devil incarnate, he was welcomed as a hero. I was told that 40 percent of Albanians spoke English, and that a popular name for children was Wilson, after President Woodrow Wilson. Even skeptics of humankind's innate desire for freedom and democracy understood the message here.

When the newly elected President Sali Berisha was asked how we could best help, he replied: “We have a democratic heart and a democratic head that are stuck in a Bolshevik body.” The 28-year-old Minister of Finance and Economy Genc Ruli was optimistic when describing what he

would consider success in the country's transition from totalitarianism to democracy: “We will be measured by the windows in our shops and how full they will be with goods that people can buy.”

My most interesting exchange with Ruli, however, happened over lunch in King Zog's palace, which towered over the Adriatic Sea. At our small table, away from his official entourage, Ruli peppered me with questions about America. Was it true that teenagers had their own cars? Were our stores really as long as their airfield in Tirana?

Finally, he leaned forward, looked me in the eye, and asked me in a quiet voice: “Now, what is this tummy tuck?” Thinking about Albania's food shortage crisis and all its other woes, I said simply: “It's an operation, Minister Ruli. But, don't worry; it's not your problem.”

What I remember most fondly from Albania was meeting the most wonderful Albanian, Mother Teresa. When I first spotted her, she was carrying an Albanian child with a club foot and

busily talking with the child's nurses and caregivers. I walked alongside her and Deputy U.S. Secretary of the Treasury John Robson, as she seemed to never stop moving.

Robson and I were there to follow up on Baker's trip, and to design assistance programs that responded to Albanian needs and desires. While walking with Mother Teresa, I asked her: “What can we do to help Albanians the most?”

She turned and looked up at me straight in the eye, and answered: “Get them jobs. Get them jobs.” She clearly stood for sustainable development, helping people to help themselves.

Food shortages in Albania had reached crisis levels. In response, the U.S. military flew in Meals Ready to Eat (MREs). The first American plane loaded with MREs into Albania landed on a bumpy, grassy runway with peasant women hoeing the adjoining field and goats and cows wandering about.

Mother Teresa joined the hundreds of other Albanians awaiting the plane at this tiny airport. When the military airlift-command crew came out of the cockpit, the Albanians cheered and rushed the plane. They were especially amazed to see that the pilot was a 20-year-old woman.

Mother Teresa stood in a circle with the wide-eyed crew, handing out rosaries and blessing them. Before anyone could notice, she slipped away to the plane, went up the steps, and, standing over the MREs, held her hands in prayer, closed her eyes, and blessed them.

This and other experiences in Albania reminded me, once again, how the United States can help people turn their hopes into reality and how USAID, the State Department, and the U.S. military can work together to help people in need around the world. ■



From *Tragedy to Action:* USAID's Environmental Trajectory

Indigenous communities located at the shorelines of the Gatún River have received technical assistance and training from USAID to help develop sustainable tourism.

ON the border between Ecuador and Colombia, communities of Cofan Indians are using improved cocoa-production techniques to increase their income as well as to reduce pressure to convert neighboring forests to agricultural lands. Three indigenous groups in this highly biologically diverse region

participate in a program with the Government of Ecuador under which they receive annual payments for upholding conservation agreements.

These conservation efforts in Ecuador, supported under USAID's Initiative for Conservation in the Andean Amazon, are just one example of USAID's innovative environmental

work around the globe. Environmental programs have become one of the larger components of USAID's portfolio—and a key factor in the design of all projects.

To manage this effort, USAID employs 44 environmental specialists throughout its overseas missions as well as 37 staff in Washington. Of these 81



specialists, 33 were brought in through USAID's Development Leadership Initiative as budding Foreign Service Officers. For almost 30 years, the American Association for the Advancement of Science (AAAS) fellows have provided invaluable technical support. Additional expertise is provided by in-country environmental specialists as well as

experts on loan from other U.S. Government agencies. Well-established federal procedures ensure careful evaluation of potential environmental impacts, and mitigation of negative effects of all USAID's development efforts.

This was not always the case.

In the early 1970s, environmental issues had not yet taken on their current

urgency. USAID had no environmental procedures and no environmental officers. Environmental consciousness was growing, albeit slowly, at home and abroad due to an emergent environmental movement, but it was not yet seen as an integral part of international development work. Then, during a USAID-funded campaign to eradicate malaria

Photo by USAID



The mouth of the Chagres River feeds 40 percent of the water for canal operations and 80 percent of the water for human consumption in Panama City and Colón, which represent more than half of the country's population.

in Pakistan, five people died from over-exposure to the insecticide malathion. USAID was sued by a consortium of U.S. environmental groups, which brought the Agency's environmental impact assessment procedures under scrutiny and sparked action.

In 1977, USAID developed a set of environmental regulations that required it to systematically consider the potential environmental impacts of all its actions. However, this was a new area for the Agency, and was not well understood by its staff. With only a couple of environment officers on its payroll, proactive thinking and planning, as well as enforcement, lagged behind.

Says Jane Stanley, who began working at USAID/Panama in 1977 as the mission environment officer: "I got the feeling when I first got this assignment that many in the mission viewed this as a new fad that would go away after a while... that environmental assessments were another pesky box to check off in the project design process."

For others, genuine concern about the environment was combined with

apprehension that new regulations would prove too onerous.

Robert Otto, the Agency's first regional environment officer in Latin America and Caribbean, found that when he arrived, people were "happy to see me . . . as well as a bit edgy. The edgy part had to do with the prospect that environmental impact issues would stop, or at least delay, most development activities and projects because of the need for lengthy impact analyses. [However], I found that mission project development officers were usually quite concerned about avoiding negative impacts."

In 1979, Jim Hester—currently the Agency environmental coordinator and director of USAID's Office of Natural Resources Management—was brought on to help energize a rewrite of the regulations and lead USAID's efforts to implement them more methodically, creating a system of mandatory assessments of the environmental impact of USAID projects.

These new regulations, known as Regulation 216, helped USAID spot problematic projects early on, and

reorient towards more environmentally sound plans.

Hester recalls a proposed project in Peru: "The initial plan was to clear-cut the trees from vast areas of Amazonian rainforest in the eastern part of the country. The thought was that if trees grew so well, then this could become the breadbasket of South America with wide-scale planting of crops in place of trees."

The environmental impact assessment found the agricultural potential would be minimal and that clearing the land would be an environmental disaster, adversely affecting people who lived in that part of the country. Instead, USAID redesigned the project to use the jungle sustainably as a forest and create incomes that would far exceed what could be earned under the original plan.

AFTER SUCCESSFULLY embedding environmental assessments and safeguards into the Agency's work, the next step was to insert environmental components into existing projects. One such project was a rural development effort in northern Costa Rica, along the border with Nicaragua, in the early 1980s. The effort planned to improve roads, schools, and health clinics as part of a comprehensive plan to address rural poverty and avert destabilization from conflict across the border. However, an assessment predicted that new roads would bring heavy deforestation and more people to the area, among other impacts. Not only did construction need to proceed in an environmentally sound way, but the pristine and ecologically critical Caño Negro river and wetlands, used as a habitat for a range of migratory threatened and endangered species, needed to be protected.

Responding to these concerns, USAID supported the creation of a

wildlife refuge to both protect the natural habitat and provide revenues from eco-tourism, creating an incentive for local citizens to support the project. “Today, the Caño Negro reserve is a thriving, though remote, bastion of eco-tourism,” said Hester.

On a much larger scale, efforts in neighboring Panama starting in the late 1970s integrated a host of activities ranging from protection of parks and forest reserves to environmental governance. These efforts responded to a series of ecosystem impacts stemming from deforestation and cattle grazing that potentially jeopardized the operation of the Panama Canal.

Bob Jordan was a mission project development officer when he helped design the Panama Canal Watershed Project in 1978. The project was designed to mitigate the impacts through a conservation program that protected 95,000 hectares of natural parks and reserves in the Panama Canal watershed, and provided technical assistance to improve the Government of Panama’s watershed management capacity and increase environmental awareness among citizens.

“It sparked my life-long interest in natural resources management,” said Jordan recently.

One crucial aspect of the program was working with Panama’s Renewable Natural Resources Directorate (RENARE). Although at first RENARE had limited capabilities, with ongoing USAID help it grew into a semi-autonomous institute. Eventually it became a fully autonomous National Environmental

Authority with a ministerial-level executive director.

With USAID’s help, RENARE “gained watershed management experience by implementing soil conservation, improved pasture practices, and 4,000 hectares of reforestation,” according to David Bathrick and Bruce Kernan, former USAID officers, in an evaluation report on the project. USAID also helped raise awareness of environmental issues more broadly,



USAID has helped to improve community incomes by building environmentally friendly, women-run private and community nurseries located in the Panama Canal Watershed.

leading to a number of locally based environmental NGOs.

USAID’s watershed management work in Panama, which continued over a span of 30 years, not only promoted the creation of protected areas in the Panama Canal Watershed, but also promoted environmental regulations for protection and sustainable management of natural resources; strengthened government institutions; promoted sustainable agriculture and

cattle ranching; and developed a watershed governance structure that is a model for decentralization.

ENVIRONMENTAL PROJECTS weren’t always focused on preserving nature from the influence of people. In Sri Lanka, the tables were turned. In the 1980s, USAID and other donors supported a large irrigation and rural development program in the Mahaweli Ganga basin. An environmental assessment of the project indicated that elephants, deprived of their natural habitat, would threaten local populations and their crops by straying into agricultural areas. Working with the Sri Lankan Parks and Wildlife Department, USAID supported an effort to create national parks, and corridors connecting them, to accommodate elephant movements. The aim was to preserve habitats of both the elephants and the local citizens.

As implementation of environmental work surged in the field, safeguards continued to be codified in Washington. In the 1980s, Congress passed regulations requiring environmental impact assessment, and conservation of tropical forests and biodiversity. This legislative action spurred further proactive attempts to address environmental issues.

To meet the congressionally mandated requirements, USAID ramped up its technical staff. By the mid-1980s, 10 environmental officers were located in field offices throughout the world and in Washington. In 1982, Hester, along with USAID Science Adviser Howard

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For Kyrgyz Farmers, A MODEL PARTNERSHIP



USAID's Kyrgyz Agro-Input Enterprise Development project helped to stimulate the production of 2,500 metric tons of corn and sunflower for high-quality edible oil. Over 800 farmers and 50 seed producers received training on modern cultivation.

