# THE FIRST ONE THOUSAND DAYS: DEVELOPMENT AID PROGRAMS TO BOLSTER HEALTH AND NUTRITION

## HEARING

BEFORE THE

SUBCOMMITTEE ON AFRICA, GLOBAL HEALTH, GLOBAL HUMAN RIGHTS, AND INTERNATIONAL ORGANIZATIONS

OF THE

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# THE FIRST ONE THOUSAND DAYS: DEVELOPMENT AID PROGRAMS TO BOLSTER HEALTH AND NUTRITION

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**TUESDAY, MARCH 25, 2014**

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON AFRICA, GLOBAL HEALTH,
GLOBAL HUMAN RIGHTS, AND INTERNATIONAL ORGANIZATIONS,
COMMITTEE ON FOREIGN AFFAIRS,
*Washington, DC.*

The subcommittee met, pursuant to notice, at 3 o'clock p.m., in room 2172 Rayburn House Office Building, Hon. Christopher H. Smith (chairman of the subcommittee) presiding.

Mr. SMITH. The subcommittee will come to order. Good afternoon. First of all, I want to apologize for the delayed opening or convening of this hearing. We did have a markup that was only put on yesterday and it included the Ukraine Support Act and two other bills. And the debate went late and then we had the votes that just completed. So we have no further votes, I believe, scheduled so we will not be interrupted. But again, I apologize to all of our witnesses and everyone who has taken the time to be here that we were late in beginning.

We are here today to address the topic of "The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition."

There is perhaps no wiser investment that we could make in the human person than to concentrate on ensuring that sufficient nutrition and health assistance is given during the first 1,000 days of life; 1,000 days that begins with conception, continues throughout pregnancy, includes the milestone of birth and then finishes at roughly the second birthday of the child.

Consider this: According to the United Nations Children's Fund, 6.6 million children died before reaching their fifth birthday in 2012; an average of roughly 18,000 daily deaths among children under 5 years old. Among the factors contributing to such a grim tally are malnutrition, obstructed newborn breathing, pneumonia, and diarrheal disease. All these, and other causes, are ones which we are capable of addressing, if we apply resources and political will to the problem.

Today's hearing complements various hearings our subcommittee with jurisdiction over global health has held over the past several years. It was inspired in part by what I experienced at the U.N.

Millennium Development Goals Summit in New York in September 2010.

There I had the privilege of participating in an extraordinary roundtable meeting of First Ladies of African nations that concluded with the signing of a declaration to end maternal and child malnutrition, with particular emphasis on "the first 1,000 days in the life of a child from the moment of conception."

The roundtable focused on that great killer of children, malnutrition. The roundtable concluded that undernutrition alone remains "one of the world's most serious, but least-addressed problems—killing an estimated 3.5 million children annually." In other words, food insecurity is a plague which ravages our future, ending the lives of little boys and little girls throughout the developing world well before their time. The roundtable also pointed out that 60 percent of the world's chronically hungry are women.

According to the Global Alliance for Improved Nutrition, or GAIN, cosponsor of the roundtable, and as a matter of fact, the folks that invited me to be there that day, malnutrition's most devastating impact is actually in the womb, often causing death or significant mental and physical disability to the precious life of an unborn child.

Children who do not receive adequate nutrition in utero are more likely to experience lifelong cognitive and physical deficiencies, such as stunting. UNICEF estimates that one in four children worldwide is stunted due to lack of adequate nutrition.

Children who are chronically undernourished within the first 2 years of their lives also often have impaired immune systems that are incapable of protecting them against life-threatening ailments, such as pneumonia and malaria.

Adults who were stunted as children face increased risk of developing chronic diseases, such as diabetes, hypertension, and heart disease. Mothers who were malnourished as girls are 40 percent more likely to die during childbirth, experience debilitating complications like obstetric fistula, and deliver children who perish before reaching age 5.

We must take a holistic, mother-and-child approach to the problem. By helping women throughout pregnancy receive adequate nutrition and supplemental micronutrients, such as iodine, Vitamin A, and folic acid, and ensuring that they are well-fed while nursing, both children and mothers thrive.

In addition to addressing undernutrition, there are a number of other interventions that can make an impact. About 44 percent of all under-5 deaths occur within the first month of life, during the neonatal period. Among newborns, the greatest threats to survival are prematurity and failure to breathe at birth, known as birth asphyxia. Following the neonatal period through the first 5 years of life, child survival is imperiled primarily by pneumonia and diarrheal disease.

The solutions are often readily at hand. Most neonatal deaths can be prevented at little to no expense with neonatal resuscitation, prompt administration of antibiotics, and nutrition supplementation. Inexpensive interventions like oral rehydration therapy, which cost 5 to 10 cents per dose, are also effective in curbing diarrheal disease. I would note parenthetically in the early 1980s

I sponsored the amendment called the Child Survival amendment which provided $50 million for vaccinations, breastfeeding promotion, growth monitoring, and ORT (oral rehydration therapy). I will never forget Jim Grant, the famous director of UNICEF, who always had an oral rehydration packet of salts in his pocket and he was instrumental in promoting this child survival revolution in saying for a couple of cents per day we can save the life of a child.

We must never pit the survival of the child against that of the mother, as both are complementary objectives. Curbing child mortality in the womb and at birth also goes hand-in-hand with reducing maternal mortality.

Best practices to radically reduce maternal mortality can and must be life-affirming, protecting from harm both patients, the mother and the child in the womb. Of course, we have known for more than 60 years what actually saves women's lives: Skilled birth attendants, treatment to stop hemorrhages, access to safe blood, emergency obstetric care, antibiotics, repair of fistulas, adequate nutrition, and pre- and post-natal care.

Political will is absolutely essential to address this problem and to make sure it is adequately resourced. One thing that I hope this hearing will bring to light, that such interventions in the first 1,000 days of life are not only morally imperative but also cost-effective as well.

One group of Nobel laureate economic experts ranked efforts to address undernutrition as the single-most cost-effective investment in foreign aid. The economists concluded that each dollar spent on reducing undernutrition could yield a $30 benefit.

One other thing I hope this hearing will highlight is the importance of faith-based organizations in fighting this battle, and to underscore the need for our aid programs to work with such organizations. We will hear from representatives from two such organizations, Food for the Hungry and World Vision, to discuss their insights.

Faith-based organizations play an absolutely critical role in places such as Africa, which one can say is a faith based continent. Matthew 25 notes, one of my favorite Scriptures, "When I was hungry, you gave me food, when I was thirsty, you gave me drink, when I was naked, you clothed me," inspires these and other great organizations such as Catholic Relief Services, just as it inspires the work of this subcommittee and so many Members of Congress.

For example, in 2004, along with my colleague on the Foreign Affairs Committee, the former chair, Ileana Ros-Lehtinen, I sponsored an obstetric fistula resolution, which passed the House of Representatives, seeking to address one debilitating factor that wreaks havoc on the lives of mothers and their children. I would note that Kent Hill, when we got it past the House, we went over to USAID, Kent Hill, who is sick from a recent trip to Africa and cannot testify today, he and I had a meeting. I said, look, you have the authority already to initiate an obstetric fistula program. It has already passed the House, use this as a framework. He did and well over 20,000 women have had fistula repairs as a direct result of the USAID's program which has been highly successful.

The following year after I offered that bill, I was able to amend the Foreign Relations Authorization Act to fund 12 centers in the

developing world to treat and prevent obstetric fistula, as well as to provide funding for skilled-birth attendants. Importantly, I was also able to remove restrictive language from the original bill that would have prohibited faith-based hospitals in the developing world from receiving funding. Again, I must stress, that it is these faith-based organizations that are doing yeoman's work on the ground to address child and mother mortality, and they must be supported.

In this Congress I introduced legislation, H.R. 3525, the International Hydrocephalus Treatment and Training Act. Hydrocephalus, or "water on the brain," is a disease which affects three to five out of every 1,000 newborns in developing countries, who are either born with it or acquire it due to neonatal infections in the first few months of life. For such children, it is often a death sentence and a very painful one at that. Doctors, even assuming there is even a doctor around, often do not know how to treat it. Moreover, if they do treat and use the traditional surgical procedure which requires the life-long use of a shunt, such shunts often become infected, leading to death a few years later.

Our bill would train doctors in Africa in a new and proven technique which does not require a shunt. It was developed by Dr. Benjamin Warf of Harvard, a noted neurosurgeon. And it is effective in at least ⅔rds of the cases of infants with hydrocephalus. It is ideally suited to conditions in the developing world. The amount required to make a difference in the lives of these children and their parents is a paltry sum, an estimated $15 million over 3 years. I invite my colleagues to consider joining that legislation and I would ask, we have asked repeatedly that USAID look at doing it administratively. You don't need to be told, you can just do it.

Initiatives such as these are ones which should gather support across the political aisle. They are life affirming, and can save lives. And I would just note parenthetically, in Cure International's effort in Uganda, in excess of 5,000 children who otherwise would have been dead and again, having suffered a very painful death, are alive. And we had one of the neurosurgeons testify before our committee from Africa, because part of the bill's hope is to train neurosurgeons throughout Africa and to build out that capacity because there are many diseases of the brain that require that kind of expertise and there is an absolute dearth of such expertise in Africa and we want to change that.

I would like to yield to my friend and colleague, Ms. Bass, for any opening comments.

Ms. BASS. Thank you, Mr. Chair, for holding today's hearing and also for yesterday's meeting that we had with African Ambassadors. I thought it was very, very helpful. I also want to offer a word of thanks to today's witnesses, including the Acting Administrator for USAID's Bureau on Food Security and a wide range of academics, physicians, and non-governmental agency leaders focusing on maternal and public health, nutrition, and economic development.

I look forward to hearing perspectives from these expert panelists as it relates to the roles of maternal health, nutrition, and food security in ensuring the health of mothers and children in the first 1,000 days of life and beyond.

As Chairman Smith has pointed out, the global scale of child mortality is staggering with 6.6 million children dying before their fifth birthday in 2012 alone. While efforts to address this challenge have produced significant progress over the past two decades, critical work remains to be done. This is particularly evident in sub-Saharan African nations where progress in the reduction of childhood deaths has shown the least progress.

The good news is that sub-Saharan Africa's progress in curbing childhood deaths related to infectious ailments are less prominent due to expanded immunization programs and increased success in the prevention of diarrhea and malaria. However, the issues of poverty, inadequate access to health care for expectant mothers and their children, and undernutrition continue to sustain high rates of childhood deaths continent-wide. This phenomena is particularly pronounced in Central and West Africa, the region which accounts for the majority of childhood deaths on the continent. Women in the Central and West African regions face the highest risk of maternal mortality and children in the regions are also impacted by the high prevalence of stunted growth.

While serious challenges remain, I applaud international efforts to curb childhood mortality including the U.N. Millennium Development Goals related to improving maternal and child health. I also recognize the critical contributions of several of the United Nations' largest collaborative efforts including the Scaling Up Nutrition Movement, the Zero Hunger Challenge, and the Integrated Global Action Plan for the Prevention of Pneumonia and Diarrhoea.

As we prepare to hear from today's witnesses, I hope we can learn critical lessons from their vast experiences and use them to increase support for the most effective measures of improving maternal and child health in the first 1,000 days of life.

I would also hope that these lessons lead to the formulation of new ways to address the health concerns of mother and children specifically in the sub-Saharan African region where they are at greatest risk. As a former healthcare professional, I also know that there are several other contributing factors to maternal death, prematurity, and childhood death and one of the factors that I am very concerned about is child marriage, is girls having babies far too young, their bodies not being able to sustain a pregnancy or them having consequences like fistula.

The other issue that contributes to maternal death is the inability of many African women and other women in developing countries to have access to birth control and so they cannot control the spacing between their pregnancies. If you have too many pregnancies, deliver too many babies too early before the body has completely matured, you are at risk of maternal death, as well as you are an increased incidence of prematurity and contributes to the death before 1,000 days. So all of these issues I would appreciate hearing about from our witnesses today. Thank you.

Mr. SMITH. Thank you, Ms. Bass. I would like to now introduce our very distinguished first witness and thank her for being here and for her work and that is Tjada McKenna who is Deputy Coordinator for Development for Feed the Future, the U.S. Government's global hunger and food security initiative, as well as the Acting Assistant to the Administrator in USAID's Bureau for Food

Security. Ms. McKenna coordinates implementation of Feed the Future across the U.S. Government, oversees its execution and reports on results, and leads engagement with external community to ensure that food security remains high on the development agenda.

Ms. McKenna joined USAID in 2010. She previously held senior positions at the Bill & Melinda Gates Foundation, Monsanto, McKinsey & Company, and American Express as well as GE.

Ms. McKenna, the floor is yours.

**STATEMENT OF MS. TJADA D'OYEN MCKENNA, ACTING ASSISTANT TO THE ADMINISTRATOR, BUREAU FOR FOOD SECURITY, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT**

Ms. MCKENNA. Thank you very much. Good afternoon. I am delighted to be here today to talk to you about USAID's nutrition efforts. I first want to recognize you for your strong leadership in addressing global child and maternal nutrition. We also recognize the 2013 congressional resolution put forward by Congresswoman Schultz and Congressman Diaz-Balart supporting U.S. Government global nutrition efforts.

As you have heard, at least 165 million children worldwide are stunted. Stunting limits the potentials of individuals, communities, and economies to grow and thrive, costing low- and middle-income countries up to 8 percent of their economic growth potential. This is unacceptable. We have the tools and technologies to make a difference and we are sharpening our focus to ensure a well-coordinated approach to reach our goals of reducing extreme poverty and hunger. And we are doing so with a particular focus on the 1,000 day window from pregnancy to a child's second birthday, which is critical to ending preventable child and maternal deaths.

Thanks in large part to new evidence that has deepened our understanding about the importance of nutrition in early life, nutrition has been the focus of recent and unprecedented global attention. Now is the time to continue this prioritization and to fuel the tremendous momentum of just the past few years. This momentum includes major developments such as the launch of a platform known as Scaling Up Nutrition or SUN. SUN is a partnership between the U.N., civil society, the private sector, donors and developing country governments to support country-led efforts to reduce undernutrition. Since its launch in 2010, 47 countries have joined and USAID is proud to serve as a donor convener providing focused support in six of those countries as well as leadership at the global level.

In 2010, the U.S. Government and former Irish Foreign Minister Micheá Martin launched the 1,000 days partnership, a partnership of governments, civil society, and the private sector to promote targeted action and investment in nutrition. The 1,000 days partnership also supports SUN.

Last June marked a banner moment for global nutrition. USAID was proud to join the Global Nutrition Summit in London in advance of the G8 where the U.S. Government announced an anticipated $1 billion for direct nutrition interventions and $9 billion worth of attributed nutrition sensitive investments from 2012 to 2014. We also signed the Nutrition for Growth Compact which mo-

bilized nutrition funding commitments from G8 donors and civil society and reaffirmed our support of the World Health Assembly nutrition targets for reducing undernutrition by 2025 for women and children including a 40 percent reduction in stunting.

USAID is taking a strong leadership role in these international efforts, both within the U.S. Government and at the global level. We are taking an evidence-based approach to inform and improve our programming including taking into account updated research analysis and recommended interventions and approaches featured in the landmark June 2013 Lancet series on maternal and child nutrition.

USAID promotes nutrition through the Feed the Future and global health inter-agency initiatives, the Food for Peace development and emergency programs, and our humanitarian assistance efforts. Our goals are to reduce stunting by 20 percent in Feed the Future's zones of influence and Food for Peace development programs and where possible, to maintain global acute malnutrition rates below 15 percent in times of crisis.

Led by USAID, the Presidential Feed the Future initiative addresses nutrition at the goal level and reduces undernutrition and hunger by improving access to nutrition services, clean water, and support for agriculture value chain activities that include nutrient-dense crops, and we are achieving impact. In 2013, Feed the Future, in collaboration with the Global Health Initiative reached more than 12.5 million children with nutrition interventions.

Beyond Feed the Future, to help maintain global acute malnutrition rates below 15 percent in times of crisis and to support nutrition among the most vulnerable populations, especially during the first 1,000 days, USAID is seeking to reform how it delivers food aid. We preposition in-kind food aid stocks near food crises and now provide cash under certain circumstances to purchase local and regional food.

By enacting the food aid reform requested in the 2015 budget to allow 20 percent of Title II food aid funding to be used for flexible emergency responses, USAID programs will be able to help about 2 million more people in crises without additional resources. These reforms will allow USAID to expand the use of local and regional purchase and successful innovative approaches such as food vouchers which are often cheaper than in-kind food aid and also allow beneficiaries to select their own food in local markets.

In addition, the Office of Food for Peace changed its approach to nutrition starting in 2006 to focus more on prevention of undernutrition during the 1,000 day window. USAID also continues to support research on various types of specialized foods and on updating and improving existing products based on evolving nutritional evidence. To further improve the integration and effectiveness of USAID nutrition programming across all of our efforts we are developing a multi-sector nutrition strategy that is near completion.

The USAID nutrition strategy addresses the underlying causes of poor nutrition by promoting the scale-up of proven, cost effective nutrition interventions including both nutrition-specific and nutrition-sensitive activities and by linking nutrition investments in agriculture, food security, health, water, sanitation and hygiene, as

well as more humanitarian and development contexts in a more integrated manner, the USAID nutrition strategy will enable us to address nutrition with more discipline than ever before. We will develop country nutrition targets that align with national plans, set country-specific targets and track and report on progress.

The USAID strategy is also informing a coordinated U.S. Government nutrition plan which is also in development. This plan will, for the first time, bring together all of the U.S. Government agencies working in global nutrition to maximize impact through better coordination of U.S. Government global nutrition investments.

There are continued efforts to coordinate and integrate multi-sectoral programs across USAID offices and bureaus and strengthen program quality using new findings. We are better addressing the complex underlying causes of stunting. We are also making meaningful contributions toward achieving the World Health Assembly 2025 nutrition targets and reducing undernutrition during the first 1,000 days worldwide.

I would like to thank Congress again for your leadership on this issue. We look forward to working with you to continue progress toward a vision of a healthier, more prosperous world. Thank you.

[The prepared statement of Ms. McKenna follows:]

Testimony of Tjada McKenna
Acting Assistant to the Administrator of the
United States Agency for International Development Bureau for Food Security and
Deputy Coordinator of the Feed the Future Initiative

Hearing Before House Committee on Foreign Affairs
Subcommittee on Africa, Global Health, Global Human Rights, and
International Organizations

"The First 1,000 Days:
Development Aid Programs to Bolster Health and Nutrition"

March 25, 2014

Thank you, Mr. Chairman, Ranking Member Bass, and Members of the Subcommittee, for having me here today. I am delighted to be here to talk about the nutrition efforts of the U.S. Agency for International Development (USAID).

First, I want to recognize Congress for the strong leadership it has demonstrated in addressing the challenge of global child and maternal nutrition. As you may know, at least 165 million children worldwide are stunted, or have short stature resulting from chronic under-nutrition. New evidence shows that the effects of stunting are even more far reaching than we realized, with implications on many aspects of the lives of individual survivors and the countries they live in. Stunting leads to irreversible cognitive impairment and poor health over the lifespan. Each year, under-nutrition in all forms is the underlying cause of 3.1 million child deaths or 45% of all child deaths worldwide. It leads to higher health care costs, increased mortality and lower productivity. On a national scale, widespread under-nutrition undermines economic development, costing low and middle income countries up to 8% of economic growth potential. Our goals of reducing extreme poverty and hunger as well as ending preventable child and maternal deaths cannot be met without addressing nutrition, especially during the critical 1,000 day window, from a mother's pregnancy to -her child's second birthday. We also strive to reach women with nutrition interventions even before they become pregnant.

This is a unique time for nutrition, and in the last few years, global nutrition has received unprecedented attention as new research and evidence have contributed to a better understanding by the international development community of the importance of good nutrition in early life for forming the basis for healthy

individuals and productive societies. A few major recent developments in particular are fueling momentum for nutrition:

- The *Scaling Up Nutrition Movement* (or SUN) was launched in 2010 as a platform for partnership between the UN, civil society, the private sector, donors and developing country governments to support country-led efforts to reduce under-nutrition, especially during the 1,000 days window. Today, 47 countries have joined the SUN Movement, indicating their commitment to improving the nutrition and health of their citizens. USAID is a strong supporter of the SUN Movement, serving as a donor-convener in 6 countries and providing both financial and technical support and playing a leadership role at the global level.
- In 2010, former Secretary of State Hillary Rodham Clinton and former Irish Foreign Minister Micheál Martin launched the 1,000 Days Partnership, which brings together governments, civil society and the private sector to promote targeted action and investment to improve nutrition for mothers and children during the 1,000 day window. The efforts of the 1,000 Days Partnership also support SUN.
- The *World Health Assembly* set nutrition targets for reducing under-nutrition by 2025 for women and children, including a 40% reduction in stunting. In June 2013, a nutrition summit in London culminated in the *Nutrition for Growth Compact*, which led to increased nutrition funding commitments from G8 donor governments and civil society. At the summit- the U.S. government announced that, from 2012 to 2014, we anticipated providing more than $1 billion for direct nutrition interventions and $9 billion worth of attributed nutrition-sensitive investments. Together we estimate that these investments will result in 2 million fewer stunted children.
- In June 2013, the new *Lancet Series on Maternal and Child Nutrition* provided updated research and analyses and made recommendations for nutrition interventions and approaches. New information from this series, particularly on how interventions in other sectors can have an impact on nutrition, is already helping to inform and improve USAID programming.

USAID is taking a strong leadership role in these international efforts, both within the U.S. Government and at the global level.

USAID promotes nutrition through the Feed the Future and Global Health interagency initiatives, the Food for Peace Development and Emergency programs, and through our humanitarian assistance efforts. Our goals are to reduce stunting by 20% in Feed the Future zones of influence and Food for Peace Development

programs and, where possible, to maintain global acute malnutrition rates below 15% in times of crisis through humanitarian programs.

To reinforce these efforts, USAID is in the final stages of developing a multi-sector nutrition strategy which will improve the integration and effectiveness of nutrition programming across all our bureaus and missions. Under our strategy, USAID will address nutrition with more discipline than ever before, developing country nutrition frameworks (based on national plans), setting country-specific targets, and tracking and reporting on nutrition progress. Nutrition programs will be integrated across humanitarian and development contexts and coordinated with those of other U.S. government agencies active overseas. The USAID nutrition strategy addresses the underlying causes of poor nutrition during the first 1,000 days by promoting the scale-up of proven, cost-effective nutrition interventions. These include both nutrition-specific (those that directly address under-nutrition) and nutrition-sensitive (such as hygiene, that indirectly affect nutrition outcomes) activities. USAID nutrition investments link programs in agriculture and food security, health, and water, sanitation and hygiene in a more integrated manner. Nutrition is also an integral part of USAID's resilience strategy.

The USAID strategy is informing a broader U.S. Government-wide nutrition coordination plan, which is currently being developed. For the first time, the U.S. Nutrition Coordination Plan will bring together all the U.S. government agencies working in global nutrition with the purpose of maximizing impact through better coordination of U.S. Government global nutrition investments.

USAID leads Feed the Future, the President's global hunger and food security initiative. This is the first Presidential Initiative to address nutrition at the goal level. Feed the Future reduces under-nutrition during the first 1,000 days window and hunger by improving access to nutrition services, clean water and support for agriculture value chain activities that include nutrient-dense crops.

USAID's integrated, multi-sectoral approach has led to tangible results:

To address water and hygiene-related factors associated with stunting, USAID has helped install more than 155,000 "tippy taps" (water-saving, hand washing device that makes clean water available at the household level) throughout Bangladesh. They help reduce diarrhea and other waterborne illnesses among young children, which in turn help promote healthy nutrition. At the same time, USAID has also supported nearly 91,000 women farmers in homestead gardening, which means improved access to nutrient-dense foods and increased income for Bangladeshi women and their children.

In Tanzania, we take a three-pronged approach to help resolve common micronutrient deficiencies that contribute to stunting. USAID trained flour millers to fortify their products with vitamins and minerals, and strengthened the capacity of 405 small and medium-scale maize millers and processing plants to safely fortify maize flour. To complement these efforts, USAID provided 1.6 million micronutrient powder sachets to help prevent stunting and micronutrient deficiencies among children 6-24 months old. USAID also promotes bio-fortified crops like the orange-fleshed sweet potato, green leafy vegetables and small livestock. Moreover, to further strengthen results like these, through Feed the Future's nutrition innovation labs, USAID supports research on nutrition-sensitive agriculture and their work is informing a growing number of Feed the Future programs. Feed the Future also works with the private sector to increase the level of responsible nutrition investments. In 2013 alone, the US government, through Feed the Future in collaboration with the Global Health Initiative reached 12.5 million children with nutrition interventions.

USAID supports the Global Alliance for Improved Nutrition in its Marketplace for Nutritious Foods program, which increases private sector investment and marketing of nutrient-dense foods. In Mozambique, for example, the Marketplace has been working with producers and food processors on a locally made peanut butter to support market development as well as food safety and quality control.

Beyond Feed the Future, to help maintain global acute malnutrition rates below 15% in times of crisis and to support nutrition in humanitarian settings and among the most vulnerable populations, especially during the 1,000 days window, USAID is seeking to reform the way it delivers food aid. In certain emergencies and under certain circumstances, USAID now provides cash to purchase local and regional food near food crises, which is on average much timelier and cheaper than in-kind food aid and also stimulate economic growth in developing countries. By enacting the food aid reform that we have requested in the 2015 Budget to allow 25 percent of Title II food aid funding to be used for flexible emergency responses, USAID programs will be able to help about 2 million more men, women and children in emergency crises without additional resources. These reforms will allow USAID to expand the use of local and regional purchase as well as innovative approaches, such as food vouchers, that are often cheaper than in-kind food aid and also allow beneficiaries to select their own food in local markets. In addition USAID continues to support research on various types of specialized foods as well as work on updating and improving existing products based on evolving nutritional evidence.

Through USAID's continued efforts to coordinate and integrate multi-sectoral programs across USAID offices and bureaus and strengthen program quality using new findings, we are better addressing the complex underlying causes of stunting. We are also making meaningful contributions toward achieving the World Health Assembly 2025 nutrition targets and reducing under-nutrition during the first 1,000 days worldwide.

I would like to thank Congress again for the leadership you are showing on this issue. We look forward to working with you to make progress on ending child and maternal malnutrition.

Mr. SMITH. Ms. McKenna, thank you very much for your testimony and for laying out and without objection your full statement will be made a part of the record and any other supplemental items you might want to include in the record.

Could you give us an idea of when the strategy that you are developing, the comprehensive strategy might be available? Is it imminent?

Ms. MCKENNA. Yes. We expect it very shortly. All along we have done a series of consultations with NGOs and other civil society groups. We have two more consultations to go. You are likely to see something in the May–June time frame.

Mr. SMITH. The collaboration and the support for faith-based organizations, particularly in Africa, which is a continent of faith, yesterday at the closing with the Ambassadors, I mentioned the importance of that. And several of the Ambassadors came up to me afterwards and said you couldn't have stated it more strongly and more accurately, that if you want to mitigate the healthcare crisis that is being experienced in Africa, you have got to include robustly faith-based organizations.

How do you go about doing that, like with World Vision and some of the other groups? Could you perhaps provide us some insights? Is the trendline to do more of that or keep it the same or less?

Ms. MCKENNA. Faith-based organizations such as Catholic Relief Services, World Vision, ADRA, are critical implementing partners for many of our efforts. We have long been working with them. And in fact, in the area such as family planning and mother-child health, they have been critical partners and critical to our success in working with that community. So we intend to continue the deep partnership and relationships that we have had with faith-based organizations to expand them where appropriate, where the programming warrants it, and to continue that open and strong dialogue.

Mr. SMITH. About 1,400 kids die daily from diarrheal diseases. There was almost like a gee whiz factor in the beginning days of the child survival revolution, a simple mixture of salt and glucose could save a life. And I remember part of that mantra was that a child may get diarrheal disease five or six times during the course of the year, weakening them every time, sometimes to the point where they die. Are we making progress on that? I know we had a very effective program in Egypt, for example, and some other countries as well. Has the impetus been kept on that?

