

In recent decades, the nutrition and health-related status of millions of individuals around the world has improved as a result of substantial domestic and international actions, investments, coordination and innovations. More than 100 million children have escaped the devastating and lasting effects of undernutrition over the past three decades¹, and young children and their mothers in low-income countries now eat better and experience less disease. Playing a leading role in such successes since 1965, the United States Agency for International Development's (USAID)² nutrition programming, through achievements, setbacks and learning, has advanced nutrition research, policy and programming to improve the longterm health of the world's most vulnerable citizens.

With a special focus on young children and women, USAID's actions measurably reflect the overall advancements in many areas. Since 1985, the prevalence of stunting and underweight in children under 5 years has been halved. Vitamin A supplementation has averted an estimated 1.25 million child deaths across 40 countries since 1988, and more than two-thirds of children under 5 in high-priority countries are now fully protected through this supplementation.^{3,4} Exclusive breastfeeding—the single most effective preventive intervention to reduce child mortality⁵—increased by an average of 30 percent across USAID-supported countries from 1990 to 2014.⁶ And as of 2016, three out of four households globally consumed iodized salt, protecting infants from potential brain damage.⁷

However, the numbers assigned to the nutrition improvements that have prevented millions of deaths and long-term disabilities only partially relate the human terms, which are also found in preserved human capital, in the enabling of life-long potentials and in improved prosperity for many citizens and their countries.

Establishing the Foundation of Nutrition at USAID

This historical resource, *Nourishing Lives and Building the Future: The History of Nutrition at USAID*, describes the Agency's pioneering role and its many contributions to global nutrition so that they are better understood at home and abroad. By highlighting USAID's nutrition activities, implemented in partnership with many actors, this legacy report aims to facilitate learning from the past to inform future nutrition programming. It is hoped that an increased appreciation of the value and impact of USAID's nutrition investments across more than five decades will inspire efforts to improve nutrition in the future–mobilizing resources from partner countries and key stakeholders in this international effort.

Looking first at the establishment of nutrition programming at USAID during the 1960s, this history recounts how the new nutrition sector emerged from the learning, experiences and needs identified in the U.S. international food assistance program, known as Food for Peace (FFP). It then briefly describes how USAID nutrition programming evolved during its first decade. The Agency's strategic implementation approaches and financial investments are also presented. The rest of the story is told in chapters highlighting advances in the major nutrition interventions, shaped and supported by USAID. Each chapter summarizes the milestones, key global results and USAID's contributions to achieving global impact over time. This review ends with conclusions and insights about future global nutrition needs, as well as the role of partner countries and of USAID in building capacity for countries to one day transition beyond the need for nutrition assistance. This USAID nutrition history also provides extensive endnotes, offering both document references and additional details of topics discussed in the text for further learning. These examples and materials, although abundant, reflect only a small fraction of USAID's nutrition legacy.

Defining Nutrition

The definition of "nutrition" for the purposes of this report comes from the World Health Organization (WHO) and encompasses the multiple interventions and approaches described in this history. As defined, "Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition—an adequate, well-balanced diet combined with regular physical activity—is a cornerstone of good health. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development and reduced productivity."⁸

The frequently used term malnutrition has historically been an incorrect synonym for undernutrition. In actual use, malnutrition comprises two areas. The first, undernutrition, indicates several conditions: (1) stunting or chronic malnutrition, or low height-for-age, (2) underweight, or low weight-for-age, (3) acute malnutrition or wasting, or low weight-for-height, and (4) micronutrient (vitamin or mineral) deficiencies. The second area encompasses overweight, obesity and diet-related non-communicable diseases. The most immediate causes of the nutritional status of individuals are their dietary intake and their health status. However, many underlying factors can contribute to an individual's overall nutritional status; interventions that aim to address such factors are collectively called nutrition-sensitive approaches.

USAID's Nutrition Goals

Optimal nutrition is fundamental to reducing child mortality and to achieving normal physical and mental development. It accelerates learning, productivity and economic growth, and thus is critical to achieving international targets and USAID's wider development mission. Therefore, USAID's goal is to improve nutrition to save lives, build resilience, increase economic productivity and advance development. USAID assists in the delivery of proven nutrition-specific interventions that address the immediate causes of malnutrition. To address the underlying and systemic determinants of malnutrition, USAID also works to maximize the nutritional impact of its nutrition-sensitive programs in agriculture, health and population, and water, sanitation and hygiene.