By David Mack

IT SEEMS THAT tiny, landlocked Kyrgyzstan has seen it all in recent years: drought, harsh winters, ethnic tension, and a popular uprising. As a result of these challenges, both natural and man-made, an estimated 47 percent of the population lives in fear of hunger or starvation or is otherwise considered

food insecure. Economic opportunity is also constrained by the fact that two-thirds of the country's 5 million inhabitants live in rural areas, yet only 7 percent of the land is arable.

USAID has been active in Kyrgyzstan since the country's independence in 1992, and opened an office a year later to support the transition to a market economy. USAID's early programs were focused on unleashing private-sector

growth and creating access to finance for small businesses. While this support allowed Kyrgyzstan's shopkeepers and traders to improve their cash flow, the country's small farmers lacked the quality fertilizer or adequate machinery to adapt to a demand-driven agricultural market. Farm production in Kyrgyzstan is made more uncertain by frequent water shortages, flooding, border closures, and social unrest.

Persistent threats to the food supply in the country prompted USAID to move beyond stopgap assistance and develop a sustainable solution. In 2001, the Agency invested \$1 million in a two-year pilot project with the International Fertilizer Development Center (IFDC) to facilitate trade and technology transfer between agro-input dealers and farmers in southern Kyrgyzstan. Crop yields dramatically increased between 25 and 35 percent, a resounding success, which stimulated additional USAID investment in the Kyrgyz Agro-Input Enterprise Development (KAED) program. USAID extended its support to IFDC in 2003 to reach more farmers, and in 2006 to replicate the program's successes in northern Kyrgyzstan, and again in 2008 to respond to a food crisis.

In 2009, while the Agency was expanding this partnership, it identified a new private-sector alliance with the Eurasia Group LLC Switzerland—Pioneer, John Deere, DuPont, and Monsanto. Together, they built upon the previous successes of KAED to help move the country beyond subsistence agriculture toward greater food security.

The current project, known as KAED Follow-On, was formed through a USAID Global Development Alliance (GDA)—the premier model for public-private partnerships since 2001. At its core, GDA reflects the current realities that a project able to sustain itself through the capital marketplace is more likely to survive, and that, says Erin Cole, USAID's GDA liaison in Central Asia, "many of the largest issues in development require solutions that no single actor could hope to tackle alone."

Increasing food security is a major U.S. international development goal, and creating sustainable new markets and supply chains is a necessity for the private sector. "Over the course of our two-year partnership with the Eurasia Group, both these goals are being met in a sustainable way," said Cole. Through the partnership, farmers receive a supply of high-quality seed, crop-protection products, and access to the newest agricultural technology and machinery at subsidized prices.

Pioneer is providing quality hybrid seeds to farmers while Du Pont and Monsanto are contributing a range of products to protect their crops. John Deere has contributed \$1.95 million worth of agricultural machinery, including tractors, planters, cultivators, sprayers, and harvesters required during the growing season. These critical agro-inputs complement USAID's technical assistance program, which provides business training to 120 local input dealers and distributors, cultivation and product usage trainings to 750 commercial farmers, and other activities to link farmers with output markets.

As a result of a decade-long effort in Kyrgyzstan, roughly 123,000 commercial and smallholder farmers have received USAID support, and are able to produce enough for commerce and larger distribution. Producing 4,000 metric tons of winter wheat, for the first time in many years, the country met the annual demand for wheat harvests with a record-making yield in 2009. Bread wheat production increased by 40,000 metric tons to a total of 1.2 million, the highest production level in Kyrgyzstan in the last 15 years.

"The results exceeded my best expectations," said Kurbanaly Mitiev,

a farmer from northern Kyrgyzstan. "I was very happy not only with the high yield, but also with the quality of the seeds that had high output, which meant that I could sell my seeds for a better price."

Additionally, 1,200 kilograms of livestock feed was distributed through private-sector markets to ensure the survival of a targeted 70,000 dairy cows (14 percent of all dairy cows in Kyrgyzstan) during the 2008-2009 winter months. The mortality rate among these animals was just 3.6 percent, compared with 13.5 percent for unassisted animals. Among program-assisted farms, the average milk yield rose 26 percent from the same period the previous year.

The combination of a highly productive crop yield and an effective livestock management campaign during the particularly cold winter months staved off what would have surely been a food crisis.

"Through our technical assistance activities, partnerships with private companies, and the provision of U.S.-financed fertilizer and seed to over 40,000 farmers, project beneficiaries have already improved yields in key food and feed crops by 20 percent," said Hiqmet Demiri, chief of party for the program.

JUST AS THE original KAED project was ending in the spring of 2010 and the project was celebrating the successful 2009 harvest, political turmoil and ethnic violence in Kyrgyzstan jeopardized the agricultural supply system, making seed, fertilizers, and other agro-inputs scarce. Kyrgyzstan's southern communities around Osh and Jalalabad were most affected by a sudden wave of ethnic

violence in June 2010 that displaced thousands of citizens from their homes and disrupted local markets.

To counter the agricultural setbacks caused by the unrest and ensure the stability of the program, USAID, the IFDC, and the Eurasia Group LLC Switzerland joined together to support the KAED Follow-On project for additional seed and funding to recover the high output from 2009.

The successes of the KAED and KAED Follow-On projects have transformed the program into a household

name throughout the country. It currently works with 20,000 farmers to plant USAID-funded improved wheat varieties and 80,000 farmers to collaborate with private-sector partners and adopt “best practices” in farming and animal care.

“[USAID’s] support significantly reduced the shortage of seed material in the country, expanded the acreage sown with crops compared to last year, and increased the use of high-quality certified varieties and hybrids,” said Torogul Bekov, Kyrgyzstan’s minister

of agriculture. “This will set the stage for receiving high yields of agricultural crops in the future.”

Since opening Kyrgyzstan’s relatively small and isolated agricultural market to large international suppliers, over 40 new business relationships have been established with an initial value of \$4 million and growing. The Association of Agribusinessmen of Kyrgyzstan, a non-profit organization established with the support and assistance of the KAED project to represent and coordinate the work of the country’s agriculture producers, suppliers, and dealers, has been instrumental in fostering the growth of budding Kyrgyz agro-businesses as they enter world markets.

USAID and a local Kyrgyz company—Oasis Agro, LLC—have also created a new public-private partnership to promote poultry and high-value feed crops. The partnership is providing farmers with training and access to key business resources in the feed and poultry industries, thus improving production of high-quality edible oil and eggs.

Because of the project’s success in Kyrgyzstan, talks with private-sector partners have already begun in an effort to expand the program to other countries in Central Asia.

THE PRIVATE SECTOR has always had a significant role in development, but the benefit of public-private partnerships is becoming an increasingly important part of sustainable development.

In 2001, USAID embraced a new approach to partnerships that fully welcomes and encourages direct collaboration with the private sector. The move was driven by the recognition



Photo by Guljamal Chokmorova, KAED

Sabira Jumabaeva’s corn field in Kyrgyzstan yielded 15 tons of corn in 2010 thanks to high-quality seeds provided by Eurasia Group Kyrgyzstan as part of a USAID program.

Photo by Daniya Baisabanova, KAED



USAID's seed assistance voucher program provided high-quality seeds to over 34,000 farmers across Kyrgyzstan, including this family in Jail Rayon.

that new stakeholders were making significant contributions to international development and developing countries. These new actors included non-governmental organizations (NGOs), private voluntary organizations (PVOs), cooperatives, faith-based organizations, foundations, corporations, financial institutions, the higher education community, remittances from diaspora communities, and even individuals.

In light of this new reality, USAID launched the GDA model of public-private partnerships in 2001 to deepen the scale, impact, and sustainability of

its development programs. With more than 900 alliances formed with over 1,700 distinct partners over the past decade, the Agency has not looked back. According to alliance officer Cole, "The GDA program was designed to combine the assets and experience of strategic partners and to leverage their capital, investments, creativity, access to markets, and skills to solve complex problems facing government, businesses, and communities."

The continued GDA partnership between USAID and the Eurasia Group LLC Switzerland is a result of

persistent efforts to attract international companies to the relatively small Kyrgyz market. This alliance has already proven to be a mutually beneficial and effective relationship that will be expanded through the KAED Follow-On project.

"The alliance serves as a prime example of how public-private partnership can address food security issues through increased agricultural productivity. KAED hopes its successes will serve as a signal to other firms in the region and lead to new public-private initiatives that address food security needs," said Demiri. ■

Fair Elections

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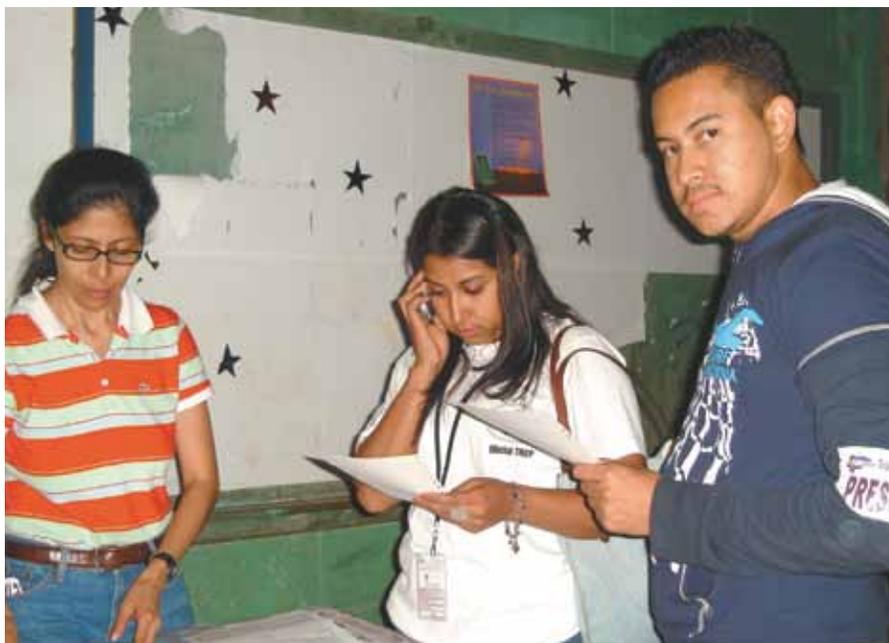
TNE. The ink was tested repeatedly to determine how quickly and completely it blackened when touched by skin and exposed to light. After much debate, the TNE decided that the ink would work and should be used, but that voters should not know in advance about its lack of color. If people knew what the ink contained, the TNE feared, someone with knowledge of chemistry would figure out that it could be removed using bleach.