Ms. MCKENNA. Yes, as you mentioned very simple interventions have had real effect and impacts on decreasing infant mortality because of diarrheal diseases. USAID global child survival is something that is at the core of our global health initiatives. It is continuing to provide interventions to alleviate the impacts of diarrheal diseases as an integral part of that.

Mr. SMITH. You know since the U.N. and especially I mentioned the roundtable, as a matter of fact, Lady Odinga was there among many other First Ladies. One of the emphases that we have all understood with that first 1,000 days from the moment of conception was the brain growth area, that if you don't get that right, the ability of that child cognitively to reach his or her potential is greatly

reduced. Are you finding a growing understanding of why this is so? Every dollar we spend in this area is a dollar that pays off in that child's life as he or she become an adult, like few things that we could possibly do.

Ms. MCKENNA. Yes, not only pays off, but the impact of a child's growth of decreased brain development, the child never recovers those gains and never recovers. And those are losses to society permanently. The Scaling Up Nutrition movement is a multi-sectoral, multi-partner movement that countries themselves have to encourage. So we are proud to say that over 47 countries have signed up as SUN countries which means that they understand the importance of maternal and child nutrition and are committed to setting their own goals and targets and addressing it themselves with their own resources in partnership with local organizations, donors, and other partners.

Mr. SMITH. How many countries do we have an arrangement with? I was actually in Guatemala the week when USAID signed an agreement and dedicated our resources to assisting them on the first 1,000 days. How many other countries do we have an arrangement with?

Ms. MCKENNA. There are six countries where we are the lead donor partner in SUN, but we are active—we are part of the global convening for SUN. There are 19 Feed the Future focus countries. One of the top line goals in Feed the Future is a reduction in undernutrition and in all 19 of those countries you see focus on both nutrition-specific and nutrition-sensitive programming. On top of that, our Global Health Initiative focuses on there are an additional set of countries where we target our nutrition funding. But because these investments, as you have said, are so cost efficient and so impactful, we have really focused our funding on those countries where the burden is greatest because we want to bring these numbers down significantly.

Mr. SMITH. Thank you. Dr. Perry from Johns Hopkins will testify later and in his written submission points out that there are an estimated three million stillbirths around the world each year; 99 percent of which occur in low-income countries. He also points out there are 3.8 million live-born children who die each year before the age of 2 and three fourths of these deaths occur during the first month after birth. And then he bottom lines and says the tragedies of the great majority of these deaths can be readily prevented at low cost.

Does that number comport with your understanding of what we are talking about in terms of the loss of life? Again, is there an understanding that with a little more oomph and effort a lot of these lives could be saved?

Ms. MCKENNA. Yes, we would have to get back to you to confirm the exact numbers, but we agree. There is an understanding that very simple intervention such as immediate and exclusive breastfeeding from birth can have a big impact and prevent the loss of life during the early days.

Mr. SMITH. During the war in El Salvador when the FMLN and the government were at great odds and it was war, Napoleon Duarte, then the President of El Salvador, negotiated a cease-fire, a Day of Tranquility, as they called it, to vaccinate the children

against the leading killers of children. And I traveled down myself with Jim Grant and others from UNICEF and one of the biggest takeaways and that was in the early '80s, that I got from that was the importance of the pulpit, that if you want to drive people to low-cost and highly-efficacious interventions, you need more than just a community health center or a doctor or others, even if they go door to door, amplifying the message that you need to do this for yourself and your children.

Do you find that USAID, again working with faith-based groups are able to effectively utilize that venue to get the message out? Because one of the things, again with vaccinations, was coming back for that second shot after the child developed a fever and they thought oh wait, this isn't what I bargained for. No, that is part of what happens in a small percentage of those who get a vaccination.

Ms. MCKENNA. Many of the solutions to these are simple behavior changes and as we know from our personal lives, behavior change is something that is very difficult to do. And so you have to go and work with organizations and people in institutions that people trust. And oftentimes, as you said, that does include their ministers and their church community. So working with them, bringing them into the coalition and training with them remains an integral part of what we do.

Mr. SMITH. Let me just ask you and I know if you had your way personally, the number would be a blank check, but we all know whoever runs the White House, there is always OMB to deal with and I remember when I chaired Veterans, I was always at odds with OMB, not with the VA because VA wanted to do more in almost every instance. But there is a proposed 2015 cut of about 12 percent and maybe we are misreading it, but in nutrition programs. I am wondering is it found somewhere else in the budget or is this just some reality that we have to deal with here and look to up it.

I know in the '80s, it was almost like a reflexive thing where OMB would cut UNICEF only to have Congress put back the money each and every year. But the 12 percent cut, are we missing something or do we need to make sure that we work with you and our colleagues on the Appropriations Committee to make sure that there is no diminution of those monies.

Ms. MCKENNA. So even in a constrained budget environment, the President's Fiscal Year 2014 budget request demonstrates a firm commitment to nutrition and ending preventable child deaths. We are using as efficiently as possible existing funding authority and are leveraging across USAID funding. Part of what we are doing with the nutrition strategy is prioritizing nutrition outcomes across multiple streams of funding, including Feed the Future, multiple streams to get better, more efficient outcomes from that funding.

Mr. SMITH. Could you provide us, if you would, an analysis of what the cut would mean if it were to be implemented? And also, while you are doing that since you are being asked. I know OMB will probably react negatively to this, but what really is needed to do what has to be done, to really take this to the next level, to try to intervene so that those three million kids don't die at stillbirth. There will always be stillbirths but it doesn't have to be as high,

as well as those who die in the first month and of course, how do we ratchet up this program? If you could provide us what we get for every extra dollar, it would make a huge difference.

Ms. MCKENNA. Right. Yes. We can provide you that analysis. And I should also mention that a critical part of this is different parties really coming together to solve the solution. So our funding actively works to leverage the funding of other donors with resources that countries, lower- and middle-income countries themselves put into this problem, as well as looking for ways to engage the private sector and appropriate response.

Mr. SMITH. I am all for partnership and leveraging, but if we had 12 percent more or even higher than that, the leveraging could be that much more effective, I would think. So if they could provide any of that, it will help in the process as we do the 2015 budget.

Ms. MCKENNA. We are happy to come back to the committee with that. Thank you.

Mr. SMITH. Thank you.

Ms. BASS. Thank you. I believe when you began to answer the chairman's questions, you made reference to how you work with faith-based organizations for family planning. And I wanted to know if you could elaborate a little more on that?

Ms. MCKENNA. Yes. So some critical things that we work on with faith-based organizations include some of the things that you alluded to in your remarks, actually. So birth spacing, delaying marriage, activities and behavior changes such as that to increase people's abilities to plan their families, to have children at appropriate times to optimize nutrition for both the mother and the child and to prevent situations that are negative. For example, when adolescent girls become pregnant, they end up competing with their child for resources for their own growth spurts. Or when children are spaced too close together, a mother's nutrition stores which are likely already depleted become even more and more depleted and so we work carefully with faith-based organizations on things like delayed marriage and child spacing to get optimal outcomes for mothers and children.

Ms. BASS. How do they go about their work, both the faith-based, as well as the secular organizations? How do they go about their work in a village in regard to family planning? Do they distribute birth control? Is it education? What specifically do they do?

Ms. MCKENNA. I think a lot of it is education, should be information about different behavior change, giving advice on different practices, things such as that.

Ms. BASS. And on the governance issue wherein some countries it is in the constitution that a girl, because I won't call a young lady, 8 years old, can get married. So I am wondering what is USAID doing in terms of educating different countries about raising the age in which females become sexually active?

Ms. MCKENNA. All of our investments kind of depend on an enabling environment that supports the development work that we do. So in our work on maternal-child health, one of the key things that we work with other actors to provide to governments is information and advice on policy reforms and data on the impact of those policies, what they are on children now and what they could be and how others have structured policies to achieve better results.

We also encourage our officers and our State Department and others to advocate on behalf of changes in those laws. But a lot of the policy support we do is providing data and evidence and helping provide the capacity to create alternative policies that will have better outcomes.

Ms. BASS. So do we work with—you said primarily education, but I don't recall if you answered me specifically on birth control.

Ms. MCKENNA. I am sorry, I didn't. I will have to get back to you. I am not—I don't oversee directly our maternal-child health area. So I just don't want to overstate anything.

Ms. BASS. And I am sorry to say that some countries seem to be going backward whether you are talking about LGBT issues and legislation that has been put forward in that regard or whether you are talking about nations that just recently said that a man could have as many wives as he wanted and he didn't even have to ask for permission. I can't imagine being given permission, but anyway. So when we go about our education work I am just hoping that we attempt to educate on that level as well, especially on the question of spacing births.

Ms. MCKENNA. Yes.

Ms. BASS. I spent many years also working in a neonatal nursery, working with premature babies, working in the labor and delivery room and seeing women, you know, it was—almost never happens in the United States. It is extremely rare for there to be a death of a mother. And to travel to sub-Saharan Africa and to be in Nairobi and see billboards where they were trying to do public education around maternal death and knowing that one of the reasons why maternal death is so high is women who cannot control when they are pregnant.

Ms. MCKENNA. I just got a note from our team. We actually do provide a variety of birth control options through our programming and I should mention another example of some of the training and education we do, the focus on exclusive breastfeeding for the first 6 months helps to prevent low lactation, menorrhea, helps to prevent further pregnancy as well.

Ms. BASS. In theory, in theory.

Ms. MCKENNA. In theory. It is not foolproof.

Ms. BASS. It is not. But we do provide birth control.

Ms. MCKENNA. We do provide a variety.

Ms. BASS. And are we prohibited by any age, especially considering the age of sexual activity can be very young?

Ms. MCKENNA. Can be very young.

Ms. BASS. Do we have any prohibitions on when birth control can be distributed?

Ms. MCKENNA. Yes, so that is a good question. We will have to get back to you. I know our bias would be not to have limitations on that, but there may be some places——

Ms. BASS. I would like to know if you can get back to me specifically in those countries where we know that girls are conceiving at very young age and having difficulty like the ones that the chairman pointed out.

Ms. MCKENNA. Yes.

Ms. BASS. Thank you very much.

Ms. MCKENNA. Thank you.

Mr. SMITH. One concluding question. Could you give us, and it is probably better for the record the break out of how your funding goes to faith-based organizations in dollar terms as well as percentage of the program?

Ms. MCKENNA. We will look to get that to you for the record. One of the things I should point out, one of the limitations we have had on pulling that data in the past is that there are cases where those organizations are the official grantees, but in many cases they are also subgrantees.

Mr. SMITH. Have you captured that? Because I have asked that question repeatedly, why we don't get the subgrantees as well.

Ms. MCKENNA. We know them, but sometimes they are not categorized or coded appropriately as to—if they are faith based or not. So I know that has been a challenge that we have had in pulling it historically, but we will look to see what we can pull now.

Mr. SMITH. Thank you. And some of the other members who would have been 1½ hours ago had we not had the votes may have some questions that they want to submit for the record.

Ms. MCKENNA. Okay.

Mr. SMITH. I have a few extras, too.

Ms. MCKENNA. We understand. We are happy to do that. Thank you very much.

Mr. SMITH. Thank you very much, Ms. McKenna.

I would like to now invite our second panel beginning first with Lisa Bos from World Vision, senior policy advisor for health, education, and water sanitation and hygiene at World Vision. In the Advocacy and Government Relations Department as such, she serves as the point person for World Vision's advocacy and education efforts with Congress and the administration. In addition, to working to engage World Vision's advocates on issues such as foreign assistance funding, maternal and child health, and water sanitation and hygiene, Ms. Bos spent nearly 9 years as legislative staff in the U.S. House of Representatives.

We then will hear from Dr. Henry Perry who is a senior associate at Johns Hopkins Bloomberg School of Public Health. His primary research interest is in the impact of community-based primary healthcare programs on health improvement especially on maternal, neonatal, and child health. He has a broad interest in primary healthcare and community-oriented public health, community participation equity and empowerment. He is currently collaborating on operations research concerning community-based material, neonatal and child health in Guatemala, Kenya, and Sierra Leone. He has led formal child survival program evaluations in Afghanistan, Bangladesh, Cambodia, India, Tibet, China and he teaches on a broad variety of topics at Johns Hopkins.

Then we will hear from Ms. Carolyn Wetzel Chen who has 14 years of international public health and development program design implementation and donor relations experience. In her current role as chief grant development officer, she leads Food for the Hungry's Global Service Center and 18 field offices in developing and executing a global strategy for raising resources from foundations, corporations, governments, and multi-lateral institutions. She has created systems, tools, and policies to guide multi-national and multi-sector teams to identify and pursue those grants for this

important work. Her long-term professional specialty has been maternal and child health and nutrition programs design and implementation, social and behavioral change, and monitoring and evaluation.

We will then hear from Dr. Sophia Aguirre, who is a professor of economics in the School of Business and Economics at the Catholic University of America. She is the director of economics program and academic chair of the Masters in Integral Economic Development. She specializes in international finance and integral economic development. She has researched and published in the areas of exchange rates and economic integration, as well as theories of population, resources, and family as it relates to development. She has testified in front of Congress on issues related to population, family, and health nationally and internationally.

We will then hear from Dr. Mehret Mandefro of George Washington University, a primary care physician and public health researcher. She is founder and president of Truth Aid, a public health consultancy that specializes in community-based public health education efforts which addresses the social determinants of health using media in these efforts. She is also an adjunct professor of health policy at the Milken Institute of Public Health at George Washington University. Dr. Mandefro began her career as a physician as a public health practitioner working extensively on HIV-infected and affected communities in Botswana, South Africa, Ethiopia, and New York, and on issues of prevention and treatment.

Ms. Bos, if you could begin.

**STATEMENT OF MS. LISA BOS, SENIOR POLICY ADVISOR FOR HEALTH, EDUCATION, AND WATER, SANITATION AND HYGIENE, WORLD VISION**

Ms. BOS. Thank you, Mr. Chairman, Ranking Member Bass. I appreciate this opportunity to testify before you today on the important issue of health and nutrition, particularly in the first 1,000 days window. Kent Hill does send his apologies that he wasn't able to be here today. I will do my best to fill his shoes.

My name again is Lisa Bos and I am the senior policy advisor for health, education and WASH at World Vision US. World Vision is a Christian humanitarian organization working to improve the lives of children in nearly 100 countries.

Good nutrition is an essential foundation for health and development, yet malnutrition continues to be the world's most serious health problem and the single biggest contributor to child mortality. As one of the world's largest private humanitarian organizations, World Vision recognizes that addressing malnutrition is essential to improving maternal and child health and so we have made it a top priority in our work.

World Vision has several recommendations for what the U.S. Government can do, and where Congress should focus when exercising its oversight, budgeting, and appropriations responsibilities, to help contribute to the best outcomes for mothers and children. We base them on our 63 years of relief, development, and advocacy experience and expertise and the evidence of what is most effective and efficient.

In summary, these recommendations are: 1) is to prioritize community-based initiatives. Our experience shows that ownership by the community and involvement of key community leaders, such as faith leaders, is critical to ensuring changes in behavior that lead to improvements in maternal and child health; 2) is to approach a child through the life-cycle, concentrating on the start of life at conception through the first 2 years, and concentrate interventions, like those to ensure adequate nutrition, on these initial 1,000 days; 3) is to ensure that food is adequate both in volume and nutrition; 4) is to include nutrition outcomes as an explicit objective of U.S. agricultural and other food security assistance programs.

Another recommendation is to focus initiatives for mothers on their time of pregnancy, ensuring they are well nourished, able to provide sufficient nutrition for their children, and give birth to healthy children.

Support and scale-up interventions that are proven to be effective, like breastfeeding, skilled birth attendants and frontline health workers, healthy timing and spacing of pregnancies, and consistent, safe access to clean water and sanitation.

Focus breastfeeding programs on support for mothers immediately after and in the 24 hours following childbirth, ensuring a good start to that child's life.

Improve partnering with NGOs, especially faith-based NGOs, including by consulting with them earlier and more consistently, leveraging public and private funding, coordinating and collaborating between initiatives regardless of the funding source, and prioritizing initiatives aimed at improving governance at the local and national levels in the countries of partnership. Given the value-add of the rich community-based networks which FBOs possess, it makes sense to capitalize on these connections.

The first 1,000 days is the time with the biggest risk of child mortality, as well as the period of most rapid physical and brain growth. Exposure to chronic malnutrition during this critical window can result in stunting which leads to impaired brain development, robbing a child of the ability to reach his or her full potential. There is strong evidence of the correlation between malnutrition and stunting, and long-term health and individual earning capacity. Therefore, it is critical that children receive good nutrition within this "window." Interventions that prevent undernutrition during this time can be much more effective than those that target children who are already undernourished and prevention is at the core of all of World Vision's work in health, nutrition, and food security.

Breastfeeding is at the core of preventing undernutrition and malnutrition in children. There are challenges with breastfeeding programs, however, as critical factors come into play which impact a mother's ability to breastfeed her child until the critical age of two. For example, if a mother becomes pregnant again, she may prematurely stop breastfeeding, often leading to significant malnutrition in that child. Programs like those that support the healthy timing and spacing of pregnancy are necessary to ensure the success of breastfeeding programs which is why multi-sectoral approaches that integrate nutrition specific interventions, direct interventions like breastfeeding, with nutrition sensitive interven-

tions, like birth spacing education and WASH programs, are critical. I would also encourage the U.S. Government to focus on health and nutrition in fragile states and in places with high rates of acute malnutrition.

The financial cost to address acute malnutrition is high, usually because there is a lack of functioning infrastructure, trained staff and health services, and limited food ability. With an approach used by World Vision called Community-based Management of Acute Malnutrition or CMAM, malnourished children are found and treated early before complications occur and more costly in-patient treatment is required. However, despite the success of programs like CMAM, investments in better health infrastructure and investments to address chronic food insecurity in communities would help in the long term to reduce the need for more expensive interventions. CMAM funding is provided mainly through the Office of Foreign Disaster Assistance within USAID for emergencies. But we would recommend that USAID also expand funding for interventions like CMAM in development programs in countries with high levels of acute malnutrition, such as India, Nigeria, and Indonesia which currently have very low rates of CMAM coverage.

The role of the faith community is also vital if we are going to reach the most rural and hard-to-reach communities. We have found that educating and mobilizing faith leaders to talk to their congregations and communities about what are sometimes viewed as taboo child and maternal health issues could be the most effective catalyst for change. The U.S. Government must continue to engage deeply with the faith community to ensure that programs recognize the convening power and reach of faith-based organizations in the developing world.

It is hard to imagine a more humane or pragmatically valuable U.S. Government investment than to focus on women and children's health, particularly nutrition in the first 1,000 days of life. Allow me to express my deep appreciation to the U.S. Congress who has consistently shown compassion and wisdom in addressing health concerns in the developing world and in fragile states. There is much more to do, but if we strengthen existing partnerships between USAID and the NGO community, we can have even more impact in the years ahead. Thank you for this opportunity to testify today and I look forward to any questions you may have.

[The prepared statement of Ms. Bos follows:]


**Written Testimony by:**

**Lisa Bos**

**Senior Policy Advisor for Health, Education and WASH, World Vision US**

**Submitted to the House of Representatives Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations "The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition"**

**March 25, 2014**

Mr. Chairman, thank you for this opportunity to testify before the Subcommittee on the important issue of health and nutrition, particularly in the first 1,000 days window. I greatly appreciate your interest in this topic and hope that my testimony today will shed some light on how NGO's and faith-based organizations like World Vision are improving nutrition for mothers and children around the world.

Kent Hill sends his apologies that he was too ill to testify today. I am going to do my best to fill his shoes. My name is Lisa Bos and I am the senior policy advisor for health, education and WASH at World Vision US. World Vision is a Christian humanitarian organization working to improve the lives of children in nearly 100 countries. We have donors in every U.S. state and congressional district who support our ongoing work.

Good nutrition is an essential foundation for health and development, yet malnutrition continues to be the world's most serious health problem and the single biggest contributor to child mortality. As one of the largest private humanitarian organizations, World Vision has made addressing malnutrition a top priority as part of our approach to improving maternal and child health.

World Vision has several recommendations for what the US Government can do, and where Congress should focus when exercising its oversight, budgeting, and appropriations responsibilities, to contribute

to the best outcomes for mothers and children. We base them on our 63 years of relief, development, and advocacy experience and expertise and the evidence of what is most effective and efficient.

1. Prioritize community-based initiatives. Our experience shows that ownership by the community and involvement of key community leaders, such as faith leaders, is critical to ensuring changes in behavior that lead to improvements in maternal and child health.
2. Approach a child through the life-cycle, concentrating the start of life at conception through the first two years, and concentrate interventions, like those to ensure adequate nutrition, on these initial 1,000 days.
3. Ensure that food is adequate in volume and nutrition.
4. Include nutrition outcomes as an explicit objective of U.S. agricultural and other food security assistance programs.
5. Focus initiatives for mothers on their time of pregnancy, ensuring they are well-nourished, able to provide sufficient nutrition for their children, and give birth to healthy children.
6. Support and scale-up interventions that are proven to be effective, like breastfeeding, skilled birth attendants and frontline health workers, healthy timing and spacing of pregnancies, and consistent, safe access to clean water and sanitation.
7. Focus breastfeeding programs on support for mothers immediately after and in the 24 hours following childbirth, and continue through the first two years of life.
8. Improve partnering with NGOs, especially faith-based NGOs, including by consulting with them earlier and more consistently, leveraging public and private funding, coordinating and collaborating between initiatives regardless of funding source, and prioritizing initiatives aimed at improving governance at the local and national levels in the countries of partnership. Given the value-add of the rich community-based networks which FBOs possess, it makes sense to capitalize on these connections.

World Vision launched its Global Health and Nutrition Strategy in 2008. It provides the overall framework for achieving our Child Well-Being Outcomes in health and nutrition. We are committed to improving the health and nutrition of women and children, and contributing to the global reduction of under-five and maternal mortality. The strategy therefore focuses World Vision's health programming on preventive, community-based interventions for improved health and nutrition for mothers and children.

World Vision's Global Health and Nutrition Strategy takes a life-cycle approach, focusing on nutrition and related sector interventions throughout the life cycle. The first and highest-priority phase targets child development during the first 1,000 days: from conception through the first two years. A significant proportion of undernutrition begins in utero and results in low birth weight, particularly in Asia. Around the world, chronic undernutrition commonly develops in the first two years of life, with lifelong implications for health, education, and economic opportunities.

The first 1,000 days is the time with the highest risk of child mortality, as well as the period of most rapid physical and brain growth. Exposure to chronic malnutrition during this critical window can result in stunting which leads to impaired brain development, robbing a child of the ability to reach his/her full potential. There is strong evidence of the correlation between malnutrition and stunting, and long-term health and individual earning capacity. Therefore, it is critical that children receive good nutrition within this "window." Interventions that prevent undernutrition during this time can be much more effective than those that target children who are already undernourished (for children already undernourished, nutrition initiatives however are still essential to ensure their survival and improve their health as much as possible) and prevention is at the core of all of World Vision's work in health, nutrition and food security.

"Children are well-nourished" is one of World Vision's Child Well-Being Outcomes, a goal for every child in every place we work. This means not only that children have enough food to eat, but also that the food is nutritious. It also means that we focus on mothers during and after their pregnancies to ensure that they themselves are well-nourished so that they can have healthy babies and can effectively breast feed.

Breastfeeding is the first, and best, cost-effective intervention for newborn babies. Breast milk maximizes a child's physical and mental potential by supporting the rapid growth and critical brain development that occurs from birth to two years of age. Appropriate breastfeeding has a high impact on reducing infant and child mortality. It should start immediately (within the first hour of birth) for the infant to benefit to the maximum. Whenever possible, infants should be breastfed exclusively, with no other liquids or solids, and on demand until six months of age, and then mothers should continue breastfeeding until the child is at least two years old, with complementary feeding introduced beginning at six months. Especially in countries that continue to have low initial and length of breastfeeding rates, programs need particularly emphasize support to mothers immediately after birth and within the first 24 hours when positioning and attachment are so important to early success.

Cost analysis of breastfeeding programs range from $0.05 to $0.95 per capita annually. World Vision has found that the cost decreases as programs scale up; in programs with 150,000 to 250,000 participants, our experience indicates a cost on average of $0.25 per child.

There are challenges with breastfeeding programs, however, as critical factors come into play which impact a mother's ability to breastfeed her child until the critical age of 2. For example, if a mother becomes pregnant again, she may prematurely stop breastfeeding, often leading to significant malnutrition. So programs like those that support the healthy timing and spacing of pregnancy are also critical to ensuring the success of breastfeeding programs, which is why World Vision uses approaches that integrate nutrition specific interventions – direct interventions like breastfeeding – with nutrition sensitive interventions like birth spacing education and WASH programs. But while we're speaking directly about the thousand days approach to lessen malnutrition and improve health, I think it's very important to note that World Vision views our work through a gender-focused lens that provides us with an opportunity to look closely at all of the factors within a mother's life that will either help her to sustain new behaviors and beliefs or that can prevent the adoption of the desired behaviors. Creating that enabling environment for success is key to helping mothers and their young children become truly resilient.

To that end, there are specific approaches that World Vision uses in our development programming which directly address the maternal and child health needs of communities but also allow for context specific adaptations where economic strengthening is a critical component for improving the lives of mothers and children. The 1,000 days approach fits squarely within our food security framework, along with factors like WASH, gender, resilience, and economic strengthening.

Timed and targeted counseling (ttC) is an integral part of WV's development programming, which is being rolled out globally. Community health workers (CHWs) and volunteers provide primary health care and nutrition counseling at the individual/household level for influencing behavior change, using a cohort and lifecycle-specific approach. Information given is timed to when behaviors can best be put into practice and targeted to both those who practice the recommended behaviors and those who influence adoption of the behaviors. The approach targets the whole household—husband, in laws, and other influencers of behaviors—and is therefore, able to promote issue awareness, knowledge, behavior change, demand for services, and identification of social barriers, ultimately empowering caregivers and children to keep themselves healthy.

Community health workers and volunteers make a series of visits to households with pregnant women and mothers of children under age 2, organizing a series of health and nutrition messages to be communicated at the most appropriate times, using a counseling and dialogue-based approach. The visits are timed and targeted according to the "life cycle" approach (early pregnancy and mid-pregnancy visits; late pregnancy/first week of life, and one month visits; and visits at 6 months, 9 months, 18 months, and 24 months of age). Caregivers are provided with information, counseling, and support to promote the practice of healthy behaviors.

In emergencies and areas with high levels of acute malnutrition, World Vision uses the Community-based Management of Acute Malnutrition (CMAM) approach to rehabilitate malnourished children. CMAM uses a case-finding and triage approach to match malnourished children with treatment best suited to their medical and nutritional needs.

With the CMAM method, most malnourished children can be rehabilitated at home with only a small number needing to travel for in-patient care. Families of all CMAM participants, as well as children with moderate malnutrition, receive supplementary food rations to help prevent a decline in nutritional status. CMAM programs also work to integrate treatment with a variety of other longer-term interventions that are designed to reduce the incidence of malnutrition, and improve public health and food security in a sustainable manner.

The financial cost to address acute malnutrition is high, usually because there is a lack of functioning infrastructure, trained staff and health services, and limited food availability. With CMAM, malnourished children are found and treated early, before complications occur and more costly inpatient treatment is required. However, despite the success of programs like CMAM, investments in better health infrastructure and investments to address chronic food insecurity in communities would help in the long term to reduce the need for more expensive interventions. CMAM funding is provided mainly through the Office of Foreign Disaster Assistance (OFDA) within USAID for emergencies. We would recommend that USAID also expand funding for interventions like CMAM in development programs in countries with high levels of acute malnutrition, such as India, Nigeria, and Indonesia, which currently have very low rates of CMAM coverage.

I'd like to also share a bit about a USAID-funded Food Security and Risk Reduction Development Assistance Program – or DAP – in western Honduras that World Vision implemented over five years. Kent Hill was able to visit this program in 2011, two years after its completion.