Origins and Evolution of USAID Nutrition Programming: An Overview

USAID was established in 1961 when U.S. President John F. Kennedy signed the Foreign Assistance Act into law and created USAID by executive order.⁹ At this time, nutrition was not yet a priority, nationally or internationally. The science of human nutrition itself was still young, having emerged as a discipline earlier in the 20th century upon the discovery of essential vitamins, minerals and other nutrients in food that, when deficient in the diet, can cause specific diseases.¹⁰ The field of international development was new; it was the dawn of international nutrition programming to measure/diagnose, understand, prevent and treat undernutrition in developing countries.

Early 1960s: Food for Peace Evolves to Combat Undernutrition The large U.S. food aid program, Food for Peace, provided the entry point for nutrition at USAID. Since its inception in 1954, when President Dwight D. Eisenhower signed into law the Agricultural Trade Development and Assistance Act, Food for Peace has provided food assistance to more than 4 billion people worldwide.¹¹ Its original intent was to reduce U.S. agricultural surpluses, promote trade through food exports to developing countries and help people globally. In its early years, Food for Peace was administered by the Director of Foreign Operations Administration,¹² and then the International Cooperation Administration,¹³ until an executive order in 1961 from President Kennedy created the White House Food for Peace Office,¹⁴ with USAID as one of the implementing agencies. USAID, established that same year, focused food aid donations on development and humanitarian needs. An important example was the major child feeding program named Operation Niños that began in 1962 under the Alliance for Progress, launched by President Kennedy to advance economic cooperation between the United States and Latin America. Operation Niños, using Food for Peace commodities, was coordinated by Dr. Martin J. Forman; he would later



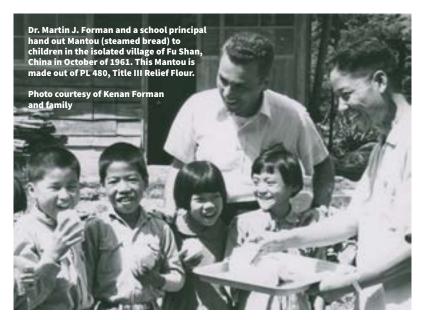
become the USAID nutrition program's first director. In 1965, the Food for Peace program was moved to USAID, and by that year, Operation Niños had reached more than 13 million school-age children and 2 million preschoolage children throughout Latin America with daily meals.¹⁵

The Food for Peace program contributed to nutritional well-being during its first years by providing U.S. surplus food product donations to millions of hungry people overseas as emergency relief, school lunches and institutional feeding. At this time, however, nutrition was not yet an explicit objective, and activities were not specifically designed to have nutritional impact. Operation Niños provided USAID with an important lesson learned: feeding school-age children was too late for preventing undernutrition.¹⁶ The priority needed to be preschool-age children, the group most vulnerable to undernutrition. USAID recognized more broadly that the food aid program presented an extraordinary opportunity not only to feed hungry populations, but, with some key changes, to address undernutrition, the causes and harms of which were just beginning to be documented. Accordingly, the food focus gradually expanded to a food and nutrition focus, targeting pregnant and lactating women and preschool-age children with food supplements to improve dietary intake, along with nutrition education and primary health care.¹⁷

From 1961 to1965, under Presidents Kennedy and Lyndon B. Johnson, the White House office of Food for Peace remained responsible for Food for Peace interagency coordination and its director served as a special assistant to the president.¹⁸ Routine management of Food for Peace operations

The task is huge. But the rewards are infinitely greater. The countries of Latin America and the United States possess the know-how and resources to do the job. To this must be added the <u>will</u> to do it. The Governments and Peoples of the Americas must believe that overcoming child malnutrition is of utmost importance and must act accordingly. The motivation of the people must be kindled, but hope must not be falsely aroused. There must be continuing evidence of the progress that can come with alliance. If this is done, the most powerful resource of all will be unleashed and can but lead to success."

Dr. Martin J. Forman in a 1965 Operation Niños Report



was carried out by the implementing agencies, principally USAID and the U.S. Department of Agriculture (USDA), as it still is today. By 1964, the White House Office of Food for Peace had become the U.S. Government's focal point on international nutrition assistance. A nutrition champion working there, Alan Berg, seized the unique opportunity afforded by having nutrition strategically located in the White House to advocate proactively for nutrition, resulting in markedly increased interest by senior government officials, including President Johnson.