Over the next few weeks, election materials were distributed to thousands of voting sites throughout the country, energetic campaigning took place by political parties, election workers were trained, and voter registration and education took place. Everything seemed to be going smoothly, in spite of lingering concern that somehow, somewhere, electoral fraud might take place.

In the final lead-up to Election Day, the mood of the country turned festive, almost euphoric; it appeared that a clean election was finally going to take place in Honduras and Hondurans were going to freely choose the good government they wanted. It felt historic, and it felt good.

USAID staff members traveled with international observers to view the voting throughout the country. One of them, Dick Martin, a USAID/Honduras education officer, helicoptered to a remote city with a contingent of U.S. congressional staffers. The polling places were scheduled to open at 6 a.m. Community officials proudly received and escorted the observer team past long lines of cheerfully expectant voters.

However, 6 a.m. didn't dawn the way it should have; the sun had yet to rise, and the morning was cloudy and



USAID has supported democracy and governance in Honduras since 1961, including the primary elections in 2008 and general elections in 2009.

dark. Furthermore, the polling place was in a school that was not electrified and had no lights. At the appointed hour, the doors opened and the first voters entered. In the near darkness of the schoolrooms, the work of checking voting lists, confirming ID credentials, and voting was difficult. But worst of all, without light, the USAID ink on voters' fingers didn't change color. By 6:15, dismayed local officials closed the polling stations and announced that water had been substituted for the ink, invalidating the election. This scene was repeated simultaneously in thousands of places across Honduras.

Moments later, the head of the TNE came on the national radio network and announced that the ink was a chemical that took a couple of minutes to change color. At the same time, God smiled on Honduras, the sun came out, and the voters' fingers turned black. The sense of relief was palpable and spread almost instantaneously by radio to the whole country. Polling places

everywhere re-opened and the election was a success. By the end of the day, the electoral process and the TNE were praised by the observer teams for being efficient and transparent.

Twenty-five years later, in 2010, Honduras experienced another chaotic and non-democratic change of government. Obviously, creating democracy is not quick or easy. USAID's successful—if white-knuckled—support for Honduras' 1985 election didn't miraculously transform the country's history of troubled and weak democratic institutions, but it undoubtedly made an important short-term contribution to U.S. foreign policy objectives in Central America at the time.

It demonstrated once and for all that elections in Honduras can be credible, fair, and transparent if the conditions are right. Hard work, risk-taking, commitment, a sense of humor, and teamwork—characteristics of USAID missions throughout the world—clearly saved the day in Honduras. ■

Guinea Forest Conservation

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the community has respected an important chimpanzee habitat. In Souti-Yanfou Forest Reserve in southwestern Guinea, they show evidence that two decades of chaotic slash-and-burn agriculture has been superseded by management practices that

emphasize the need to look after the forests in the long term. Forest cover is visibly denser and evidence of this regeneration is confirmed by locals, who say that water sources that had dried up are now flowing.

In neighboring Balayan-Souroumba and Sincerey-Oursa Forest Reserves, the images also show that tree density

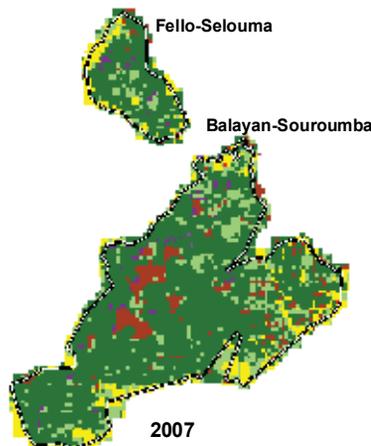
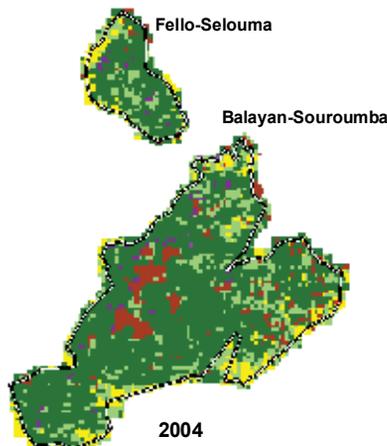
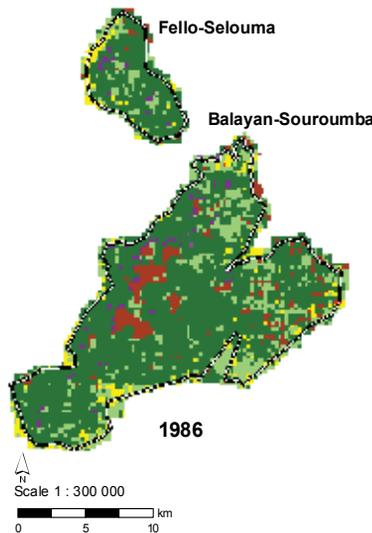
is better now than in the 1960s. “The empowerment of the local communities has delivered tremendous outcomes, with locals actively planting trees and going so far as to reduce destruction by relocating entire villages to less sensitive sites,” says Estes. By contrast, the imagery shows that the Fello-Selouma Reserve, which remained outside USAID’s project area, has been subject to creeping agricultural encroachment and steady deforestation.

In most cases, the reserves are now in better condition than at any time since the 1986 set of images. While this partnership uses satellite images to look downward, one local says that now, “we see a way forward.”

“The results are not only a source of optimism and hope for Guinea’s forests, but the information is already being used by USAID’s partners to identify what works and to help guide future conservation activities throughout the region,” says Greg Booth, who worked on the partnership before becoming the U.S. Department of Agriculture regional program manager for Armenia and Georgia.

THANKS TO THE evidence generated by the USAID-EROS efforts, the partnership’s boundaries have expanded outside of the USAID project areas. Although the Guinean Forestry Department has given up some direct control over forest management, the effectiveness of the community approach has won the authorities over. This form of forest regulation is now a government imperative for all of Guinea’s forest reserves. Said one government agency representative: “We are now educators, not policemen,” and “our victory is if the experiences of

Land Cover / Land Use Percent Change			
	1986	2004	2007
Balayan-Souroumba			
Agriculture	3.1%	4.6%	5.6%
Gallery Forest	0.1%	0.1%	0.1%
Bowé	7.3%	7.3%	7.3%
Dense Forest	1.9%	1.5%	1.5%
Wooded Savanna	71.4%	70.0%	70.8%
Open Shrub and Tree Savanna	16.0%	16.3%	14.5%
Settlements	0.1%	0.1%	0.1%
Fello-Selouma			
Agriculture	8.6%	10.3%	14.6%
Gallery Forest	0.0%	0.0%	0.0%
Bowé	1.7%	1.7%	1.7%
Dense Forest	3.0%	2.7%	2.7%
Wooded Savanna	70.8%	65.1%	65.4%
Open Shrub and Tree Savanna	15.9%	20.3%	15.6%
Settlements	0	0	0



Produced by: U.S. Geological Survey, EROS Center, Sioux Falls, SD, USA

Balayan-Souroumba and Fello-Selouma Forest Reserves: land cover in 1986, 2004 and 2007. Balayan-Souroumba benefited from USAID-supported efforts to introduce and use co-forest management, while Fello-Selouma, which served as a control site for this study, did not benefit from a co-forest management plan. In Balayan-Souroumba, the area of wooded savanna and dense forest has been stable, and tree density has increased. Agricultural encroachment increased slightly along the eastern fringe. The Fello-Selouma Reserve has suffered from higher levels of deforestation resulting from agricultural encroachment.

Source: US Geological Survey, EROS Center



The edge of the Balayan-Souroumba forest in the dry season. Tree density and diversity is excellent up to the forest perimeter. Communities are now managing the forest resources in partnership with local forest agents.

co-management are shared and used elsewhere.”

Indeed, this positive philosophy is already spilling over Guinea’s borders into the whole Mano River region, including Ivory Coast, Liberia, and Sierra Leone. USAID is working with partners there to implement action plans to extend effective forest-management practices through the Mano River Forestry Initiative.

“This creative partnership between USAID and USGS has not only generated a new and inexpensive way

of monitoring and benchmarking the impact of this project in Guinea, says Booth. “It has also provided a solid basis for conservation-ists everywhere to illustrate, justify, and share information about what works.” ■

GO ONLINE
to read more
about USAID’s
environmental work

Environment

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Minners, initiated USAID participation in the AAAS program to attract highly qualified scientists to work on environment and science.

USAID’s diverse history of environmental work has led to a natural-resource management approach that

not only takes into account natural resources such as water, forests, and land, but also economic growth and good governance. USAID’s Mike McGahuey, who has worked on natural resources management issues in Africa for more than 30 years, highlights the importance of such an approach: “In the African Sahel in the 1970s, project-driven reforestation

efforts were aimed at conservation and the results were poor. In contrast, over the last 25 years, farmer-managed natural regeneration of on-farm trees has grown from a few thousand hectares to over 5 million hectares in the Sahel and continues to expand. Driving this expansion were increased crop yields and greater resilience to climatic variability. But, in addition to these economic drivers were changes in the forest codes that conveyed forest management authority and responsibility from the state to farmers and communities. These two factors—economic incentives and local control over resources—were critical to successes.”

With global climate change an increasing concern, USAID is also considering how its activities affect greenhouse gas emissions and the impacts that a changing climate is already having (and will continue to have) on the globe and on USAID’s work. To that end, the Agency plans to release a new Climate Change and Development Strategy that provides guidance and a roadmap for USAID’s climate change work, including integration of climate considerations across its development portfolio.

Today USAID takes an integrated approach to natural resources management. Land and water must be managed skillfully so they are able to produce food for the world’s growing population. Water quality must be maintained and improved to keep populations healthy. Forests must be maintained by people who live in and near them, and depend upon them for their livelihoods.

If decades ago the environment was not yet seen as an integral part of international development work, today, at 50, the Agency is that much wiser for its years. ■

MESSAGE FROM
USAID Bureau for Food Security Chief

FEED THE FUTURE: A Model for Doing Development Differently

By PAUL WEISENFELD

AT USAID, we're doing business differently. And that includes how we help other countries feed their people and drive economic growth.

As the head of USAID's new Bureau for Food Security (BFS), I'm thrilled to be able to celebrate our work promoting global food security in this month's edition of *FrontLines*. I'm proud to be a part of BFS, which was created in part to lead the U.S. Government's Feed the Future initiative, a whole-of-government, multi-agency effort to address the root causes of hunger that limit the potential of millions of people.

