

USAID Agriculture Strategy

Linking Producers to Markets

USAID STRATEGY



U.S. Agency for International Development
July 2004



The world's agriculture produces \$1.3 trillion a year in food and fiber. Agriculture, forestry, and fishing account for one of every two jobs worldwide and seven of 10 jobs in sub-Saharan Africa, East Asia, and the Pacific. Maintaining the natural resource base that sustains these jobs is critical in the coming decades.

Foreign Aid in the National Interest, 2003

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“Because three-fourths of people in poor developing countries are employed in agriculture, the long road to development begins with increasing agricultural productivity.”

*Luther G. Tweeten and Donald G. McClelland,
Promoting Third-World Development and Food Security, 1997*

Foreword

In August 2001, the U.S. Agency for International Development (USAID) approved an interim agricultural development strategy, signaling the intent to raise the profile of the Agency’s agricultural development assistance efforts. The strategy focused on four themes: mobilizing science and technology to reduce poverty and hunger; developing global trade opportunities for farmers; reducing the knowledge divide with training, outreach, and adaptive research at the local level; and taking the long view by promoting sustainable agriculture and sound environmental management.

The definition of agriculture used in the interim strategy derived from the 2000 Famine Prevention and Freedom from Hunger Improvement Act:¹ the science and practice of activities related to production, processing, marketing, distribution, utilization, and trade of food, feed, and fiber. Though the breadth of this definition blurs traditional sectoral boundaries—between agriculture and health, for example—it promotes a useful coherence of perspective for addressing the complexities of agriculture and is retained in this new USAID Agriculture Strategy.

Since approving the interim strategy, USAID has had numerous consultations with partners, stakeholders, and other donor organizations. These focused on

- reviewing directions and priorities proposed in the interim strategy and approaches that might be highlighted in articulating the importance of agriculture to economic development and poverty reduction
- defining USAID’s role in the U.S. Government’s support of agricultural development
- providing guidance to USAID operating units on program design

In early 2002, USAID’s preparation for the World Food Summit: Five Years Later and the World Summit on Sustainable Development offered chances to probe more deeply into potential areas for engagement in the developing world’s agriculture sector.

The Afghanistan recovery program provided an important incentive to act on the new agricultural development priority. Food shortages and famine conditions experienced in southern Africa and Ethiopia in 2002–03 offered further opportunity to emphasize the new directions in agriculture and highlight key food and agricultural issues that must be dealt with aggressively by African nations as well as donors.

USAID drew on international commitments, advances in knowledge, and consultations with stakeholders to prepare this new agricultural development strategy, *Linking Producers to Markets*. The strategy articulates how USAID will address developing world challenges of food, rural poverty, employment, investment, and sustainable natural resource management in the coming years.

¹ The Act (P.L. 106-373) amends Title XII of the Foreign Assistance Act of 1961 as amended. The definition includes family and consumer sciences, nutrition, food science and engineering, agricultural economics and other social sciences, forestry, wildlife, fisheries, aquaculture, floriculture, veterinary medicine, and other environmental and natural resource sciences.

Executive Summary

In many developing countries, the agricultural sector's performance determines overall economic growth, trade expansion, and increased income-earning opportunities. Increasingly, this performance is shaped by global, regional, and national trade standards, changing consumer preferences, and international advancements in science and technology. To be successful, agricultural producers in these developing countries require training and infrastructure support, good governance and sound policies, and a solid and progressive institutional base that supports market participation.

Conceptual Framework

Good governance is an essential element of the enabling environment for science-based, market-led, sustainable agriculture. An emphasis on good governance in agricultural sector programming underscores the need for mutual responsibility, one of the key principles evoked at the U.N.

Conference on Financing for Development in Monterrey, Mexico, in March 2002. In accordance with the Monterrey consensus on aid effectiveness principles, ideal partners for USAID-supported agricultural development efforts will be countries committed to the following:

- implementing policies that encourage greater agricultural productivity and sound natural resource management
- investing in infrastructure that enables markets to work efficiently
- building research institutions that ensure a flow of new and adapted technologies to producers and postharvest enterprises
- supporting the expansion of effective training, education, and communication systems that provide producers and those in agribusiness—women and men—with information they need to be effective market participants

Some *transformational development countries* are only beginning to put in place these conditions for successful agricultural-sector transformations. Agricultural development programs in these countries will aim to help them become better partners by providing technical assistance and limited amounts of financial support.

In countries considered *fragile states*, the objectives of U.S. assistance are stabilization, recovery, and reform. Determinations of agricultural development programs in fragile states will be based on their contribution to these objectives. Such programs will focus on restoration or recovery to previous levels of production and productivity, support of near-term reform measures, and other immediate steps to promote stability and increase productivity.

For *strategic states*, USAID will support programs consistent with foreign policy objectives and concerns. In many strategic states, resources will be programmed to either promote transformational development or contribute to overcoming fragility. In these cases, the approaches to and criteria for agricultural development programs will be consistent with the U.S. foreign policy goals and concerns that underlie the overall assistance program.

Ensuring food security in emergencies is an important aspect of the *provision of humanitarian assistance*. In cases of chronic emergencies, humanitarian assistance will be structured to address systemic failures. This often entails the use of humanitarian resources to improve agricultural production and productivity. A variety of interventions—such as policy reform, food for work, cash distributions to vulnerable people, stabilization of food stocks, and market-based seed assistance for vulnerable farmers—may be the focus of efforts to diminish the number and depth of emergencies.

Certain *global or transnational issues*, such as negotiations on the reduction of agricultural subsidies in the World Trade Organization or global

climate change, are linked to agricultural development. Strategic themes of the Agriculture Strategy will guide selective support for key global or transnational issues.