New Evidence on the Relationship between Malnutrition and Mental Retardation Sparks Action

Delegates to the 1963 World Food Conference in Washington, D.C., recommended increased attention to nutritional needs in food aid programs.¹⁹ Data on the magnitude and severity of the undernutrition problem in developing countries were plentiful, thanks to 32 national nutrition surveys conducted by the U.S. Government's Interdepartmental Committee on Nutrition for National Defense and the National Institutes of Health from 1955 to 1965.²⁰ But the key momentum-generating event appears to have been the December 1964 International Conference on Prevention of Malnutrition in the Pre-School Child at the National Academy of Sciences in Washington, D.C. The meeting highlight was Dr. Joaquin Cravioto's presentation of his seminal research on the relationship between child malnutrition and mental development in Mexico and Guatemala. Cravioto's research found that severe early malnutrition not only decreases a child's body size, but also is associated with lower intelligence scores.²¹ This alarming new finding generated international concern. Malnutrition not only adversely affected individual development, but could also impede national development in countries where as many as two-thirds of the children were malnourished. The troubling discovery resonated with those in power, who were moved to act on it, but only because Alan Berg conveyed the news immediately after attending the conference in a widely read editorial, "For the Child Who Has Nothing," published in *The New Republic* (Christmas issue, December 26, 1964).²² The editorial galvanized enough attention in the White House that a special interagency Sub-Group on Nutrition, co-chaired by Food for Peace in the White House and in USAID, was set up to recommend what the U.S. Government could do to address the now much more ominous nutrition problem.²³ The Sub-Group on Nutrition's report was circulated on March 3, 1965; 3 weeks later, President Johnson²⁴ spoke about it directly:

The most grave health problem of the world remains hunger and malnutrition. Studies indicate that in some developing countries as high as 70 percent of preschool children are undernourished or malnourished. Such malnutrition not only results in high child death rates and widespread disabling diseases but research has now established that it also produces permanent retardation of mental as well as physical development. Food for Peace is concentrating increasing attention on nutrition, especially for the young."

President Johnson, Special Message to the U.S. Congress on February 10, 1966.

President Johnson stressed the urgency of addressing the world's nutrition problems in his Special Message to the U.S. Congress on February 10, 1966, calling for a war against hunger.²⁵ Again in late 1967, in his cover letter transmitting the 1966 annual report to Congress on international food aid, the President described Food for Peace's many benefits, including nutrition, stating, "To countless children it has meant freedom from the weakness, disease and mental retardation which are the tragic consequences of malnutrition."²⁶

USAID's First Nutrition Action: Improving the Quality of U.S.-donated Foods

The recommendations of the Sub-Group on Nutrition were implemented, leading to yet greater attention by USAID to undernutrition in low-income countries, especially for preschool-age children. Specific steps were taken to improve the nutritional quality of foods provided to children by Food for Peace, such as the fortification of nonfat dry milk with vitamins A and D by late 1965—this marked USAID's first nutrition action. Fortification of other milled cereal commodities with essential vitamins and minerals soon followed. The annual Food for Peace Reports to Congress began featuring a section on combating malnutrition, starting with the 1966 report on the prior year's program.²⁷

By 1966, the food aid program was reaching 10 million preschool-age children.²⁸ That year, the high-protein fortified blended food, Corn Soy Milk, was added to the list of products that could be purchased with food aid, and over 92 million pounds were programmed for 82 countries. This low-cost food product was specifically designed to meet the nutritional needs of young children at a critical time when nonfat dry milk had become too expensive for the Food for Peace program.²⁹

An important obstacle to meeting nutritional needs was removed when Public Law 480 was amended in 1966, no longer restricting the Food for

BETTER NUTRITION

In a Special Message to Congress on February 10, 1966, President Johnson proposed that the United States lead the world in a war against hunger, including increased emphasis on nutrition, especially for the young. In the President's words:

"Beyond simple hunger, there lies the problem of malnutrition:

We know that nutritional deficiencies are a major contributing cause to a death rate among infants and young children that is thirty times higher in developing countries than in advanced areas.

Protein and vitamin deficiencies during pre-school years leave indelible scars.Millions have died. Millions have been handicapped for lifephysically or mentally.