Reflecting the values of the American people, President Barack Obama announced Feed the Future at the 2009 G8 Summit in L'Aquila, Italy, where global leaders committed to "act with the scale and urgency need-ed to achieve sustainable global food security."

Why is there such urgency to achieve global food security? Because almost 1 billion people—more than one-seventh of the world's population—suffer from chronic hunger, and each year more than 3.5 million children die from



Paul Weisenfeld

undernutrition. And because an estimated 70 percent of the poor in developing countries live in rural areas, where agriculture can be a key driver to foster economic growth, which in turn is one of the fundamental forces to transform the developing world and eradicate poverty.

Food security is also about so much more than just food—in addition to agriculture and nutrition, food security is inextricably linked to economic, environmental, and human security. By

helping to sustainably feed communities in developing countries, we're building a foundation to prevent crises that have the potential to lead to human conflict. We are also increasing our own national security here in the United States.

The current drought and famine in the Horn of Africa provides a stark illustration of why short-, medium- and long-term strategies (see page 34) to ensure food security are needed. USAID's efforts, under the leadership of the Bureau for Democracy, Conflict and Humanitarian Assistance, to provide food and other emergency assistance to those in need must continue. But equally important, Feed the Future's approach reflects our firmly held stance as development professionals that aid is not an end in itself; our goal is to help create conditions where it is no longer needed.

A key approach of Feed the Future is working with partner countries and other donors to co-invest in selective, targeted regions that have the best chances of flourishing, and in value chains (see page 42) that have the greatest potential

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FEEDING IN



An Ethiopian woman feeds Plumpy'nut peanut paste to her 1-year-old daughter at a therapeutic feeding center.

In 2010, USAID forecasting tools warned that Ethiopia, Kenya, and Somalia would be hard hit on many fronts by serious drought conditions. Now, in the midst of the region's worst crisis in decades, the U.S. Government—among other interventions—is ramping up its multi-pronged emergency food response and planting the seeds for long-term, country-led agricultural resiliency.

Photo by Aysha House-Moshi, USAID

THE PRESENT AND THE FUTURE THE HORN OF AFRICA

By Jessica Hartl

IT WAS not unexpected. USAID has been working in the eastern Horn of Africa for years, so climate scientists, USAID teams, and partners saw the cyclical droughts happening more and more often. From every 20 years, to every 10 years, and now more frequently.

Soaring global food prices, combined with drought in 2007 and 2008, hit the region hard. In response, USAID worked with government, U.N. and NGO partners to increase the resiliency of drought-prone communities.

These efforts have helped many escape the worst effects of the current drought. But for some, the scorched landscape returned too soon, before they had a chance to recover. In August 2010, USAID's Famine Early Warning Systems Network (FEWS NET), in conjunction with partners such as the U.S. Geological Survey, NASA, and the National Oceanic and Atmospheric Administration, warned of La Niña weather conditions on the Indian Ocean. La Niña is a natural change in sea-surface temperatures that occurs every few years. The phenomenon would reduce rainfall and cause drought in parts of the Horn. Officials from the organizations expected Ethiopia, Somalia, and Kenya to be hit the hardest.

The predictions came true—both the autumn 2010 and spring 2011 rains

failed. The drought is the worst the region has seen in 60 years, affecting more than 13.3 million people. In May 2011, FEWS NET reported: "This is the most severe food-security emergency in the world today."

Starting in October 2010, USAID prepositioned food in the region, ramped up food assistance programs in Ethiopia and Kenya, and considered ways to respond in the famine-affected areas of Somalia. These areas have largely been inaccessible due to the threat of the terrorist group al-Shabaab, which has held de facto control of much of southern Somalia for several years.

Despite these challenges, the U.S. Government is using all available tools to help those in need. Projects undertaken by USAID and its partners include food distribution, nutrition, health, water and sanitation, economic recovery, and agricultural development.

The largest part of the response, food assistance through USAID's Office of Food for Peace, amounts to two-thirds of current U.S. Government emergency assistance to the Horn. In addition, USAID's Office of U.S. Foreign Disaster Assistance has provided critical life-saving health; nutrition; and water,

sanitation, and hygiene services throughout the Horn of Africa as well as cash and vouchers to strengthen livelihood opportunities.

But countries cannot be sustained by emergency aid. To address challenges such as global food insecurity, longer-term solutions must be part of the equation. The U.S. Government's Feed the Future initiative aims to reduce poverty and undernutrition by supporting countries to develop their agriculture sectors as a catalyst to generate broad-based economic growth.

As the overall framework to address global hunger, Feed the Future recognizes the importance of food and other humanitarian assistance, such as nutrition, during crises to save lives and protect livelihoods. The initiative also supports conflict mitigation and good governance efforts required to ensure that reductions in poverty and gains in nutrition stick.

SOMALIA IS perhaps the most complicated country in one of the world's most delicate regions. Not surprisingly, it has borne the brunt of the drought. According to UNICEF, as a result of this crisis, a child dies in Somalia every six minutes.

GO ONLINE

For more on the crisis in the Horn of Africa and how to get involved, visit www.usaid.gov/fwd

Fleeing Severe Drought in a Country at War

After making the difficult decision to flee their homes due to worsening drought conditions in southern Somalia, thousands of women, men, and children are embarking on an arduous 20- to 30-day trek to reach Dadaab, Kenya—home to the largest refugee camp in the world. Many are undernourished. All are physically and emotionally exhausted.

Their first stop is one of three recently established reception centers where they receive assistance from the American people: high-energy biscuits, a 21-day food ration of maize meal, wheat flour, vegetable oil, pulses (beans, peas, or lentils), corn-soya blend flour, and a variety of non-food items to meet their basic needs prior to formal registration by the Government of Kenya as refugees.

In fiscal year 2011, USAID provided food commodities valued at \$50.7 million to support the reception centers and ongoing monthly food distributions managed by the World Food Program for Dadaab's more than 440,000 registered refugees. USAID is the World Food Program's largest donor—both globally and for the Dadaab refugee operation.

Limited access has played a large role in shaping the current situation. Historically, USAID has been the largest food aid donor for Somalia. However, in January 2010, the World Food Program (WFP) suspended part of its emergency operation because the security risks became too high in the areas controlled by al-Shabaab.

Between 2008 and 2010, 14 WFP staff were killed while providing food assistance in Somalia. While WFP has continued to operate in accessible areas in the

north, the lack of access in southern Somalia has exacerbated the drought conditions, resulting in the July 2011 declaration of famine in six southern areas.

USAID's response to the current crisis began with the FEWS NET alert in fall 2010.

Shortly after this forecasting tool warned of impending trouble, the Agency prepositioned approximately 19,000 metric tons of food in the region. In fiscal year 2011, USAID has contributed more than 31,000 metric tons of food aid for WFP distribution in accessible areas of the country, including Somaliland, Puntland, Mogadishu, border areas with Kenya and Ethiopia, and some central areas in Somalia.

The Agency is also using innovative new food aid programs to complement WFP food distribution. Under the new Emergency Food Security Program

(EFSP), food is purchased locally and regionally, which saves on distribution time and shipping costs.

Additionally, in Somalia, USAID is providing \$13.2 million to private voluntary organizations to support cash transfers to households faced with extreme food insecurity, enabling them to purchase foods directly in their local markets. These cash programs are a rapid method of getting cash resources into people's hands. They not only give beneficiaries the freedom to purchase the kinds and quantities of food that they prefer, but also help infuse cash into the local economy, which in turn helps local shopkeepers and farmers.

EFSP resources also have been used to purchase regional ready-to-use therapeutic foods to treat 66,450 acutely malnourished children, primarily in the southern areas of Somalia.



Photo by Aysha House-Moshi, USAID

Ethiopian women at a therapeutic feeding center in a pastoralist camp in Dire Dawa.

Across Somalia's two borders, in Kenya and Ethiopia, a more encouraging panorama has evolved amidst the crisis. "In both countries, where governance is strong and U.S. Government investments can reach people in need, prior development investments have paid off, and stable environments have allowed emergency aid to reach those in need," says Greg Gottlieb, senior deputy assistant administrator in USAID's Bureau for Food Security.

In Ethiopia, Africa's largest labor-based social safety net program—put in place after a 2003 drought—is reaping large dividends by mitigating the impacts of the current drought. USAID is now helping 2.3 million of the 7.5 million chronically insecure individuals supported by the Government of Ethiopia's Productive Safety Net Program through a combination of in-kind food assistance and financing for public work projects that improve food security. (See sidebar.)

In Kenya, the Agency supports WFP drought-relief operations such as food distribution, and nutrient-fortified feedings for vulnerable mothers and children affected by drought or floods, as well as large numbers of refugees at camps along the border.

But there is another key difference. Both Kenya and Ethiopia are Feed the Future focus countries—beneficiaries of international efforts to build internal agricultural resiliency. In 2009, President Barack Obama pledged \$3.5 billion to support agricultural development and improved global food security, which leveraged another \$18.5 billion in pledges from the international donor community in the wake of the 2007/2008 food-price crisis. In the United States, this pledge became Feed the Future.

A Model of Preparedness in Ethiopia

If Somalia has borne the brunt of the current drought and ensuing famine, Ethiopia has fared comparatively better. The reasons are manifold, but among them includes a concerted government and donor response following a prior crisis.

After a severe drought in 2003, the Government of Ethiopia and donors designed and launched the Productive Safety Net Program (PSNP), the largest labor-based social safety net program in Africa. The USAID-supported PSNP focuses primarily on chronically food-insecure households in 318 *woredas*, or districts, which consistently suffer food gaps of three months or more because of poverty and little access to food. This program is a flagship component of the government's food security program.

The PSNP aims to protect rural families' assets so they are not forced to sell off livestock or send school-aged children to work to buy food to cover consumption gaps during lean seasons. It is also intended to improve community assets through conservation (e.g., reforestation, anti-erosion, improved water sources) and infrastructure (e.g., feeder roads, farmer training centers) improvements made through labor-based public works.

According to Dina Esposito, director of USAID's Office of Food for Peace, the program works like this: "Most donors supporting the PSNP pool their resources, which the Government of Ethiopia makes available to the designated district-level authorities. These local authorities distribute cash or in-kind food payments to designated beneficiaries and oversee the public works activities. USAID's Food for Peace resources go through our PVO [private voluntary organization] awardees, who partner with the local authorities to provide both food payments and resources for the public works activities, as well as training for local officials implementing the program."