Strengthening the capacity of countries and producers to increase their agricultural productivity under the Agriculture Strategy will require the commitment of many partners. In addition to USAID's renewed commitment to agricultural development, U.S. business and cooperative sectors, international science and technology organizations, other U.S. Government agencies, U.S. colleges and universities, and NGOs must also commit fully to agricultural development when partnering with USAID.

Four Strategic Themes

Agricultural development is thus a strategic priority for USAID. The Agency's agricultural development efforts will focus on increasing agricultural productivity and smallholder participation in markets through four strategic themes.

1. To expand trade opportunities and improve the trade capacity of producers and rural industries, USAID will support the development of sound policy environments; promote building institutions and good governance; expand rural finance; strengthen producers' groups and other rural organizations; enhance access to production, storage, and processing technologies; and focus on higher-value nutritious foods benefiting producers and consumers. In particular, implementation of the Agriculture Strategy will be coordinated with the USAID Trade Capacity Building Strategy and focus on helping countries to meet sanitary and phytosanitary regulatory standards and attain higher levels of agriculture trade disciplines required for accession to the World Trade Organization.

2. To improve the social, economic, and environmental sustainability of agriculture, USAID will work to restore the health of land, water, and forestry resources; develop sustainable and renewable energy sources; develop environmental assessment methodologies that enable communities and implementing

partners to assess environmental risks and damage due to natural and conflict-related disasters; and strengthen local capacity for integrated management of agricultural and natural landscapes. The Agency will also improve analytical and economic frameworks linking agriculture and natural resource investments, find organisms endangered in nature and help protect them, and support the development of agriculture and natural resource policies that promote good governance and improve productivity.

3. To mobilize science and technology and foster capacity for innovation, USAID will assist countries and regions to formulate science policies, strategies, and governance systems; support technology development and application; expand public and private sector partnerships and collaborative networks of specialists; and foster innovation within and among developing countries so that they can generate, utilize, and direct new technologies in locally appropriate directions. USAID and its partners will support women's capacity to participate in national innovation systems and ensure investments in science and technologies are appropriate to specific national and regional conditions and systems.

4. To strengthen agricultural training and education, outreach, and adaptive research, USAID will support education and training tailored to reach women and girls; develop and extend innovative rural information and communication technology systems; and improve problem-based, site-specific learning approaches. USAID recognizes that the ability to access and manage information is fast becoming a fundamental requirement for rural producers to participate effectively in an increasingly global food, feed, and fiber system, and will work to ensure that the smallholder agriculture sector receives training and support services necessary to fully participate.

Implementation

This Agency strategy serves as a benchmark for review and approval of new strategic plans and for triennial strategy reviews of operating unit programs. The strategy will also be used in reviewing

and analyzing bureau program budget submissions and constructing the Agency annual budget submission. Operating units will monitor progress in overall agricultural development as well as specific programmatic results. While the weight given to a strategic theme will be situation-specific, a demand-driven, competitive economic framework for agriculture should be the starting point in developing countries capable of transformational development. In fragile and strategic states, other criteria will be added.

All USAID agricultural programming should conform with this strategy, though the emphasis and articulation of specific objectives will respond to bureau and operating unit strategic plans, bureau mandates, and country circumstances. In some instances, national interest or other U.S. foreign policy objectives may cause a program to fall outside the strategic framework, but these few exceptions will be clearly linked to achieving the foreign policy objective in a specific country or circumstance.

To implement the strategy, the Agency will

- link the Agriculture Strategy to the joint State-USAID *Strategic Plan Fiscal Years 2004–2009* and identify indicators for performance goals
- ensure that operating unit strategic plans and priorities reflect analyses and recommendations of ongoing external review bodies
- strengthen donor coordination in agricultural planning and activity implementation
- develop options to address the requirements of agricultural development under a variety of programmatic circumstances, including fragile, famine-prone, and food-insecure states
- develop a new approach to agricultural education and training in transformational development countries
- develop guidelines and tools for conducting agricultural sector assessments and design strategies and programs consistent with the new USAID business model
- strengthen professional capabilities to design and implement effective agricultural programs
- develop state-of-the-art courses on strategic agriculture issues
- provide adequate resources to agriculture from all budget sources



The Agriculture Challenge

For many developing countries, overall economic growth, trade expansion, and increased income-earning opportunities depend on the performance of the agricultural sector.

For over 40 years—while the world’s population doubled—USAID has supported critical agricultural research, training, and outreach programs that reduced global levels of food insecurity. Over the next 40 years, the world’s population will increase by almost half. In developing countries, increases in agricultural productivity must be accelerated to bring down current levels of food insecurity and meet the food, job creation, and income needs of new populations.

Farmers are not the only actors in the agricultural sector. Producers include those who fish in oceans, rivers, and streams, and those who use aquaculture techniques to produce supplies of the food commodity for which demand is growing most rapidly. Producers also tend livestock herds, whether in traditional nomadic patterns or in capital-intensive production units. Producers harvest the natural abundance of forests and rangelands and undertake

agroforestry and plantation forestry. Processors, manufacturers, and marketing chains that bring food, feed, and fiber from producers to consumers are also part of the agricultural sector.

Women play a prominent role in the agricultural sector. In most developing countries, they provide a substantial share of farm labor and are responsible for household food security. There is some evidence that men’s participation in agriculture is declining, whether due to war, disease, or movement toward more lucrative and secure income-earning opportunities. Approximately one-third of all rural households in sub-Saharan Africa are now headed by women. In Southeast Asia, 90 percent of the rice cultivation is done by women. Yet women’s access to productive resources—land, knowledge and capital—is consistently less than men’s.² The impact of agricultural trade on women’s income varies, depending on this access.³

² United Nations Food and Agriculture Organization, “Gender and Agriculture,” FAO Gender and Food Security/Agriculture website <<http://www.fao.org/Gender/en/agri-e.htm>>.

³ Samuel Skogstad, 2001, “International Trade: Impact, Opportunities and Constraints on the Participation of Women” (Washington, D.C.: USAID), 2.