Malnutrition saps a child's ability to learn. It weakens a nation's ability to progress. It can-and must-be attacked vigorously." $^{\rm 31}$

Nutrition at USAID: Antecedents Leading to Comprehensive Action

1954 - Public Law 480, the Agricultural Trade Development and Assistance Act, is signed into law by President Eisenhower, creating the U.S. international food aid program, Food for Peace, mainly to reduce agricultural surpluses, expand trade and offer food aid. The program was initially administered by the Foreign **Operations Administration.** 1962 1961 Operation Niños, a massive President Kennedy creates Food for Peace child feeding USAID, calls for an Alliance for program, begins in Latin Progress with Latin America. America under the Alliance and refocuses the Food for for Progress. Peace program on develop ment and responding to food crises and humanitarian needs. 1965 The Sub-group on Nutrition, co-chaired by Food for Peace in the White House -0 and in USAID, issues "Meeting Nutritional Needs." This report was the first U.S. Government effort to look broadly at improving international nutrition. Nonfat dry milk for food aid distribution is fortified with vitamins A and D-USAID's first nutrition action. The Food for Peace program is moved to USAID. 1967 1966 A War on Hunger Office is President Johnson sends a -0 created in USAID, with a Nutrition special message to the U.S. and Child Feeding Service that Congress, proposing that the directs the Agency's new global United States lead the world nutrition program. India in a war against hunger, implements the first major USAID including increased "emphasis national nutrition activity, after on nutrition, especially for the successfully containing the Bihar voung." Food for Peace famine with U.S. food aid. introduces Corn Soy Milk. 1969 The USAID Administrator establishes the central Technical Assistance

Bureau, with Nutrition among its new technical offices. Nutrition is - now its own sector. Peace program to distributing only surplus food and allowing U.S. farmers to produce (and sell to the U.S. Government) commodities best suited to the needs of the recipient countries and beneficiaries, including their nutritional needs.³⁰ Previously, soybean, a high-quality, low-cost protein source, could not be used because it was not in surplus in the United States. Soybean has since proved invaluable for making fortified blended foods to affordably meet the nutritional needs of young children.

1967-1969: USAID's Nutrition Programming Begins Equally important to the Sub-Group on Nutrition's recommendation to improve the nutritional guality of donated foods was their recognition that USAID needed technical expertise in nutrition and should work on nutrition across its various sectors, giving particular priority to nutrition in its health programming. Formerly, USAID had been relying on the Interdepartmental Committee on Nutrition for National Defense and the National Institutes of Health for advisory services in nutrition due to limited in-house expertise. As a result of this need, the special USAID Office of War on Hunger, established in early 1967, included a new Nutrition and Child Feeding Service among its four branches-USAID's first organizational unit dedicated to implementing its nutrition programming.³² Dr. Forman, USAID's nutrition visionary and pioneer, moved from the Food for Peace Division to create and lead the new Nutrition and Child Feeding Service.³³ In 1969, nutrition was further elevated in organizational importance when the USAID administrator established the Technical Assistance Bureau to put USAID on the cutting edge of development through research, analysis, technical assistance and technology. Nutrition Services, directed by Dr. Forman, was one of the new technical offices in this Bureau, establishing nutrition as its own sector alongside health, education and agriculture.

USAID vigorously launched its nutrition mission, seeking to prevent the immense human tragedy of widespread undernutrition and its implications. The nutrition portfolio applied nutrition science; implementation skills; food, vitamin and mineral supplements; food and fortification technology; social and behavior change communication; and integration of basic health services to improve the nutritional status, health and survival of millions of young children and women of reproductive age. Complementing its nutrition efforts, USAID supported long-term solutions to increase food production and incomes through agriculture and the Green Revolution,³⁴ and to increase access to family planning services. The scope of the nutrition sector rapidly expanded from strengthening the impact of the Food for Peace program to supporting direct nutrition interventions independent of food aid, and to working with other sectors, most importantly health and agriculture, to address the underlying causes of malnutrition.

USAID Support for Food Technology and Fortification A quick success of USAID's expanded nutrition action was its focus on food technology solutions, such as food fortification with vitamins and minerals, and the production of more affordable and nutritious foods for young children, namely fortified foods made from local blends of cereals (such as corn and wheat) and oilseeds (mainly soybean). With similar actions already underway to improve U.S. donated foods, it made sense to build on that experience. In partnership with the USDA, low- and middle-income countries received USAID assistance to initiate food fortification and production of fortified blended foods, building on technologies produced by U.S. millers and farm equipment manufacturers.³⁵ Several million tons of cereal-soy fortified blended foods have been distributed for over 50 years now and are still widely used by USAID, USDA, nongovernmental organizations (NGOs) and the U.N. World Food Programme to improve the diets of millions of mothers and children.