In 2011, USAID's PVO awardees supported 2.3 million of the 7.5 million chronically food-insecure individuals that fall under the PSNP umbrella, providing them food for three to six months and also funding public works projects in 59 districts.

Ethiopia's PSNP allows these 7.5 million chronically food insecure individuals to retain their assets and maintain their food intake levels during hunger periods, rather than selling their assets and depending on emergency-relief support year after year.

Led by USAID, Feed the Future is an interagency effort designed to improve agricultural development in 19 countries, helping to prevent future food crises. It concentrates on small-holder farmers, many of whom are women, as critical drivers of this potential economic growth.

The details may be complex, but the theory is simple: Improving the yields of subsistence farmers through tools like improved fertilizers, drought-and-disease tolerant seeds, and finding markets for their crops in environmentally sustainable ways, means better

opportunities for the poor and improved food security for all.

In Kenya, as in Ethiopia, USAID assistance is addressing both emergency aid and long-term development.

Regions receiving emergency aid are most vulnerable to cycles of flood and drought, and largely found in the arid and semi-arid lands of Kenya and Ethiopia. In and around the refugee camps, including the world's currently largest camp at Dadaab, Kenya, on the border with Somalia, the U.S. Government provides crucial emergency supplies and support to ballooning numbers of refugees.

Support to these refugees did not begin with the current crisis. USAID's refugee assistance started in 1992, supporting over 2 million refugees fleeing conflict after the fall of the Siad Barre regime in Somalia. Currently, there are more than 920,000 Somali refugees in the Horn of Africa region and Yemen, many of them having left their home country because of poverty, conflict, drought, and extreme hunger.

Though much of the emergency food assistance is distributed directly to refugees, WFP has also created some food-for-asset programs for refugee-hosting communities and other drought-affected Kenyans. Food for assets involves providing individuals a wage in food for their participation in construction activities such as rainwater catchments, irrigation canals, and

dams—all things that support pastoral or agriculture-based livelihoods.

Since 2010, the Agency has also been supporting WFP's pilot cash-for-asset programs in select parts of Kenya. Previously, WFP had investigated which areas of the country would be most appropriate for the use of cash transfers and identified two—Mwingi and Tharaka districts—that are classified as semi-arid lands and have ongoing food-for-assets activities.

Through the water conservation projects, beneficiaries have been able to extend their water sources for an extra two to four months, and increase their yields for sorghum and other crops. This is particularly important in the Turkana region, which has benefited greatly from the construction of ponds for thirsty livestock and improved irrigation to allow communities in

these arid lands to save crops that would otherwise wither and die from drought.

But in Kenya as a whole, as in Ethiopia, a longer-term framework has been crafted to buttress these emergency measures. Feed the Future supports projects that build food security by improving key agricultural value chains, conducting crop research, promoting better natural resource management, and including improved water management processes.

Feed the Future efforts in Kenya began in September 2010, emphasizing the role of small-scale farmers, women in agriculture, and the private sector while complementing efforts by the Government of Kenya and other donors to enhance agricultural and dairy production and marketing.

In Ethiopia, Feed the Future efforts focus on strengthening selected value chains—including maize, wheat, coffee, honey, livestock, and dairy—while also encouraging private-sector engagement and improving market function.

Regionally, USAID's mission covering the whole of East Africa is also working to open up access to regional markets with a focus on staple crops and livestock, as well as reduce trade barriers and increase the capacity of key regional African institutions and firms as part of the Feed the Future platform.

THE LATEST forecasts indicate average rains in the fall of 2011 in the most drought-affected areas of the region, and conditions are expected to improve in most pastoral areas. Even so, FEWS NET forecasts that famine conditions will persist in southern Somalia into at least January 2012.

As long as millions of people around the world remain vulnerable to fluctuating climates and food prices, the U.S. Government will continue to use



Photo by Tony Karumba, AFP

Aden, a 3-year-old Somali refugee recovering from severe malnutrition, is fed by his father at a stabilization center in Hagadere in August.

WHAT THE F***?

Internet Appeals Ask People to Think Bigger, Act Bolder

The F-word. Coming out of the mouths of top-tier entertainers. That'll get a second look...and listen. The suggestively potty-mouthed celebrities (and a few politicians, too) are part of a symbolically bleeped Public Service Announcement, or PSA, called "The F Word: Famine is the Real Obscenity."

The attention-seeking Internet ad is not only asking for a donation for famine relief in the Horn of Africa, but is stepping beyond the usual appeals of this sort with a call to action. The ads ask people to pressure politicians around the globe to make long-term investments in agriculture in developing countries that struggle to feed their people.

While not exactly the sexiest of marching orders, the ad does appear to be part of a larger global effort that acknowledges donor fatigue, a global-get-involved spirit especially among young people, and that the root causes of famine are preventable.

The ONE Campaign says it created the PSAs as part of its broader campaign to support long-term strategies to end famine.

USAID's own PSA, "FWD," is taking a similar albeit less provocative tact.

FWD stands for Famine, War, Drought. The campaign—it includes appearances by actors Josh Hartnett, Geena Davis, and Uma Thurman; model Chanel Iman; and professor and vice presidential spouse Jill Biden—provides instructions to help people make financial donations to relief efforts and includes a primer about the origins of the current crisis.

The aim is to unite the public, NGOs, and corporations to respond to the immediate crisis and to promote the kinds of long-term measures to prevent famine that characterize the Feed the Future initiative. The tagline:



"Do more than donate. Forward the facts."

Go online to watch the ONE Campaign's "F Word" and USAID's "FWD" videos and for other links.

emergency-response mechanisms to address immediate needs in large-scale crises.

Dina Esposito, director of Food for Peace, explains: "In the face of devastating crises, the Agency supports activities wherever possible that not only provide relief but also enable communities to protect and rebuild their assets and infrastructure, thus

providing a potential platform for further developmental growth."

According to USAID Administrator Rajiv Shah, the U.S. Government will also continue to view long-term food security—support for the development of countries' agriculture sectors—as the best preemptive response and most effective tool to curtail future food crises. ■

Message from Paul Weisenfeld

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to alleviate poverty and end under-nutrition. Feed the Future strategies are country-owned and country-led, fostering the kind of national pride and enduring spirit exhibited by our inaugural Feed the Future "Hunger Hero" David Nyange (see online version of *FrontLines*).

Our work to create this lasting change within focus countries centers around important cross-cutting issues such as empowering women (see page 44), as well as cross-sector collaboration (see page 46) with both traditional and non-traditional partners.

USAID's work over the past 50 years has resulted in some great successes in agriculture and food security (see page 8), many of them previously untold. In addition to the progress outlined in this issue, we've also added 62 new agriculture Foreign Service Officers; expanded the role of the presidentially appointed Board for International Food and Agricultural Development, or BIFAD; and continued to promote new and innovative scientific research.

Our goals are ambitious, as they should be for an issue that goes to the heart of USAID's development agenda. Over the next five years, Feed the Future's interagency partners together will aim to help an estimated 18 million vulnerable women, children, and family members—mostly smallholder farmers—escape hunger and poverty. As Secretary of State Hillary Rodham Clinton has said: "The question is not whether we can end hunger, but whether we will." ■

Rwandan Fruit Salad

By Christine Spetz

Nutrition education program at district hospital is helping close the knowledge gap and is fighting malnutrition one classroom at a time.

EVERY day, Josephine Mukamana* straps her 18-month-old daughter to her back and walks the short distance from her home to the market. During the walk, she composes a grocery list in her head. There was a time when Mukamana's list would not have included locally grown fruits such as bananas, oranges, pineapple, and passion fruit, but that was before she

participated in a nutrition education program at Kibagabaga Hospital in Rwanda's Gasabo district.

The 11-month program—the first of its kind at Kibagabaga Hospital—launched in August in response to survey findings that showed many children in the district are underweight and malnourished. Malnutrition in children can cause irreversible, long-term damage such as stunted

growth and impaired cognitive development. Children can also suffer from anemia, goiter, and night-blindness when they are deficient in specific micronutrients, namely iron, iodine, and vitamin A, respectively.

In Rwanda, 44 percent of children under age 5 suffer from chronic malnutrition according to 2010 Demographic and Health Survey preliminary results.

“After hospital staff conducted a small survey of malnutrition in the Gasabo area, we discovered that the problem is not so much a lack of food, but rather the choices being made about what to eat. The biggest problem is knowledge. Understanding which foods keep the body healthy and help it grow,” says Dr. Christian Ntizimira, acting director at Kibagabaga Hospital.

“Chronic malnutrition is associated with a number of long-term factors including chronic insufficient protein and energy intake, frequent infection, sustained inappropriate feeding practices, and poverty. Some causes of malnutrition among children under 5 are insufficient food intake, infectious diseases, household food insecurity, and inappropriate care for children and women,” says Josephine Kayumba, nutrition specialist at USAID/Rwanda.

The nutrition education program that Mukamana participated in receives funding from the USAID-financed HIV/AIDS Clinical Services Program, which is run by IntraHealth International. The effort aims to combat malnutrition by teaching the Gasabo community about the importance of nutrient-rich foods and how to prepare these foods in the most nutritious way. In addition, mothers enrolled in the prevention of



A fruit salad takes form during a nutrition education program at Rwanda's Kibagabaga Hospital.

mother-to-child transmission services and their children are the primary target group for participation in order to minimize the side effects from antiretroviral drugs and to strengthen the immune system.

AT THE PROGRAM launch, Mukamana, along with 50 mothers accompanied by their children under 5, received a lesson on nutrition and fruit—the theme of that day’s program. During the program, the women learned about the relationship between nutrition and child development starting at birth; the importance of hand washing and other good hygiene practices when preparing food; and the need to include appropriate amounts of carbohydrates, proteins, vitamins, minerals, and fats in their daily diets.

“I learned that I’m not always preparing nutrient-rich foods like vegetables and fish,” Mukamana says, adding that she now regularly includes small fish, particularly the dry ones called “Indagara,” from the market in the meals she prepares, in addition to carrots, cauliflower, spinach, peppers, and onions.

As part of the program, Mukamana also participated in a demonstration of how to prepare a fruit salad using locally available produce.

Although Mukamana says she and her husband cannot afford to purchase all the fruits needed to make a salad every day, they buy enough produce to make sure everyone at home eats a banana, an orange, or a piece of pineapple after every meal. The family is also consuming more vegetables and protein on a daily basis—small changes that are starting to make a difference.