While the current agricultural development challenge is not unlike that already successfully addressed by Green Revolution technologies, it may prove to be more difficult. The world's most productive lands have already been brought into production, and water supplies are increasingly scarce. Further, new population growth is overwhelmingly occurring in developing countries and concentrated in urban areas. Other factors affecting development more generally, including poor governance, conflict, and HIV/AIDS, could derail current agricultural progress.

Producers are not only required to adopt a new generation of technologies and make more efficient use of the natural resource base that supports agriculture, but they must respond to greater and more discerning market demand. This means getting agricultural products of acceptable quality to growing urban markets at affordable prices.

To sustain the record of accomplishment in providing assistance that enables developing countries to meet these new challenges, the USAID strategy for supporting agricultural development must be

- linked to market trends, at global, regional, national, and local levels, and focused on improving competitiveness and efficiency
- aggressive with regard to improving natural resource management
- innovative, facilitating the development and use of science and technology
- attentive to the needs and capabilities of producers, rural communities, and vulnerable groups

Such a strategy will guide the Agency's agricultural programming and assure its effective contribution to Millennium Development Goals⁴ through

⁴ The first U.N. Millennium Development Goal, approved in September 2000, is the eradication of extreme poverty and hunger. It targets halving by 2015 the proportion of people living on less than \$1 a day and the proportion who suffer from hunger.

increasing economic growth and reducing poverty and hunger, creating jobs and investment opportunities, expanding trade, and improving health and nutrition. Given that the largest proportions of poor people in developing countries are employed in the agriculture sector, USAID will accomplish this by focusing on increasing broad-based agricultural productivity and expanded smallholder participation in markets.

Conceptual Framework

A rising portion of the harvests of developing-country producers travels to regional and, increasingly, international markets to be processed and packaged for consumers in distant cities and foreign lands. Off-farm employment and enterprises contribute an increasing share of income to agricultural households. International standards for food safety are a major factor in determining how much of a crop crosses national borders. Increasingly, a producer's ability to earn profits from her or his farm labor is shaped not only by the local variables of weather, water, and soil, but by global, regional, and national trade standards; changing consumer preferences; and international advancements in science and technology.

Market-oriented producers are woven into international networks of scientific research and technological development, and into global, regional, and national trade and investment systems. They rely on improved seeds produced by international breeding programs; fertilizers formulated according to standards established by research, regulatory bodies, and the industry; and information from private entrepreneurs and publicly funded agricultural extension programs.

With this ever-changing mix of new technologies and new and expanding market opportunities, producers must be able to count on sound policies, good governance, and a solid and progressive institutional base that supports agriculture and market participation. In addition, to benefit fully from this dynamic environment, producers need access to training and infrastructure support.

Lack of assets and limited ability to manage risks keep many farmers and producers in poverty, unable to produce enough food for their families or pursue opportunities to sell more specialized products. Local markets—in land, labor, financial capital, and water—play the major role in household risk management strategies to cope with climate variability, economic downturns, and political uncertainty. Yet these same markets also enable responses to economic opportunities that emerge. Both formal and informal institutions critically influence the processes through which households and individuals gain access to, exercise rights over, and use these factors of production.

The rights, responsibilities, and roles of men and women in agriculture vary, and are often quite distinct. Women engage in production, processing, and marketing tasks, both on their own account and on behalf of their families. As noted however, women's access to productive assets, information, and services is significantly constrained. Overall productivity suffers as a result. Consideration of women is important in planning a successful transformation of the agricultural sector. Inclusion of women improves their ability to benefit from a focus on agricultural development. Benefits can occur by promoting women's secure access to agricultural assets, ability to obtain credit to purchase improved agricultural inputs and tools, or ability to earn fair wages for labor and receive fair prices for products.

As democratic governments have multiplied around the world, international organizations governed by multilateral consensus have begun to develop and apply new rules for trade, financial flows, and environmental management. At the same time, however, international terrorism and civil wars have heightened tensions. The combined impact of social, political, economic, and technological transformations has been far-reaching, affecting funding for agricultural programming as well as the economic context in which international financial institutions and agricultural producers operate.

Good governance is an essential element of the enabling environment for science-based, market-

led, sustainable agriculture. Sound economic governance at all levels is critical to ensuring the stable and secure environment in which market systems can operate. Sound governance also promotes investment and provides appropriate support to overcome market weaknesses.

Expanded and diverse participation of all citizens in public decisionmaking enhances the probability of good governance. Such participation not only empowers men and women to hold government accountable but encourages them to be responsible for their communities and begin solving their own problems.⁵ While some countries are making excellent progress toward good governance, others face obstacles. Critical analyses of impediments to progress will help national governments identify their costs and develop the political commitment to support change. These analyses will also provide community and private-sector groups with a stronger voice in lobbying for change.

An emphasis on good governance in agricultural sector programming underscores the need for mutual responsibility, one of the key principles evoked at the U.N. Conference on Financing for Development in Monterrey, Mexico, in March 2002. Simply put, the conference agreed that developing countries must take responsibility for charting and navigating their own development course. Donors, private investors, and the international nongovernmental community can support, and perhaps accelerate, country-led actions. At Monterrey, they pledged to do so.

The U.S. Government used the occasion of the Monterrey Conference to announce the Millennium Challenge Account (MCA), the single largest expansion of U.S. foreign assistance in decades. The MCA focuses on developing countries that are demonstrating the greatest progress toward ruling justly, investing in people, and promoting economic freedom and opportunity.

⁵ Jon Anderson et al., *Nature, Wealth, and Power: Emerging Best Practice for Revitalizing Rural Africa*, (Washington, D.C.: USAID, 2002). <http://www.dec.org/pdf_docs/PNACR288.pdf>

USAID and U.S. Department of State

Joint Strategic Plan, 2004–09

The principal aims of the Department of State and USAID are anchored in the U.S. National Security Strategy and its three underlying and interdependent components: diplomacy, development, and defense. The Department of State and USAID share the lead in advancing sustainable development and global interests.⁶ The broad aim of U.S. diplomacy and development assistance is to turn vicious circles into virtuous ones, where accountable governments, political and economic freedoms, investing in people, and respect for individuals beget prosperity, healthy and educated populations, and political stability.