This progress was achieved through methodical actions, experiences and improvements. Back in the l960s, many of the world's leading international nutritionists believed that the major nutrition problem facing low-income countries was insufficient amounts of good-quality protein in local diets. Low intake of good-quality protein containing an adequate amount of each essential amino acid was thought to be the primary cause of undernutrition in young children.³⁶ Therefore, USAID prioritized activities to boost protein intakes, including the promotion of legume consumption (such as soybean), the addition of soy flour to bread and pasta and the breeding of grains with more or better-quality protein, such as high-lysine corn. But the biggest effort was research on food grains fortified with lysine—the missing or limiting essential amino acid.

The international nutrition community was hopeful that fortifying widely eaten cereal staples with lysine could potentially be as successful in reducing protein deficiency and child undernutrition as food fortification with vitamins and minerals had been for reducing micronutrient deficiencies, but the results were disappointing. The fortification technology was feasible and the fortified cereals well accepted; however, there was no discernible nutritional impact. In large, controlled lysine fortification field trials in Guatemala (corn), Thailand (rice) and Tunisia (wheat), children eating these "improved" cereals did not grow any better than children eating the traditional diet.³⁷

The lack of results was consistent with new data available in the early 1970s showing that inadequate energy intake, not protein deficiency, was

the principal problem affecting these populations.³⁸ Leading nutritionists concluded that the basic food-related solution to undernutrition was to provide more of it, not simply better or more protein, and that more attention should be paid to the major micronutrient deficiencies (iodine, iron and vitamin A) and to the underlying economic and social determinants of undernutrition. The widespread syndrome that affected so many young children who failed to grow and thrive in low-income countries was renamed from protein malnutrition to protein-energy malnutrition.³⁹

Discovering that protein fortification was not a solution to child undernutrition was critical to subsequent successes. USAID nutrition programming has always been evidence-based, powered by investments in research and evaluation to determine why and how something works or does not work. Research findings have not only charted USAID's course, but also informed the broader nutrition and development communities around the world (see Chapter 6 on Nutrition Research and Measurement).

New Direction for Nutrition Interventions

Learning from the protein deficiency paradigm failure, USAID moved on, making important changes in its nutrition strategy. Realizing there is no single technical nutrient fix for ending undernutrition, the portfolio broadened to complement USAID's support for food technology. As described in Chapter 2, this included assistance for delivery of maternal and

ESSENTIAL NUTRITION ACTIONS

- Promotion of optimal breastfeeding during the first 6 months
- Promotion of optimal complementary feeding starting at 6 months, with continued breastfeeding to 2 years of age and beyond
- Promotion of optimal nutritional care of sick and severely malnourished children
- Promotion of optimal nutrition for women
- Prevention of vitamin A deficiency in women and children
- Promotion of adequate intake of iron and folic acid and prevention and control of anemia for women and children
- Promotion of adequate intake of iodine by all members of the household

child nutrition and health services, community mobilization and behavior change to improve maternal diets, infant and young child feeding practices and treatment of severe malnutrition. Addressing micronutrient deficiencies (vitamin A, iron and iodine) was also a high priority, as will be described in Chapter 3. These areas of emphasis, first introduced in the 1970s,⁴⁰ are the same evidence-based, nutrition-specific interventions at the core of USAID's Multi-Sectoral Nutrition Strategy 2014-2025,⁴¹ which guides an integrated, Agency-wide approach to addressing global malnutrition (described in more detail in Chapter 5). These interventions are commonly known as the Essential Nutrition Actions.

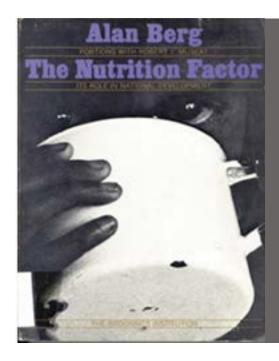
Likewise, after recognizing that undernutrition could enhance the progress of human immunodeficiency virus (HIV), USAID took major steps to support research on the importance of proper nutrition for people living with HIV and integrate nutrition programming into HIV prevention, care and treatment (see Chapter 4). Multi-sectoral nutrition planning also became a hallmark of the USAID program in the 1970s. It was an ambitious attempt to address malnutrition broadly and structurally by increasing the understanding of the diverse causality of malnutrition, and generating a commitment to action from the multiple sectors needed to solve the problem. Knowledge gaps and lack of cross-sectoral support made this multi-sectoral approach non-viable at that time, but USAID has since re-invigorated this coordinated, Agencywide nutrition programming with promising results (see Chapter 5).