“My daughter is happier now [that she’s eating healthier]. She has more

energy, and her skin is improving,” Mukamana says. Vitamin-deficient skin is prone to developing rashes or becoming dry and thick.

“When others learn more about nutrition it will change the way they live and eat. People will realize that their children can be healthy too,” she adds.

“In general, Rwanda produces enough food to overcome malnutrition problems in the country. However, due to the limited food in the standard diet, children’s nutrient requirements are not being met,” says Kayumba. “More education is needed across the country on how to diversify the contents of meals, including the appropriate quantity, quality, and frequency to feed a child, as well as proper food preparation and feeding practices.”

In September, the nutritionist at Kibagabaga Hospital took the program to another health center in Gasabo district to give a second educational session. As part of this session, a group of mothers learned to make a vitamin-rich stew. The program was scheduled to offer a third classroom session this fall for district community health workers with the aim of encouraging them to talk more about nutrition with their clients.

The program aims to reach a different group every month and educate 250 to 300 families in the area.

In the future, hospital staff also want to reach schools, local leaders, and public institutions with essential nutritional information to prevent malnutrition and the kinds of non-communicable diseases like diabetes that it can lead to. ■

Christine Spetz is with IntraHealth

*Name has been changed for privacy reasons.

From Hunger to Famine

Hunger: The sensation that comes from a lack of food in a person’s stomach.

Chronic Hunger: Hunger becomes chronic when a person doesn’t eat enough to get the energy he or she needs to lead an active life.

Undernutrition/Malnutrition: The outcome of insufficient food intake and repeated infectious diseases. It includes being underweight for one’s age, too short for one’s age (stunted), dangerously thin for one’s height (wasted), and deficient in vitamins and minerals (micronutrient malnutrition). UNICEF says one-third of all child deaths in the world can be attributed to undernutrition. Ironically, malnutrition can also refer to overnutrition, or “globesity.”

Underweight: This is measured by comparing the weight of a child against children of his or her same age who are considered well nourished and healthy.

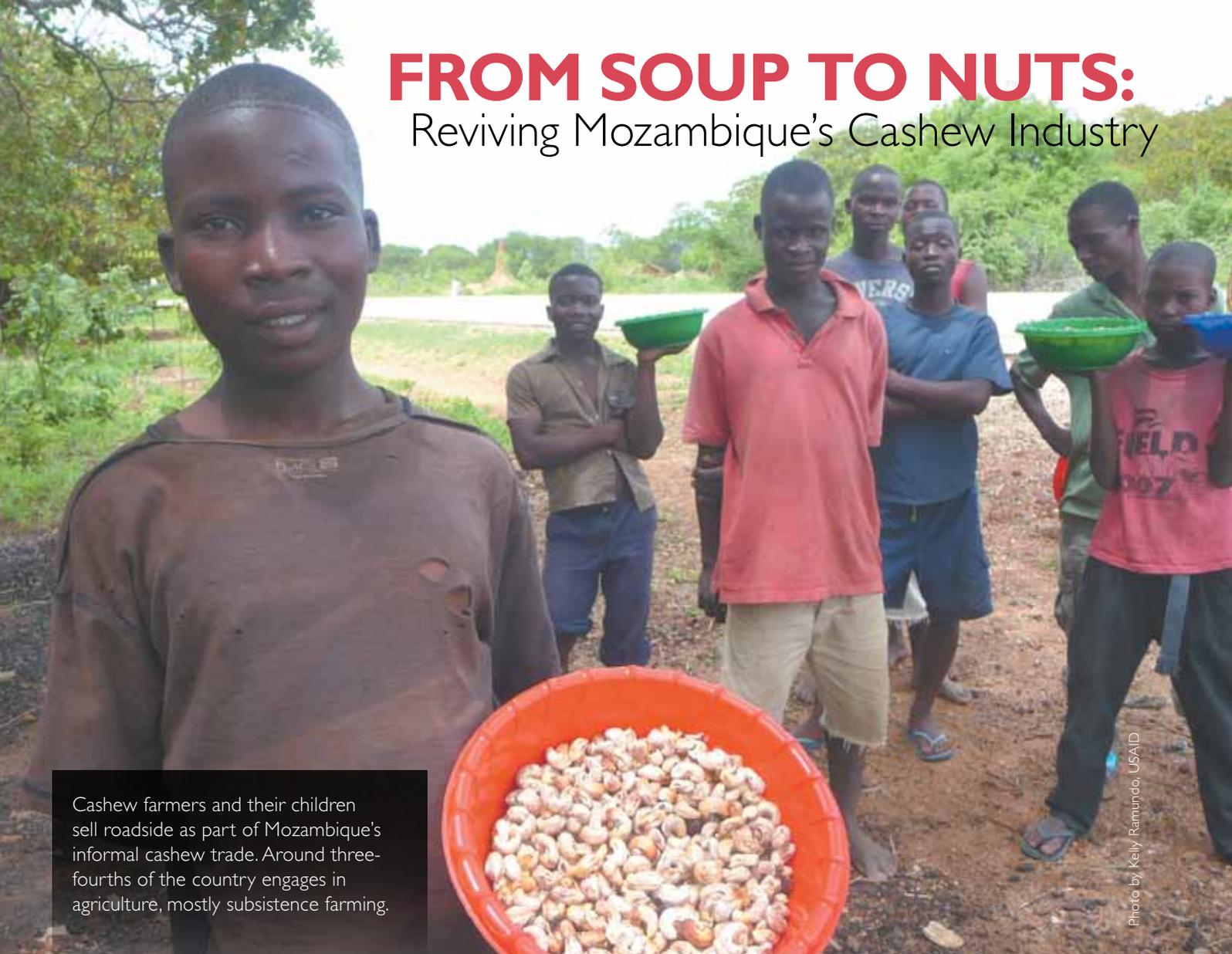
Wasting: This term indicates acute malnutrition, reflecting a recent and severe situation—usually starvation or disease—that has led to substantial weight loss.

Famine: The United Nations declares a famine when at least 20 percent of a population consumes fewer than 2,100 calories of food a day; when malnutrition rates exceed 30 percent for children; and when more than two people per 10,000 people die each day (or when there are four child deaths per 10,000 people each day).

Sources: United Nations, World Food Program, UNICEF, U.S. Centers for Disease Control and Prevention

FROM SOUP TO NUTS:

Reviving Mozambique's Cashew Industry



Cashew farmers and their children sell roadside as part of Mozambique's informal cashew trade. Around three-fourths of the country engages in agriculture, mostly subsistence farming.

Photo by Kelly Ramundo, USAID

By Kelly Ramundo

CASHEW may be informally known as a poor man's crop, but that reputation may have more to do with the sandy, nutrient-poor conditions in which the crop thrives than its impact on farmers' incomes in parts of East and Southern Africa, Southeast Asia and South America. When cultivated skillfully, the bean-shaped under-hanging of the juicy, bitter fruit can be a life-changing commodity.

In Mozambique, a once dominant cashew sector has slowly been regaining steam in recent years after decades of

conflict and unfavorable economic policies left it crippled in the late 1990s, according to John McMahon senior agriculture policy adviser for USAID/Mozambique. During the last five years, the Mozambican cashew processing industry, with USAID assistance, generated approximately 4,500 new jobs in rural Mozambique, and contributed directly to the income of 22,500 family members. Thirty-nine percent of those new jobs are held by women.

In most districts where factories are located, they are the only source of wage income. Since 2002, a rash of small, labor-intensive factories have combined

with the countries' more informal roadside sellers to produce over 60,000 tons of the nut, about half of which were exported for around \$40 million.

What is clear is that over the past decade, the beloved nut has reemerged as one potential path out of poverty for rural Mozambicans up and down the production chain: from the farmers who grow it to the factory workers who process it. Buoyed by ballooning demand, and with USAID assistance, the cashew is helping to transform the economic structure of rural areas in one of the world's poorest countries.

If Mozambique's cashew industry can be imagined as a pyramid, at its

base are the country's roughly 3.7 million small-scale, subsistence farmers, 1 million of whom engage in cashew production—managing an estimated 18 million trees in the country's northeast.

USAID and its partners are helping reintroduce the lucrative tree to small-holder farmers, teaching growing, grafting and pruning techniques for maximum yield, and encouraging them to unite into associations to pool crops and fetch higher prices for their raw material.

And with world prices rising and expected to remain steady, life is changing for many growers in Mozambique's cashew production areas located in Nampula, Zambezia, and Cabo Delgado provinces.

Arlindo Chaleira received plants and the technical know-how to see them thrive through USAID implementer ADRA (Adventist Development and Relief Agency). With just one hectare of land, he is the epitome of the smallholder farmer benefiting from the nuts' global popularity, and from a network of USAID-supported technical advisers.

"I used to plant things any which way," he says. "This project teaches me how to plant. Life has changed. With this knowledge and one hectare, I can get 500 kilos [of nuts]."

Chaleira now combines his crop with other growers in his farmers' association, and with the profits, he has made enough to place all eight of his children in school, an anomaly in rural Mozambique.

But the farmers are only one part a long chain linking crop, industry, and markets in the Southern African country. The value of cashew increases considerably where there is a functioning

processing industry to export the kernels to higher-end buyers in the West.

AT THE OPPOSITE end of the chain, at CondorNuts in Anchilo, Nampula province, hundreds of Mozambicans operate foot pumps to shell raw cashews, their hands stained an oily black from the acidic shell liquid. Instead of being shipped abroad in their raw form, as most of Mozambique's cashews are, or roasted on open fires and sold cheaply on the side of the road in the informal market, these high-quality cashews are being processed for export mainly to Europe and the United States with USAID assistance.

Because of how easy it is to break a cashew, and the premium paid for perfect nuts, humans are better than machines at shelling the cashews. At its two factories, Condor employs around 2,000 workers to both extricate the fragile nut and then export it to Europe for further processing (flavoring, roasting, and retail packaging).

Silvino Martins is a young Mozambican businessman and the manager at Condor, one of the 12 cashew-processing factories in Nampula province.

Though he is situated at the top end of the value chain, he knows—thanks in part to USAID-supported technical advisers—that his success is inextricably linked to that of the farmers that provide his raw material and the workers processing it.

Because of these linkages, Martins is looking at ways to help his suppliers increase their yields.