The Department of State and USAID will work to ensure that

- institutions, laws, and policies foster private sector-led growth, macroeconomic stability, and poverty reduction
- trade and investment increase by means of market-opening international agreements and further integration of developing countries into the trading system
- financial and energy markets are secure and stable
- food security and agricultural development are enhanced
- environmental capacity, energy use, and resource management are improved

In accordance with the Monterrey consensus on aid effectiveness principles, ideal partners for USAID-supported agricultural development efforts will be countries making credible efforts in these areas and committed to the following:

- implementing policies that encourage greater agricultural productivity and sound environmental management
- investing in infrastructure that enables markets to work efficiently
- building research institutions that ensure a flow of new and adapted technologies to producers and postharvest enterprises
- supporting the expansion of effective training, education, and communication systems that provide producers and those in agribusiness—women and men—with information they need to be effective market participants

Some *transformational development countries* are only beginning to put in place these conditions for successful agricultural-sector transformations. Agricultural development programs in these countries will aim to help them become better partners by providing technical assistance and limited amounts of financial support.

In countries considered fragile states, the objectives of U.S. assistance are stabilization, recovery, and reform. Fragile states are characterized by weak effectiveness and legitimacy, and often by poor performance on a range of indicators relating to economic freedom, ruling justly, and investing in people. Typically, the U.S. assistance strategy in a fragile state has a shorter time horizon than a strategy in a transformational development country. Determinations of agricultural development programs in fragile states will be based on their contribution to stabilization, recovery, and reform. Such programs will focus on restoration or recovery to previous levels of production and productivity, support of near-term reform measures, and other immediate steps to promote stability.

⁶ U.S. Department of State and USAID, *Strategic Plan Fiscal Years 2004–2009: Aligning Diplomacy and Development Assistance* (Washington, D.C.: Department of State and USAID, 2003). <www.usaid.gov/policy/budget/state_usaid_strat_plan.pdf>

For strategic states, USAID will support programs consistent with foreign policy objectives and concerns. In many strategic states, resources will be programmed to either promote transformational development, or contribute to overcoming fragility. In these cases, the approaches to and criteria for agricultural development programs will be consistent with the U.S. foreign policy goals and concerns that underlie the overall assistance program.

Ensuring food security in emergencies is an important aspect of the provision of humanitarian assistance. In cases of chronic “emergencies,” humanitarian assistance will be structured to address systemic failures. This often entails the use of humanitarian resources to improve agricultural production and productivity. A variety of interventions—from policy reform to food for work to stabilization of food stocks and market-based seed assistance for vulnerable farmers—may be the focus of efforts to diminish the number and depth of emergencies.

Certain global or transnational issues, such as negotiations on the reduction of agricultural subsidies in the World Trade Organization or global climate change, are linked to agricultural development. The four strategic themes of the Agriculture Strategy will guide selective support for key global or transnational issues.

Strengthening the capacity of countries and producers to increase their agricultural productivity will require the commitment of many partners. In addition to USAID’s renewed commitment to agricultural development, U.S. business, science, and technology sectors, colleges and universities, and NGOs must commit to making use of their strengths and lessons learned.

A Renewed Commitment

Agricultural development is a strategic priority for USAID. This strategy marks a renewal of the Agency’s support for agricultural development and sets out guidance for its engagement in such efforts. USAID will focus its efforts on four strategic themes:

- expanding global, regional, and domestic trade opportunities and improving the capacity of producers and rural industries to act on them
- improving the social, economic, and environmental sustainability of agriculture
- mobilizing science and technology and fostering a capacity for innovation
- strengthening agricultural training and education, outreach, and adaptive research

These strategic themes support the Millennium Development Goals of reducing poverty and hunger through agricultural development. The strategies build on the comparative advantages that the United States offers in agribusiness and trade; community-based natural resource management and sustainable environmental protection; agricultural research and development; and training, education, and information and communication technologies.

Strategic Themes

1. Expanding Trade Opportunities and Improving Trade Capacity of Producers and Rural Industries

Regional growth, rapidly expanding urban areas, regional trade agreements, and the advent of World Trade Organization accords have meant that agricultural producers and entrepreneurs—both men and women—face greater domestic competition for agricultural products. It also means that there are significantly expanded opportunities for participating in markets, whether local, national, regional, or



international. However, governments must create enabling policies and institutional environments that facilitate producers' access to these markets. And to achieve increased levels of income, agricultural producers and entrepreneurs must have the capacity to respond to such opportunities.

This theme builds, in part, on USAID's larger *Strategy for Building Trade Capacity in the Developing World*. As that strategy notes, "Trade and investment are the principal mechanisms through which global market forces—competition, human resource development, technology transfer, and technological innovation—generate growth in developing and developed countries."⁷ Given the importance of agriculture and agribusiness to increasing production efficiency and generating jobs in developing countries, USAID's trade capacity building efforts will, of necessity, focus on these sectors.

Success in global, regional, and domestic agricultural trade cannot be achieved unless producers know how to gain access to markets and meet requirements for product quality, timeliness, and price. Tariff barriers, weak adherence to sanitary and phytosanitary standards, inadequate infrastructure and postharvest technologies, and political insecurity and corruption all impede the growth of agricultural trade.

Addressing these access and capacity issues are legitimate concerns for USAID's strategy for linking

⁷ USAID, *Building Trade Capacity in the Developing World* (Washington, D.C.: USAID), 1. <http://www.dec.org/pdf_docs/PDABX241.pdf>

producers to markets. Because improving security and reducing corruption are challenges for all USAID programs, these challenges are best addressed through crosscutting and collaborative efforts among sectors, with partners, and with other U.S. Government agencies.