Strategic Implementation Approaches and Funding

Since the start of USAID's nutrition programming in the mid-1960s, the Agency has been working with other U.S. Government agencies while also forming strategic partnerships with international and local actors to boost nutrition research, policy, advocacy and programming. These partnerships have enhanced the implementation of USAID's nutrition programming and ensured that nutrition investments will lead to long-term results.

Implementation Strategies

During its first several decades, USAID had agreements with other U.S. Government agencies for the following specialized activities: (1) integrating nutrition services into primary health care (the Office of International Health in the Department of Health and Human Services); (2) applying food technology solutions to undernutrition (USDA); (3) analyzing and influencing the consumption effects of agricultural policies on nutrition (USDA); and (4) conducting nutrition surveys and surveillance (U.S. Centers for Disease Control and Prevention [CDC]). The latter is the only inter-agency agreement spanning nearly the entire history of USAID's nutrition programming. The Agency has also implemented nutrition programming throughout its history by partnering with host governments and with many U.S. and local institutions, including NGOs, universities, research centers, international development consulting firms and private businesses.



EARLY MULTI-SECTORAL ACTIONS AND INVESTMENTS

In 1973, the influential best seller "The Nutrition Factor: Its Role in National Development" helped to drive thinking on nutrition's vital role in national development. The book grew out of USAID's experience assisting India to establish a national nutrition policy and program in the aftermath of the Bihar famine in the late 1960s.

Alan Berg, the author and a pioneer of USAID's early nutrition actions, expanded on USAID's nutrition experience in India (where he directed the Agency's first national nutrition program), examined malnutrition as an obstacle to development, and suggested practical solutions.

The book caught the attention of World Bank President Robert McNamara and led to the World Bank starting its nutrition program in 1972 and hiring Berg as the director. This is a prime example of how USAID's nutrition investments have had a significant impact far beyond the activities themselves.

INDIA MAKES NUTRITION A NATIONAL PRIORITY | Bihar Famine, 1966-67

In 1966, the forward-looking U.S. Ambassador to India, former Under-Secretary of State Chester Bowles, personally impressed with the interagency Sub-Group on Nutrition's report, requested that USAID initiate a nutrition program in India. India's undernutrition problems were and continue to be enormous, given the country's poverty, large population, poor sanitation and status of women. U.S. NGOs were already working with the Indian government to distribute food aid in most Indian states in what was the largest Food for Peace program in the world. The Indian government had impressive human resources, infrastructure and a commitment to social protection. All of these assets were quickly harnessed to respond to India's back-to-back droughts that significantly reduced food production and led to the 1966-1967 famine centered in Bihar state. That emergency, India's worst drought of the 20th century, was contained, and food scarcity and millions of deaths from starvation were averted by successful relief efforts. The U.S. donation of 14 million metric tons of food grains (representing a fifth of the U.S. wheat harvest), efficiently distributed to 60 million individuals over the 2-year period, prevented a catastrophe.⁴² During the famine response, the largest relief operation of its kind in history, important lessons were learned, including the value of early warning systems.

"Just as economic strength is the true basis of national strength, adequate nutrition is essential for the individual personality to unfold. Without attention to nutrition, we shall be denying large sections of our people an opportunity to help themselves and make their contributions to their country."