"What you are getting now is some of the processors working to encourage more planting of quality seedlings. Though it might be five years until those come into production, you are seeing some interest by industry to

say: 'How can we influence here?'" explains USAID's McMahon.

In his factory, Martins pays his employees a guaranteed minimum salary and treats them well: offering child care and up to two meals during their shifts. If the value chain continues to improve, Martins is convinced that Mozambique can reemerge to rival Brazil, India, and Vietnam as a premier exporter of processed nuts.

Jeanne Downing, a USAID value-chain expert, explains that a functioning value chain is not about competition among industrial buyers and local sellers, but rather, symbiosis: "In the case of cashews, you're not really competing with your neighbor; you are really competing with Vietnam. You're really competing with Brazil. And unless, as an industry, you can find a way of working together, none of you will win," she says.

IN MOZAMBIQUE, AS in many of the countries where USAID works, the Agency and its partners are active up and down the value chain: imparting technical knowhow to farmers; helping processors access finance, and then working with them to ensure healthy competition and standards for workers; fostering public-private partnerships; helping with quality control for the end product and marketing it to international buyers; and even working to influence the policy environment for the industry as a whole.

In the case of Mozambique's Condor, the Agency has helped partially guarantee a bank loan to get the factory up and running and see that it expands.

McMahon compares the full range of USAID assistance to a three-legged stool:

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Empowering Women to Feed and Lead

By Kimberly Flowers,
Alina Paul, and Elisa Walton



THE U.S. hunger and food security initiative, Feed the Future, is improving the lives of smallholder farmers by increasing food production, improving nutrition, expanding access to markets, and boosting incomes. Many of the farmers are women, who play vital roles in agriculture and food security. They participate in paid employment, trade, and marketing as well as many unpaid activities such as tending to crops and animals, collecting water and wood for fuel, caring for family members, and

managing household consumption and food preparation.

But a woman's world is often laden with constraints—from less land ownership; to less access to credit, extension, and other services; and less ability to hire labor on their farms. Too often, these production constraints go unrecognized. Closing gaps in women's access to resources increases agriculture productivity and reduces hunger.

“When we liberate the economic potential of women, we elevate the economic performance of communities,

nations, and the world,” Secretary of State Hillary Rodham Clinton said at a Sept. 19 U.N. General Assembly event highlighting women and agriculture.

Reaching female farmers is a top priority for Feed the Future to transform agriculture and achieve a sustainable, long-term impact in food security and nutrition. This can include fostering leadership among women in producer groups, encouraging the growth of women-owned farms and enterprises, designing and delivering gender-sensitive training, and introducing

Malian Aïssata Konaté is president of her local women's group, supplying female farmers with high-yield seeds.



new crops and innovations to increase crop productivity.

For example, one Feed the Future horticulture program in Tanzania targets women in the community by working with women's groups and encouraging other, established groups to include more female members. The program emphasizes gender equality as a guiding principal and provides trainings that benefit entire families. Trainings take place at times that are convenient for women and include nutrition education. The program is implemented by Fintrac, a woman-owned U.S.-based company that has been leading agricultural solutions to end hunger and poverty for more than 20 years and has a long legacy of promoting the participation, autonomy, and well-being of women in all of its projects.

In Tanzania, half of the program's field managers are women, serving as role models and leaders for all farmers. "My work involves helping all family members, but I particularly enjoy seeing women become confident in their ability to contribute to their families' well-being," said Halima Abubakary, one of the program's field managers.

THE UPENDO WOMEN Farmers Group in Mlandizi, Tanzania, has been growing vegetables since 2005, but the crops were plagued by pests, disease, and bad weather. Feed the Future's program provided the members with training on how, what, and when to grow, as well as leveraged money from a local bank to build a low-cost greenhouse. The greenhouse is protecting their crops, extending crop cycles, and

producing more nutritious crops. Most importantly, the farmers now make five times more income a month.

In Honduras, the United Nations' 2008 Gender Inequality Index estimates that the country suffers a 68 percent loss in human development as a result of gender inequality. Although there has been a rise in employment for women over the last two decades, most openings are for low-skill, low-paying jobs with poor working conditions. A Feed the Future-funded project in Honduras aims to lift more



Aissata Konaté with her children in front of their new house.

than 30,000 households out of extreme poverty and undernutrition by increasing incomes. The project, which just got off the ground this year, has already made significant progress reaching female farmers.

For example, in Dolores, Honduras, where the average family income is less than \$8 per day, the Nueva Esperanza Women Tilapia Farmers' Group has joined together to raise tilapia to sell in the local market. The first-time farmers inherited two abandoned ponds,

but lacked the experience and technical knowledge to sustain a business. When the project contacted them, they found the ponds filled with contaminated water and unhealthy fish. The project—also implemented by Fintrac—trained the farmers on pond management, fish weighing, breeding, and feeding as well as best practices for water management to produce larger, healthier fish that will provide not only nutrients and vital protein to the local community, but also a self-sustaining food resource and source of income.

In Mali, where women do more than one-third of the farm work, and nearly 68 percent of the population is considered poor, increasing opportunities for women can have a powerful impact on productivity and agriculture-led growth. There, a Feed the Future-supported project helps to train farmers, many of whom are women, to become quality-certified seed producers. USAID has been working with the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT) since 2007 to encourage high-quality seed production and improved livelihoods for farmers in the country.

Certified seed, which helps guarantee purity and meets certain quality standards, is more costly to produce but sells at a higher price. The project looks at the entire seed value chain, from training farmers to become producers, to building capacity of rural agrodealers. It also supports active rural marketing—such as demonstration plots, farmer field days, and seed fairs—to develop local demand for

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Pepsi and Chickpeas: An Interview with Derek Yach,

PepsiCo's Senior Vice President of Global Health and Agriculture Policy



Photo by PepsiCo

Derek Yach is senior vice president of global health and agriculture policy at PepsiCo, where he leads the internal Global Human Sustainability Task Force and engagement with major international policy, research, and scientific groups. He is also a member of the International Food and Policy Research Institute's Strategic Advisory Board. Yach previously headed the global health program at The Rockefeller Foundation, was professor of public health and head of the Division of Global Health at Yale University, and acted as executive director of the World Health Organization.

On Sept. 21, PepsiCo Inc. announced a unique, trilateral partnership with USAID and the United Nations World Food Program during the Clinton Global Initiative's 2011 annual meeting in New York. A key achievement of the U.S. Government's Feed the Future initiative, this partnership will help build long-term economic stability for smallholder chickpea farmers in Ethiopia by involving them directly in PepsiCo's product supply chain. And that's just the beginning.

QUESTION: Most people don't think of chickpeas or Ethiopia when they think of PepsiCo. How did PepsiCo get involved in this project?

DEREK YACH: At PepsiCo we are constantly seeking ways to create new markets, invest in emerging economies, advance healthy nutrition, ensure

environmental sustainability, and drive the long-term growth and profitability of our company. PepsiCo's work in Ethiopia was triggered by a discussion between PepsiCo, the World Food Program (WFP), and USAID which led to the signing of a Memorandum of Understanding on Jan. 28 at the World Economic Forum at Davos. The idea behind Enterprise EthioPEA was initiated at the request of Ethiopian Prime Minister Meles Zenawi, who wanted to use local crops to solve nutritional problems and build his country's export market. Knowing the nutritional benefits of chickpeas and considering our long term business, we worked closely with the prime minister, as well as other partners like the Ethiopian Institute for Agricultural Research, to make the vision a reality.

Given their health benefits, chickpeas are an important, innovative ingredient

for new ready-to-use supplementary foods (RUSF)—often called food aid. At a time where 13 million people are suffering from famine and malnutrition in the Horn of Africa, there is both an acute and a long-term need to address famine and chronic malnutrition in the region. With our chickpea project, not only will we be helping to alleviate famine and malnutrition, but we will also ensure that local farmers will get more work and guaranteed income while enabling our long-term growth, innovation, and relevance among customers.

Consumers worldwide are demanding that healthier food options be made more available and affordable. PepsiCo is looking at every point of the supply chain to meet our consumers' demands, with the aim of developing sustainable agriculture that benefits communities, farmers, consumers and business. Enterprise EthioPEA will work with smallholder chickpea

farmers to increase the productivity and value of their crop and grow the domestic market and export markets for chickpeas. With the expected growth of our business in chickpea-based products such as hummus, we expect to source at least 10 percent of our supply from Ethiopia, which amounts to at least 2,000 tons of chickpea per year.

Q: As a private entity, what does PepsiCo hope to accomplish through this work? And why is it important now?

Yach: With Enterprise EthioPEA, PepsiCo hopes to use chickpeas to address famine and malnourishment in the Horn of Africa, stimulate economic development in Ethiopia, and support PepsiCo's business strategy for Africa more generally. Today, PepsiCo is one of the world's largest manufacturers of chickpea-based hummus, a product that is experiencing rapid growth in demand. Chickpeas will play an important role in growing PepsiCo's nutrition business to \$30 billion in revenue by 2020. This is truly a great example of what we at PepsiCo call "Performance with Purpose." The project will create new markets for products and in- ing PepsiCo to create healthier, locally sourced foods and beverages that benefit the whole community while driving long-term growth for the company.

Q: What is unique or different about this partnership?

Yach: Enterprise EthioPEA works on three levels. It benefits the long-term health and nutrition of the people of Ethiopia—and potentially beyond. It potentially benefits the economic livelihoods of millions of smallholder Ethiopian farmers and their families. And it benefits PepsiCo by providing us new insights into a growing market and helping us grow our nutrition

business. Of course, it also brings together private enterprise, governmental agencies, NGOs, and the local community for a new and impactful way of helping others. With so many stakeholders involved, we're blending collaboration, know-how, expertise, and resources to benefit local communities and global consumers.

Q: One of the interesting things about this partnership is the transition from involvement by a company's foundation arm to involvement by the profit-making side. Can you talk more about that?

Yach: Indeed. For PepsiCo, Enterprise EthioPEA is by no means just about altruism. Like other initiatives, this one is absolutely central to our business performance and long-term growth. The foundation has been able to really help communities while "testing" our ability to enter a new market. That's why we try to keep the foundation and our business units working closely together. Foundation support is appropriate to address nonprofit aspects of our work. That includes our work in this project with the WFP and in other related projects, the support the foundation provides to capacity building in science and learning. We believe that by simultaneously investing business dollars in the project, we are assured of creating a profit stream in time that will allow the overall project to grow and thrive. Remaining as a foundation project would leave it as an interesting but limited pilot.