Like most Food for Peace development food aid programs, it enabled us to integrate effectively all that is needed to make progress on nutrition and food security for the most vulnerable. Even more important, in this case, coordination between the DAP and a World Vision privately-funded program in the same part of Honduras strengthened nutrition outcomes made possible by the giving of thousands of individual Americans over the course of the next several years. Because of USAID's role, the Honduran DAP enabled World Vision to initiate the direct participation of local governments.

The municipalities in western Honduras had not previously addressed the problem of malnutrition in a concerted manner. When the DAP started in 2004, more than half of Hondurans lived in extreme poverty, with 72% affected by food insecurity. Children's high levels of malnutrition – 46% chronic malnutrition, 30% under-weight, and only 23% of newborns receiving exclusive breastfeeding – were not addressed locally because nutritional interventions were centralized in the Ministry of Health. Through the DAP, World Vision spurred 17 local governments to introduce food security and nutrition in their development plans and budgets for the first time.

In 2011, USAID evaluated the DAP for sustainability. It was shown that, two years after USAID funding ended, we sustained the seven percent decrease in underweight children thanks to dramatically improved access to trained nutrition workers and maternal education. Skilled birth attendants now served under local community ownership. Household food security continued to improve. Farmer field schools piloted under the DAP had become well established. Local government services were strengthened. All of this benefited 128 communities and more than 157,000 people in the western part of the country.

I use this example from Honduras because it illustrates clearly the role the US government can play in helping partners leverage other programs and funding opportunities to develop strong, sustainable programs with community ownership and results. This is the type of collaboration that the US government needs to continue to support with NGOs, since these NGOs are a vital partner in promoting sustainability in community-based programs.

Addressing nutrition as part of maternal and child health programs is critical to reducing stunting and reducing the number of preventable child deaths where malnourishment is often an underlying cause. In many cases, these interventions are not costly and lead to behavior change that is sustainable generation after generation. With the new USAID nutrition strategy, we are hopeful that nutrition programming and outcomes will be better aligned across government agencies. A large piece of the strategy is the need to scale up interventions. Implementing partners like World Vision are well positioned to play a key role in this part of the strategy, particularly at the community and household level where interventions are most needed and where we have been working side by side with communities for years.

Achieving our goal for improving maternal and child health also depends on integrating multiple actions and behaviors to promote nutrition. It means helping people get not only the proper amount of calories but also nutrient-dense foods as well. Nutrition outcomes MUST be an explicit objective of U.S. agricultural and other food security assistance programs, particularly for a child's first 1000 days, starting with a mother's pregnancy.

Some of the best maternal and child nutrition outcomes are found with the Title II Food for Peace programs, which reduce stunting of children while also improving household incomes and household dietary practices. They provide good examples of how nutrition-specific activities – such as exclusive breastfeeding until 6 months and appropriate complimentary foods after 6 months – and nutrition sensitive activities – such as potable water, sanitation, and production of more nutritious foods – work together to improve child nutrition.

The role of the faith community is also vital if we are going to reach the most rural and hard-to-reach communities. We have found that educating and mobilizing faith leaders to talk to their congregations and communities about what are sometimes viewed as "taboo" child and maternal health issues can be the most effective catalyst for change. The U.S. government must continue to engage deeply with the faith community to ensure that programs recognize the convening power and reach of faith-based organizations in the developing world.

World Vision engages faith leaders because most people in the world have a faith of some kind. The Pew Research Center's Forum on Religion & Public Life reports that 5.8 billion adults and children are

affiliated with a religion, 84% of the 2010 world population of 6.9 billion. We see this first-hand as a faith-based organization working in more than 100 countries.[1] So faith leaders have considerable influence in their communities. Unfortunately, like other leaders, some faith leaders sometimes spread misinformation, creating social barriers that prevent people from visiting clinics, receiving vaccinations, and using birth spacing methods. Misguided influence can also encourage child marriage and the poor treatment of women and girls, and discourage the involvement of men in maternal and child health. Our training process for faith leaders replaces misinformation and stigma with truth and acceptance. Our program teaches about birth spacing and the importance of good nutrition for children and pregnant women. It encourages greater involvement of men at all levels (family planning, HIV testing, health visits of mother and child, etc.).

All too often, development programs focus on supply of commodities or services to communities. This does not necessarily lead to better child or maternal health outcomes if the demand for services is not there. This again is where US government programs could be doing better in their work with NGOs, and in particular faith-based organizations, because FBOs are well positioned to generate community level demand for improved health service delivery and enable multi-sectoral integration to advance results. We are also well positioned to engage local faith communities and civil society to ensure that local and national governments are meeting their commitments to maternal and child survival, which is a key component for long-term sustainability and country ownership of maternal and child health programs.

I also want to make sure we don't lose sight of the need to respond to the needs of mothers and children in fragile and conflict-ridden communities, such as South Sudan. World Vision staff have seen the deplorable health conditions that are affecting over half of that country which is currently embroiled in a political and military crisis. This conflict has caused the death of thousands of people over the last several months. We have a firsthand understanding of the importance of the investment of USAID/OFDA in providing lifesaving materials such as clean water, sanitation supplies and facilities, food and other lifesaving goods for, most critically, women and children. The support of USAID in South Sudan is keeping that country alive through this critical time in its nascent life especially with the current political crisis in the country.

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[1] Pew Forum on Religion and Public Life, "The Global Religious Landscape: A Report on the Size and Distribution of the World's Major Religious Groups as of 2010," December 2012: www.pewforum.org/2012/12/18/global-religious-landscape-exec

Along with providing critical lifesaving supplies, USAID is providing needed support through its JHPIEGO grant to World Vision, which has helped to start to develop the country's health system. In addition to the immediate lifesaving support, we would ask that the support to the country's health system continue where the conflict has not "hit " – in places like Western Equatoria, for example. We sometimes see in places like this that important health work can be overshadowed by conflict in other parts of the county. By providing this support, it will ensure the continuation of essential health services to people not only affected by the crisis, but also in the host community. By assisting stable locations in the country to receive health services, there will also be an extra added incentive for communities and parties to "keep the peace" in their areas. All that I have said here about South Sudan also applies to Somalia; there is much work in health programs that should be done in this fragile state.

Improved health for the world's poorest people is not only a moral imperative but also a pragmatic investment for peace, security, and worldwide economic growth and nutrition. Thank you, Mr. Chairman, for this opportunity to testify today and I look forward to our continued discussion on how we can better respond to the needs of mothers and children around the world. I welcome any questions you may have for me.

Mr. SMITH. Ms. Bos, thank you very much for your leadership and please send our best to Kent Hill. Is he okay? I know he was very sick from his trip.

Ms. BOS. He is. He is working on recovering at home.

Mr. SMITH. Thank you. Dr. Perry.

**STATEMENT OF HENRY PERRY, M.D., PH.D., SENIOR ASSOCIATE, HEALTH SYSTEMS PROGRAM, DEPARTMENT OF INTERNATIONAL HEALTH, BLOOMBERG SCHOOL OF PUBLIC HEALTH, JOHNS HOPKINS UNIVERSITY**

Dr. PERRY. Thank you very much, Congressman Smith, Congressman Bass. It is a great privilege and honor for me to be here today. This is a subject that I am passionate about. I have spent 35 years working with NGOs, working in community health and increasingly involved in the academic and research and evidence side of community-based programming to improve child health and particularly mothers and children during the first 1,000 days of life.

I am going to restrict my verbal comments to a portion of what my written testimony conveys. You very well summarized a lot of the technical issues and the human magnitude of lives being lost from conditions that we know are readily preventable or treatable, given our current state of knowledge and know-how and programmatic strategies. I am very pleased that you have mentioned Jim Grant several times in your comments and one of the comments that Jim Grant made when he was the Executive Director of UNICEF that I think is very germane to my comments today is his phrase often repeated that "morality marches with capacity." And even though we have made tremendous progress in reducing the number of deaths of mothers and children in the last 50 years, and I think it is one of the unheralded successes of our world and of the contribution of the United States toward that goal, the fact that 6.6 million children are still dying and 300,000 mothers are still dying, mostly from readily preventable treatable conditions is a point of great moral concern in the public health priority of course.

What I want to focus on in my comments are the fact that we have these evidence-based interventions that we know work under ideal circumstances. The evidence, the scientific evidence is there that all of these things are highly effective and I have listed these in my testimony. You mentioned a number of them yourself, but interventions that are so supple in many respects, we find so hard to implement. Exclusive breastfeeding and hand washing are but two I think are the most important that obviously don't involve health facilities. They don't involve higher-level health staff to carry out. We still are needing the resources to apply the knowledge that we have to implement these interventions at scale in communities and countries with high mortality.

So in the 75 countries with more than 98 percent of all maternal deaths and deaths of children under 5, the coverage of all of these interventions except for immunizations and Vitamin A is below 60 percent and in some cases, for example, exclusive breastfeeding or antibiotic treatment of pneumonia, we have levels of coverage that are on the order of 25 or 30 percent. And so in my view, one of the most important things that we can do to save the lives of mothers

and children in the first 1,000 days of life is to develop a better delivery system that reaches down to the household level that engages communities and uses community health workers to implement interventions that we know work and that we know that can be provided by these front line health workers.

We know there is an enormous deficit of health manpower, of highly trained health manpower. The World Health Organization has estimated that by the year 2025, the global deficit will be about 13 million, highly trained staff, and we know that from those of us like yourself, Congressman Smith, who have been in rural areas, facilities are very few and far between. And for the foreseeable future, these facilities will not be readily available to people.

And so we need to develop a focus on a delivery system that is in the community that uses the community as capacity, its resources, adequately trains and supports them in order to deliver interventions that we know work. So we need the commitment to build a community-based delivery system for these interventions and it is also essential that we work with community empowerment approaches and women's empowerment approaches to make use of these interventions as well.

I had the recent privilege of evaluating a Food for the Hungry child survival project that focused on nutrition and prevention of diarrhea in Mozambique that reached a population of 1.1 million people. And Food for the Hungry has been a pioneer of a very exciting approach to community-based delivery which is the kind of thing that we need much of which is called care groups in which volunteer women are assigned responsibility for 10 to 12 households and they meet with 10 or 12 volunteers every 2 weeks to learn health education messages and deliver those to the households. This approach was applied by World Relief in a rural part of Mozambique, 1.1 million people, and it had a dramatic impact on reducing undernutrition within that population at a very low cost of only 55 cents per capita per year. No food was involved in terms of distribution of food. It was total health education, prevention of diarrhea which is an important predictor of malnutrition of course, so we need to apply a lot of our knowledge that we have at scale working with governments, using these very simple approaches that don't rely on higher level health facilities, higher level health staff. We have enormous experience and knowledge in doing this. And in fact, the NGO community that I have worked with for the last 35 years particularly with the USAID Child Survival and Health Grants Program that I have been connected to for a long time which has been instrumental in developing these approaches and I think are vital for the success of ending preventable child deaths by the year 2035 which is one of the goals that the United States Government has signed on to with many other countries around the world and it represents an exciting opportunity for the next 20 years to see the progress that can be made with our current know-how and expanding of available programming at very low cost.

So I would like to share my thoughts about what the United States Congress could do to end preventable deaths during the first 1,000 days of life. The first point is that the United States Congress should at least maintain, but much more preferably, substan-

tially expand its financial support for child survival programs in the 75 countries where 98 percent of maternal and child deaths occur.

U.S. Congress should elevate U.S. Government support for community health workers by insisting on funding child survival and other global health programs that are carried out by community health workers in a way that builds long-term sustainability for community health worker programs that engage communities and civic society, not just government health programs. The NGO community, the faith-based community are an essential part of that.

The U.S. Congress should call on the administration to draft a comprehensive health workforce strategy with the focus on community health workers and other frontline health workers to maximize the impact of U.S. Government investments in the global health workforce.

And finally, the U.S. Congress should insist on strong funding for the USAID Child Survival and Health Grants Program which has been supporting U.S.-based NGOs, referred to as PVOs (private voluntary organizations), for three decades now and these organizations have been leaders of and champions of community-based programming for maternal and child health in low-income countries. This includes World Vision, Food for the Hungry, but many other NGOs, both faith-based and nonfaith-based.

The United States has been a global leader in support for innovation and community-based child survival programming. It should continue in this role. The current levels of funding for maternal and child health programs both to USAID and to UNICEF need to be expanded, not cut. To not fully support these efforts and to cut funding for these programs that represent a moral failure on the part of our Government and it would not support the wishes of the great majority of American citizens who repeatedly have expressed their support for U.S. Government funding for saving the lives of mothers and children.

Fully engaging the U.S. PVO community by providing major financial support to it for this effort will increase the quality of child survival programming around the world, promote innovation, expand community engagement and community-based services and accelerate the reduction and readily preventable deaths during the first 1,000 days of life. Thank you.

[The prepared statement of Dr. Perry follows:]

**Testimony of Henry B. Perry, MD, PhD, MPH**
**Senior Associate, Department of International Health,**
**Johns Hopkins Bloomberg School of Public Health**

**Congressional Hearing: The First One Thousand Days of Life – Development Aid Programs to Bolster Health and Nutrition**

**House Committee on Foreign Affairs**
**Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations**
**Rayburn House Office Building**

**25 March 2014**

Mr. Chairman, distinguished Committee members, staff, and others gathered here today, I am honored to be asked to speak today regarding what our government can do to support the first 1,000 days of life in places around the world where the risk of death is high and where healthcare services are scarce. I speak as an American citizen who has been working for 35 years with child survival programs and, at this latter point in my career, as someone who is now engaged in research, writing and teaching about child survival programs.

One of the greatest and unheralded advances in global health over the past 50 years has been the marked reduction in the number of mothers and children dying around the world even though the number of pregnant women and births has greatly increased. Yet, in spite of this progress, we must recognize that we have a long ways to go, since we have the scientific know-how and the proven low-cost program strategies to further accelerate reductions in the number of readily preventable deaths. The United States Government has been a leader in this process over the past 50 years – by funding research and programs that have contributed to this progress. I am here to urge the Congress to continue and in fact expand its support for research and programs that are geared to reducing readily preventable deaths among women and children, particularly during the first 1,000 days of life.

At present, there are estimated 3 million stillbirths around the world each year, and 99% of these occur in low-income countries.[1] In addition, there are approximately 3.8 million live-born children who die each year before the age of two years, and three-fourths of these deaths among occur during the first month of life.[2] More than 300,000 mothers die each year from maternal causes.[3] Thus, altogether, more than 7 million deaths are occurring each year among viable fetuses that have reached at least 6 months of life, among live-born children before reaching their 2nd birthday, or among mothers in the pre-partum, intra-partum, or post-partum periods. The period of greatly heightened risk of death for both the mother and the infant is the time during labor and delivery and the first 48 hours following birth. At least one-third of stillbirths are among children who suffer and die from intra-partum asphyxia, from a complication of prolonged labor, eclampsia, or some other complication of the delivery process.

The tragedy is that the great majority of these deaths can be readily prevented at low cost. This is a tragedy not only a public health terms but also in moral terms as well. Governments all over the world – including the United States – along with foundations, international donors, and citizens of the world with even a few dollars to spare – all of us should be contributing to the effort to eliminate the disparities in mortality that now exist among mother and among their children during the first 1,000 days of life. In fact, the United States government and many other governments around the world have joined with UNICEF and the World Health Organization to eliminate preventable maternal and child deaths by the year 2035. This campaign, referred to as A Promise Renewed,[4] was initiated here in Washington at Georgetown

University by our own government in collaboration with UNICEF, the World Health Organization, and the governments of India, Ethiopia, Democratic Republic of Congo, and Nigeria. Today, 176 countries have signed on to achieve the goal of eliminating preventable maternal and child deaths by 2035, as have hundreds of NGOs and faith-based organizations. The campaign for A Promise Renewed will need strong support over the next two decades from not only governments but also from individuals throughout the world, civil society, businesses, foundations and others in our global community.

How can this be achieved? The basic and simple answer is to ensure that every pregnant woman and every newborn has access to a set of evidence-based interventions from a trained and supported health worker. Most of these interventions can be provided by community-level workers with minimal training, working outside of health facilities and in the home using simple, low-cost medicines and commodities.

What are these interventions? Among the most important of these are the following:

- Provision of antenatal care (including provision of balanced energy supplements and multiple micronutrients as well as detection and treatment of syphilis, HIV, or who live in malaria-endemic areas) to pregnant women;
- Delivery in a clean environment by a skilled birth attendant who has access to referral care if needed and the capacity to manage birth asphyxia;
- Postnatal care for the mother and baby
- Exclusive breastfeeding during the first 6 months of life and appropriate complementary feeding beginning at 6 months of age;
- Provision of multiple micronutrients (vitamin A, zinc and iron) and immunizations;
- Detection and treatment of neonates with infection;
- Detection and treatment of children with pneumonia and malaria;
- Provision of oral rehydration fluids and zinc for children with diarrhea;
- Detection and management of children with severe malnutrition;
- Promotion of appropriate hand-washing practices;
- Provision of access to safe water and sanitation.

Unfortunately, in most high-mortality settings, the percentage of mothers and children who have access to these interventions still remains surprisingly low. In the 75 countries with more than 98% of all maternal deaths and deaths of children younger than 5 years of age occur, the coverage of all of these interventions is 60% or less with the exception of immunizations and vitamin A supplementation.[5] For a number of these very important interventions, coverage levels are 30% or less.

In 2011, there were an estimated half a million deaths of children younger than 2 years of age from diarrhea and 1 million deaths from pneumonia in this age group.[6] By increasing the coverage of interventions for the prevention and treatment of diarrhea and pneumonia to attainable levels (80% for all interventions except for immunizations, and 90% for immunizations), 95% of diarrhea deaths and 67% of pneumonia deaths in children younger than 5 years could be eliminated by 2025 at a cost of only $6.2 billion.[7]

For the foreseeable future – over the next two decades during which the world is committing itself to ending preventable maternal and child deaths – there will not be adequate numbers of formally trained professional health workers and nor will there be enough health facilities that will be readily available to those who need services. The World Health Organization has estimated that by the year 2035 there will be a global deficit of about 12.9 million skilled health professionals (midwives, nurses, and physicians).[4]

The scientific evidence is abundantly clear that community health workers, with only a few months of training or less and who reside in the communities they serve, can deliver 90% of the interventions required to end preventable maternal and child deaths.[8,9] In fact, an analysis that I led found that if community health workers were fully deployed and utilized we could save 3.6 million more children's lives every year.[6] Africa as a whole has been languishing in its progress in reducing under-5 mortality, but Malawi and Ethiopia have been able to meet their Millennium Development Goal targets for reducing under-5 mortality because of the expansion of coverage of key child survival health interventions through community health workers.

What is lacking now is the commitment to build the community-based delivery system for these interventions. An essential component of these interventions is now community empowerment and empowerment of women's groups. These approaches are needed for women to adopt healthy behaviors, recognize warning signs for which treatment is needed, and support each other in the process of doing all they can to ensure a healthy outcome for themselves and their babies.[10]

To cite but one of many possible examples, I had the privilege of evaluating a USAID-funded child survival program implemented in rural Mozambique by my colleague here today, Carolyn Wetzel, and others at Food for the Hungry. Through a program of educating women volunteers who were each responsible for 10-12 households, it was possible to accelerate by four times the average annual rate of decline in the percentage of undernourished children in a population of 1.1 million people over a 5-year period at cost only $0.55 per capita of the total population.[11] No food was distributed, and no medical care was provided. To our knowledge, this is the largest successful program of improvement in childhood nutrition that has not used food supplementation as an intervention.

These findings are important because the best current evidence indicates that undernutrition of mothers and children is a cause of 45% of all death among children younger than 5 years of age.[12] Therefore, we urgently need to expand outreach programs to all mothers, neonates and children to ensure that their nutritional status is optimized. This requires community-based approaches that do not require health facilities or higher-level trained personnel. Approaches like the one implemented by Food for the Hungry will be essential for ending preventable maternal and child deaths over the next two decades.

What should the United States Congress do to end preventable deaths during the first 1,000 days of life? The answer is straightforward.

(1) The US Congress should at least maintain but much more preferably substantially expand its financial support for child survival programs in the 75 countries where 98% of maternal and child deaths occur.
(2) The US Congress should elevate US Government support for community health workers by insisting on funding child survival and other global health programs that are carried out by community health workers in a way that builds long-term sustainability for CHW programs and that engages communities and civic society, not just government health programs.
(3) The US Congress should call on the administration to draft a comprehensive health workforce strategy, with a focus on community and other frontline health workers, to maximize the impact of US Government investments in the global health workforce.
(4) The US Congress should insist on strong funding for the USAID Child Survival and Health Grants Program, which has been supporting US-based NGOs (referred to as private voluntary organizations, also called PVOs) for three decades now and have been leaders in and champions of community-based programming for maternal and child health in low-income countries.

The United States has been a global leader in support for innovation and community-based child survival programming. It should continue in this role. The current levels of funding for maternal and child health programs both to USAID and to UNICEF need to be expanded, not cut. To not fully support these efforts and to cut funding for these programs would represent a moral failure on the part of our government, and it would not support the wishes of the great majority of American citizens who repeatedly have expressed their support for US Government funding for saving the lives of mothers and children.

Fully engaging the US PVO community by providing major financial support to it for this effort will increase the quality of child survival programming around the world, promote innovation,

expand community engagement and community-based services, and accelerate the reduction in readily preventable deaths during the first 1,000 days of life.

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Mr. SMITH. Thank you so very much for your testimony and your very specific recommendations to us.

Ms. Wetzel Chen.

**STATEMENT OF MS. CAROLYN WETZEL CHEN, CHIEF GRANT DEVELOPMENT OFFICER, FOOD FOR THE HUNGRY, INC.**

Ms. WETZEL CHEN. Let me begin by thanking Chairman Smith and Ranking Member Bass for holding this important hearing. Eight years ago when I was working in Mozambique and visiting a household, I noticed a severely malnourished child. The family explained that they were not sure if the child would live or die and they were reticent to invest resources and time into the well-being because it seemed unlikely he would live. I remember the grandmother saying to me, "In what world do children not die?" And as that statement hit home to me "in what world do children not die?" I thought, in my world. I was born in Clovis, California and if a child died, it was a tragedy. It was an anomaly. And here a grandmother was telling me this was normality for her.

I consider it a great privilege to speak to you today representing faith-based organizations because we have at hand the knowledge and the means to make poor child nutrition and child death not normal in communities like the one I visited in Mozambique.

I am speaking on behalf of Food for the Hungry, a global poverty solutions partner that helps the world's most vulnerable children and communities thrive. We are proud to often work ourselves out of a job as communities we have partnered with exchange poverty-producing mindsets and behaviors for healthy perspectives and actions.

Faith-based organizations are a critical component of the first 1,000 day effort. In 2011, 78 of the largest U.S. faith-based international development organizations invested more than $5 billion in funds from private sources to meet the needs of those living in poverty. Faith communities are called to care for children regardless of national boundary or religious identification. Responding to the neediest, not just the nearest, is an important component of many faiths.

Research has found that stunting in the first years of life result in cognitive impairment that reduces an individual's ability to learn, resulting in reduced lifetime earning potential. Those who experience poor nutrition in the first 1,000 days of life have a higher risk of life-long physical and mental disability which is likely to impact their cognitive ability, school performance, and early potential.

If you have ever been on the Dell Web site or maybe it was an Apple, and you have looked at buying a computer and you said do I want this much RAM? How fast do I want my processing system to be? Well, I hate to compare buying a computer to what we are discussing here, but I couldn't help but think about that in that you are deciding at that moment what your future is going to be for the next 3, 5 or how many years you are going to use that computer. How am I going to build this system? Well, the same thing is happening with children in the womb, in the 1,000 days we are investing in their future. And if we don't do it well, it is going to be a lifetime of suffering.

Now if there was a low-risk investment opportunity that delivered a 10-to-1 benefit to cost ratio, most people would take it. I certainly would, especially in this environment. Whatever sacrifices it might take in the present moment, if we knew that we could invest $100 today and receive $1,000 in a specified period of time, it would be a very popular investment. A conservative medium value of benefit to cost ratio for investment to reduce stunting in selected high burdened countries is 18 to 1. For every $1 invested to reduce stunting, an $18 return is estimated considering increased productivity, savings of resources, and increased earnings in the job market. This is an excellent return on investment and compares favorably with other investments for which public funds compete.

Food for the Hungry trains teams of community volunteers to deliver behavior-change communication about key nutrition, hygiene and disease-prevention practices. The strategy of behavior change that we use is called the care group model. My colleague, Dr. Perry, mentioned this. It has reduced infant and child mortality rates dramatically. A final evaluation of Food for the Hungry's USAID funded child survival project in rural Mozambique, a project that I helped to start up and oversee, saved an estimated 6,316 lives of children less than 5 years of age. More than 6,000 children could have died now live. Malnutrition in that same project in children under 2 years of age decreased by 34 percent in project areas.

Many international development projects mobilize paid employees, but Food for the Hungry mobilizes entire communities to contribute to the first 1,000 day window. In the above-mentioned Mozambique child survival project, FH found that 80 percent or 1.8 million hours of project work was carried out by community volunteers and 97 percent of the work was done by community-level staff and volunteers. The care group model FH promotes blankets the community with life-saving messages and behavior change support. In one care group project, a survey was done 20 months and again 4 years after the project ended. So think about this, in this community all government funding has now departed. It is just the community carrying on. Those surveys found that the mothers continued practicing key health behaviors.

In addition to behavior sustainability, care group volunteers also were found to be continuing their work with local leaders, taking initiatives to replace positions if a volunteer was not able to continue.

FH is committed to sharing with governments, NGOs, and other stakeholders effective ways of improving nutrition in the 1,000 days window. We host a care group Web site. We share at international forums and we have created a care group implementation manual to help other organizations implement care groups effectively. We believe in this model. We believe in its ability to save children's lives and we want others to be using it.

Care groups have been so widely recognized for their effectiveness in reducing malnutrition that they are now used by 24 NGOs in at least 20 countries. The Center for High Impact Philanthropy at the University of Pennsylvania has endorsed Food for the Hungry's care group model as a high impact, low cost solution to child malnutrition and illness.

Considering the body of evidence supporting an investment in the first 1,000 days of life, what can the United States Government do to further success? Number one, we would suggest to encourage local governments to increasingly promote nutrition as a cross-cutting and whole of government initiative.

Number two, as my colleague at World Vision mentioned, support local community delivery platforms for nutrition education and promotion. Increasingly include livelihood programs as an integral component of women's empowerment and as a strategic approach to reducing the underlying determinants of poverty. Ensure that WASH strategies, frameworks, and resources are increasingly integrated into U.S. and government nutrition programs. Increase awareness that strategic nutrition investments can contribute to human capital formation and can thereby drive economic growth. It is not simply a health program. It is an economic impact.

Food for the Hungry runs a food security project funded by the U.S. Government and Ethiopia. In this project, we have a subpartner named ORDA. They are a local organization and they have been increasing in their capacity to run such a program.

My last recommendation is to recognize that as we aim to increase local ownership of such strategies, the international NGO community offers a key role in helping local agencies build and scale their own capacity. Thank you.

[The prepared statement of Ms. Wetzel Chen follows:]

**Testimony of Carolyn Wetzel Chen, MPH & TM, RN**
**Chief Grant Development Officer**
**Food for the Hungry**

**Congressional Hearing: The First One Thousand Days of Life – Development Aid Programs to Bolster Health and Nutrition**

**House Committee on Foreign Affairs**
**Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations**
**Rayburn House Office Building**

**25 March 2014**

Let me begin by thanking Chairman Smith and Ranking Member Bass for holding this important hearing and giving me the chance to testify about an issue on which the lives of millions stand in the balance. I am here today as a nurse, as a community health worker, as a Christian and the designer and implementer of USG funded programs that have allowed children, who would have otherwise died, to live.

## I. An introduction to Food for the Hungry

I am speaking on behalf of Food for the Hungry, a global poverty solutions partner that helps the world's most vulnerable children and communities thrive. FH has developed highly innovative, comprehensive and sustainable interventions and approaches, while being nimble enough to respond rapidly to changing environments. FH tackles the root causes of problems to effect lasting change. We are proud to often work ourselves out of job as communities we've partnered with exchange poverty producing mindsets and behaviors for healthy perspectives and actions.