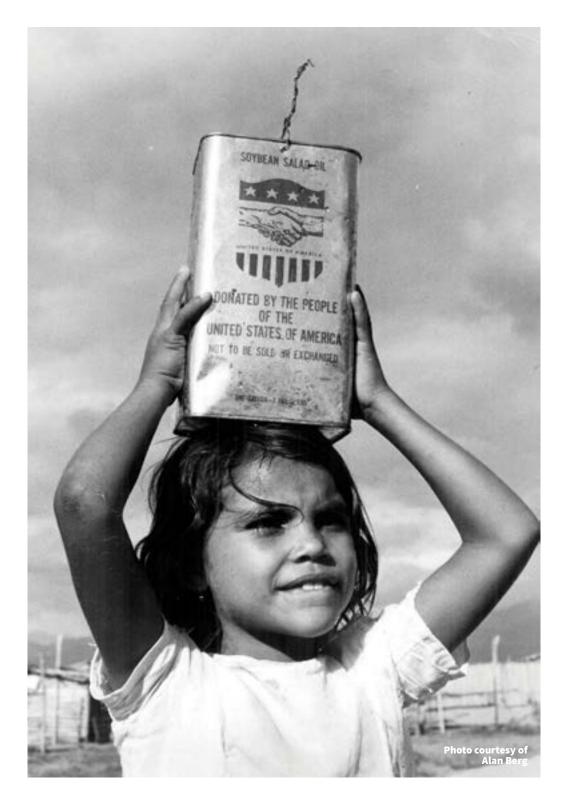
Indira Gandhi, Prime Minister of India, 197143

INNOVATIVE NATIONAL NUTRITION PROGRAM

Paradoxically, this horrific famine shaped India's destiny for the better for generations to come, as its leaders took bold measures to prevent future calamities: embracing the Green Revolution to increase food production and incomes, and transitioning emergency feeding programs into more permanent means of tackling undernutrition. USAID actively encouraged and assisted the Indian government in implementing these new national priorities. Selling the nutrition "gospel" on development grounds was a catalyst for much of what followed.⁴⁴ The nutrition chapter in the Indian government's Fourth 5-Year Plan in 1967 was a first anywhere. India served as a vast learning lab for testing new approaches, such as fortification of wheat products with vitamins, minerals and lysine; early experimentation with the double fortification of salt with iron in addition to iodine; and local production of fortified blended foods for children, such as Bal Ahar made with U.S.-donated wheat and local oilseeds. The Indian private sector food and pharmaceutical industries brought in their ingenuity as part of the solution. Social marketing and mass media, applied for the first time, modernized nutrition education and created demand via commercial advertising, radio and movie shorts.⁴⁵ The U.S. Government's 1968 annual William A. Jump Award for Exemplary Service in Public Administration was a tribute to the USAID office in India's nutrition staff working on the famine and its related nutrition initiative.⁴⁶

REACHING THE PRESCHOOL CHILD WITH NUTRITION SERVICES

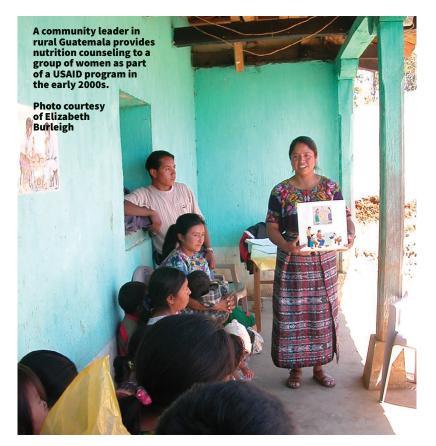
Community-based, integrated nutrition services reached preschool-age children and pregnant and lactating women with USAID food supplements, nutrition counseling and health care. Project Poshak in Madhya Pradesh (1971-1975) demonstrated the benefits of a weekly take-home food delivery system for achieving higher coverage of the most vulnerable children less than 3 years of age compared to the more traditional on-site daily feeding at clinics.⁴⁷ USAID assistance to innovative community nutrition programs informed the Government of India's national preschool feeding program, known as the Special Nutrition Program, and later, India's now-famous national Integrated Child Development Services (ICDS) scheme, which began small in 1975 and, as of 2018, was the largest nutrition program in the world, having expanded massively to cover populations in need. USAID provided food and technical assistance to the ICDS through 2006, after which the Indian government covered the full costs and food needs of the program.⁴⁸



The learning curve at the startup of USAID's nutrition programming was greatly accelerated by its field presence in many countries, carrying out large-scale maternal and child feeding and health activities. Implementing partners, most notably large U.S. NGOs, and host governments gained extensive applied nutrition experience that advanced worldwide learning on how to deliver effective services. Among the initial country programs, India, the site of USAID's first support for a national nutrition program, led the way by rapidly providing invaluable experience to inform both the Agency's and the global community's nutrition efforts. In the early years at the central level in Washington, D.C., USAID had a large number of smaller, more specialized nutrition projects and additional staff to manage them, whereas since the 2000s, the tendency has been to consolidate the portfolio into a few, large, multipurpose projects managed by few staff. These global projects provide technical assistance to country programs and engage in research and development to contribute guidance on state-of-the-art innovations for international nutrition programming. USAID's nutrition priorities are shaped by country needs and requests, new scientific discoveries, evidence of what works and what does not, neglected problems and new nutrition concerns and needs. These factors have contributed, in turn, to decisions to support integrated projects that address all or most of the Essential Nutrition Actions, or to fund specialized projects that focus intensely on advancing coverage of one intervention (e.g., breastfeeding promotion or vitamin A supplementation).