To enable producers and rural industries to better connect themselves to agricultural trade opportunities, USAID will

- *support the development of sound policy environments* that enable open markets, private sector investment, and gender-equitable access to factors of production, products, and income
- *promote effective institutions and governance* to enable female and male producers to acquire, protect, and use the assets they need to take advantage of emergent market and trade opportunities
- *expand rural finance* to increase the capacity of producers and producers' groups to invest in production and processing operations and overcome gender-based constraints to access

Linking Producers to Markets

Exporting Organic Honey from Zambia

With funding support from USAID, approximately 3,000 honey farmers in Zambia's poorest province have been trained at the Zambia Agribusiness Technical Assistance Center in proper procedures for producing, harvesting, and handling certified organic honey for export. Within less than a year, certified organic honey exported from the North-Western Province leaped 260 percent, from 50 to 180 tons. Early estimates indicate that households engaged in export production increased their annual incomes by 40–100 percent.

- *strengthen producers' groups and other rural organizations* to enable them to gain market mastery and reduce transaction costs; gain access to and effectively use information on domestic, regional, and international markets; and facilitate technology transfer
- *enhance access to production, storage, and processing technologies* to enable male and female producers to provide products demanded by the market in the right qualities and at competitive prices
- *focus on more nutritious foods* (natural and fortified) that can be marketed as higher-value and benefit producers and consumers

The experiences of USAID and others will be drawn upon to develop and introduce approaches that are sensitive to differences between men and women as well as effective for different kinds of producers seeking different kinds of market opportunities.

2. Improving the Social, Economic, and Environmental Sustainability of Agriculture

Because biodiversity and natural resources are central to the livelihoods of rural populations throughout the developing world, they cannot be separated from the broader context of social, economic, and development challenges. Sound environmental and natural resource management is fundamental to the sustainability of agricultural production systems and economic benefit streams, and offers possibilities of increasing productivity in the future.

For rural populations, access to and control over natural resources are major governance issues. Improved governance and economic frameworks maximize the ability of rural populations to benefit from their resource base, while creating a powerful force for preserving land, water, and biodiversity over the long term. Sound environmental management is key to reducing vulnerability of rural communities in an evolving global marketplace of



increasing competitiveness in agricultural and natural resource-based enterprises.

To ensure positive benefits to local incomes and the ecosystem, USAID will

- *restore the health of land, water, and forestry resources and develop sustainable and renewable energy sources* to regain productivity of degraded lands; maintain viable ecosystems; reduce vulnerability to disasters; and ensure adequate quality and quantity of resources for domestic, industrial, agricultural, and environmental needs
- *support the development and application of environmental assessment methodologies* that enable communities and implementing partners to better assess environmental risks and damage due to natural and conflict-related disasters
- *strengthen local capacity for integrated management of agricultural and natural landscapes* to maximize benefits to individual women and men, while valuing public goods
- *improve analytical and economic frameworks linking agriculture and natural resource investments* to achieve the dual goals of resource protection and economic growth, while enhancing competitiveness in global economic networks
- *protect natural ecosystems by finding organisms endangered in nature and securing them in seed banks and botanical gardens* to improve biodiversity management—including agricultural

Linking Producers to Markets

Conserving Biodiversity in Mexico

In partnership with USAID and the Starbucks Coffee Company, Conservation International works with farmers in the buffer zone of Mexico's El Triunfo Biosphere Reserve to produce environmentally friendly coffee. The project's goal is to promote cultivation methods that protect forests, streams, and wildlife, while boosting farmers' incomes. The program works with six cooperatives and more than 1,000 coffee farmers who cultivate over 3,000 hectares. Starbucks Coffee Company bought coffee directly from the cooperatives—75,000 pounds in 1999 and 1.7 million pounds in 2002. The coffee is sold under the brand names Commitment to Origins™, Shade Grown Mexico™, and Decaf Shade Grown Mexico™.



tripling yields mean that wheat, rice, and maize are now cheaper for consumers by half—in real terms—than 40 years ago. Overall, the productivity growth in staple food crops has made a critical contribution to agricultural development and reductions in poverty and hunger.⁸ Continued research and development are needed to sustain these achievements.

Growth in staple food crops alone does not ensure agricultural development and food security. Access to nutritious food is also important, as is the need to improve the availability of protein and micronutrients in staple foods and vegetables. Another way to address the nutritional aspects of food security is through access to a variety of foods. Animal-source proteins and micronutrients can have long-term impact on productivity and economic development; these nutrients have been shown to have a strong and positive impact on the cognitive, physical, and behavioral development of children.⁹ Advances in science and technology that enhance protein content and increase bioavailability of micronutrients will contribute positively to the health status of poor consumers, especially girls and boys.

biodiversity—and ensure the material necessary to increase agricultural productivity

- *support the development of agriculture and natural resource policies* to promote good governance in ways that empower local citizens, enhance competitiveness, and improve the productivity of the resource base

USAID and its partners will undertake to identify effective approaches to sound environmental and natural resource management, and, in particular, will employ the principle of adaptive management.

3. Mobilizing Science and Technology and Fostering Capacity for Innovation

Crop and livestock research has led to the production of more food at lower costs. Doubling and

⁸ Michael Johnson and Peter Hazell, "Cutting Hunger in Africa through Smallholder-led Agricultural Growth," technical paper distributed at the 2002 World Summit on Sustainable Development (Washington, D.C.: IFPRI and USAID).

⁹ Charlotte G. Neumann et al., "Animal Source Foods Improve Dietary Quality, Micronutrient Status, Growth and Cognitive Function in Kenyan School Children: Background, Study Design and Baseline Findings," *Journal of Nutrition* 133 (November 2003): 3939S–47S.