Food for the Hungry has implemented relief and development programs in over 20 countries since 1971. We are a faith-based NGO. Currently about half our funding comes from individual child sponsors, churches and private donors and half from governments and multinational donors. Of the nearly 2,000 employees of Food for the Hungry worldwide, 97% are nationals of the country where they work and most are motivated by their Christian faith. FH works closely and contextually with indigenous faith and community leadership, often providing leadership opportunities to those who have never before had a voice. We walk with communities to understand how their faith, their values and perspective on humankind, on history and the future connect with the promotion of maternal and child health practices and behaviors. Building on a community's intrinsic motivation, often inspired by faith, is a key component to the sustainability of our work.

## II. The importance of faith based organizations in addressing the 1,000 day window

In 2011, 78 of the largest US faith-based international development organizations invested more than $5 billion in funds from private sources to meet the needs of those living in extreme poverty. In the developing world, it is estimated that faith-based organizations provide between 25 and 75 percent of the health care services (depending on the country). On average, faith-

based organizations receive 16 percent of their funding from government sources. This shows strong grassroots and faith community support for international development, but also tracks what we know from experience – that partnerships with government are often vital to success and developing strong, sustainable programs.

Faith communities are called to care for children, regardless of national boundaries or religious identification. Responding to 'the neediest,' not just 'the nearest' is an important component of many faiths. The faith community played a key role in the launch of ***A Promise Renewed***, a global effort to accelerate action on maternal, newborn and child survival. More than 221 faith based organizations have joined US and international governments, civil society and private sector organizations in signing a pledge to redouble their efforts to end all preventable child deaths.

**III. The importance of the 1,000 Days window**

It is a privilege to testify about the importance of the first one thousand days window for impact. The period of time from a start of woman's pregnancy to her child's second birthday lays the foundation for a child's lifelong health, cognitive development and future potential.

**Investing in the 1,000 day window of opportunity saves lives.**
Each year under nutrition, including fetal growth restriction, stunting, wasting and micronutrient deficiencies along with suboptimum breastfeeding, is estimated to cause 3.1 million child deaths or 45% of all child deaths.[i] Worldwide, the mortality rate for children under five dropped by 47% between 1990 and 2012. We can celebrate that 17,000 fewer children are dying each day, but 6.6 million children under five died in 2012, largely from preventable causes.[ii] This is an epidemic of unthinkable magnitude, considering that the estimated cost per child of interventions to reduce stunting in children under 24 months is $96.58[iii] and a package of five proven life-saving interventions can be delivered for £5 [$8.25 USD] per year per child.[iv]

**Investing in the 1,000 day window of opportunity offers great return on investment**
If there was a low risk investment opportunity that delivered a 4 to 1 benefit to cost ratio, most people would take it. Whatever sacrifices it might take in the present moment, if people knew that they could invest $100 today and receive $400 in a specified period of time, it would be a very popular investment opportunity. A conservative, median value of benefit to cost ratios for investments to reduce stunting in selected high-burden countries is 18 to 1.[v] For every $1 invested to reduce stunting an $18 return is estimated considering increased productivity, savings of resources and increased earnings in the job market. This is an excellent return on investment and compares favorably with other investments for which public funds compete.

**The Science of Investing in the 1,000 day window of opportunity**
Research has found that stunting in the first years of life results in cognitive impairments that reduce an individual's ability to learn resulting in reduced lifetime earning potential. The areas of the brain specifically affected are the:

1. pre-frontal cortex (related to attention, fluency and working memory)
2. hippocampus, reducing dendrite density (affecting spatial navigation, memory formation and consolidation)

3. reduced myelination of axon fibers (thus reducing the speed at which signals are transmitted between neurons)
4. damage to the occipital lobe and the motor cortex (delays in the development of locomotor skills)

Those who experience poor nutrition in the first 1000 days of life (from conception to 2 years) have a higher risk of lifelong physical and mental disabilities, which is likely to impact their cognitive ability, school performance and earning potential. Countries can lose between 2 to 3 percent of their potential Gross Domestic Product (GDP) each year.[vi]

**IV. FH's contribution to the 1,000 days window of opportunity**

**Effective behavior change communication resulting in reductions in malnutrition**

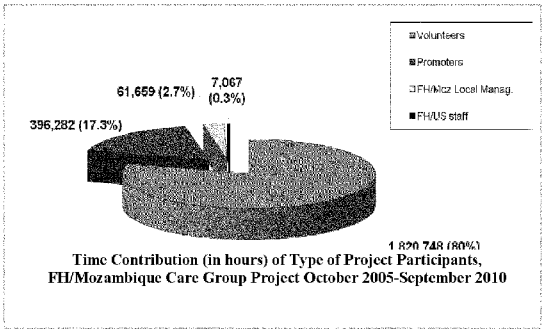
Food for the Hungry train's teams of community volunteers to deliver behavior change communication about key nutrition, hygiene and disease prevention practices. This strategy of behavior change, called the Care Group Model, has reduced infant and child mortality rates dramatically.[vii] A final evaluation of a Food for the Hungry, USAID funded Child Survival project in rural Mozambique (using the current version of the Bellagio Lives Saved Calculator[viii]), saved an estimated 6,316 lives of children less than five years of age, and estimated 32% reduction in Under Five Mortality Rate (U5MR). Malnutrition (weight for age) in children under two years of age decreased by 22% and 34% in the project areas (both changes are statistically significant).

The three year (8/08-9/11), multi-sectoral, Ethiopia Title II Program, led by FH and funded by USAID, included maternal child health and nutrition focused Care Groups, among other agriculture, livelihood, financial management and disaster risk reduction interventions. Results from the final evaluation showed an increase in the dietary diversity score from a baseline of 3.14 to 3.97, increasing average months of food provision from 8.4 to 10 and average number of livestock per household increased from 4.05 to 5.00 and underweight reduced from 46.2% to 40.0%.

FH's three year (8/08-9/11), multi-sectoral, USAID funded DRC Title II program used the Care Group approach and saw successful changes in household behaviors resulting in beneficiary children with the three appropriate infant and young child feeding practices increasing from 5.7% to 61.2% and households adopting a least three improved hygiene behaviors increasing from 31.4% to 66.3%. In addition year round access to an improved water source within 200m of house increased from 47.4% to 67.6%.

**Community mobilization**

Many international development projects mobilize paid employees, but Food for the Hungry mobilizes entire communities to contribute to the first 1,000 days window of opportunity. In the above mentioned Mozambique Child Survival project, FH measured the hours all project participants contributed and found that 80% (or 1.8 million hours) of the project work was carried out by community volunteers and 97% of the work was done by community-level staff and volunteers. Just 3% of the work was done by local or international management staff.



**Time Contribution (in hours) of Type of Project Participants, FH/Mozambique Care Group Project October 2005-September 2010**

Recent social network analysis studies have shown that many behaviors and conditions spread person-to-person through social networks such as smoking, obesity, and even happiness.[ix] Social networks normally have information hubs or individuals who have a lot more connections and influence than other members in the network. The authors of the most prominent social network studies (Christakis and Fowler) have suggested that effective behavior change approaches should target these social network "hubs" with prevention messages. Early results with such approaches have shown documented success.[x] Typically in Care Group projects, a group of targeted women (for example pregnant women and women with children under 2 years of age) are organized geographically into a small group and asked to elect among themselves or select a woman who lives nearby them to be their "lead volunteer." Prior to the election, the women who will nominate the leader, are told what characteristics their leader will need to have to be successful. In this way Care Groups tap into social networks, normally electing the most connected and influential women among them to be their leaders and share information with them.

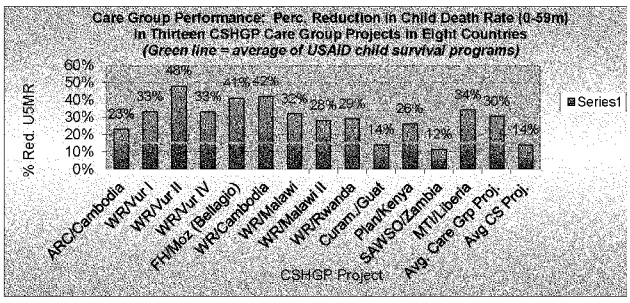
**Sustainable Results**

FH has observed remarkable sustainability of behaviors that contribute to good nutrition in the 1,000 day window of opportunity. The Care Group model FH uses to promote healthy behaviors is so effective because all pregnant women and mothers with children under 2 are invited to participate in the program. The mothers listen to messages shared by their peers in a small group setting. Outreach activities and messaging is done to reach men, the community, and grandmothers. In this way, entire communities are blanketed with new knowledge and practices that will continue long beyond the life of the activity. In one Care Group project, a survey was done 20 months after the program ended and found that mothers continued practicing key health behaviors. As a specific example, treating children aged 0-59 months with diarrhea with Oral Rehydration Solution (ORS) increased from 46% to 82% during the project timeframe; 20 months after project closure the rate of diarrhea treatment with ORS was 83%.

In addition to behavior sustainability, Care Group volunteers also were found to be continuing their work with local leaders taking initiative to replace positions if a volunteer was not able to continue. The same Care Group follow-up survey indicated a 93.4% retention rate among Volunteer Leader Mothers and found that local leaders had replaced volunteers who had resigned, moved or died and organized their training.[xi] Despite receiving no new lessons or materials, over half of the beneficiary households reported being visited by their Volunteer Leader Mothers in the last two weeks.[xii]

**Dissemination of Effective Methods with others**

FH is committed to sharing with governments, NGO's and other stakeholders effective ways of improving nutrition in the 1,000 day window. FH has also been promoting the Care Group model through Care Group Website (www.caregroupinfo.org), at international forums, through articles in peer-reviewed journals and through the creation of the Care Group Implementation Manual. The Care Group Implementation Manual was written and produced in 2012 by FH staff to help other organizations implement Care Groups effectively and document lessons learned.




A second, peer-reviewed version of the manual is being developed as part of a USAID funded capacity building program and is targeted for release in 2014. FH is passionate about sharing the Care Group model with Ministries of Health and other stakeholders because it has proven to be so effective in creating change that leads to significant reductions in child mortality and malnutrition. In a review of 13 Care Groups project in 8 countries, the reduction in under-five mortality was done using the Bellagio Lives Saved Calculator. The average estimated reduction in Under Five Mortality Rate (U5MR) for these 13 Care Group projects was 30%, while, by contrast, the average of U5MR for USAID child survival projects was 14%. A review involving 58 non-Care Group projects and 13 Care Group projects found that Care Group interventions outperformed non-Care Group projects on 12 out of 13 results-level behavioral and coverage indicators.[xiii] Care Groups have been so widely recognized for their effectiveness in reducing malnutrition that they are now used by 24 NGOs in at least 20 countries.

**V. Policy Recommendations[xiv]**

Considering the body of evidence supporting an investment in the first one thousand days of life and the important role faith based organizations play turning that investment into improved and saved lives what can the United States Congress do?

1. Promote nutrition as a cross-cutting and "whole of government" initiative, thereby requiring different ministries (MoH, MoAg, MoEd) to break out of their silos and work in collaboration to solve the problem.

2. Support community delivery platforms for nutrition education and promotion as well as services such as integrated management of childhood illness. Focus on scaling up coverage

of nutrition interventions and reaching the very vulnerable through health facility and community outreach. Please refer to my colleagues, Dr. Henry Perry's testimony for more detail on the importance of community health workers in this effort.

3. Include livelihood programs as an integral component of women's empowerment and as a strategic approach to reducing the underlying determinate of poverty.

4. Ensure that WASH strategies, frameworks and resources are integrated into the US and other government nutrition programs.

5. Educate countries to recognize that nutrition is not a consumption issue; nor is it primarily a question of welfare. Strategic nutrition investments can contribute to human capital formation and can thereby drive economic growth.

6. Recognize that as we aim to increase *local* ownership of such strategies, the international NGO community offers a key role in helping local agencies build and scale their own capacity.

7. Consider the formation of a national coordinating body that takes on the roles of advocacy and coordination of national plans to improve national health and nutrition goals. Such a coordinating body could engage civil society organizations, academia and the private sector to improve and expand nutrition, food security, agriculture, education, WASH and gender empowerment initiatives and programs.

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[i] Black, R.E., et al., Maternal and child undernutrition and overweight in low-income and middle-income countries. The Lancet, 2013; published on-line June 6. http://globalnutritionseries.org/

[ii] The Millennium Development Goals Report 2013, United Nations; A Promise Renewed, Committing to Child Survival: A Promise Renewed Newsletter, Issue 1, May 2013, MDG-Fund (Peru), Saving One Million Lives , UNICEF (Chad, India), Every Woman Every Child.

[iii] Hoddinott, J., et.al. The Economic Rational for Investing in Stunting Reduction. Maternal and Child Nutrition (2013). (Suppl 2). pp 69-82.

[iv] Based on the costing of five interventions Vitamin A supplementation , therapeutic zinc, micronutrient powders, de-worming, and adequate iron and folic acid for pregnant women. Data provided by the World Bank: http://go.worldbank.org/TVP0EI5YV0.

[v] *Ibid., p. 69.*

[vi] World Bank, *"Nutrition: Overview."* http://uni.cf/qb63KK [last accessed 18 April 2013].

[vii] Edward, A. et al., Examining the evidence of under-five mortality reduction in a community-based programme in Gaza, Mozambique, Trans. Roy. Soc. Trop. Med. Hyg. (2007), doi:10.1016/j.trstmh.2007.02.025

[viii] The Bellagio Lives Saved Calculator is the work of the Bellagio Group that published the 2003 Lancet Child Survival articles and the 2005 Lancet Neonatal Survival articles. These spreadsheets were developed by Saul Morris of DFID while he was at the London School of Hygiene and Tropical Health.

[ix] Christakis, N and Fowler, J. (2008) The Collective Dynamics of Smoking in a Large Social Network. N Engl J Med;358:2249-58; Christakis, N. and Fowler, J. (2007); (2) The Spread of Obesity in a Large Social Network of 32 Years. N Engl J Med;357:370-9; (3) Christakis, N. and Fowler, J. (2008) Dynamic spread of happiness in a large social network: longitudinal analysis over 20 years in the Framingham Heart Study. BMJ 2008;337:a2338 doi:10.1136/bmj.a2338

[x] See Buller, D et al. Randomized Trial Testing the Effect of Peer Education in Increasing Fruit and Vegetable Intake," Journal of National Cancer Institute 91 (1999): 1491-1500. and Outcomes of a Randomized Community-level HIV Prevention Intervention for Women Living in 18 Low-income Housing Developments," American Journal of Public Health 90(2000):57-63.

[xi] "Retention of Community Health Volunteers Using Care Groups" presented by W. Meredith Long, Melanie Morrow, Pieter Ernst, Adele Dick. APHA 2002

[xii] "Retention of Community Health Volunteers Using Care Groups" presented by W. Meredith Long, Melanie Morrow, Pieter Ernst, Adele Dick. APHA 2002

[xiii] Tom Davis, MPH, presentation at the APHA Community-Based Primary Health Care Working Group Annual Conference, Washington, DC, 29 October 2011. Information collected from a review of 67 USAID CSHGP projects final evaluations.

[xiv] These Policy Recommendations are chiefly taken from the Alliance for Global Food Security (AGFS) Nutrition Strategy Comments Oct, 31 2013 document and Bread for the World Briefing Paper Number 19, Scaling up Global Nutrition: Bolstering U.S. Government Capacity, July 2012.

Mr. SMITH. Thank you very much for your testimony and again in your written, more elaborate testimony you just lay out so many good recommendations for this subcommittee to consider. And it must be very gratifying when you talk about Mozambique, about the 6,000 children who might otherwise not be here. I mean all of you must have that sense of what you have done has had a profound impact. So again, I thank you.

I would like to now ask Dr. Aguirre, if you could.

**STATEMENT OF SOPHIA AGUIRRE, PH.D., CHAIR, INTEGRAL ECONOMIC DEVELOPMENT MANAGEMENT PROGRAM, CATHOLIC UNIVERSITY OF AMERICA**

Ms. AGUIRRE. Thank you, Mr. Chair, Chairman Smith, for your invitation to participate in this hearing. I submitted in my written reports all the necessary references to literature evidence for what I am going to say and some of my previous colleagues in this panel have also raised some of the issues that are relevant to this discussion, so I am going to limit myself to some specific comments, among the comments I have already submitted in writing.

The first 1,000 days of a person's life is really established in the literature and that is why it is important because it affects the normal development of that individual for the rest of their lives. But I want to focus on something that Ms. Chen already mentioned and that is that this has an economic consequence. When we shortchange a child before their income because they don't have enough to eat, then the rest of his life or her life as well as the whole community is hampered. It really means depriving the child, the family, the community, the society and their country of a human and social capital potential that they could have contributed and that it has a high cost when it comes in terms of GDP as well as the cost of attending that person who is handicapped and could have been prevented from being there.

Undernourishment in an infant or in an expectant mother causes low birth weight and poor cognitive development as was mentioned before. That also means lower productivity and hampers development in the long run. These illnesses are not easily treated as we know once they occur. In many cases they cannot be solved any longer and the cost of attending these needs are very high. So in addition to the lost human capital and social capital that we acquire on the top of that, these burdens can be added to the financial side of these countries and these communities. And it can be solved, as already mentioned, with very low cost interventions.

Ensuring household food access, good health and hygiene conditions, as well as good care and health practices for infants and pregnant mothers, is to ensure that future generations will have the opportunity to contribute toward building the human and social capital necessary for sustainable development. We know that sustainable development is more than economic processes. That involves many other processes that are necessary, social, political, economic. And therefore, the contribution of each individual to this social and human capital is very important.

That if these needs are first met in the family, typically for children and therefore healthy families are key to providing stability during the earliest stage of life. Successful nutritional programs,

such as CONIN in Argentina, ASEPUENTE and APIB cooperatives in Guatemala to mention just a few of some of the ones that I have evaluated in terms of their nutrition success, focus on prevention of hunger and/or undernourishment by taking a holistic approach. All these programs have in common that their focus of action goes beyond immediate provision of nutrients for those in need. And I want to emphasize it is not enough to provide food. Rather, the success relies on the integral approach, these programs seek to strengthen family life and engage communities so to address the obstacles encountered to achieve lasting nutritional and healthy solutions. We need to provide the means for lasting solutions. They seek to improve the overall living conditions by helping those under nutritional stress develop initiatives that will provide access to food and/or household appliances at accessible prices; they foster households and community agency by teaching responsibility and providing seed funds for home gardens and personal initiatives; they train beneficiaries in household management, hygiene, nutrition, saving schemes, and local government agency. All these are means that provide long-term solutions and sustained provision of food. They facilitate training and education so head of households can find jobs.

Mr. Chairman and honorable members of the committee, and especially I want to acknowledge Congressman Bass, the U.S. Government foreign assistance programs which target the very young cannot be considered one more effort among the many initiatives in which the U.S. is engaged. It is a priority and it is a long term investment. We know that the best way to invest is in prevention, right? And we don't have to pay for the consequences. These programs have lasting effects on the lives and opportunities of disadvantaged populations; and they prevent essential human and social capital losses wherever malnourishment prevails. Because of the lasting impacts infant malnutrition brings, identifying strategies that go beyond the mere provision of food to families but take an integral and holistic approach and places the family at the center of these solutions, is to work toward making sustainable development possible. Thank you again for inviting me to testify today.

[The prepared statement of Ms. Aguirre follows:]

# Statement Submitted

by

Hon. Maria Sophia Aguirre, Ph.D.

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To

House Committee on Foreign Affairs
Subcommittee on Africa, Global Health, Global Human Rights,
and International Organization

Hearing

"The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition"

Tuesday, March 25th, 2013, 1:30 pm

Room 2172 of the Rayburn House Office Building

Chairman Smith, Ranking Member Karen Bass and other members of the Committee, I am pleased to address the Honorable Committee on the issue of U.S. Government foreign assistance programs which target the very young. The vital role that nutrition has in the first 1000 days of a person's life is a well-established fact in scientific literature.[1] This is precisely because meeting the nutritional needs at this stage has lasting impacts throughout life.

Sustainable development is an outcome beyond those of just economic processes. It is an outcome of economic, social, and political processes that interact with and reinforce each other in ways that hinder or facilitate its achievement. At the center of these dynamics is the human person – the economic agent – who generates and is served by the economic activity. The human person has physical needs, and these are typically first met within the family.[2] Whether these needs are met or not makes a difference in his or her capacity to contribute to the economic process. Growth stunting at the age of two is irreversible. One can argue that it amounts to depriving children of equal opportunities for the rest of their lives. It equally means depriving their families, communities, societies, and their country of the human and social capital potential they have and could have contributed.

Undernourishment in an infant or in an expectant mother causes low birth weight and poor cognitive development, undermines school performance and therefore, the future educational achievement of a person.[3] This means lower productivity and hence, it hampers development. Growth stunting in early childhood has been found to be also related to dementia, obesity, hypertension, and diabetes among other illnesses.[4] These illnesses not only affect those who suffer them but it places an economic burden on the family members, communities, and

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[1] See among others Food and Security Administration (FAO), *The State of Food Insecurity in the World,*: The Multiple Dimensions of Food Security, 2013; Victora C, Adair L, *et a,*. "Maternal and child undernutrition: consequences for adult health and human capital," *Lancet*. 2008; 371:340–357; Robinson S., "Fall C. Infant nutrition and later health: a review of current Evidence", *Nutrients*, 4:8, 2012, pp. 859-874; Adair L.S. *et al*, "Associations of linear growth and relative weight gain during early life with adult health and human capital in countries of low and middle income: findings from five birth cohort studies," *Lancet*, 2013. For more information see: www.Globalnutritionseries.org

[2] Maria Sophia Aguirre, "An Integral Approach to an Economic Perspective: Consequences for Measuring Impact," *Journal of Market and Morality*, 16:1, 2013, pp 53-67; Maria Sophia Aguirre, "La Familia: Motor del Desarrollo Económico", in *Hacia la Responsabilidad Familiar Corporativa, Guia de Buenas Practicas*, Centro Standard Bank CONFYE del IAE Business School, 2013.

[3] Black, R.E., *et al*, "Maternal and child undernutrition: global and regional exposures and health consequences", *Lancet*,19;371, 2008, pp.243-60.

[4] Kim JM *et al*, "Associations between head circumference, leg length and dementia in a Korean population", .*International Journal of Geriatrics Psychiatry*, 23:1, 2008, pp. 41-8.; Staff RT *et al*, "Childhood socioeconomic status and adult brain size: childhood socioeconomic status influences adult hippocampal size," *Annual Neurology*, 71:5, 2012, 71:5, pp. 653-60; .Gunston, G.D. *et al*, "Reversible cerebral shrinkage in kwashiorkor: an MRI study", *Archives of Disease in Childhood*, 67:8, 1992, pp. 1030-1032; and Msra, A and L. Khurana, "Obesity-related NCDs South Asia vs White Caucasians", *International Journal of Obesity*, 35:1, 2011, pp. 167-187;

finances of the country to which they belong. These burdens can be avoided through investing in effective preventive initiatives.

Ensuring household food access, good health and hygiene conditions, as well as good care and health practices for infant and pregnant mothers, is to ensure that future generations will have the opportunity to contribute towards building the human and social capital necessary for sustainable development. I mentioned earlier that, typically, these needs are first met in the family. Healthy families are the key to providing stability during this early stage of life.[5] Successful nutritional programs, such as CONIN in Argentina, ASEPUENTE and APIB cooperatives in Guatemala to mention a few, focus on prevention of hunger and/or undernourishment by taking a holistic approach. All these programs have in common that heir focus of action goes beyond immediate provision of nutrients for those in need. Rather, through an integral approach, these programs seek to strengthen family life and engage communities so to address the obstacles encountered to achieve lasting nutritional and health solutions. They seek to improve the overall living conditions by helping those under nutritional stress develop initiatives that will provide access food and/or household appliances at accessible prices; they foster households and community agency by teaching responsibility and providing seed funds for home gardens and personal initiatives; they train beneficiaries in household management, hygiene, nutrition, saving schemes and local government agency. They facilitate training and education so head of households can find jobs.

Mr. Chairman and Honorable members of the Committee, U.S. Government foreign assistance programs which target the very young cannot be considered one more effort among the many initiatives in which the U.S. is engaged. It is a priority and it is a long term investment. These programs have lasting effects on the lives and opportunities of disadvantaged populations; and they prevent essential human and social capital losses wherever malnourishment prevails. Because of the lasting impacts infant malnutrition brings, identifying strategies that go beyond the mere provision of food to families but take an integral and holistic approach and places the

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[5] Maria Sophia Aguirre, "The Family and Economic Development: Socioeconomic Relevance and Policy Design", in *The Family in the New Millennium*, ed. Scott Love and Thomas Holman, London: Praeger Perspectives, 2006; Bisnaire, Lisa, Philip Firestone, and David Rynard, "Factors Associated With Academic Achievement in Children Following Parental Separation", *American Journal of Orthopsychiatry*, 60:1, 1990, pp. 67-76; Duncan, W., "Economic impact of divorce on children's development: Current findings and policy implications", *Journal of Clinical and Child Psychology*, 23:2, 1994, pp. 444-457.

family at the center of these solutions, is to work towards making sustainable development possible. Thank you.

Mr. SMITH. Thank you very much, Doctor, for your testimony and without objection since you had additional comments they will be made a part of the record as well as everybody else's full statement.

I would like to now welcome our final witness, Dr. Mandefro.

**STATEMENT OF MEHRET MANDEFRO, M.D., ADJUNCT PROFESSOR OF HEALTH POLICY, MILKEN INSTITUTE SCHOOL OF PUBLIC HEALTH, THE GEORGE WASHINGTON UNIVERSITY**

Dr. MANDEFRO. I am delighted to be providing remarks today and I want to commend both you, Chairman Smith, and Ranking Member Bass for shining a light on a very important topic, child survival and maternal health.

The public health components of our foreign assistance programs are the most leveraged commitments we can make to advance the well being of communities around the world. And we know from scientific data and practical experience that the underlying social conditions provide the foundation for realizing the physical, mental, and social well being of all, especially children. As we think about the importance of the first 1,000 days in a child's life, beginning in pregnancy, we know that the launch conditions, in my field we call these social determinants, materially impact child survival and maternal health.

Dr. Perry Klass recently wrote in the New York Times about poverty as a childhood disease. I could not agree more. My own work has brought me to clinics in Addis Ababa, Ethiopia and in the South Bronx. I have personally seen the effects of poverty in a child's life and the ways in which it affects the entire family unit. The connection between the toxic levels of stress that poverty can cause and its debilitating effects in early childhood development is well studied in the scientific literature. We have seen the damaging effects that stress hormones can cause on brain and cognitive development. To name just one specific example, exposure to excessive levels of cortisol can permanently change the brain architecture in a developing child. The science is unequivocal on this point. Early childhood experiences of stress have a profound effect on the long-term health outcomes of children into the adult years. So now that we know more we must do more. With more than 200 million children under 5 years of age that are not achieving their full development potential, we cannot afford to leave the discussion of improving the health of children to what they eat alone. We must also address the environments they are born into with clarity, courage, and accountable outcomes. These are the primary factors that ultimately determine health in their lives and their mothers.

Of course poverty is the primary target of our foreign assistance programs. So what, you may ask, does framing poverty as a childhood disease bring to the conversation of child survival and maternal health? First, it changes where we begin the conversation by highlighting the fact that feeding a child's mind is as important as feeding a child's body. Children need nurturing environments to thrive that take into account their emotional and cognitive development; the psychosocial development is often left off the table in dis-

cussions about global child survival. This is harder to do when poverty is the differential.

Second, given that we know that child survival begins with maternal health, framing poverty as a childhood disease also calls into question the conditions under which pregnant mothers live and give birth. In other words, because we pay insufficient attention to the prenatal and postpartum environment, we miss a huge opportunity to improve the lives of the very people we could help the most.

It turns out poverty is also a health hazard for adults. Early childhood experiences of stress have a profound effect on the long-term health outcomes of adults. According to one study, there is a 240 percent increase in hepatitis, a 250 percent increase in sexually transmitted diseases, a 260 percent increase in chronic obstructive pulmonary disease, and a 460 percent increase in depression. Those statistics are humbling.