Q: Last year, USAID Administrator Rajiv Shah said that "private sector companies can bring fresh perspectives to addressing the principal development challenges of our day." Do you agree?

Yach: Companies like PepsiCo can certainly bring fresh perspectives and

viewpoints to the table. However, the private sector alone cannot change the world. Partnerships, collaboration, and knowledge exchange between the private and public sector, as well as civil society, is what will truly help solve development challenges and benefit communities worldwide. We have seen how our agronomists are able to bring modern approaches to agriculture needed by smallholder farmers if they are to transition from being aid recipients to becoming entrepreneurs. Our logistics teams are providing critical insights related to enhancing the efficiency of distribution systems, warehousing, and many other aspects of operations. Our marketing teams have already highlighted the importance of understanding the needs and desires of the poorest consumers as food-based solutions are developed. Administrator Shah has demonstrated leadership and acumen in tapping into the strengths of the private sector. He understands what business can offer and, as we have seen with this initiative, he has helped to create the right conditions for partnerships to work.

Q: If this project goes well, what's next?

Yach: Enterprise EthioPEA is one of a series of efforts to understand and improve the link between agriculture, nutrition, and sustainability. Our work with Mexican sunflower farmers is another, and we have other related projects underway around the globe. Success in our initial tests will pave the way for expansion of both the chickpea work, as well as our broader Social Enterprise Agriculture Initiative, which plans to tackle other crops grown across sub-Saharan Africa. Each new crop will hold importance to both PepsiCo and the people of Africa. In fact, we see sesame farming as offering one of the most immediate and ripe opportunities. ■

Cashew Value Chain

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“The first leg is strong focus on technologies [such as research, improved crop varieties, production processes, and fertilizer] to improve productivity for both income and nutrition; the second is integrated programs, so that means building capacity of community-development and farmers groups and giving them better access to inputs, markets, and credit; the third is agribusiness—linking farmer associations together into unions, then federations, so they have better access to international or regional markets and can benefit from economies of scale.”

According to McMahan, it is those three pieces working together that makes the program so successful. From 2005 to 2008, the nine processing factories supported by USAID operating in Nampula and Zambezia provinces generated \$31 million in revenues by exporting processed cashews to the European markets. These nine plants, which generated

employment for about 3,400 Mozambicans, had a production capacity of about 20,000 tons of cashews, compared to just 120 tons in 2001, when the first of nine units supported by USAID began operating.

Cashew is not the only value chain that USAID supports. In Mozambique, there is also a focus on oilseeds (groundnuts, sesame, soybeans), fruits (bananas, mangos, pineapple), and pulses (cowpeas, pigeon peas).

And throughout its global network, the Agency has incorporated integrated support of value chains into the U.S. Government’s flagship food security program, Feed the Future.

According to William Garvelink, who helped stand up the new bureau leading the initiative and is now at the Center for Strategic and International Studies: “[Feed the Future] looks at the entire value chain, so the U.S. Government can intervene in any way from planting seeds to marketing products; whatever’s

needed, we can quickly be involved. It’s a broad spectrum.”

Downing explains that the Agency’s value-chain strategy is anchored in the reality that a focus on production must also consider markets. “There are no incentives for farmers to produce crops unless they can sell them,” she says.

IN MOZAMBIQUE, AS in many places with emerging industries, the cashew industry still faces many challenges, among them, how to massively increase production.

Because cashews trees have a productive lifespan of around 50 years, it often takes a great deal of effort to convince a farmer to replace a fully-grown tree—albeit an unproductive one—with a sapling that will take five years to yield nuts. One of the approaches that may work, according to McMahan, is to actually involve processors in commercial seedling production, which they can then sell to farmers for a small price, “giving them a commercial interest in that tree.”

Another opportunity, says McMahan, is to start supporting larger-scale commercial agriculture “that includes opportunities for the small-scale farmers either as out-growers, contract farmers, or, in some cases, laborers.”

But still, worldwide demand for cashew is increasing at around 5 percent annually. To help quench that thirst, Mozambique now has around 10 processors, when years ago there were virtually none, and the industry is netting to smallholder farmers \$20 million worth of kernels purchased per year. Unless the West decides to shake its nut craze, there is no where to go but up.

Martins of CondorNuts is optimistic: “By improving all parts of the chain, ultimately...cashews produced here will be just as competitive as in India.” ■



Through profits made from the cashew, Mozambican farmer Arlindo Chaleira, right, has sent his eight children to school, an anomaly in rural Mozambique.



Photo by Fintrac Inc.

Members of the Nueva Esperanza Women Tilapia Farmers Group, first-time farmers in rural Honduras, are learning best practices for raising and selling tilapia.

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better seeds and organize the seed production from farmers' cooperatives.

One participant in the Mali project, Aïssata Konaté, is president of a women's group and supplies many other women farmers with high-yielding seeds after increasing her income enough to build a new house for her family.

"This has changed my status in the village," said Konaté. "Here housing is normally the responsibility of men. Now the community can see how women can provide for their families, too."

Each year, Ghana produces approximately 300,000 tons of fish for local and international markets, but unsustainable practices are depleting the country's fish stocks and putting a strain on local livelihoods. While men do most of the

fishing in Ghana, most fishmongers and fish processors are women. Recognizing the important role these women play in their communities, the Feed the Future-funded Integrated Coastal and Fisheries Governance (ICFG) initiative took several female Ghanaian fishmongers to Senegal to study how communities and the government there are practicing a system of "co-management" of the fisheries resources. They observed best practices in marine conservation, monitoring and enforcement of fisheries regulations, and community participation in fisheries management.

Based on their new perspective, the participants from ICFG plan to form their own association in Ghana to advocate against practices like the use of dynamite, monofilament nets, driftnets, and "light fishing," a practice in which an electric bulb of high wattage is placed

into the water to attract fish. With support from USAID/Ghana, through Feed the Future, these women and their communities are working toward a more sustainable future for Ghanaian fisheries.

"The U.S. Government, through Feed the Future, will continue to work to bring successful programs like those described above to scale, creating sustained, inclusive economic growth which, by definition, incorporates a focus on empowering women," said Tjada McKenna, Feed the Future's deputy coordinator for development. As illustrated by the projects highlighted here, women are clearly the critical force to transform agriculture and food production, reduce poverty, and improve nutrition worldwide. ■

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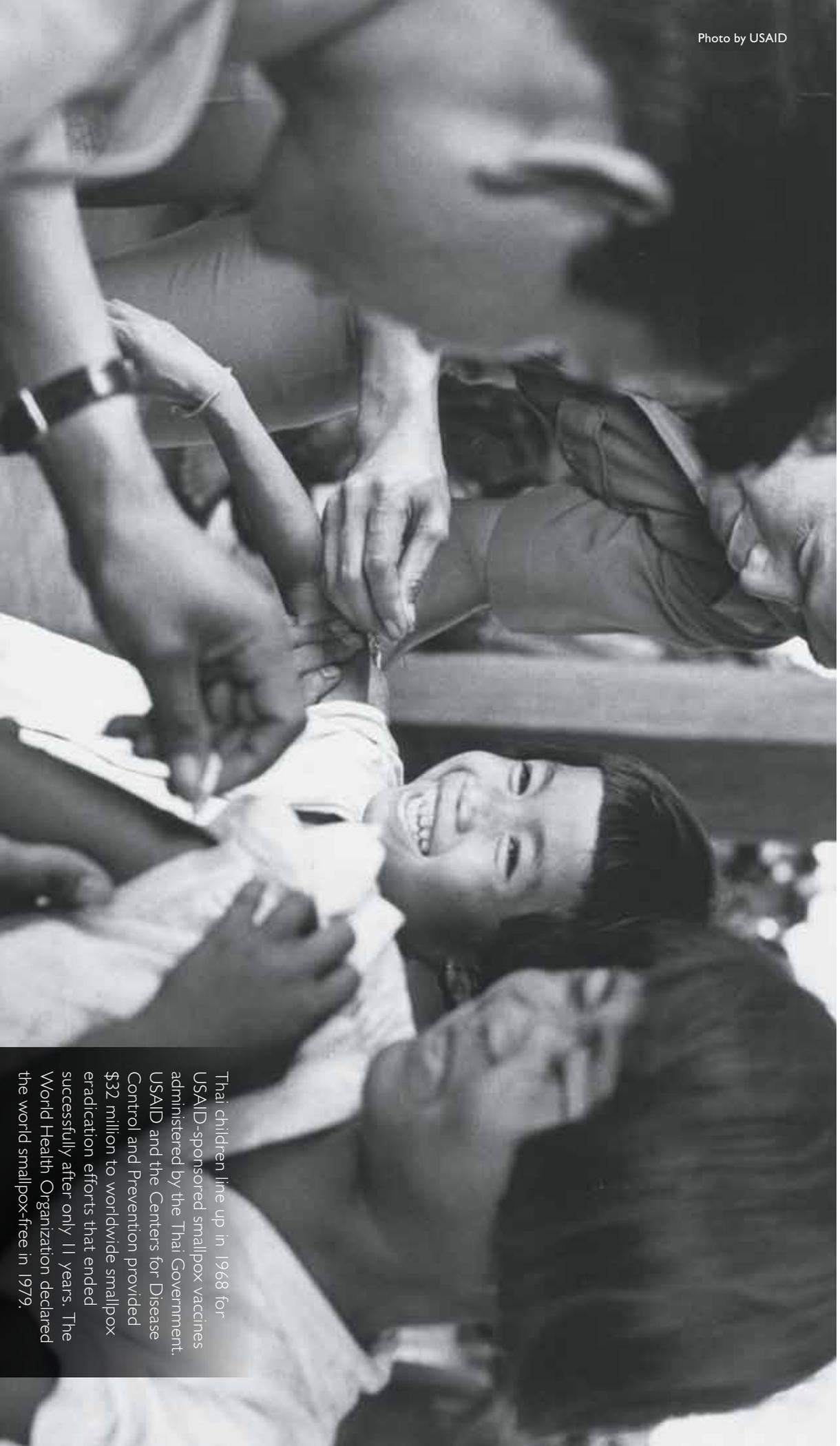


Photo by USAID

Thai children line up in 1968 for USAID-sponsored smallpox vaccines administered by the Thai Government, USAID and the Centers for Disease Control and Prevention provided \$32 million to worldwide smallpox eradication efforts that ended successfully after only 11 years. The World Health Organization declared the world smallpox-free in 1979.