Linking Producers to Markets

Urea Deep Placement Technology in Asia

USAID-funded research at the International Fertilizer Development Center has developed a urea deep placement (UDP) technology package that increased rice yields while reducing nitrogen fertilizer application and nitrogen loss. Farmers report paddy yield increases of 15–25 percent.

UDP technology has been adopted by over 600,000 farmers in Bangladesh, where it is being introduced on banana, papaya, and vegetable crops. The technology is also being introduced in Nepal and Vietnam, where farmers are seeing increases in their farm incomes.

USAID recognizes that the enormous challenge of increasing agricultural productivity and smallholder participation in markets depends on harnessing scientific and technological advances and using new tools—such as those offered by biotechnology, nanotechnology, global positioning, and geographic information systems—for the business of agriculture. USAID also recognizes that these modern technologies and tools are management-intensive, and require specific attention being paid to balancing opportunities for their acquisition by women and men.

The Agency will work with its partners to increase science and technology capacity and foster innovation within and among developing countries so that they can generate, utilize, and direct new technologies in locally appropriate directions. Further, USAID will

- *formulate science policies, strategies, and governance systems* that reflect the rights, responsibilities, and roles of men and women within the

particular culture, and ensure that investments in science and technology yield maximum benefits

- *support technology development and application*, addressing the different needs and constraints of men and women throughout the agricultural sector, to raise agricultural productivity for increased economic competitiveness; stabilize and enhance food, feed, and fiber production in developing countries; increase protein content and bioavailability of micronutrients in staple foods and vegetables; and reduce environmental degradation and pollution
- *expand public and private sector partnerships and networks* to facilitate collaboration on applied research activities by networks of specialists on crops, including staple foods and vegetables; natural resource management; and other aspects of the food, feed, and fiber system
- *foster science and technology innovation capacity and national innovation systems* to meet the challenges of today's agricultural environment, including volatile climatic and market changes, evolving grades and standards, infectious disease, political instability, and the special needs of women

USAID and its partners will support the formulation of comprehensive science and technology systems appropriate to specific national and regional conditions, strengthen national capacity for conducting research, and promote public awareness of the value of innovation in accelerating agricultural growth.

4. Strengthening Agricultural Training and Education, Outreach, and Adaptive Research

Major advances in agricultural science and technology over the past decade have had uneven impacts on people's productivity and livelihoods. Some farmers perceive some new technologies as too risky, either in production or financial terms. Farmers' use of other technologies is limited by lack

of access to necessary inputs (such as fertilizer and pesticides) or markets. Still other potentially beneficial technologies are never adopted because farmers never hear about them.

Over the past 20 years, new information and communication technologies have affected opportunities for productive enterprises as well as trade and commerce. Such technologies have enabled farmers to tap into new markets and acquire information about new production approaches. The ability to access and manage information is fast becoming a fundamental requirement for rural producers to participate effectively in an increasingly global food, feed, and fiber system.

Education and training programs that reach out to women and men who are rural producers and others in related processing and marketing chains can benefit from new information and communication technologies. When supported by NGO partners, rural communities have shown remarkable ability to use innovative information technologies to better manage their natural resources profitably and sustainably. Producers for global markets (such as smallholder coffee growers around the developing world) have begun to understand how to open more profitable segments of these markets by linking improvements in production and processing technology (such as biofortification) with new information technologies that document higher product quality assurance standards.

However, access to new information and communication technologies is still limited. For information about new agricultural technologies, many rural producers continue to rely on occasional extension agent visits, word of mouth, farmer field days, and input supply dealers. Though participatory research methodologies have been shown to be highly effective, they reach a limited number of rural producers.

To achieve broader technology adoption rates, move toward more efficient and user-driven research approaches, and ensure that new technologies for production and processing result in safe



and affordable products for consumers, information and communication technologies need to play a larger role in agricultural research, education, training, and agribusiness.

New information and communication technologies are not enough. Many farmers lack basic skills. Further, HIV/AIDS, malaria, and anemia mortality and morbidity are resulting in a significant loss of productive labor and affect the intergenerational transfer of agricultural skills and best practices, especially in the most highly affected countries of Africa. Hobbled countries even further is the gap between male and female literacy rates, school completion rates, and rates of higher education and training. Developing countries need to establish sustainable, gender-equitable, and institutionalized systems that allow for a continual replacement of highly skilled experts and a strengthened human resource base to compete in the global knowledge economy.

Reducing the knowledge gap in developing countries will require leadership from the professional agricultural research and education communities; expanded participation from agribusiness and market participants; and the development of innovative models for linking producers, entrepreneurs, and agribusinesses to information they need. To ensure that agricultural producers and entrepreneurs benefit from new and improved technologies and market opportunities, USAID will

- support education and training tailored to reach women and girls as well as long-term training and basic education curricula in the agricultural sciences and related subjects to strengthen the human and institutional capacity of developing countries
- develop and extend innovative rural information and communication technology systems that address the differential abilities and needs of men and women to improve access by dispersed farmers and agribusiness entrepreneurs to information across an array of agricultural disciplines and uses
- improve problem-based, site-specific learning approaches to solve problems—local, organiza-

tional, and site-specific—by using adaptive research and getting “on-the-shelf” solutions into the field

USAID will ensure that poor women and men have access to training and support services—such as information and communication technologies—by removing gender-based obstacles, including institutional constraints to education and training.

Implementation

The USAID Agriculture Strategy and regional bureau strategies provide guidance for field missions in the development of their country strategic planning documents. All operating units undertaking agriculture programs will take account of the four strategic themes, within the context of other USAID sector strategies, regional agricultural development strategies, and country specificity.

Operating units should pay particular attention to the interaction of HIV/AIDS and agriculture, including the use of agricultural extension to message HIV/AIDS prevention, and consider opportunities to utilize food-based solutions to mitigate its impacts. To promote increased and diversified flows of technology and financing for agriculture, operating units also should consider development alliances such as those pioneered under the Global Development Alliance (GDA) secretariat. Finally, food aid and development resources should be strategically integrated. Both play an important role in protecting assets and expanding income-earning options for vulnerable populations.