The connection between these outcomes is thought to be mediated by social, emotional, and cognitive impairment as well as the adoption of harmful health risk behaviors later in life. These harmful effects also affect pregnancy outcomes by increasing the likelihood of fetal death in pregnant women. In one study, researchers found a direct correlation, up to 80 percent increased risk of fetal death in pregnant women with the highest amount of exposures of toxic stress while they were children. So these statistics compel us to rethink our approach to child survival and women's health by recognizing that physical health begins with mental health. Considering the psychological health of children also affords the opportunity to consider a host of related issue that affect the mental well-being of kids, namely child marriage as you recognized in your opening comments.

Child marriage robs the chance for a child to be a child and the statistics are also disturbing. Over the next 10 years we are talking about 180 million girls that will be married before the age of 18 and often under violent conditions. We know this has direct health effects on both child survival issues, but also maternal mortality as adolescent girls are the group most at risk to experience negative pregnancy outcomes.

So in closing, I submit that as the 2015 deadline approaches for the Millennium Development Goals, perhaps the most impactful improvement we can make to improve the health of women and children around the world is including mental health in our post-2015 objectives and our discussions of child survival. Thank you for the opportunity.

[The prepared statement of Dr. Mandefro follows:]

Mehret Mandefro, MD, MSc
Adjunct Professor of Health Policy, GWU
House Committee on Foreign Affairs
Tuesday, March 25, 2014, The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition

The public health components of our foreign assistance program are the most leveraged investments we can make to advance the wellbeing of communities around the world. And we know from scientific data and practical experience that the underlying social conditions provide the foundation for realizing the physical, mental and social wellbeing of all – especially children. As we think about the importance of the first 1000 days in a child's life, beginning in pregnancy, we know that the "launch conditions" – in my field we call these social determinants – materially impact child survival and maternal health.

Dr. Perri Klass recently wrote about poverty as a childhood disease in the *New York Times*. I could not agree more. My own work has brought me to clinics in Addis Ababa, Ethiopia and in the South Bronx. I have personally seen the effects of poverty in a child's life and the ways in which it affects the entire family unit. The connection between the toxic levels of stress that poverty can cause and its debilitating effects in early childhood development is well studied in the scientific literature. We have seen the damaging effects that stress hormones can cause on brain development. To name just one specific example, exposure to excessive levels of cortisol can permanently change the brain architecture in a developing child. The science is unequivocal on this point. Early childhood experiences of stress have a profound effect on the long-term health outcomes of children into the adult years.

So now that we know more – we must do more.

With more than 200 million children under 5 years of age that are not achieving their full development potential,[1] we cannot afford to leave the discussion of improving the health of children to what they eat alone. We must also address the environments they are born into with clarity, courage, and accountable outcomes. These are the primary factors that ultimately determine health in their lives and their mothers.

Of course poverty is the primary target of our foreign assistance programs.. So what, you may ask, does framing poverty as a childhood disease bring to the conversation of child survival and maternal health?

First, it changes where we begin the conversation by highlighting the fact that feeding a child's mind is as important as feeding a child's body. Children need

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[1] Grantham-McGregor SM, Cheung YB, Cueto S, Gleww P, Richter L, Strupp B. Development potential in the first 5 years for children in developing countries. *Lancet* 2007; 369:60-70.

nurturing environments to thrive that take into account their emotional and cognitive development. The psychosocial development often left off the table in discussions about global child survival. This is harder to do when poverty is the differential. Second, given we know that child survival begins with maternal health, framing poverty as a childhood disease also calls into question the conditions under which pregnant mothers live and give birth. In other words, because we pay insufficient attention to the prenatal and postpartum environment, we miss a huge opportunity to improve the lives of the very people we could help the most.

It turns out poverty is also a health hazard for adults. Early childhood experiences of stress have a profound effect on the long-term health outcomes of adults. According to one study there is a 240% increase in hepatitis, 250% increase in STDs, 260% increase in COPD, and a 460% increase in depression.[2] The connection between these outcomes is thought to be mediated by social, emotional and cognitive impairment as well as the adoption of harmful health-risk behaviors later in life. These harmful effects also affect pregnancy outcomes by increasing the likelihood of fetal death in pregnant women. In one study, researchers found a direct correlation – up to 80% – between the risk of fetal death and the amount of exposure to toxic stress that pregnant women experienced when they were children.

These statistics compels us to rethink our approach to child survival and women's health by recognizing that physical health begins with mental health. As the 2015 deadline approaches for the Millennium Development Goals, perhaps the most impactful improvement we can make to improve the health of women and children around the world is including mental health in our post-2015 objectives as an independent target onto itself.

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[2] Felitti MD, Vincent J, Anda MD, Robert F et al. Relationship of child abuse and household dysfunction to many of the leading cases of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine* 1998; 14(4): 245-258.

Mr. SMITH. Thank you very much, Doctor, for your testimony and your recommendations as well. A question for everyone and then I will ask some to each of you and then I will yield to my colleague, Ms. Bass. As I asked of USAID earlier, Ms. McKenna, there is a 12.2 percent cut in the line item for nutrition in the official presentation from the administration from $115 million to $101 million. There has also been a cut of 19 percent in tuberculosis, from $236 million to $191 million. There is a discouraging trendline in some of these recommendations for the budget. Even vulnerable children is cut by 34 percent from $22 million to $14.5. And I am wondering again, thankfully budgets are dynamic processes and this isn't the bottom line. Hopefully, it will ratchet up from this. But what would that kind of cut do to the work, especially sometimes other countries and partners take their cue from us? If we deemphasize something, will they in a corresponding way do the same, especially when as you spoke earlier about the ratios, 18-to-1 and some of those other very, very unbelievable ratios in terms of investments made and consequences gleaned.

Also, if you could, constructively speaking criticism is good. I am sure and Ms. Bass, we get it all the time, given the nature of our jobs. And frankly sometimes when it is well meaning and properly focused, it really does cause recalibrations and changes in behavior in Congress, as it should. Sometimes, it is just negative. Anything positively and negatively you can suggest with regards to USAID, here is your chance, if you could. I am sure you convey privately, but I do think they are grownups. It is good for them to hear what is working, what is not, and any suggestions that you might have.

You, Dr. Perry, had a number of them and one of them was to draft a comprehensive health workforce strategy. I thought we tried to do that in PEPFAR. There was a very significant capacity-building component to that legislation, particularly the first bill that was signed. But it would appear we haven't done it well enough so maybe you want to elaborate on that. And you also say the U.S. Congress should elevate U.S. Government support for community health workers by insisting on funding child survival carried out by community health workers. Don't we do that? Is that something we need to revisit. And you can elaborate on that either in written form or even now on exactly how we might do that.

Ms. Bos, again, from a faith-based perspective, do you find that World Vision is discriminated against at all or are you fully accepted as partners in this very worthwhile endeavor?

Ms. Wetzel, again, if you could speak to that as well and utilize existing religious networks. Do you find that the go-to group that is already in-country building on their capacity and their roots, if you will, particularly from the sustainability point of view. Once the money dries up or goes elsewhere, it is always nice to know the work continues.

Dr. Perry again, you obviously are well published and I have to get that article that was mentioned earlier that you wrote or the op-ed, but the Lancet, I will never forget this, back in 2008 and I read it, talked about and focused on undernutrition and that if you didn't get it right in those first 2,000 days or so what happens to that child is largely irreversible. You might want to talk about that and whether or not—there was a great deal of buzz and positive

reaction to those early articles. Has that literature continued? Are we still writing about it? Not we, but people who are experts in the field to drive this train and do even more to elaborate on it if you would.

Dr. Aguirre, if you could speak about Guatemala and maybe elaborate a bit on that. You have done a lot of work there. It would be nice to get your insights into how that has worked since USAID did provide significant funding there.

Dr. Mandefro, the toxic stress, you did elaborate a bit on it and I am wondering when you stated that one study, research has found a direct correlation between risk of fetal death and the amount of exposure to toxic stress that pregnant women had experienced when they were children. If you could maybe cite that study and maybe elaborate on that. Those are just some opening questions and I will yield to my colleague.

Yes, Ms. Bos.

Ms. BOS. Thank you, Mr. Chairman. Regarding the FY15 budget, certainly as implementing partners of USAID, we work with them to try to do more with less where we can and be as efficient and effective as possible. Of course, we do always support robust funding of foreign assistance programs for the nutrition line item specifically because those interventions are so cross-cutting and so cost effective. We would certainly support strong funding in that area. The community request for nutrition for FY15 is I believe $200 million. So there is a significant gap there and we appreciate Congress in the past having given strong support to the maternal and child health and global health programs at USAID.

As far as recommendations for USAID or our faith-based experience with USAID as a partner, we certainly feel like they value their partnership with us as we do our partnership with them. I would say that some of the movement at USAID has been more toward localization of aid. Often that means a definition of a local partner being an entity based in the country where USAID is putting in a program. Often that excludes international NGOs, even though we have local staff, we have local partners with churches, other NGOs, other organizations, it does exclude us from some of those programs if localization is a key component of that. So that is something——

Mr. SMITH. On that point, do you find or you have concerns that especially since you are so well audited and oversighted both internally as well as externally, that those protections might not exist for an indigenous NGO that might have people who are friends of the health minister or others that—where corruption might become a problem?

Ms. BOS. That is certainly something that could happen. I mean certainly we have sound oversight both within our organization and externally to make sure that we are financially responsible. But really at the end of the day if the goal is to build up local capacity, faith-based organizations are so well suited to do that because we already work from a bottom up perspective with the local communities. I mean that is how you build the capacity with those local communities and then you create the sustainability, the behavior change that lasts generation after generation.

Dr. PERRY. Thank you very much for your questions, Congressman Smith. I would like to start out with your question about what I think USAID could do better to strengthen its support for child survival programming. As I mentioned in my testimony, I have been connected with the child survival and health grants program for over 25 years now and it was an outgrowth of your original legislation back in the '80s that Congress earmarked for the child survival program. It was an effort to provide funding directly to U.S.-based PVOs to work in partnership with local PVOs in developing countries to address to child survival funding. It was a centrally funded program that has always been very small. The amount of money that has been given out by this program has never exceeded $20 million and it has been going downhill for the last 25 years. And I find that to be an extraordinary observation, given the fact that universally within USAID and outside of USAID, this is seen as one of USAID's very best programs for many reasons which I won't elaborate on right now, but it does involve World Vision, Food for the Hungry, many other faith-based NGOs, PVOs, and non-faith-based organizations. But it provides an opportunity for the Government to support the NGO efforts that originate in the United States to strengthen what they can do. But in my experience for more than three decades now, the creativity and innovation and deep passion and commitment that exists within the NGO community in the United States for child survival is extraordinary.

I think what USAID has done in developing this program has been excellent. They have developed a tremendous rapport, as you just mentioned, with the PVO community. But at this particular moment in time, it is the understanding of the NGO, PVO community that this whole program may be shelved. It hasn't been funded for 2 years now. And I find this extraordinary given the success, the demonstrated success of this program and what it has meant in terms of developing the kinds of approaches and programs that we feel are so important to move this agenda forward in nutrition and other aspects of child survival.

So I would like to make a passionate plea that the committee give special attention to ensuring in child survival funding that there is a serious effort made to engage the U.S. NGO, PVO community going forward and to greatly accelerate the amount of funding that has been made available to this program. I have asked over the years many times why this program has continually been cut back and one of the answers that has been consistently given is exactly what Ms. Bos said a second ago and that is that funding has been decentralized to the country level so there is no money available at the central level to fund these kinds of programs. And this kind of funding is vital to engage the U.S. NGO community because frequently the NGO U.S.-based NGO community within the country level doesn't have quite the same opportunity of operations that it does have by functioning as it has through the U.S. child survival and health grants program for the last 25 years. So I hope I have made my point.

Mr. SMITH. If you could, again, how much has actually been spent? Not any for the last 2 years from that spigot?

Dr. PERRY. There have been no grants awarded by the United States Child Survival and Health Grants Program for the last 2

years and there are none scheduled at the present time. Previously, the amount of funding was on the order of $20 million and the project that I discussed—that I evaluated with Food for the Hungry was funded through this mechanism. And I think it is a terribly important one for many reasons.

Mr. SMITH. And what would be an ideal amount in your view?

Dr. PERRY. $200 million, minimum.

Mr. SMITH. Okay. Your thoughts comport with Niels Daulaire who used to be very active over at USAID during——

Dr. PERRY. Yes.

Mr. SMITH. I know he has been concerned. None of us want to see any lessening of the commitment to the HIV/AIDS, malaria, and tuberculosis efforts. We also don't want to see a crowding out of other worthwhile programs robbing those in order to get to a critical mass and PEPFAR certainly has been successful beyond our dreams in many, many ways.

Dr. PERRY. It takes money to be successful.

Mr. SMITH. But that shouldn't mean that these other very important—so if you could give further thought, all of you, on—we will fight to try to get this—that is why we are having the hearing. It is about that first 1,000 days. And it seems to me when you talk about the development goals, which will be the post-2015 goals, when they will come up with a whole new set, the laggard has been child mortality.

As one of you said, and I have to remember which, we should celebrate, as you put it, the success that has been made, but there is so much that we have not done as a world or as a country to try to mitigate the problem of child mortality that is right within our grasp.

Dr. PERRY. Right.

Mr. SMITH. So $200 million, whatever you think, we need a sustainable and a very accurate number to fight for it and I know that Members of Congress are very open to—and I know that because I talk with them about these issues all the time to making sure we get it right. So that is why this hearing is being held, frankly.

Dr. PERRY. I will be happy to address your other question, but I think I have taken more time than I should.

Mr. SMITH. We will get to everyone, if you don't mind?

Dr. PERRY. I mean you had some other questions about

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Mr. SMITH. The Lancet study.

Dr. PERRY. About our support for community health worker programs and our comprehensive health workforce strategy and also the issue about what is the current status of knowledge about undernutrition. So let me just very briefly make a comment about those.

There have been programs supported by USAID that involve community health workers, but we now need—we are at a new stage where we need to professionalize our community health worker workforce which has not happened before. There are going to be more and more interventions that can be provided at the community level, but we need to learn how to integrate these together in an effective system that can be sustained over time and that can be effective and that is what we have not been funding so far. So

we are going to continue to need to build a system and it is an integral part of a health system strengthening approach.

In my experience, health system strengthening is being recognized more and more as an important area for our involvement, but too often health system strengthening has been limited to services that take place at facilities without giving full recognition to the critical role of communities and community-based delivery in terms of improving population health. And it is not recognized by ministries of health still. It is an area that needs a lot of work and support.

My only comment about undernutrition is that there was a recent series in the Lancet that was published only a few months ago that updated the 2008 Lancet series that you mentioned that was led by Dr. Robert Black at Johns Hopkins. Their conclusion is that 54 percent of child mortality can be attributed to undernutrition and in the 2008 version I think they were saying something like 38 percent or something like that. So I mean the science has continued to stress the importance of undernutrition as a fundamental part of reducing mortality, improving child survival in the first 1,000 days of life.

The problem is that so much of our aid is focused on curative health systems and not driven down to the community with behavior change communication, hand washing, exclusive breastfeeding, very simple low-cost things. These have not been given the kind of attention that other sort of medically-oriented interventions have gotten in the past and it takes a change of mindset that we are still struggling to bring about in the donor community.

Mr. SMITH. Without objection, the most recent Lancet studies that you have mentioned by R.A. Black will be made a part of the record and I thank you for reminding of us that.

Dr. PERRY. Yes.

Mr. SMITH. It is very important. Dr. Wetzel Chen?

Ms. WETZEL CHEN. Thank you. First responding to your question about recommendations for the U.S. Government, for one thing I would say we have really appreciated USAID's focus on improving their monitoring and evaluation. So for many years we were doing programs, there wasn't a heavy focus or guidance put on how to do baseline surveys, how to do followup. So it was unclear what was really working. So that support and initiative by the Government is very helpful.

Secondly, we have appreciated multi-sector and multi-year funding from the U.S. Government. One of the programs that Food for the Hungry has been able to rely on over many years has been the food security programs. So those cover nutrition, but they also include agriculture livelihoods and they provide an excellent base for us really to make changes in the community. They are typically 5-year programs and that is what is so key. When we are funded for 1 year or 3 years, it is very difficult to see behavior change happening and make an impact, so that long-term funding makes a world of difference.

Another thing that we always face as a challenge is contextualizing our programs. So there is usually a push when once we are funded to start implementing right away and see impact. But what we need to do is step back and say what are the specific

barriers that are preventing what has worked maybe in other places from working here. So allowing a lead time where we can do investigative work would be very helpful. DFID recently started doing programming slightly different where they would fund, they would select an organization or a consortia and then they would say, okay, you have 6 months to do studies and develop your full proposal. That seemed like a great way to really allow us to make impact through the programs.

Thirdly, I would like to recommend or to comment on the restraints that we have seen in terms of local NGOs. So as Ms. Bos shared, as an international NGO, we have seen that our funding is becoming more competitive. It is difficult. We don't feel that we are being discriminated against in any way as a faith-based organization. We can come to the table, compete for funding just like any other international NGO. But as Ms. Bos was sharing, 97 percent of our staff worldwide are nationals of the country where they work, but we are unable to access more and more of the funding that is made available because we are not considered a local NGO.

And there is a lot of strength and capacity that comes from having global service centers that support our field operations. We find that with the funding that we are able to win, we are using more and more resources to build the programmatic capacity of local organizations versus the technical impact of the program.

Fourthly, I would like to say we have appreciated the U.S. Government's focus on capacity-building grants and initiatives. For example, the CORE group. This is a group of maternal and child health technical implementers, NGOs. They come together twice a year. They have working groups. Some focus on nutrition. That has been a great place for the sharing of technical innovations, of best practices that TOPS Initiative by the U.S. Government. In years past, there was the institutional capacity building grant. Those are great ways to get out what works to NGOs that are implementing that.

Your question was about community health workers. Well, as I combine that with recommendations for the Government, I would say there has been a focus lately on innovation and while I applaud that focus, it often means that what we have seen to work is harder and harder to get funding for. A lot of it isn't rocket science. Breastfeeding, ORS, it works. And it is simple, but it is not happening at the level that we want to see it happening. So balancing that focus on innovation with funding what really works is important. And that relates to the community health worker question. That is funded. We have seen that going on, but it is not scaled up.

In so many countries where Food for the Hungry enters, there may be a community health worker initiative, but you may have one person trying to reach thousands of households. And what we have seen work in our care group approach is that we take one community volunteer. That person reaches somewhere between 10 and 12 neighbors. So it is peer-to-peer education. And social and behavior change research has shown that that is what really creates the changes at the household level, that we need not just a community health worker system, but one that has research has

proven is effective in creating behavior change. That is my comment. Thank you.

Mr. SMITH. Dr. Aguirre.

Ms. AGUIRRE. Yes. I will focus particularly on Guatemala which is what you have requested from me. I want to say when you look at the funding allocation in the case of USAID and what Guatemala—more than 30 percent goes to democracy and governance, something that is not surprising given the conditions of Guatemala at this point in time. We know it is a very conflicting and high crime country at this point in time.

And so having worked specifically in red zones, areas of high crime in this country, we see the consequences for the malnutrition, etcetera that we are dealing with this today because of crime, because of the lack of security, etcetera, broken families, widows. I have researched areas where the average structure is a widow because the husband has been killed in entire areas, in departments in the country. That is the framework that is not a misallocation of funds when you think in terms of long-term growth in a country and the consequences of high cost of lack of democracy and governance has on security in a country.

That being said though, I would say that I find it difficult to justify the high level of funding that in Guatemala is placed today on family planning, disproportionately given the needs of the country. We are talking about almost as much as allocation for democracy and governance when people are dying of malnutrition or lack of access to clean water or basic education.

So if I have one comment I have to make is about the allocation of funding from an economic point of view I would call inefficient as it does not meet the requirements of long-term growth for that country.

Together with that though, I was thinking of other areas where I have seen very interesting work done and USAID had been part of it is the public/private initiatives that have been taking place in Guatemala. I have been working there for several years and what I have seen specifically since 2007 has been a significant growth of public/private initiatives where you see USAID has played a good role in some aspects, for example, in the area of education of agriculture, of HIV. So there are areas that are very good. However, I wish I would see much more engagement on the part of USAID for the purpose of erasing malnutrition where you have very good community-based private initiative programs, long-term investments in communities in very needy communities, for example, as in the north of Guatemala, where we have very high-level malnutrition and hunger. There are very good initiatives taking place there. There are long-term investments as my colleagues have mentioned before. Those are the ones who are really finding long-term solutions. They take 3, 4 years investment in the different communities; USAID having not really a partner in those efforts. It will serve them well to do so.

Also, the lead time. I think this is also a very important issue. When you look at some of the investments of USAID, I will surrender they lack an institutional acknowledgment or reality of what are the values that this country wants to hold, what are the cultural backgrounds that take place in that country and that

sometimes the programs promoted by USAID, not only misplace the authority I should say. For example, by ignoring tyrants when we are talking about minors, but also by the type of programs that—our educational programs that they propose, especially in the area of sex education and family planning and I want to go to this because I have found it in my own data and that is that access to family planning, contraceptives, sex education, among some of these in this red area, red zone areas as they call, high crime areas, none of this has been helpful for early pregnancies for example. In fact, it has increased early pregnancies and it has misplaced the emphasis.

Unfortunately in Guatemala you have a lot of child abuse. The data is across the country. I can say it now because there is research everywhere. And it is an area that systematically we ignore. Interesting enough, right? Where we have—we offer all type of methodologies for contraception. We ignore the fact that we have child abuse and the consequence of that, lasting consequences for that in children.

So there are some areas where I think USAID has done a fantastic job and there are some areas where I am greatly concerned because I really think it is a misuse of funds, especially when we are talking about cutting budgets. It might be worth it to take a serious revision and especially looking at the goals that they have proposed from here to 2016 as per their report. Thank you.

Dr. MANDEFRO. So at this point I feel like I am just echoing my colleagues which I will do, happily. First of all, I could not agree with you more in terms of the child abuse statistics. They are really disheartening and one thing that continues to amaze me in my work is wherever I got across cultures, across race, across economic divides the numbers are startling and it is about one in three. And if we are looking at specifically at sexual abuse, actually it is one in three before the age of 18. And when you have a population risk factor that is that big, we can't afford to ignore it, so I guess my first comment would be is really getting USAID to do more in the sphere of mental health. And I think as a whole in global public health, we have a long way to go. And I say this to you as an internist, as a primary care physician, not even as a mental health specialist because I have seen it.

I truly believe that physical health begins with mental health. And I think a correlate point to that is that you know to the point you raised about behavior change programs, behavior change is about psychological health and well being. We know that even from the scientific literature in this country. Forty percent of our premature deaths are due to behaviors. And it is a very tough issue which is why it requires investment and I think why Congress can kind of place some restrictions about at least a certain percentage of the global public health assistance program being really directly at behavior change and more importantly addressing these large issues of abuse.

The second point to the community health workers point I couldn't agree more about the need to professionalize and I just wanted to name two projects in particular. In Ethiopia, there has actually been a lot of headway with the Ethiopian health extension workers program and a lot of their materials can serve as an exem-

plary model of how you professionalize in addition to the brave and pioneering work of partners in health. And Haiti and Rwanda are truly exemplary programs of how you can do this community health worker approach and take it to scale and get some really lasting affects.

And then to your point, Chairman Smith, the study that I cited and I think I might not have actually included the reference in my original written comments comes out of the literature in child abuse actually in this country. It is the 2004 Journal of Pediatrics study by Susan Hillis, et al., there are a lot of authors, but it is actually the original authors who came up with the adverse childhood experiences study. It is a retrospective cohort study, so they looked back on these experiences of 9,159 women over the age of 18 who attended a primary care clinic in San Diego. What they looked at was adverse childhood experiences as scored from one to eight and these are really a list of things like physical abuse, emotional abuse, sexual abuse, experiences of violence, household dysfunctions, all kinds of measures. And when they stratified this, the highest group which had an experience of 5 to 8 abuse adverse experiences had an increased risk of 80 percent in fetal death. So fetal death was actually one of the outcomes they looked at and I can give you the specifics for that reference.

Mr. SMITH. Thank you very much, for all of you. Ms. Bass.

Ms. BASS. Thank you very much. Dr. Perry, I was looking at your testimony and on page two, you list interventions that you thought would be the most appropriate. And I was just wondering what you thought in terms of how our funding is going now. I don't know where we might emphasize, but it seems like a lot of these we don't address.

Dr. PERRY. We don't.

Ms. BASS. Oral rehydration, I am sure we do, but of our funding, where do you think the emphasis is lacking now, given your list of interventions?

Dr. PERRY. Well, I think one basic fundamental idea in all of this is that nutrition has not been given the level of funding that it should have. And I think there is a wide consensus of that and that, in fact, one of the highlights, I think, of The Lancet series, The Lancet Maternal and Child Nutrition series, both in 2008 and 2013 is that we do need stronger funding for nutrition programs. And so that is an important part of this.

One area that is particularly important that I wanted to mention that responds to your question, but I also was looking for a chance to bring it up anyway since you said you had been a nurse in neonatal care unit.

Ms. BASS. Yes.

Dr. PERRY. Home based neonatal care is one of the exciting new interventions that has been developed scientifically, is now being applied on a broader scale. It is very simple. It uses community health workers to give education messages to mothers during pregnancy, have somebody who is trained to be there at the time of delivery, and then to have visitation every day for the first few days after birth and then periodically after that. Promoting good nutrition is one of the fundamental parts of it, exclusive breastfeeding, looking for signs of infection that could be treated with antibiotics

early on, proper care of the umbilical cord. This is unbelievable, but studies that are led by Hopkins and other groups now show that just simply applying chlorhexidine to the umbilical cord at the time of birth today in the world we live in can reduce neonatal mortality rates by 25 percent.

Ms. BASS. Do people use traditional methods? Is there some——

Dr. PERRY. There is still all kinds of unclean practices that take place in this world that we live in today. Why haven't we done a better job of this? I mean it is really astounding. We are not talking about money. This is pennies involved for this. So I think that home based neonatal care is a very important area that we need to put more money into. We know that as under-5 mortality continues to decline, the proportion of deaths that are occurring in the neonatal period will be increasing over time, so putting more and more emphasis on preventing neonatal deaths and stillbirths which basically requires good prenatal care and also good quality basic medical care during the time of delivery by somebody who can be a community level worker, but who has some basic training in the management of clean delivery and recognition of complications. All of these areas are going to need more funding.

We have done fairly well with oral rehydration. Zinc has come in now as an additional component for treating diarrhea. The coverage of zinc for cases of diarrhea is very low, so we have got to bring that up. Community case management of pneumonia with antibiotics, using community health workers, that has been known for a long time that that can reduce mortality from pneumonia by a third or more, but it is still a very low coverage level of this intervention. We have done very well with immunizations and Vitamin A. Those coverage levels are 80 percent or higher, but it is these other ones that are very low that we really need to focus on and we need to work on doing these in an integrated way.

You can't have a community level worker doing one thing and then having a different community level worker doing another thing. It doesn't work like that at the community level. It may work that way at the higher levels of government, but when you get down to the village level, we have got to learn how to apply these things in an integrated, coordinated way that is effective. And we are still learning and struggling with that.

Ms. BASS. Thank you. Dr. Aguirre, I was interested in what you were saying about family planning in the red zone and child abuse. And maybe you could connect that more for me. And when you are referring to child abuse, actually both of you and I was wondering what you were talking about, what type of abuse, you know. Here, for example, the main reason why children are removed from home is actually neglect as opposed to physical abuse, but you both referred to child abuse, so I was wondering—how we were defining it.

Ms. AGUIRRE. Thank you very much, Congressman Bass. Two things I wanted to say. What I found systematically in the studies I have done and specifically in red zones, but to some——

Ms. BASS. Red zones are the high crime areas?

Ms. AGUIRRE. High crime areas. High crimes areas that unfortunately there are more than we would like to see in Guatemala. What you find is in schools, so we are talking about high schools

or grade schools where access to contraceptives is widespread or the type of education promoted and often connected to USAID, this is why I brought this issue are present. Typically, you find a higher level of sexual activity among the young and sometimes beginning in fifth grade. This is what I find in the data. And actually, this is consistent with other findings in other countries, too. This is not only a Guatemala surprise.