Nutrition Investments

The U.S. Government, through USAID, has made substantial commitments to and progress toward improving nutrition through maternal and child health, emergency and food assistance and agriculture and food security programming, dating back to the start of USAID's nutrition investments in the 1960s. From 1969 to 1973, USAID's average nutrition budget was \$11.3 million⁴⁹ per year (excluding food and emergency assistance).⁵⁰ The small, budding nutrition sector received only



1 percent of USAID's total budget for health, population and nutrition.⁵¹ Nevertheless, these nutrition investments had an impact due to a strategic focus on influencing policy to achieve nutrition objectives, especially through the health and agriculture sectors.

In 1974, with the U.S. pledge to increase global nutrition and food production investments at the World Food Conference, USAID's nutrition budget more than doubled.⁵² Conference commitments led to a steady rise in USAID's nutrition funding, primarily from the agriculture account.⁵³ The nutrition budget grew further with USAID's Child

Survival Initiative in the mid-1980s, which provided a major funding increase for the most cost-effective, life-saving health interventions, including nutrition, and especially micronutrients. A new child survival and health funding account was also created and from 1986 to 2009, the majority of USAID's nutrition activities were funded through this account.⁵⁴

In 2010, USAID began allocating funds specifically for nutrition, as part of the overall health fund, rather than nutrition work being done within the

maternal and child health budget. USAID's average annual total nutritionspecific budget continued to grow as the Agency enhanced support for improving nutrition through its global health and Food for Peace programming as well as through Feed the Future, the U.S. government's global hunger and food security initiative.⁵⁵ During this same period, with the addition of International Disaster Aid cash to the Food for Peace budget and increasing support for the use of local and regional procurement as well as cash transfers and vouchers, the Food for Peace program increased its investments in nutrition-specific and nutrition-sensitive activities in humanitarian contexts to over \$3 billion annually.

Since 2010, 80 percent of USAID's annual nutrition-specific health funds are managed at the country level, while 20 percent are managed by the Agency's headquarters, with the latter's focus being on key global issues, such as improving nutrition data quality and increasing program effectiveness through implementation research.⁵⁶ USAID's country program nutrition budgets are used to implement multi-sectoral nutrition activities alongside, and leveraging investments from, other health investments, as well as Feed the Future. There is also close coordination with Food for Peace activities, particularly in long-term rehabilitation and reconstruction programs. USAID's funding for nutrition programming is just one portion of a larger global effort to reduce all forms of malnutrition among high-burden countries. As detailed in the 2018 Global Nutrition Report,⁵⁷ international funding for basic nutrition, or nutrition-specific, aid by donors and multilateral agencies amounts to an estimated U.S. \$856 million per year (based on 2016 data). This equates to less than one percent of global oversees development assistance.⁵⁸ However, none of these results take into account the expansive investments in nutrition-sensitive programming, for which the United States has been the largest donor for the past few years.

While USAID and other international donors' funds have facilitated significant advances in improving nutrition globally, there remains an existing gap of \$70 billion⁵⁹ to achieve the globally agreed-upon World Health Assembly Nutrition Targets by 2025.^{60,61} Accelerating progress toward these targets will require action from all global and local stakeholders, with countries taking the lead on improving their own nutrition status. In addition, through involvement in and coordination with key platforms, such as the Scaling Up Nutrition (SUN) Movement, USAID is supporting increased national-level commitment and investment in nutrition. USAID staff and programs also work closely with government partners to support the development and implementation of nutrition policies and strategies, with an emphasis on domestic resource mobilization and accountability. USAID is committed to supporting host country ownership of nutrition, including through strengthening the capacity of local organizations and leveraging their investments in nutrition, looking toward a day when countries can transition out of the need for development assistance.