While the weight given to a particular strategic theme in the Agency Agriculture Strategy will be situation-specific, a demand-driven, competitive economic framework for agriculture should be the starting point in developing countries capable of transformational development. Each operating unit undertaking an agriculture program will determine whether to focus solely on agriculture or make agriculture part of a broader economic growth focus. In either case, operating units will monitor

Linking Producers to Markets

Increasing Albanian Milk Production

Land O'Lakes Inc., with support from USAID, has been helping rural women in Albania improve the health of their cows and increase the quality and quantity of milk produced. Over 8,000 women received training in milk quality (sanitation and milk quality tests), herd health (prevention of mastitis and other diseases), dairy breeding and reproduction (artificial insemination), forage production, and business management and marketing (recordkeeping and cheesemaking under household conditions). As milk production increased, improved collection systems were established with milk-cooling tanks and simple milk-testing laboratory equipment, some of which are owned and operated cooperatively. Improving the quality and quantity of locally produced milk has resulted in Albanian dairy products gaining an increased share of regional markets.

progress in overall agricultural development, as well as specific programmatic results. In chronic food emergency situations, the focus should be on ensuring a greater degree of food security, livelihood options, and economic stability for the most vulnerable populations. In these cases, improving agriculture can be used as a part of an initial response that will facilitate later development.

This Agency strategy serves as a benchmark for review and approval of new strategic plans and for triennial strategy reviews of operating unit programs. In fragile and strategic states, other criteria will be added to the Agency strategy for selection and approval of operating unit agricultural program focus and results. The Agency strategy will also be used in reviewing and analyzing bureau program budget submissions and constructing the Agency annual budget submission.

Both field and Washington-based operating units contribute to the Agency's Agriculture Strategy. USAID's field missions work with local partners in public and private sectors to determine the most effective mix of activities for accelerated agricultural growth. Similarly, both field and Washington-based USAID personnel contribute to emergency food and agriculture programming and work with local partners to provide appropriate measures of emergency assistance. The emergency assistance endeavors to strengthen local economies and specifically to target vulnerable farming populations in efforts to improve livelihood sustainability and agricultural productivity. At USAID headquarters, pillar bureaus support worldwide research programs in agriculture; oversee food aid programming, including the World Food Program; and cover all aspects of health, HIV/AIDS, family planning, and nutrition. USAID's headquarters staff also lead interagency and international donor coordination efforts; keep abreast of emerging issues and opportunities; and provide technical leadership and field support in specialized issues such as biotechnology, long-term education, and sanitary and phytosanitary trade standards.

Regional Bureau Strategies

Regional bureaus coordinate programming for field missions within geographic regions—Latin America and the Caribbean (LAC), Europe and Eurasia (E&E), Asia and the Near East (ANE), and sub-Saharan Africa (AFR). Bureaus also control additional funds for agricultural activities and initiatives. Bilateral and regional field missions develop mission-level strategic plans and implement agriculture-related activities in economic growth, agriculture, and natural resource management.

Agricultural development requirements and successes are linked to the local contexts, including physical, social, and policy environments. Distinctive needs shape each regional bureau's priorities for agricultural programming. While each of the four objectives of the larger Agency strategy is reflected in regional bureau strategies, their ranking, sequencing, and size will vary according to the characteristics of the region.

The Agricultural Development Strategy of the Bureau for Africa

Without accelerated development progress, countries in sub-Saharan Africa face the prospect of increasing hunger and poverty: the region may be home to nearly two-thirds of the world's undernourished people in 2010. The social, political, and economic dislocations stemming from infectious diseases such as HIV/AIDS, environmental degradation, and dysfunctional social and economic policies will only exacerbate the region's problems.

The Presidential Initiative to End Hunger in Africa (IEHA), launched in August 2002 at the World Summit on Sustainable Development, includes six focus countries—Mozambique, Zambia, Uganda, Kenya, Mali, and Ghana—and three regional missions—east, west, and southern Africa. Under IEHA, USAID is investing heavily in smallholder agriculture, a sector that supports the livelihoods of nearly 80 percent of the subcontinent's population, employs over 70 percent of its labor force, contributes over 30 percent to overall GDP, and represents 40 percent of its export earning.

IEHA has six intervention areas:

- *developing science and technology applications and support services* that harness the power of new technology
- *improving agricultural trade and market systems* for major African producers and products in local, regional, and international markets
- *promoting and strengthening community-based producer organizations* to link business and farmers through opportunities that add value and increase incomes
- *building human and institutional capacity* to shape and lead the policy and research and provide agricultural education
- *integrating vulnerable groups and countries in transition* into sustainable development processes

- *enhancing natural resource management* to conserve and foster the production of environmental goods and services that contribute to economic growth

USAID is collaborating with other donors to help African governments create a policy environment that will renew agricultural sector growth—across the region, in its subregions, and nationally. Some key policy areas include development of strategies for mitigating the impact of HIV/AIDS and other infections on agriculture and food security and for harmonizing trade policies, product grades and standards, and biosafety regulations.

The goal of the Trade for African Development and Enterprise Initiative (TRADE) is building capacity for long-term sustainable trade and investment development. The initiative seeks to

- enhance the competitiveness of African products and services
- expand the role that trade can play in African poverty reduction strategies
- promote U.S.-African business linkages
- improve the delivery of public services supporting trade
- build African capacity for trade policy formulation and implementation
- strengthen the enabling environment for African businesses

Through coordinated programming and complementary investments, TRADE and IEHA work together on agriculture, orienting programs toward rural communities and smallholder producers.