Ms. BASS. So is this related to—because there are people in this country that believe if you do sex education or if you provide access to contraceptives that that makes kids more sexually active.

Ms. AGUIRRE. I will say I find consistent data to that position. However, let me say that I have recommended in some places the introductions of sex education. The question is what of sex education we are engaging. For example, I have experiments where I have present parents and children in this area of abuse precisely to show that we need to address this address since the schools are being ignored. And this is a very serious issue. And when I refer to sexual abuse it is not only child abuse, not only verbal abuse, we are talking about sexual abuse.

Ms. BASS. Okay.

Ms. AGUIRRE. Ninety-nine percent of the time it is not immediate family members, but it might be extended family or others, often members of a gang. There are plenty of them. Gang members.

So this is the type of data that I find. So what I am saying is this is not—what I am trying to say here is this is not about not having a sex education program if there is a need for one. I think it is the approach. What I find in the data on the studies that I have undertaken, that is problematic.

Ms. BASS. And I would ask you what was the approach? You know, for instance, we went through a number of years here before my time where we promoted abstinence which wasn't very successful. But so what was the approach that you felt that led to sexual abuse?

Ms. AGUIRRE. So what I found is two things here. I said more pregnancy and sexual activity, one subject. That is what I said. And another subject, the issue, the fact that we find sexual abuse and it is not being addressed.

Ms. BASS. Okay.

Ms. AGUIRRE. So we are putting funding on safe sex type of programs, read safe sex as "do sex, but just be protected" as opposed to perhaps delayed sexual activity. You are in fifth grade, right?

Ms. BASS. Right.

Ms. AGUIRRE. Delay sexual activity and instead of focusing for example on more healthy and comprehensive sex education where you show respect and in addition to that, you address the issue of sexual abuse. That is what I was trying to say.

Ms. BASS. So you are separating them. I see. I got that. And then just on the side note if the chairman doesn't mind, I was in Guatemala, I believe it was the beginning of last year with Senator Landrieu looking at the issue of orphans in Guatemala and I am just curious if you have any information about that. What I understand happened is that the Guatemalans cut off adoption in the United States for some real reasons because there was a lot of corruption going on.

Ms. AGUIRRE. You are absolutely right, yes.

Ms. BASS. But when Guatemala did that, it left about 300 kids in limbo because they had already been in the process. And so you happen, I am sorry, this is not really our subject, but anyway, I thought I would——

Ms. AGUIRRE. Well, I will be happy to address this issue because I have worked closely with people who have been very connected with the change of the law as well as with orphans.

Ms. BASS. Oh, good.

Ms. AGUIRRE. So I have to say I don't know if I will call it left in limbo. If there is a system, a large system in Guatemala where extended family will take those children, same pattern that often you will find, for example, in sub-Saharan Africa.

Ms. BASS. And here.

Ms. AGUIRRE. And here. We were talking about developing countries, so I am sorry. But also there has been a real concern, as you said because of the abuses that have been taking place in the process of adoptions, so they are working toward stabilizing that situation and there have been quite a lot of initiatives actually, especially at the local government levels, for example, in Guatemala City, they have an incredible, very interesting project on taking the kids from the streets and working with them. So I think that they are addressing the issue of orphans. It is not that they are being neglected.

Ms. BASS. Right, I mean I went to an orphanage and I saw the kids there, but the ones I was referring to in limbo were ones that were actually in the process of being adopted.

Ms. AGUIRRE. Oh, I am sorry. I misunderstood you.

Ms. BASS. And U.S. parents here who were in the process of adopting them and then the government shut it down. So I didn't know if that ban had been lifted.

Ms. AGUIRRE. To the best of my knowledge, it has not been.

Ms. BASS. Okay, thank you.

Ms. AGUIRRE. I cannot——

Ms. BASS. I am sorry. I appreciate that. I am sorry to put you on the spot here.

Dr. Mandefro, I wanted to ask you a couple of questions, too. Dr. Perry recommended exclusive breastfeeding which I certainly understand and would support, but I was just wondering when you find the women who are undernourished, how does that work actually, you know what I mean? Does that wind up compromising the woman's health or does her body protect her by not really producing?

Dr. MANDEFRO. I mean it is a problem, right? This is why child health must begin with maternal health. The moms definitely need their own nourishment in order for that to work. In some cases, they can still provide exclusive breast milk. Everyone's responses are slightly different, but it is a problem for sure.

I also wanted to just address the abuse question before that you had asked. When I said one in three, I was specifically talking about sexual abuse, but actually the scientific literature as it relates to adverse childhood experiences, breaks out all of these into four different abuses, physical, sexual, emotional, and neglect. So it actually gives you a score for each. So it is all of those abuses.

Ms. BASS. And so what do you think that we are doing to really address in various countries the issue of girls getting married too early, child marriage? Is there anything that we are doing to support efforts, educational efforts against that?

Dr. MANDEFRO. This is a very tough issue. Actually, the Council on Foreign Relations had a report that came out not even 7 months ago on how child marriage is a U.S. foreign policy issue now. So this issue is actually getting some traction in the domestic policy scene as well. I think child marriages also have been very effectively framed by development community as being connected to at least five of the MDGs, you know, affecting all of those outcomes. But we are ultimately talking about cultural change which is very difficult to do from the outside. I think it requires innovative methods of doing community-based outreach. There are programs.

I actually sit on the board of an organization, a reproductive health organization called Engender Health and they have been doing a lot of interesting things around gender norms in South Africa. They have a program call Men as Partners because I think where you have to start with an issue like child marriage is obviously engaging the men in a conversation and in particular, young men. So some of the most pioneering work, I think, in this area has been actually these community-based efforts that take on this challenge of talking to the men directly in these communities. And I think Men as Partners is a great program to look at. Yes, there are other programs like that.

Ms. BASS. Thank you. Thank you very much. Thank you, Mr. Chair.

Mr. SMITH. Thank you very much. Just one final question. I chaired a hearing better part of a year ago, about a year ago. We heard from Dr. Peter Hotez from Baylor who is an expert in the area of neglected tropical diseases. And I have since read his book and the question arises about in talking about the global health programs, in regard to the submission from the administration, we have already talked about the cut of 12.2 percent from $115 million to $102 million. The cut in the vulnerable children line was a 34 percent cut. But there is also a cut for neglected tropical diseases from $100 million to $86.5 million, a 13.5 percent cut or proposed cut.

I am wondering one of the biggest takeaways from reading the book and from hearing from our witnesses including Dr. Hotez from Baylor, that there were some 2 billion people who have neglected tropical diseases, that it actually worsens the vulnerability of a woman, especially for HIV/AIDS, which was something that even though I have been at many PEPFAR meetings, worked on the legislation, was not aware of it until that hearing.

But also the fact that so many children, their immune systems get compromised and in the context of nutrition, we want to feed the children, not feed the worms. And I am wondering what your thoughts might be on this. We are working on some legislation right now which will probably be a multi-month, even multi-year project because it is hard to get bills passed, I know, because most of my bills take 3 years before they become law. But this whole idea of neglected tropical diseases, the first 1,000 days, obviously, the mother is weakened, less likely if she has one of these terrible

diseases to effectively provide breast milk for her child, plus she is sick. What are your thoughts about the correlation between NTDs and nutrition and again, hopefully, we don't feed the worms? Anyone want to touch on that?

Ms. BOS. I can chime in on that, Chairman. I think that reemphasizes the need for a multi-sectoral approach to maternal and child health. If you are getting worms from unsafe water, you know, it obviously is then tying into all of the health outcomes both for the mother and the child. So too often I think the U.S. Government has been guilty of this and I think sometimes us as NGOs have also been guilty of taking a very vertical approach and seeing things in silos. And we have really learned lessons from that that you cannot address just one issue at one point in time because they are so interconnected.

And to build on something that Dr. Perry said as well, how do you get those integrated multi-sectoral interventions? The message is out through community health workers. There are ways that we are growing our knowledge of how to do that and part of that is using a lifecycle approach. So there are certain things that need to happen at 30 days of a child's life or at 6 months or at 2 years, whether it be vaccinations or teaching the mother how to prepare complementary foods for her child properly. All of those messages can be delivered at a certain point in time in a congruent way where the mothers really understand at the household level what they need to be doing. So that is just another piece, I think, of how all of this comes together. But again, getting away from some of the vertical structures that we have had. And that is where some of these strategies come into play as well, both a nutrition strategy, USAID has a water strategy. Hopefully, we can get a health worker strategy. Because different agencies are doing some of these different vertical pieces, having those intergovernmental, interagency strategies really would be very helpful into making sure every piece is working together the way it should.

Dr. PERRY. You asked a very complicated question that is a source of debate in the global health academic community and practitioner community, so I am not going to try to resolve all of that in 30 seconds. But just a comment or two. One is that there is a very exciting and successful program for neglected tropical diseases called CDI, Community Directed Interventions. And it has been supported, I don't know to what degree the United States Government directly has supported this, but it has been part of the WHO tropical disease research program and it has been going on a long time. But the reason I mention this is because it involves community empowerment, community-based delivery systems that started out as a very integrated, vertical, sort of top-down program that reached down to the community in the ways that we are arguing for, I think all of us here. But they are now starting to use this approach to bring in other child survival interventions in an integrated fashion. So I would encourage you to look into that and think about how we can build on these kinds of programs. We need all these programs and unfortunately, in the global health community, funding is so limited we end up fighting with each other to get a little bigger piece of the pie. We need a bigger pie.

I would encourage you to look for ways in which the implementation of neglected tropical diseases at the community level that reach down to the household, which they have to do to be effective, can link as well into some of the nutrition and child survival interventions that we are talking about. I think there is a lot of published literature on this, a lot of evaluations of CDI and there is some exciting opportunities there, particularly in Africa.

Ms. AGUIRRE. I was going to second Dr. Perry. That is what I was going to bring up, too.

Mr. SMITH. Thank you very much to all of you. Thank you for your leadership, your patience. I again apologize for that long delay.

And your information I can assure you will be widely disseminated among my colleagues and it will help me and others know what we need to do next step. I am very grateful and I know Ms. Bass is as well for your participation today.

This hearing has generated a great deal of interest among other civil society organizations and some of whom have provided unsolicited submissions for the record and without objection, I will ask that these documents be entered into the record from the American Academy of Pediatrics, a statement by its president, James M. Perrin, M.D.; from Bread for the World, a statement by its president, Rev. David Beckman. And from Lions Club International, a statement by its immediate past international president, Wayne A. Madden. Without objection, it is so ordered.

Members have 5 legislative days to submit additional questions or material for the record and again I thank you so very, very much. The hearing is adjourned.

[Whereupon, at 5:36 p.m., the committee was adjourned.]

# APPENDIX

## Material Submitted for the Record

**SUBCOMMITTEE HEARING NOTICE**
**COMMITTEE ON FOREIGN AFFAIRS**
U.S. HOUSE OF REPRESENTATIVES
WASHINGTON, DC 20515-6128

**Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations**
**Christopher H. Smith (R-NJ), Chairman**

March 25, 2014

**TO: MEMBERS OF THE COMMITTEE ON FOREIGN AFFAIRS**

You are respectfully requested to attend an OPEN hearing of the Committee on Foreign Affairs, to be held by the Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations in Room 2172 of the Rayburn House Office Building (and available live on the Committee website at www.foreignaffairs.house.gov):

**DATE:** Tuesday, March 25, 2014

**TIME:** 1:30 p.m.

**SUBJECT:** The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition

**WITNESSES:** Panel I
Ms. Tjada D'Oyen McKenna
Acting Assistant to the Administrator
Bureau for Food Security
U.S. Agency for International Development

Panel II
Ms. Lisa Bos
Senior Policy Advisor for Health, Education, and Water, Sanitation, and Hygiene
World Vision

Henry Perry, M.D., Ph.D.
Senior Associate
Health Systems Program
Department of International Health
Bloomberg School of Public Health
Johns Hopkins University

Ms. Carolyn Wetzel Chen
Chief Grant Development Officer
Food for the Hungry, Inc.

Sophia Aguirre, Ph.D.
Chair
Integral Economic Development Management Program
Catholic University of America

Mehret Mandefro, M.D.
Adjunct Professor of Health Policy
Milken Institute School of Public Health
The George Washington University

**By Direction of the Chairman**

*The Committee on Foreign Affairs seeks to make its facilities accessible to persons with disabilities. If you are in need of special accommodations, please call 202/225-5021 at least four business days in advance of the event, whenever practicable. Questions with regard to special accommodations in general (including availability of Committee materials in alternative formats and assistive listening devices) may be directed to the Committee.*

# COMMITTEE ON FOREIGN AFFAIRS

MINUTES OF SUBCOMMITTEE ON *Africa, Global Health, Global Human Rights, and International Organizations* HEARING

**Day** *Tuesday* **Date** *March 25, 2014* **Room** *2172 Rayburn HOB*

**Starting Time** *3:20 p.m.* **Ending Time** *5:36 p.m.*

**Recesses** [ *0* ] (____to ____) (____to ____) (____to ____) (____to ____) (____to ____) (____to ____)

**Presiding Member(s)**

*Rep. Chris Smith*

*Check all of the following that apply:*

**Open Session** [✓]
**Executive (closed) Session** [ ]
**Televised** [✓]

**Electronically Recorded (taped)** [✓]
**Stenographic Record** [✓]

**TITLE OF HEARING:**

***The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition***

**SUBCOMMITTEE MEMBERS PRESENT:**

***Rep. Karen Bass***

**NON-SUBCOMMITTEE MEMBERS PRESENT:** *(Mark with an * if they are not members of full committee.)*

**HEARING WITNESSES: Same as meeting notice attached? Yes** [✓] **No** [ ]
*(If "no", please list below and include title, agency, department, or organization.)*

**STATEMENTS FOR THE RECORD:** *(List any statements submitted for the record.)*

***Questions for the record from Rep. Smith for Ms. McKenna***
***Question for the record from Rep. Bass for Ms. McKenna***
***Revised and extended statement of Dr. Mandefro, submitted by Dr. Mehret Mandefro***
***Materials related to child nutrition, submitted for the record by Dr. Henry Perry***
***Materials from The Lancet, submitted by Rep. Chris Smith***
***Statement for the record from the American Academy of Physicians, submitted by Rep. Chris Smith***
***Statement for the record from Bread for the World, submitted by Rep. Chris Smith***
***Statement for the record from Lions Clubs past President, submitted by Rep. Chris Smith***

**TIME SCHEDULED TO RECONVENE** _____
**or**
**TIME ADJOURNED** *5:36 p.m.*

Gregory B. Simpkins
**Subcommittee Staff Director**

**Questions for the Record**
**Submitted to Bureau for Food Security**
**Acting Assistant Administrator Tjada McKenna by**
**Representative Chris Smith**
**Subcommittee on Africa, Global Health Human Rights,**
**and International Organizations**
**Committee on Foreign Affairs, U.S. House of Representatives**
**"The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition"**
**March 25, 2014**

**Question #1:**

Dr. Perry's written testimony states that there are an estimated three million stillbirths around the world each year; 99 percent of which occur in low-income countries. He also points out 3.8 million live-born children die each year before the age of two. Three-fourths of these deaths occur during the first month after birth. Do these numbers comport with your understanding of what we are talking about in terms of the loss of life?

**Answer:**

There are an estimated 2.6 million stillbirths around the world each year, with 99 percent occurring in low-income countries. The countries with the highest stillbirth and neonatal mortality risk are in sub-Saharan Africa or experiencing emergency/conflict settings. Almost five million infants die before the age of one, two-thirds of whom (2.9 million) die in their first months after birth.

USAID has been an active participant of the global steering committee that developed the *"Every Newborn Action Plan,"* which was endorsed at the World Health Assembly and launched in June 2014. The strategic objectives, high-impact interventions, and recommendations of this action plan have been integrated into the operational plans of all 24 USAID maternal and child health priority countries. In USAID's integrated maternal and newborn health programs, we support interventions that are provided during pregnancy and birth, which are essential for reducing stillbirth and newborn rates. In addition, USAID has rolled out a simplified newborn resuscitation program in 73 countries in partnership with the private sector and the American Academy of Pediatrics. In the 24 priority countries, newborn mortality rates declined 33 percent from 1990 to 2011. With an increased focus on strengthening maternal and newborn interventions during the day of birth, including newborn resuscitation, we expect that stillbirth rates will also be reduced.

**Question #2:**

The Administration proposed a budget for FY 2015 that actually cuts over 12% in funding for nutrition programs from what Congress had authorized for 2014. Could you

provide us with an analysis of what this budget cut would mean if it were implemented and explain the rationale behind it?

**Answer:**

The Administration's FY 2015 budget request for USAID's nutrition program reflects difficult choices made in a constrained budget environment. However, it is important to note that the Fiscal Year 2015 budget request includes $101,000,000 for nutrition under the Global Health Programs account, which is an increase of $6,000,000 over the Fiscal Year 2014 request of $95,000,000. In the Fiscal Year 2014 Appropriations bill, Congress provided $115,000,000 for global health nutrition programs, thereby providing additional funding.

USAID's approach to undernutrition concentrates on a multidisciplinary program that works across numerous funding streams – with the Global Health Programs-USAID account representing only one of the funding sources – to address the root causes of undernutrition. The aggregate of these investments will help fulfill our commitments made in the Nutrition for Growth Compact of 2013 to reduce stunting and child mortality, and increase coverage of effective nutrition interventions by leveraging the investments of more than 90 government, not-for-profit, and private sector entities.

Nutrition programming under the Global Health Initiative and Feed the Future aims to improve the nutritional status of women and children. Nutrition-specific activities aim to prevent and treat undernutrition through a variety of integrated services, which include: expanding nutrition education to improve maternal diets; enhancing nutrition during pregnancy; promoting exclusive breastfeeding; and improving infant and young child feeding practices.

In addition, on May 22, 2014, USAID announced a new effort to reduce the number of chronically malnourished or stunted children by at least 2 million over the next five years and hold global acute malnutrition below the agreed emergency threshold of 15 percent in places with humanitarian crises, such as South Sudan and the Central African Republic. Overall, the new 360-degree approach – called the Multi-Sectoral Nutrition Strategy – aims to cut the rate of stunting by 20 percent in places where USAID works.

**Question #3:**

What funding is needed to really make a difference in this area and take current programs to the next level? Please provide an analysis of the benefits of each extra dollar spent on these nutrition programs.

**Answer:**

The Administration's FY 2015 budget request for USAID's nutrition program reflects difficult choices made in a constrained budget environment. However, it is important to note that the Fiscal Year 2015 budget request includes $101,000,000 for nutrition under the Global Health Programs account, which is an increase of $6,000,000 over the Fiscal Year 2014 request of $95,000,000. In the Fiscal Year 2014 Appropriations bill, Congress provided $115,000,000 for global health nutrition

programs, thereby providing additional funding. Tremendous progress has been made in USAID's nutrition program and this will continue with the funding level to be provided for FY 2015.

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**Question #4:**

Could you give us a break-out of how your funding goes to faith-based organizations, both in dollar terms and as a percentage of overall program funding? Please include both official grantees and sub-grantees.

**Answer:**

USAID works alongside faith-based and community groups to raise awareness about critical global development issues and address the needs of vulnerable populations around the world. In the selection of its partners, USAID neither discriminates for or against organizations based on their faith-based character or affiliation; USAID thus also does not track funding in this way. However, USAID regularly partners and works with faith-based organizations and religious leaders, and those partnerships are in fact key to our work. Many such organizations are among USAID's largest implementing partners. For example, over a third of the American Schools and Hospital Abroad grantees for the past few years have been faith-based or faith-inspired organizations.

Although reporting on faith-based organizations is limited, FY13 Feed the Future obligations were at least $149 million, approximately 11% of the total FY13 FTF obligations for USAID. FTF partnered with at least the following faith-based organizations: Catholic Relief Services, Food for the Hungry, Inc., Adventist

Development and Relief Agency International, World Vision International, World Vision Mozambique, CARITAS Rwanda, and Child Fund International, in addition to several sub-grantees. However, official grantees track funding that they provide to individual sub-grantees and to report on this funding would require significant additional effort.

**Question #5:**

One area that was not cut but was actually increased was Family Planning and Reproductive Health. First of all, can you list what services fall on this category? Why was this funding apparently increased at the expense of other programs, such as nutrition, especially given that a large amount of funding goes toward this from groups such as the Bill and Melinda Gates Foundation, UN agencies such as UNFPA and other foreign governments such as the United Kingdom and Scandinavian governments?

**Answer:**

The Administration's FY 2015 budget request for USAID's family planning and reproductive health (FP/RH) program reflects the importance of family planning as part of an integrated package of interventions which collectively will accelerate progress toward the U.S. Government's goal of Ending Preventable Child and Maternal Deaths. Evidence shows that expanding access to voluntary family planning could prevent 30 percent of maternal deaths and 25 percent of child deaths annually, through healthy timing and spacing of births. Furthermore, according to the World Health Organization, three out of four induced abortions could be eliminated if the need for family planning were fully met.

USAID supports all the key components of effective FP/RH programs: service delivery, contraceptive supply and logistics, health communication, biomedical and social science research, policy analysis and planning, and monitoring and evaluation. Principles of voluntarism and informed choice undergird the program.

The U.S. Government, through USAID, is the bilateral leader in the arena of international family planning and reproductive health assistance. With its unique comparative advantages – technical expertise, strong on-the-ground presence, and agreements with world-class implementing partners across the full spectrum of interventions – USAID effectively complements the efforts of multilateral organizations, including UNFPA, to implement successful voluntary FP/RH programs.

**Question #6:**

Insufficient care during pregnancy and delivery is largely responsible for maternal and neonatal deaths in developing countries. Human resource constraints are limiting the capacity of countries to improve birth attendance rates. What strategies could countries with severe human resource constraints invoke to curb maternal and neonatal deaths? Did the Administration's proposed budget for 2015 actually reduce the amount of funding for skilled birth attendants?

**Answer:**

The Administration's support for global health is absolutely unwavering. USAID shares your concern that human resource constraints are limiting the capacity of countries to improve birth attendance rates, and we are committed to furthering advances to curb maternal and neonatal deaths. Tremendous progress has been made in global health, and this will continue with the funding level to be provided for FY 2015.

In countries with severe human resource constraints, there are a number of strategic drivers that reduce the risk of maternal and newborn death and disability.

- Improving individual and household behaviors for nutrition, infection prevention and the use of maternity services to improve pregnancy outcomes
- Advancing access to services by the most vulnerable, who may suffer from inequities due to age, marital status, race, ethnicity, geography, culture, economic, legal barriers or disability
- Strengthening integration of maternal health with family planning
- Scaling up quality maternal and fetal care – antenatal, labor and delivery and postpartum – including prevention and treatment of life-threatening complications
- Promotion of immediate (within the first hour of birth) and exclusive breastfeeding for six months, with continued breastfeeding along with appropriate complementary foods beginning at six months through two years, including during illness
- Preventing, diagnosing and treating indirect causes of maternal mortality and poor birth outcomes, including malnutrition and infections
- Averting and addressing maternal morbidity and disability, including anemia and fistula
- Advancing respectful maternity care and choice of mother about where, with whom and how to give birth, and improving conditions of health care providers
- Strengthening and supporting health systems, including commodities, personnel, measurement and quality improvement
- Promoting data for decision-making and accountability
- Scaling up innovation and research for policy and programs

With respect to health care providers, USAID is supporting the recruitment, training, supervision and retention of health care providers so that individuals can receive high-quality pre-service education, enhance their competencies throughout their career, gain respect and appreciation, and continue dedicated work. Also, USAID is using innovative approaches to draw women to life-saving services, such as the use of cell phones to remind women of appointments, and the use of vouchers to pay for transportation for women to travel to health facilities for safe deliveries or life-changing fistula surgeries. Through diversified strategies and effective innovations, USAID is accelerating progress in 24 high-burden countries toward Ending Preventable Child and Maternal Death by 2035. The USAID Maternal Health Vision for Action complements the Global Maternal Newborn Action Plan, both launched in June 2014.

**Questions for the Record**
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**Acting Assistant Administrator Tjada McKenna by**
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**Bolster Health and Nutrition"**
**March 25, 2014**

**Question #1:**

Are there prohibitions within USAID programming on giving birth control to individuals beneath a certain age, especially considering that the age of sexual activity in some places is quite young? Please specifically address the countries where girls are conceiving at a very young age.

**Answer:**

USAID works to increase the capability of women and girls to realize their rights, determine their life outcomes, and influence decision-making. USAID is committed to improving access to family planning and other reproductive health activities that are grounded in reproductive rights, including for youth. Youth populations have been a cross-cutting priority in family planning and reproductive health programming for years, and USAID projects take into consideration the unique health needs of adolescents and youth, particularly young women.

USAID does not have specific restrictions on providing family planning information, services and commodities to individuals beneath a certain age. USAID programming respects and follows local laws regarding any age restrictions on provision of contraceptives in countries where girls are conceiving at a young age. As stated in the International Conference on Population and Development Programme of Action, USAID recognizes that appropriate methods for couples and individuals vary according to their age, parity, family-size preference, and other factors. USAID ensures voluntarism and informed choice in all of its family planning programming, and encourages high-quality counseling for potential family planning clients.

Testimony of Mehret Mandefro, MD, MSc
Adjunct Professor of Health Policy, Milken Institute School of Public Health
The George Washington University
Hearing Before House Committee on Foreign Affairs
Subcommittee on Africa, Global Health, Global Human Rights and International Organizations

"The First 1,000 Days:
Development Aid Programs to Bolster Health and Nutrition"

Tuesday, March 25, 2014

Thank you Mr. Chairman and Ranking Member Bass for having me here today. I am delighted to be providing you my remarks and appreciate your leadership in shining a light on issues of child survival and maternal health.

The public health components of our foreign assistance programs are the most leveraged investments we can make to advance the wellbeing of communities around the world. And we know from scientific data and practical experience that the underlying social conditions provide the foundation for realizing the physical, mental and social wellbeing of all – especially children. As we think about the importance of the first 1000 days in a child's life, beginning in pregnancy, we know that the "launch conditions" – in my field we call these the social determinants – materially impact child survival and maternal health.

Dr. Perri Klass recently wrote about poverty as a childhood disease in the *New York Times*. I could not agree more. My own work has brought me to clinics in Addis Ababa, Ethiopia and in the South Bronx. I have personally seen the effects of poverty in a child's life and the ways in which it affects the entire family unit. The connection between the toxic levels of stress that poverty can cause and its debilitating effects in early childhood development is well studied in the scientific literature. We have seen the damaging effects that stress hormones can cause on brain development. To name just one specific example, exposure to excessive

levels of cortisol can permanently change the brain architecture in a developing child. The science is unequivocal on this point. Early childhood experiences of stress have a profound effect on the long-term health outcomes of children into the adult years.

So now that we know more – we must do more.

With more than 200 million children under 5 years of age that are not achieving their full development potential,[1] we cannot afford to leave the discussion of improving the health of children to what they eat alone. We must also address the environments they are born into with clarity, courage, and accountable outcomes. These are the primary factors that ultimately determine health in their lives and their mothers.

Of course poverty is the primary target of our foreign assistance programs. So what, you may ask, does framing poverty as a childhood disease bring to the conversation of child survival and maternal health?

First, it changes where we begin the conversation by highlighting the fact that feeding a child's mind is as important as feeding a child's body. Children need nurturing environments to thrive that take into account their emotional and cognitive development. The psychosocial development often left off the table in discussions about global child survival. This is harder to do when poverty is the differential. Second, given we know that child survival begins with maternal health, framing poverty as a childhood disease also calls into question the conditions under which pregnant mothers live and give birth. In other words, because we pay insufficient attention to the prenatal and postpartum

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[1] Grantham-McGregor SM, Cheung YB, Cueto S, Gleww P, Richter L, Strupp B. Development potential in the first 5 years for children in developing countries. *Lancet* 2007; 369:60-70.

environment, we miss a huge opportunity to improve the lives of the very people we could help the most.

It turns out poverty is also a health hazard for adults. Early childhood experiences of stress have a profound effect on the long-term health outcomes of adults. According to one study there is a 240% increase in hepatitis, 250% increase in sexually transmitted diseases, 260% increase in chronic obstructive pulmonary disease, and a 460% increase in depression.[2] The connection between these outcomes is thought to be mediated by social, emotional and cognitive impairment as well as the adoption of harmful health-risk behaviors later in life. These harmful effects also affect pregnancy outcomes by increasing the likelihood of fetal death in pregnant women. In one study, researchers found a direct correlation – up to 80% increased risk of fetal death in pregnant women with the highest amount of exposure to toxic stress while they were children.[3]

These statistics compels us to rethink our approach to child survival and women's health by recognizing that physical health begins with mental health. Considering the psychological health of children also affords the opportunity to consider a host of related issues that affect the mental wellbeing of kids, like child marriage, which robs the chance of a child to be a child. In the next 10 years, over 180 million girls will be married before the age of 18, often under violent conditions. And we know this has direct effects on issues of maternal health and child survival given adolescent girls are most at risk to experience negative pregnancy outcomes. So in closing, as the 2015 deadline approaches

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[2] Felitti MD, Vincent J, Anda MD, Robert F et al. Relationship of child abuse and household dysfunction to many of the leading cases of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine* 1998; 14(4): 245-258.

[3] Hillis, Susan D, Anda RF, Dube SR, Felitti et al. The association between adverse childhood experiences and adolescent pregnancy, long-term psychosocial consequences, and fetal death. *Pediatrics* 2004; 113(2):320-327.

for the Millennium Development Goals, perhaps the most impactful improvement we can make to improve the health of women and children around the world is including mental health in our post-2015 objectives as an independent target onto itself.

MATERIAL SUBMITTED FOR THE RECORD BY HENRY PERRY, M.D., PH.D., SENIOR ASSOCIATE, HEALTH SYSTEMS PROGRAM, DEPARTMENT OF INTERNATIONAL HEALTH, BLOOMBERG SCHOOL OF PUBLIC HEALTH, JOHNS HOPKINS UNIVERSITY

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Health Systems Program

28 January 2014

Dr. Rajiv Shah, Administrator
United States Agency for International Development
Washington, DC

Dear Dr. Shah:

I am writing in follow-up to the letter recently sent to you by the Board of Directors of the CORE Group on January 22 to testify that the CSHGP has been one of USAID's finest and successful investments for preventing maternal, newborn and child deaths, especially with vulnerable populations.

I write as a US citizen and as someone who has been working with the USAID Child Survival and Health Grants Program (CSHGP) since 1987. I have worked with NGOs that have received USAID child survival grants (while I was working at Andean Rural Health Care – now Curamericas Global – and while I was working at Future Generations. I have evaluated child survival programs carried out by other PVOs, including CARE, Food for the Hungry, Salvation Army World Service Organization, World Relief, and World Vision. I have served as Vice-Chair of the Board of Directors of the CORE Group (the association of US-based PVOs that USAID supports), and at present I am working on two operations research projects funded by the CSHGP, one with Concern Worldwide in the slums of Freetown, Sierra Leone and one with Curamericas Global in the most isolated mountainous area of Guatemala. I mention all of this to say that through my association with the CSHGP, I have formed a very strong and informed opinion about the value of USAID's funding to US-based international PVOs who carry out community-based programs to promote child survival and maternal health and increasingly other key interventions for family planning, HIV, malaria and TB. I have been on the faculty of the Health Systems Program at the Johns Hopkins Bloomberg School of Public Health since 2009, and I am engaged in research and writing on community-based primary health care in developing countries.

I believe that the CSHGP should have received continually expanded funding over the past three decades. Instead, as you and we all know, the funding has remained constant (around $20 million per year) since its creation in 1985. And, taking inflation into account, the actual real support has declined substantially over the years. This led to a situation in which only 20% of high-quality proposals were able to be funded. The fact that USAID has now chosen to fund no new projects through the CSHGP for the past two years is terribly disheartening.

Why do I say funding for the CSHGP has been one of USAID's very finest investments? There are four reasons for this.

First of all, repeated surveys have shown that US taxpayers want to see our government support programs that save children's and mother's lives. I am confident that

there are very few, if any, other programs at USAID that have had as direct an effect on providing high-quality maternal and child health services to underserved populations around the world at such a low cost as has the CSHGP.

Secondly, there is no other health-related program at USAID that I am aware of that has the same very high level of technical quality of screening proposals for funding, guidelines for program implementation, and evaluation. The strategy of requiring appropriate quality headquarters support staff at the recipient PVO, a baseline household survey of the population to be served by the child survival project, a mid-term and final evaluation carried out by an external consultant, and a final end-of-project survey to measure changes in coverage of key interventions have been in place since 1985. These policies have created the framework through which some of the world's most successful child survival programs have emerged. (Parenthetically, let me say that the evaluations produced over the past three decades years constitute the world's preeminent storehouse of child survival programming information and the results are publicly accessible.)

This approach has transformed many PVOs, which were brought into this new framework for programming as a result of receiving CSHGP funding. The CSHGP has been responsible for the professionalization of many PVO health program staffs and for markedly improving the quality of programs of these PVOs – not only for the funded CSHGP projects but for other health-related programs within these PVOs. This support has been critical for enabling PVO recipients to improve their capacity to mount effective child survival programs at increasingly larger scale, and now this capacity is being transferred to ministries of health and NGO partners.

The CSHGP support for the CORE Group has been one of the important avenues through which the capacity of PVOs has been strengthened. The CORE Group has promoted sharing of latest developments in child survival programming and has given PVOs the opportunity to share their best practices with one another. It is a vital resource for the professional development of PVO child survival program managers.

The third reason I say that support for the CSHGP has been one of USAID's finest investments is that this support has helped US-based PVOs innovate and apply new practical approaches to community-based programming. The creativity, deep commitment to developing effective programs, and technical expertise that exists among PVO child survival program managers has been one of the outstanding features of the CSHGP. This has been achieved in partnership between the CSHGP and the PVO community because of the unique collaborative and mutually relationship that has been established over this three-decade period.

The fourth reason I say this is because, by building partnerships with US-based PVOs, USAID has been able to leverage its funding by requiring that PVOs provide a financial match of 15-25% and in some cases, this match has been much more. Furthermore, the CSHGP has made it possible to engage the US citizens as charitable donors in a way that expands child survival programs and that fosters an awareness and commitment among US citizens about these programs and USAID's role with them.

I recognize that just because the CSHGP has been one of USAID's finest past investments is not a sufficient justification to continue funding this program or to expand it. We are aware that there is an internal review of how USAID might relate to the PVO community moving forward in this "post-MDG era" in which ending preventable maternal and child deaths by the year 2035 will be a top priority.

Let me respond to this by stating as most forcefully as I can that it is inconceivable to me that USAID would build its "A Promise Renewed" strategy without giving priority to the expansion of coverage of key child survival interventions in high-mortality settings by helping countries to build effective community-based service delivery systems in partnership with communities, district-level ministry of health programs, and national or local NGOs. An evidence-based approach to programming, which USAID supports, will require this.[1] One of the best opportunities that USAID has to promote the expansion of coverage of key child survival interventions is to support US-based PVOs to implement community-based maternal and child survival programs in priority settings. US-based PVOs have the capacity to quickly get programs up and running and rapidly expand coverage of priority interventions – in collaboration with communities, local/national NGOS, and district-level ministry of health programs. With longer-term funding that goes beyond the usual 4-5 years, I have no doubt that the partners working with CSHGP-funded child survival programs could sustain the coverage levels they achieve while US-based PVOs are gradually withdrawing their engagement over another 5-10-year period.

Over the years I have heard it said that that many within USAID are opposed to significant funding for US-based PVOs because they (and national or local NGOs in-country) have the capacity to only mount "boutique" (small-scale) and short-term projects. I believe that viewpoint is entirely mistaken. Funding constraints are often what force PVOs into small-scale, short-term activities. If longer-term funding of larger amounts were made available (instead of the typical 4-5-years of funding for $2-3 million as has been the case recently), very significant gains could be achieved in reducing maternal and child mortality at scale. And these results could be sustained by allowing a 5-10 year period of ongoing but diminishing support to US-based PVOs to slowly withdraw their support with close monitoring of coverage levels to ensure that they remain high. Furthermore, major national NGOs are now achieving the capacity to generate their own long-term funding through profit-making activities that provide sustainable funding and that enable them to scale up their programs. BRAC, with programs now in 11 countries, is now the world's pre-eminent example of this growing capacity. It is now the world's largest NGO, Bangladesh's largest NGO, and it is still growing rapidly. It is no longer possible to discount NGOs (including US-based PVOs) as "boutique" players.

It is widely acknowledged that ending preventable child and maternal deaths by the year 2035 will required all partners and stakeholders working together – governments, international donors, foundations, civic society, the private sector, and NGOs. What better way could USAID engage civic society in the US for this historic goal than to make US-based PVOs key players in USAID's strategy and giving them the funding that will enable them to reach their potential?

Over the past three decades, USAID, through its CSHGP, has been building up the capacity of US-based PVOs to carry out child survival programs in the most challenging settings around the world. How could USAID not fully capitalize on this investment by ramping up in a major way the financial support through the CSHGP to make US-based PVOs a central player in the campaign to end preventable maternal and child deaths by 2035?

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[1] Freeman P, Perry H, Gupta S, Rassekh B. Accelerating progress in achieving the Millennium Development Goal for children through community-based approaches. 2009. *Global Public Health* Nov 3:1-20.

I and many others hope that the fears we have that USAID intends to marginalize the PVO child survival community are unfounded. I urge you and others responsible for crafting the future direction of USAID's efforts in the campaign to end preventable maternal and child deaths by 2035 to build up a strongly funded, vigorous next-generation CSHGP that builds on three decades of success and effective partnerships between USAID and the US PVO community.

I write this with great respect and appreciation for all the opportunities that the CSHGP has provided to me personally as well as to the PVOs I work, and I also write this as a US citizen who wants to see USAID funds well-spent in a way that will save lives of mothers and children in the most cost-effective way possible.

Sincerely,

Henry B. Perry, MD, PhD, MPH
Senior Associate, Health Systems Program

cc Dr. Ariel Pablos-Mendez, Associate Administrator, Bureau for Global Health
Robert Clay, Deputy Assistant Administrator, Bureau for Global Health
Katie Taylor, Deputy Assistant Administrator, Bureau for Global Health
Wade Warren, Deputy Assistant Administrator, Bureau for Global Health
The Honorable Ben Cardin, US Senator from Maryland
The Honorable Barbara Mikulski, US Senator from Maryland
The Honorable John Sarbanes, US Representative from the Maryland 3rd District

## Consolidated Supplemental Materials

### Maternal and Child Nutrition 1

## Maternal and child undernutrition and overweight in low-income and middle-income countries

Robert E Black, Cesar G Victora, Susan P Walker, Zulfiqar A Bhutta, Parul Christian, Mercedes de Onis, Majid Ezzati, Sally Grantham-McGregor, Joanne Katz, Reynaldo Martorell, Ricardo Uauy, and the Maternal and Child Nutrition Study Group

Maternal and child malnutrition in low-income and middle-income countries encompasses both undernutrition and a growing problem with overweight and obesity. Low body-mass index, indicative of maternal undernutrition, has declined somewhat in the past two decades but continues to be prevalent in Asia and Africa. Prevalence of maternal overweight has had a steady increase since 1980 and exceeds that of underweight in all regions. Prevalence of stunting of linear growth of children younger than 5 years has decreased during the past two decades, but is higher in south Asia and sub-Saharan Africa than elsewhere and globally affected at least 165 million children in 2011; wasting affected at least 52 million children. Deficiencies of vitamin A and zinc result in deaths; deficiencies of iodine and iron, together with stunting, can contribute to children not reaching their developmental potential. Maternal undernutrition contributes to fetal growth restriction, which increases the risk of neonatal deaths and, for survivors, of stunting by 2 years of age. Suboptimum breastfeeding results in an increased risk for mortality in the first 2 years of life. We estimate that undernutrition in the aggregate—including fetal growth restriction, stunting, wasting, and deficiencies of vitamin A and zinc along with suboptimum breastfeeding—is a cause of 3·1 million child deaths annually or 45% of all child deaths in 2011. Maternal overweight and obesity result in increased maternal morbidity and infant mortality. Childhood overweight is becoming an increasingly important contributor to adult obesity, diabetes, and non-communicable diseases. The high present and future disease burden caused by malnutrition in women of reproductive age, pregnancy, and children in the first 2 years of life should lead to interventions focused on these groups.

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This publication has been corrected. The corrected version first appeared at thelancet.com on June 20, 2013
See Comment page 371
This is the first in a Series of four papers about maternal and child nutrition
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Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, USA (Prof R E Black MD)

### Maternal and Child Nutrition 2

## Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?

Zulfiqar A Bhutta, Jai K Das, Rehana Rizvi, Michelle F Gaffey, Neff Walker, Susan Horton, Patrick Webb, Anna Lartey, Robert E Black, The Lancet Nutrition Interventions Review Group, and the Maternal and Child Nutrition Study Group

Maternal undernutrition contributes to 800 000 neonatal deaths annually through small for gestational age births; stunting, wasting, and micronutrient deficiencies are estimated to underlie nearly 3·1 million child deaths annually. Progress has been made with many interventions implemented at scale and the evidence for effectiveness of nutrition interventions and delivery strategies has grown since *The Lancet* Series on Maternal and Child Undernutrition in 2008. We did a comprehensive update of interventions to address undernutrition and micronutrient deficiencies in women and children and used standard methods to assess emerging new evidence for delivery platforms. We modelled the effect on lives saved and cost of these interventions in the 34 countries that have 90% of the world's children with stunted growth. We also examined the effect of various delivery platforms and delivery options using community health workers to engage poor populations and promote behaviour change, access and uptake of interventions. Our analysis suggests the current total of deaths in children younger than 5 years can be reduced by 15% if populations can access ten evidence-based nutrition interventions at 90% coverage. Additionally, access to and uptake of iodised salt can alleviate iodine deficiency and improve health outcomes. Accelerated gains are possible and about a fifth of the existing burden of stunting can be averted using these approaches, if access is improved in this way. The estimated total additional annual cost involved for scaling up access to these ten direct nutrition interventions in the 34 focus countries is US$9·6 billion per year. Continued investments in nutrition-specific interventions to avert maternal and child undernutrition and micronutrient deficiencies through community engagement and delivery strategies that can reach poor segments of the population at greatest risk can make a great difference. If this improved access is linked to nutrition-sensitive approaches—ie, women's empowerment, agriculture, food systems, education, employment, social protection, and safety nets—they can greatly accelerate progress in countries with the highest burden of maternal and child undernutrition and mortality.

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See Comment page 371
This is the second in a Series of four papers about maternal and child nutrition
Aga Khan University, Karachi, Pakistan (Prof Z A Bhutta PhD); Emory Global Health Institute, Emory University, Atlanta, GA, USA (J K Das MSc); Pharos Global Health Advisors, Toronto, ON, Canada (M F Gaffey MSc); Johns Hopkins University, Bloomberg School of Public Health, Baltimore, MD, USA (N Walker PhD, Prof R E Black PhD); University

## Maternal and Child Nutrition 3

# Nutrition-sensitive interventions and programmes: how can they help to accelerate progress in improving maternal and child nutrition?

*Marie T Ruel, Harold Alderman, and the Maternal and Child Nutrition Study Group**

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This is the third in a Series of four papers about maternal and child nutrition

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Acceleration of progress in nutrition will require effective, large-scale nutrition-sensitive programmes that address key underlying determinants of nutrition and enhance the coverage and effectiveness of nutrition-specific interventions. We reviewed evidence of nutritional effects of programmes in four sectors—agriculture, social safety nets, early child development, and schooling. The need for investments to boost agricultural production, keep prices low, and increase incomes is undisputable; targeted agricultural programmes can complement these investments by supporting livelihoods, enhancing access to diverse diets in poor populations, and fostering women's empowerment. However, evidence of the nutritional effect of agricultural programmes is inconclusive—except for vitamin A from biofortification of orange sweet potatoes—largely because of poor quality evaluations. Social safety nets currently provide cash or food transfers to a billion poor people and victims of shocks (eg, natural disasters). Individual studies show some effects on younger children exposed for longer durations, but weaknesses in nutrition goals and actions, and poor service quality probably explain the scarcity of overall nutritional benefits. Combined early child development and nutrition interventions show promising additive or synergistic effects on child development—and in some cases nutrition—and could lead to substantial gains in cost, efficiency, and effectiveness, but these programmes have yet to be tested at scale. Parental schooling is strongly associated with child nutrition, and the effectiveness of emerging school nutrition education programmes needs to be tested. Many of the programmes reviewed were not originally designed to improve nutrition yet have great potential to do so. Ways to enhance programme nutrition-sensitivity include: improve targeting; use conditions to stimulate participation; strengthen nutrition goals and actions; and optimise women's nutrition, time, physical and mental health, and empowerment. Nutrition-sensitive programmes can help scale up nutrition-specific interventions and create a stimulating environment in which young children can grow and develop to their full potential.

## Maternal and Child Nutrition 4

# The politics of reducing malnutrition: building commitment and accelerating progress

*Stuart Gillespie,* Lawrence Haddad,* Venkatesh Mannar, Purnima Menon, Nicholas Nisbett, and the Maternal and Child Nutrition Study Group*

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This is the fourth in a Series of four papers about maternal and child nutrition

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In the past 5 years, political discourse about the challenge of undernutrition has increased substantially at national and international levels and has led to stated commitments from many national governments, international organisations, and donors. The Scaling Up Nutrition movement has both driven, and been driven by, this developing momentum. Harmonisation has increased among stakeholders, with regard to their understanding of the main causes of malnutrition and to the various options for addressing it. The main challenges are to enhance and expand the quality and coverage of nutrition-specific interventions, and to maximise the nutrition sensitivity of more distal interventions, such as agriculture, social protection, and water and sanitation. But a crucial third level of action exists, which relates to the environments and processes that underpin and shape political and policy processes. We focus on this neglected level. We address several fundamental questions: how can enabling environments and processes be cultivated, sustained, and ultimately translated into results on the ground? How has high-level political momentum been generated? What needs to happen to turn this momentum into results? How can we ensure that high-quality, well-resourced interventions for nutrition are available to those who need them, and that agriculture, social protection, and water and sanitation systems and programmes are proactively reoriented to support nutrition goals? We use a six-cell framework to discuss the ways in which three domains (knowledge and evidence, politics and governance, and capacity and resources) are pivotal to create and sustain political momentum, and to translate momentum into results in high-burden countries.

# Community Health Workers in Low-, Middle-, and High-Income Countries: An Overview of Their History, Recent Evolution, and Current Effectiveness

Henry B. Perry,[1] Rose Zulliger,[2] and Michael M. Rogers[3]

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Keywords

human resources for health, primary health care, Millennium Development Goals, health systems, health systems strengthening

Abstract

Over the past half-century, community health workers (CHWs) have been a growing force for extending health care and improving the health of populations. Following their introduction in the 1970s, many large-scale CHW programs declined during the 1980s, but CHW programs throughout the world more recently have seen marked growth. Research and evaluations conducted predominantly during the past two decades offer compelling evidence that CHWs are critical for helping health systems achieve their potential, regardless of a country's level of development. In low-income countries, CHWs can make major improvements in health priority areas, including reducing childhood undernutrition, improving maternal and child health, expanding access to family-planning services, and contributing to the control of HIV, malaria, and tuberculosis infections. In many middle-income countries, most notably Brazil, CHWs are key members of the health team and essential for the provision of primary health care and health promotion. In the United States, evidence indicates that CHWs can contribute to reducing the disease burden by participating in the management of hypertension, in the reduction of cardiovascular risk factors, in diabetes control, in the management of HIV infection, and in cancer screening, particularly with hard-to-reach subpopulations. This review highlights the history of CHW programs around the world and their growing importance in achieving health for all.

# Reducing child global undernutrition at scale in Sofala Province, Mozambique, using Care Group Volunteers to communicate health messages to mothers

Thomas P Davis, Jr,[a] Carolyn Wetzel,[a] Emma Hernandez Avilan,[b] Cecilia de Mendoza Lopes,[c] Rachel P Chase,[d] Peter J Winch,[d] Henry B Perry[d]

**Care Group peer-to-peer behavior change communication improved child undernutrition at scale in rural Mozambique and has the potential to substantially reduce under-5 mortality in priority countries at very low cost.**

**ABSTRACT**

**Background:** Undernutrition contributes to one-third of under-5 child mortality globally. Progress in achieving the Millennium Development Goal of reducing under-5 mortality is lagging in many countries, particularly in Africa. This paper shares evidence and insights from a low-cost behavior-change innovation in a rural area of Mozambique.

**Intervention:** About 50,000 households with pregnant women or children under 2 years old were organized into blocks of 12 households. One volunteer peer educator (Care Group Volunteer, or CGV) was selected for each block. Approximately 12 CGVs met together as a group every 2 weeks with a paid project promoter to learn a new child-survival health or nutrition message or skill. Then the CGVs shared the new message with mothers in their assigned blocks.

**Methods of evaluation:** Household surveys were conducted at baseline and endline to measure nutrition-related behaviors and childhood nutritional status.

**Findings:** More than 90% of beneficiary mothers reported that they had been contacted by CGVs during the previous 2 weeks. In the early implementation project area, the percentage of children 0–23 months old with global undernutrition (weight-for-age with z-score of less than 2 standard deviations below the international standard mean) declined by 8.1 percentage points ($P<0.001$), from 25.9% (95% confidence interval [CI]=22.2%–29.6%) at baseline to 17.8% at endline (95% CI=14.6%–20.9%). In the delayed implementation area, global undernutrition declined by 11.5 percentage points ($P<0.001$), from 27.1% (95% CI=23.6%–30.6%) to 15.6% (95% CI=12.6%–18.6%). Total project costs were US$3.0 million, representing an average cost of US$0.55 per capita per year (among the entire population of 1.1 million people) and US$2.78 per beneficiary (mothers with young children) per year.

**Conclusion:** Using the Care Group model can improve the level of global undernutrition in children at scale and at low cost. This model shows sufficient promise to merit further rigorous testing and broader application.

MATERIAL SUBMITTED FOR THE RECORD BY THE HONORABLE CHRISTOPHER H. SMITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW JERSEY, AND CHAIRMAN, SUBCOMMITTEE ON AFRICA, GLOBAL HEALTH, GLOBAL HUMAN RIGHTS, AND INTERNATIONAL ORGANIZATIONS

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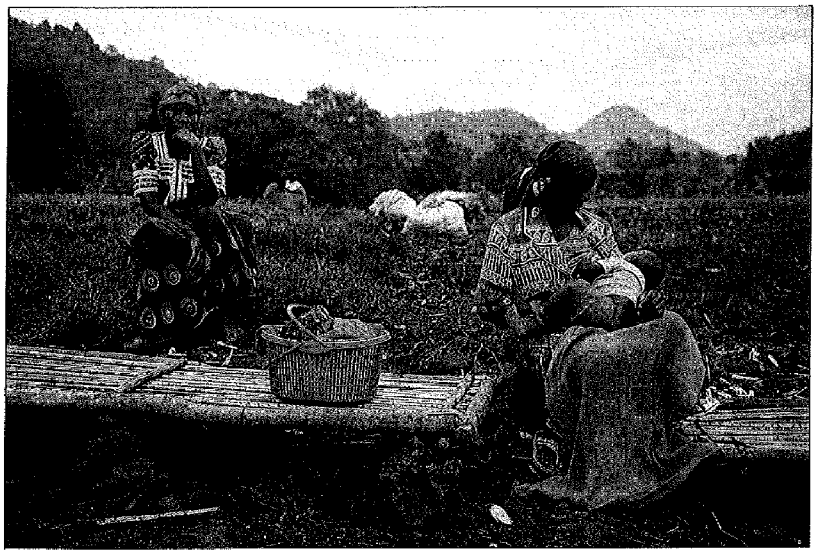
# Maternal and Child Nutrition

## Executive Summary of *The Lancet* Maternal and Child Nutrition Series



"Nutrition is crucial to both individual and national development. The evidence in this Series furthers the evidence base that good nutrition is a fundamental driver of a wide range of developmental goals. The post-2015 sustainable development agenda must put addressing all forms of malnutrition at the top of its goals."

## Maternal and Child Nutrition

Maternal and child undernutrition, consisting of stunting, wasting, and deficiencies of essential vitamins and minerals, was the subject of a Series of papers in *The Lancet* in 2008.[1-5] In the Series, we quantified the prevalence of these issues, calculated their short-term and long-term consequences, and estimated their potential for reduction through high and equitable coverage of proven nutrition interventions.

The 2008 Series identified the need to focus on the crucial period from conception to a child's second birthday—the 1000 days in which good nutrition and healthy growth have lasting benefits throughout life. The Series also called for greater priority for national nutrition programmes, stronger integration with health programmes, enhanced intersectoral approaches, and more focus and coordination in the global nutrition system of international agencies, donors, academia, civil society, and the private sector.

5 years after the initial series, we re-evaluate the problems of maternal and child undernutrition and also examine the growing problems of overweight and obesity for women and children and their consequences in low-income and middle-income countries (LMICs). Many of these countries are said to have the double burden of malnutrition—continued stunting of growth and deficiencies of essential nutrients along with the emerging issue of obesity. We also assess national progress in nutrition programmes and international efforts toward previous recommendations.

The first paper[6] examines the prevalence and consequences of nutritional conditions during the life course from adolescence (for girls) through pregnancy to childhood and discusses the implications for adult health. The second paper[7] covers the evidence supporting nutrition-specific interventions and the health outcomes and cost of increasing their population coverage. The third paper[8] examines nutrition-sensitive interventions and approaches and their potential to improve nutrition. The fourth paper[9] discusses the features of an enabling environment that are needed to provide support for nutrition programmes, and how they can be favourably influenced. A set of Comments[10-13] examine what is currently being done, and what should be done nationally and internationally to address nutritional and developmental needs of women and children in LMICs.

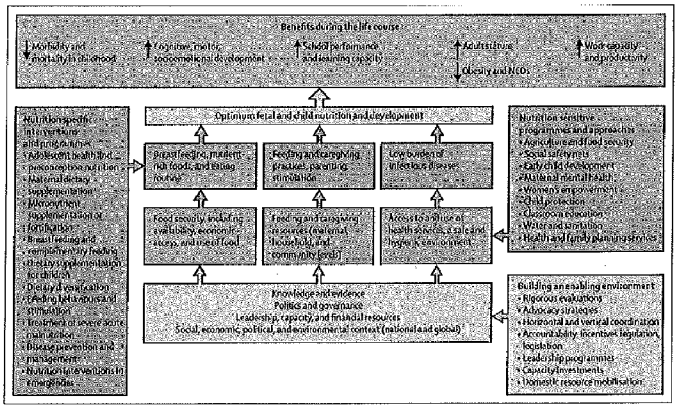



*Figure 1:* Framework for actions to achieve optimum fetal and child nutrition and development

## A new conceptual framework

The present Series is guided by a framework (figure 1) that shows the means to optimum fetal and child growth and development.[6] This framework outlines the dietary, behavioural, and health determinants of optimum nutrition, growth, and development, and how they are affected by underlying food security, caregiving resources, and environmental conditions, which are in turn shaped by economic and social conditions, national and global contexts, capacity, resources, and governance. The Series focuses on how these determinants can be changed to enhance growth and development, including the nutrition-specific interventions that address the immediate causes of suboptimum growth and development and the potential effects of nutrition-sensitive interventions that address the underlying determinants of malnutrition and incorporate specific nutrition goals and actions (panel 1). It also shows how an enabling environment can be built to support interventions and programmes to enhance growth and development.