The Agricultural Development Strategy of the Bureau for Asia and the Near East

Agricultural growth has been an important precursor to overall economic growth in most ANE countries. In large part, those that performed poorly did so because of poor infrastructure, policies that restricted equitable distribution of agricultural gains, and protectionist policies that constrained broad-based economic growth.

Promoting agricultural development remains an indispensable means of increasing food security and economic growth. Approximately 58 percent of the region's population work in the agricultural sector, and about 62 percent of the total live in rural areas, one-third of them in poverty. The region is also home to 70 percent of the world's 792 million undernourished people.

Given the limited availability of resources, the challenge is to develop new ways of doing business that selectively address critical issues while developing private-sector and other partnerships that result in mutually beneficial gains. Toward this end, the ANE sustainable agriculture and food security conference held in Manila in 2002 developed a strategic plan for investments in agriculture that includes

- improving economic governance to promote the growth of agroenterprises and off-farm business development
- bridging the knowledge divide to enable farmers and entrepreneurs to gain access to the information they require
- investing in information technology to accelerate outreach efforts and train a new generation of scientists
- promoting trade liberalization and market development to support domestic and international trade capacity building and marketing
- harnessing advancements in science, particularly in biotechnology, to increase agricultural productivity and improve nutritional status of populations
- managing the environment to foster integration of environmental planning and natural resources management into agriculture development

The Agricultural Development Strategy of the Bureau for Europe and Eurasia

In most E&E countries, the agribusiness sector (farming and related food processing and trade) remains an important part of the national economies, though unemployment and underemployment continue to be widespread, especially in rural areas. E&E seeks to increase the competitiveness of agricultural producers and processors and provide employment opportunities, thereby supporting political stability, domestic and regional trade, and family incomes.

Food industry growth stimulates consumer demand and increases prices. This benefits individuals cultivating private plots and managing small and medium-scale farms, and expands opportunities for producers moving up and down the processing and marketing chain. Efficient processors and value-added enterprises are able to compete in domestic markets and enter export markets. Establishing strong market chains that link farmers to consumers requires particular attention to three strin-

gent sets of standards: food safety, plant and animal health safety, and product quality.

The E&E agricultural development approach focuses on four elements:

- *accessing the land, technology, and capital* necessary for efficient production
- *establishing strong market linkages* between farmers and consumers
- *developing producer and processor organizations* to facilitate technology transfer, economies of scale, and advocacy capacity
- *improving competitiveness* to establish the needed policy framework and common standards, remove trade barriers, and facilitate domestic and international marketing of exportable quality products

The Agricultural Development Strategy of the Bureau for Latin America and the Caribbean

The United States has a strong interest in seeing the LAC region achieve broad-based economic growth and rising living standards. Although the region is largely urbanized, the rural sector remains a significant part of the economy. The expansion of free trade agreements in the Western Hemisphere has opened up opportunities for entrepreneurs to revitalize rural economies, creating an expansion of jobs and income. The bureau's approach encourages the production of high-demand and high value-added goods for trade in local, regional, and global markets.

Recognizing high levels of income and asset inequality, the bureau's approach also encourages measures that reduce asset-related constraints to participation in market opportunities and improve the capacity of smaller enterprise to take advantage of new trade dynamics.

Four action areas through which missions contribute to diversification of rural economies and sustainable reduction in poverty include:

- rules of trade—to help countries prepare for, participate in, and implement rules deriving from commitments negotiated under regional free trade agreements
- science and technology—supporting research and applications of biotechnology, food safety, plant and animal health, and communications and information technology
- access to assets—to establish property rights systems, rural finance mechanisms, and market services, and develop skills through higher education and vocational and professional training
- vulnerability management—to mitigate environmental and economic risks

Next Steps

To implement the strategy, the Agency will

- link the Agriculture Strategy to the joint State-USAID 2004–2009 Strategic Plan and identify indicators for the performance goals in the plan
- ensure that operating unit strategic plans and priorities reflect analyses and recommendations of ongoing external review bodies, such as World Bank-led agricultural science and technology assessments, the study on the contribution of agricultural science and technology to poverty reduction by the Consultative Group on International Agricultural Research (CGIAR), and the InterAcademy Council's review of science and technology in Africa
- strengthen donor coordination in agricultural planning and activity implementation, working at headquarters, in country, through networks of the OECD's Development Assistance Committee, and other specialized bodies
- develop options to address the unique and evolving requirements of agricultural development under a variety of programmatic circumstances, including fragile, famine-prone, and food-insecure states
- develop a new approach to agricultural education and training in transformational development countries as part of the enhanced relationship with U.S. university partners, stressing innovation and cost effectiveness by combining U.S.-based training with a variety of other models, including distance education; shorter-term, skill-oriented programs; and programs that coordinate in-country and foreign educational programs in U.S. and third-country institutions
- develop guidelines and tools for conducting agricultural sector assessments and design strategies and programs consistent with the new USAID business model to support field missions in developing agricultural components of country strategic planning documents and projects
- strengthen professional capabilities to design and implement effective agricultural programs, especially through continued rebuilding of foreign service staff, and drawing on the expertise of professionals at the U.S. Department of Agriculture and other agencies through resource support service and participating agency service agreements
- develop state-of-the-art courses on strategic agriculture issues to improve job performance, create a common and shared knowledge base, strengthen the sense of community, and improve information sharing and networking
- provide adequate resources from all budget sources (including the P.L. 480 program) to agriculture, recognizing that increasing agricultural growth and productivity not only reduces hunger and adds to rural incomes but can save billions of dollars now being spent on emergency food assistance

All USAID agricultural programming should conform with this strategy, though the emphasis and articulation of specific objectives will respond to bureau and operating unit strategic plans, bureau mandates, and country circumstances. In rare instances, national interest or other U.S. foreign policy objectives may cause a program to fall outside the strategic framework, but such exceptions will be few, and they will be clearly linked to achieving the foreign policy objective in a specific country or circumstance.

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