*Panel 1:* Definition of nutrition-specific and nutrition-sensitive interventions and programmes

**Nutrition-specific interventions and programmes**

- Interventions or programmes that address the immediate determinants of fetal and child nutrition and development—adequate food and nutrient intake, feeding, caregiving and parenting practices, and low burden of infectious diseases
- Examples: adolescent, preconception, and maternal health and nutrition; maternal dietary or micronutrient supplementation; promotion of optimum breastfeeding; complementary feeding and responsive feeding practices and stimulation; dietary supplementation; diversification and micronutrient supplementation or fortification for children; treatment of severe acute malnutrition; disease prevention and management; nutrition in emergencies

**Nutrition-sensitive interventions and programmes**

- Interventions or programmes that address the underlying determinants of fetal and child nutrition and development—food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment—and incorporate specific nutrition goals and actions
- Nutrition-sensitive programmes can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage, and effectiveness
- Examples: agriculture and food security; social safety nets; early child development; maternal mental health; women's empowerment; child protection; schooling; water, sanitation, and hygiene; health and family planning services

Adapted from Scaling Up Nutrition[17] and Shekar and colleagues, 2013[18]

## An unfinished agenda for undernutrition

The publication of *The Lancet* Maternal and Child Undernutrition Series 5 years ago stimulated a tremendous increase in political commitment to reduction of undernutrition at global and national levels. Most development agencies have revised their strategies to address undernutrition focused on the 1000 days during pregnancy and the first 2 years of life, as called for in the 2008 Series. One of the main drivers of this new international commitment is the Scaling Up Nutrition (SUN) movement.[16,19] National commitment in LMICs is growing, donor funding is rising, and civil society and the private sector are increasingly engaged.

However, this progress has not yet translated into substantially improved outcomes globally. Improvements in nutrition still represent a massive unfinished agenda. The 165 million children with stunted growth have compromised cognitive development and physical capabilities, making yet another generation less productive than they would otherwise be.[6] Countries will not be able to break out of poverty and sustain economic advances without ensuring that their populations are adequately nourished. Undernutrition reduces a nation's economic advancement by at least 8% because of direct productivity losses, losses via poorer cognition, and losses via reduced schooling.[20] We cannot afford for nothing to change.

## Burden of nutritional conditions

### Undernutrition in LMICs

Stunted linear growth has become the main indicator of childhood undernutrition, because it is highly prevalent in nearly all LMICs, and has important consequences for health and development. It should replace underweight as the main anthropometric indicator for children. The prevalence of stunting in children younger than 5 years in LMICs in 2011 was 26%, a decrease from 40% in 1990, and 32% in 2005, the estimate in the previous nutrition Series.[1,5] The number of stunted children has also decreased globally, from 253 million in 1990, to 178 million in 2005, to 165 million in 2011. This represents an average annual rate of reduction of 2·1%.[5]

The World Health Assembly (WHA) called for a 40% reduction in the global number of children younger than 5 years who are stunted by 2025 (compared with the baseline of 2010).[21] This aim would translate into a 3·9% reduction per year and imply reducing the number of stunted children from 171 million in 2010, to about 100 million in 2025.[6] At the present rate of decline,

stunting is expected to reduce to 127 million, a 25% reduction, in 2025. Eastern and western Africa and south-central Asia have the highest prevalence of stunting; the largest number of children affected by stunting, 69 million, live in south-central Asia. In Africa, only small improvements are anticipated on the basis of present trends, with the number of affected children increasing from 56 to 61 million, whereas Asia is projected to show a substantial decrease in stunting prevalence.

The prevalence of wasting was 8% globally in 2011, affecting 52 million children younger than 5 years, an 11% decrease from an estimated 58 million in 1990.[6] The prevalence of severe wasting was 2·9%, affecting 19 million children.[6] 70% of the world's children with wasting live in Asia, mostly in south-central Asia, where an estimated 15% (28 million) are affected.[6]

Deficiencies of essential vitamins and minerals are widespread and have substantial adverse effects on child survival and development.[6] Deficiencies of vitamin A and zinc adversely affect child health and survival, and deficiencies of iodine and iron, together with stunting, contribute to children not reaching their developmental potential. Much progress has been made in addressing vitamin A deficiency but efforts must continue at present coverage levels to avoid regressing because dietary intake of vitamin A is still inadequate. Additionally, micronutrient deficiencies have an important part to play in maternal health.[6]

Breastfeeding practices are far from optimum, despite improvements in some countries. Suboptimum breastfeeding results in an increased risk for mortality in the first 2 years of life and results in 800 000 deaths annually.[6]

| | Attributable deaths with UN prevalences* | Proportion of total deaths of children younger than 5 years | Attributable deaths with NiMS prevalences† | Proportion of total deaths of children younger than 5 years |
|---|---|---|---|---|
| Fetal growth restriction (<1 month) | 817 000 | 11·8% | 817 000 | 11·8% |
| Stunting (1–59 months) | 1 017 000* | 14·7% | 1 179 000† | 17·0% |
| Underweight (1–59 months) | 999 000* | 14·4% | 1 180 000† | 17·0% |
| Wasting (1–59 months) | 875 000* | 12·6% | 800 000† | 11·5% |
| Severe wasting (1–59 months) | 516 000* | 7·4% | 540 000† | 7·8% |
| Zinc deficiency (12–59 months) | 116 000 | 1·7% | 116 000 | 1·7% |
| Vitamin A deficiency (6–59 months) | 157 000 | 2·3% | 157 000 | 2·3% |
| Suboptimum breastfeeding (0–23 months) | 804 000 | 11·6% | 804 000 | 11·6% |
| Joint effects of fetal growth restriction and suboptimum breastfeeding in neonates | 1 348 000 | 19·4% | 1 348 000 | 19·4% |
| Joint effects of fetal growth restriction, suboptimum breastfeeding, stunting, wasting, and vitamin A and zinc deficiencies (<5 years) | 3 057 000 | 44·7% | 3 149 000 | 45·4% |

Data are to the nearest thousand. *Prevalence estimates from the UN. †Prevalence estimates from Nutrition Impact Model Study (NiMS).

Table 1: Global deaths in children younger than 5 years attributed to nutritional disorders

Key messages on disease burden due to nutritional conditions

- Iron and calcium deficiencies contribute substantially to maternal deaths
- Maternal iron deficiency is associated with babies with low weight (<2500 g) at birth
- Maternal and child undernutrition, and unstimulating household environments, contribute to deficits in children's development and health and productivity in adulthood
- Maternal overweight and obesity are associated with maternal morbidity, preterm birth, and increased infant mortality
- Fetal growth restriction is associated with maternal short stature and underweight and causes 12% of neonatal deaths
- Stunting prevalence is slowly decreasing globally, but affected at least 165 million children younger than 5 years in 2011; wasting affected at least 52 million children
- Suboptimum breastfeeding results in more than 800 000 child deaths annually
- Undernutrition, including fetal growth restriction, suboptimum breastfeeding, stunting, wasting, and deficiencies of vitamin A and zinc, cause 45% of child deaths, resulting in 3·1 million deaths annually
- Prevalence of overweight and obesity is increasing in children younger than 5 years globally and is an important contributor to diabetes and other chronic diseases in adulthood
- Undernutrition during pregnancy, affecting fetal growth, and the first 2 years of life is a major determinant of both stunting of linear growth and subsequent obesity and non-communicable diseases in adulthood

### Maternal, newborn, and child nutrition

New evidence further reinforces the importance of the nutritional status of women at the time of conception and during pregnancy, both for the health of the mother and for ensuring healthy fetal growth and development. 32 million babies are born small-for-gestational-age (SGA) annually—representing 27% of all births in LMICs. Fetal growth restriction causes more than 800 000 deaths each year in the first month of life—more than a quarter of all newborn deaths.[6] This new finding contradicts the widespread assumption that babies who are born SGA, by contrast with preterm babies, are not at a substantially increased risk of mortality. Neonates with fetal growth restriction are also at substantially increased risk of being stunted at 24 months and of development of some types of non-communicable diseases in adulthood.[6]

Undernutrition (fetal growth restriction, suboptimum breastfeeding, stunting, wasting, and deficiencies of vitamin A and zinc) causes 45% of all deaths of

children younger than 5 years, representing more than 3 million deaths each year (3·1 million of the 6·9 million child deaths in 2011).[4] Fetal growth restriction and suboptimum breastfeeding together cause more than 1·3 million deaths, or 19·4% of all deaths of children younger than 5 years, representing 43·5% of all nutrition-related deaths (table 1).

Good nutrition early in life is also essential for children to attain their developmental potential; however, poor nutrition often coincides with other developmental risks, in particular inadequate stimulation during early childhood.[5] Interventions to promote home stimulation and learning opportunities in addition to good nutrition will be needed to ensure optimum early development and longer-term gains in human capital.[5]

This new evidence strengthens the case for a continued focus on the crucial 1000 day window during pregnancy and the first 2 years of life. It also shows the importance of intervening early in pregnancy and even before conception. Because many women do not access nutrition-promoting services until month 5 or 6 of pregnancy, it is important that women enter pregnancy in a state of optimum nutrition. The emerging platforms for adolescent health and nutrition might offer opportunities for enhanced benefits.[7]

There is a growing interest in adolescent health as an entry point to improve the health of women and children, especially because an estimated 10 million girls younger than 18 years are married each year.[6] Evidence-based interventions must be introduced in the pre-conception period and in adolescents in countries with a high burden of undernutrition and young age at first pregnancies; however, targeting and reaching a sufficient number of those in need may be a challenge.

#### Prevention of maternal deaths

Iron and calcium deficiencies contribute substantially to maternal deaths. Previously reported analyses, confirmed by this Series, showed that anaemia is a risk factor for maternal deaths, probably because of haemorrhage, the leading cause of maternal deaths (23% of total deaths). Additionally there is now sound evidence that calcium deficiency increases the risk of pre-eclampsia, currently the second leading cause of maternal death (19% of total deaths). Thus, addressing deficiencies of these two minerals could result in substantial reduction of maternal deaths.

#### Emerging burden of obesity

Overweight in adults and increasingly in children constitutes an emerging burden that is quickly establishing itself globally, affecting both poor and rich populations. The prevalence of maternal overweight has increased steadily since 1980, and exceeds that of maternal underweight in all regions of the world. Maternal overweight and obesity result in increased maternal morbidity and infant mortality.[8]

Overweight and obesity prevalence is increasing in children younger than 5 years globally, especially in developing countries, and is becoming an increasingly important contributor to adult obesity, diabetes, and non-communicable diseases.[8] Although the prevalence of overweight in high-income countries is more than double that in LMICs, most affected children (76% of the total number) live in LMICs. The trends in early childhood overweight are a probably a consequence of changes in dietary and physical activity patterns over time overlaid on risks attributable to fetal growth restriction and stunting.

If trends are not reversed, increasing rates of childhood overweight and obesity will have vast implications, not only for future health-care expenditures but also for the overall development of nations. These findings confirm the need for effective interventions and programmes to reverse these anticipated trends. Early recognition of excessive weight gain relative to linear growth is essential.

### Furthering the evidence to improve maternal and child nutrition

Since the 2008 Series, many nutrition interventions have been successfully implemented at scale, and the evidence base for effective interventions and delivery strategies has grown. At the same time, coverage rates for other interventions are either poor or non-existent. We modelled ten nutrition-specific interventions across the lifecycle to address undernutrition and micronutrient deficiencies in women of reproductive age, pregnant women, neonates, infants, and children to assess the effects and cost of scaling up (figure 2).[7] The interventions were: periconceptual folic acid supplementation, maternal balanced energy protein supplementation, maternal calcium supplementation, multiple micronutrient supplementation in pregnancy, promotion of breastfeeding, appropriate complementary feeding, vitamin A administration and preventive

zinc supplementation in children aged 6–59 months, management of severe acute malnutrition (SAM), and management of moderate acute malnutrition.

Continued investment in nutrition-specific interventions and delivery strategies to reach poor segments of the population at greatest risk can make a substantial difference. If these ten proven nutrition-specific interventions were scaled-up from existing population coverage to 90%, an estimated 900 000 lives could be saved in 34 high nutrition-burden countries (where 90% of the world's stunted children live, figure 3) and the prevalence of stunting could be reduced by 20% and that of severe wasting by 60%. This would reduce the number of children with stunted growth and development by 33 million.[7] On top of existing trends, this improvement would comfortably reach the WHA targets for 2025.

### Cost of scaling up proven interventions

We estimate that the cost of scaling-up this package of ten essential nutrition-specific interventions to 90% coverage in 34 countries is Int$9·6 billion per year (table 2).[7] Of the $9·6 billion, $3·7 billion (39%) is for micronutrient interventions, $0·9 billion (10%) for educational interventions, and $2·6 billion (27%) for management of SAM. The remaining $2·3 billion (24%) accounts for provision of food for pregnant women and children aged 6–23 months in poor households. Since many interventions are being scaled up from negligible coverage, the cost is reasonable; the cost per discounted life-year saved is about $370 ($213 per undiscounted life-year saved).

More than half the $9·6 billion is accounted for by two large countries which will rely heavily on domestic resources (India and Indonesia). Consumables (drugs, or other items such as for transport or administration) account for a little less than half of the $9·6 billion, and all but the poorest countries can be expected to cover most of the expenditures on personnel. Therefore, $3–4 billion from external donors could make a substantial difference to child nutrition

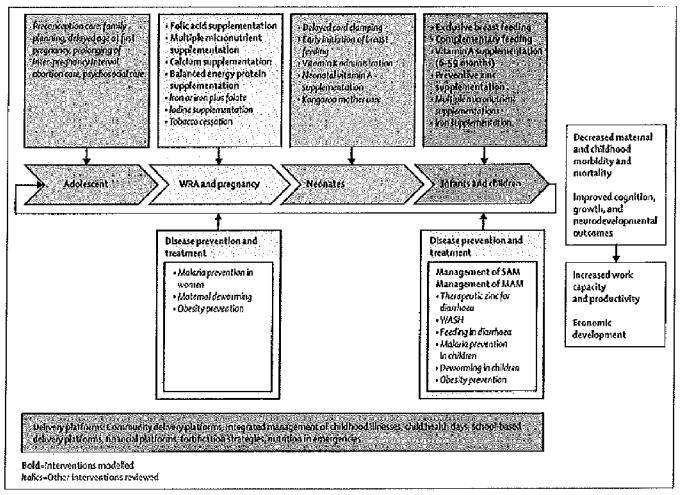



*Figure 2:* Conceptual framework
WRA=women of reproductive age. WASH=water, sanitation, and hygiene. SAM=severe acute malnutrition. MAM=moderate AM

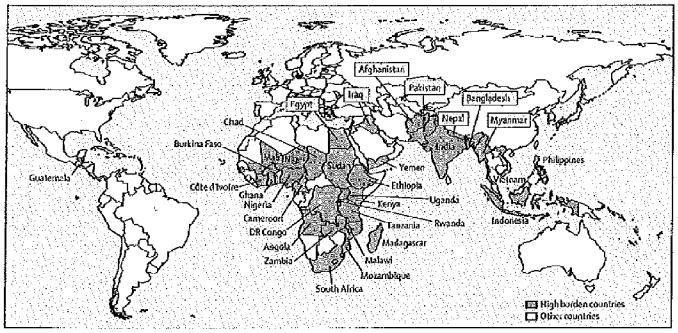



*Figure 3:* Countries with the highest burden of malnutrition
These 34 countries account for 90% of the global burden of malnutrition.

### The promise of emerging interventions and delivery strategies and platforms

Delivery strategies are crucial to achieving coverage with nutrition-specific interventions and reaching populations in need. A range of channels can provide opportunities for scaling up and reaching large population segments, such as fortification of staple foods and conditional and unconditional cash transfers.[7] Community delivery platforms for nutrition education and promotion, integrated management of childhood illness, school-based delivery platforms, and child health days are other possible channels.

Innovative delivery strategies—especially community-based delivery platforms—are promising for scaling up coverage of nutrition interventions and have the potential to reach poor and difficult to access populations through communication and outreach strategies.[7] These could also lead to potential integration of nutrition with maternal, newborn, and child health interventions, helping to achieve reductions in inequities.

## Unlocking the potential of nutrition-sensitive programmes

In addition to nutrition-specific interventions, acceleration of progress in nutrition will also require increases in the nutritional outcomes of effective, large-scale, nutrition-sensitive development programmes.[8] Nutrition-sensitive programmes address key underlying determinants of nutrition—such as poverty, food insecurity, and scarcity of access to adequate care resources—and include nutrition goals and actions. They can therefore help enhance the effectiveness, coverage, and scale of nutrition-specific interventions.

Our review of potentially nutrition-sensitive programmes in agriculture, social safety nets, early child

| | Number of lives saved* | Cost per life-year saved† |
|---|---|---|
| **Optimum maternal nutrition during pregnancy** | | |
| Maternal multiple micronutrient supplements to all<br>Calcium supplementation to mothers at risk of low intake‡<br>Maternal balanced energy protein supplements as needed<br>Universal salt iodisation‡ | 102 000<br>(49 000–146 000) | $571 (398–1191) |
| **Infant and young child feeding** | | |
| Promotion of early and exclusive breastfeeding for 6 months and continued breastfeeding for up to 24 months<br>Appropriate complementary feeding education in food secure populations and additional complementary food supplements in food insecure populations | 221 000<br>(135 000–293 000) | $175 (132–286) |
| **Micronutrient supplementation in children at risk** | | |
| Vitamin A supplementation between 6 and 59 months age<br>Preventive zinc supplements between 12 and 59 months of age | 145 000<br>(30 000–215 000) | $159 (106–766) |
| **Management of acute malnutrition** | | |
| Management of moderate acute malnutrition<br>Management of severe acute malnutrition | 435 000<br>(285 000–482 000) | $125 (119–152)§ |

Data are number (95% CI) or cost in 2010 international dollars (95% CI). *Effect of each of package when all four packages are scaled up at once. †Cost per life-year saved assumes that a life saved of a child younger than 5 years saves on average 59 life-years, based on WHO data (2011[10]) that life expectancy at birth on average in low-income countries is 60, and that most deaths of children younger than 5 years occur in the first year of life. To convert to cost per discounted life-year saved multiply these estimates by 59/32 (ie, 1·84). ‡Intervention has effect on maternal or child morbidity, but no direct effect on lives saved. §Cost per life-year saved by management of severe acute malnutrition only; costs for supplementary feeding for moderate acute malnutrition are currently unavailable.

**Table 2:** Effect of packages of nutrition interventions at 90% coverage

development, and schooling confirms that programmes in these sectors are successful at addressing several of the underlying determinants of nutrition, but evidence of their nutritional effect is still scarce.

Targeted agricultural programmes have an important role in support of livelihoods, food security, diet quality, and women's empowerment, and complement global efforts to stimulate agricultural productivity and thus increase producer incomes while protecting consumers from high food prices.* Evidence of effect on nutrition outcomes, however, is inconclusive, with the exception of effects on vitamin A intake and status from homestead food production programmes and distribution of biofortified vitamin A-rich orange sweet potato. Evidence suggests that targeted agricultural programmes are more successful when they incorporate strong behaviour change communications strategies and a gender-equity focus. Although firm conclusions have been hindered by a dearth of rigorous programme evaluations, weaknesses in programme design and implementation also contribute to the limited evidence of nutritional outcomes so far.

Key messages on nutrition-specific interventions

- A clear need exists to introduce promising evidence-based interventions in the preconception period and in adolescents in countries with a high burden of undernutrition and young age at first pregnancies; however, targeting and reaching a sufficient number of those in need will be challenging.
- Promising interventions exist to improve maternal nutrition and reduce intrauterine growth restriction and small-for-gestational-age (SGA) births in appropriate settings in developing countries, if scaled up before and during pregnancy. These interventions include balanced energy protein, calcium, and multiple micronutrient supplementation and preventive strategies for malaria in pregnancy.
- Replacement of iron-folate with multiple micronutrient supplements in pregnancy might have additional benefits for reduction of SGA in at-risk populations, although further evidence from effectiveness assessments might be needed to guide a universal policy change.
- Strategies to promote breastfeeding in community and facility settings have shown promising benefits on enhancing exclusive breastfeeding rates; however, evidence for long-term benefits on nutritional and developmental outcomes is scarce.
- Evidence for the effectiveness of complementary feeding strategies is insufficient, with much the same benefits noted from dietary diversification and education and food supplementation in food secure populations and slightly greater effects in food insecure populations. Further effectiveness trials are needed in food insecure populations with standardised foods (pre-fortified or non-fortified) to assess duration of intervention, outcome definition, and cost effectiveness.
- Treatment strategies for severe acute malnutrition with recommended packages of care and ready-to-use therapeutic foods are well established, but further evidence is needed for prevention and management strategies for moderate acute malnutrition in population settings, especially in infants younger than 6 months.
- Data for the effect of various nutritional interventions on neurodevelopmental outcomes is scarce; future studies should focus on these aspects with consistency in measurement and and reporting of outcomes.
- Conditional cash transfers and related safety nets can address the removal of financial barriers and promotion of access of families to health care and appropriate foods and nutritional commodities. Assessments of the feasibility and effects of such approaches are urgently needed to address maternal and child nutrition in well supported health systems.
- Innovative delivery strategies, especially community-based delivery platforms, are promising for scaling up coverage of nutrition interventions and have the potential to reach poor populations through demand creation and household service delivery.
- Nearly 15% of deaths of children younger than 5 years can be reduced (ie, 1 million lives saved), if the ten core nutrition interventions we identified are scaled up.
- The maximum effect on lives saved is noted with management of acute malnutrition (435 000 [range 285 000–482 000] lives saved); 221 000 (135 000–293 000) lives would be saved with delivery of an infant and young child nutrition package, including breastfeeding promotion and promotion of complementary feeding; micronutrient supplementation could save 145 000 (30 000–216 000) lives.
- These interventions, if scaled up to 90% coverage, could reduce stunting by 20·3% (33·5 million fewer stunted children) and can reduce prevalence of severe wasting by 61·4%.
- The additional cost of achieving 90% coverage of these proposed interventions would be US$9·6 billion per year.



All of the materials from *The Lancet* submitted for the record can be accessed here: http://www.thelancet.com/series/maternal-and-child-nutrition

**Testimony of the American Academy of Pediatrics**
**Concerning Nutrition in the First One Thousand Days**
*Submitted for the Record to the Africa, Global Health, Global Human Rights and International Organizations Subcommittee of the House Foreign Affairs Committee* March 24, 2014
Submitted by: James M. Perrin, MD, FAAP, President, American Academy of Pediatrics

On behalf of the 62,000 primary care pediatricians, pediatric subspecialists and pediatric surgical specialists of the American Academy of Pediatrics, thank you for highlighting U.S. development programs that address health and nutrition in the first one thousand days between a woman's pregnancy and her child's second birthday. Good nutrition, healthy active living, and malnutrition and hunger prevention programs are critical for all children, and the Academy supports programs that address these issues both in the US and globally.

Nutrition is the foundation for human health and development, and a growing body of research and scientific evidence indicates that children who are well-nourished early in life have healthier brain development, stronger immune systems, fewer chronic diseases, higher IQs, and better educational performance. Yet as of 2009, nearly 200 million children worldwide suffered from chronic undernourishment.[1] Malnutrition, including both undernourishment and obesity, is a global epidemic, impacting both wealthy and developing countries in serious ways.

The effects of hunger, malnutrition, and lack of adequate micronutrients on children's cognitive growth and development are tragic, and effective public health interventions are needed to help children around the world survive and thrive. Pediatricians across the globe play a major role in preventive and curative strategies against malnutrition by promoting breastfeeding, introducing families to healthy maternal, infant, and child nutrition, and monitoring growth rates.

The AAP is highly committed to heightening awareness and intensifying educational efforts regarding the importance of nutritional assessment and guidance. A host of Academy members

are actively engaged in promoting proper nutrition through numerous advocacy, policy, research, education, and partnership activities.

Nutrition is key to newborn health and survival. About 800,000 children's lives could be saved per year if children were optimally breastfed, including exclusive breastfeeding during their first six months.[2] Good nutrition begins with healthy mothers: A healthy birth weight is a strong indicator of a newborn's chances for survival, health and long-term development, and in low-income countries a major cause of low birth weight is the mother's under-nutrition before and during pregnancy.

The health of babies also affects health and income generation throughout life, making it critical to long-term poverty reduction. Children who are stunted from chronic nutritional deprivation, for example, suffer irreversible effects, including a weak immune system that increases their chances of dying from common illnesses and diseases, and impaired brain development that hurts their chances to learn at school and work productively later in life.

Good nutritional outcomes begin with the mother. Poor maternal nutrition impairs fetal development and contributes to low birth weight and stunting, a reduced growth rate that has irreversible effects including a weakened immune systems and impaired brain development.[3] Furthermore, women who received an education are less likely to have malnourished children.[4]

The AAP strongly recommends breastfeeding as the preferred feeding for infants. Breastfeeding has proven to have numerous health benefits for both mother and child. Studies show that children who are not breastfed have higher rates of mortality, meningitis, some types of cancers, asthma and other respiratory illnesses, bacterial and viral infections, ear infections, juvenile diabetes, some chronic liver diseases, allergies and obesity. Due to the resounding evidence of

improved child health and well-being, AAP recommends that mothers breastfeed exclusively for the first six months, but continue breastfeeding for at least the first year of a child's life. In the absence of human milk, iron-fortified infant formulas are the most appropriate substitutes for feeding healthy, full-term infants during the first year of life.

The AAP urges the Subcommittee to continue to prioritize this important issue. If we may be of further assistance please contact the AAP Department of Federal Affairs at 202-347-8600 or aemmel@aap.org. Thank you for your consideration.

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[1] UNICEF. "Tracking Progress on Child and Maternal Nutrition: A survival and development priority." New York: November 2009.
[2] World Health Organization. "Fact sheet N°342: Infant and young child feeding." Updated February 2014. http://www.who.int/mediacentre/factsheets/fs342/en/; and UNICEF. "Breastfeeding." Nov. 6, 2013. http://www.unicef.org/nutrition/index_24824.html.
[3] UNICEF. "Improving Child Nutrition." New York: April 2013.
[4] World Food Programme. "Women and Hunger: 10 Facts." http://www.wfp.org/our-work/preventing-hunger/focus-women/women-hunger-facts.

**Written Testimony of Rev. David Beckmann,**

**President, Bread for the World**

**The U.S. House Foreign Affairs Subcommittee on Africa, Global Health, Global Human Rights, and International Organizations**

**"The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition"**

**March 25, 2014**

**Smart Investments in Civil Society Organizations' Nutrition Capacity**

Thank you Chairman Smith, Ranking Member Bass, and Members of the Committee for your leadership and for the opportunity to submit testimony. Bread for the World is a collective Christian voice urging our nation's decision makers to end hunger at home and abroad. Bread's network of individuals and churches includes about one million people, and we enjoy the strong support of about 50 church bodies. Bread's secular affiliate, the Alliance to End Hunger, engages diverse organizations – interfaith partners, secular charities, universities, and corporations – in building the political will we need to end hunger.

Thank you for holding this hearing on "The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition." As the Chairman recognizes, early childhood nutrition not only improves lifelong health outcomes, it is an investment in a child's earning potential and a country's economic growth. Bread for the World sees this as a critically important priority to making sustained progress towards ending hunger and extreme poverty. We applaud the U.S. government's leadership on maternal and child nutrition. It has helped raise awareness about the importance of nutrition in the 1,000 days between pregnancy and a child's second birthday. Today, 50 countries have joined the Scaling Up Nutrition (SUN) Movement, including most of the countries that suffer the highest burden of maternal and child undernutrition.

This testimony focuses on strengthening the capacity of local civil society organizations (CSOs) to help scale up nutrition at the country level.

2013 was an important year for nutrition. Following growing attention to food security and nutrition at previous G-8 Summits, a *Nutrition for Growth* event was held around the UK-hosted 2013 G-8 Summit. This high level event garnered important nutrition commitments from governments, civil society, and the private sector—commitments that are backed by new nutrition findings from *The Lancet*, a leading medical journal, on why investments in nutrition have one of the highest rates of return of all development sectors. Highlights included focusing nutrition efforts on the 1,000 Days "window of opportunity," identifying the SUN Movement as the primary vehicle for scaling up nutrition worldwide, and supporting the growing role of civil society.

Following the June 2013 *Nutrition for Growth* event in London, Bread for the World, Concern Worldwide, and a number of U.S.-based organizations partnered to hold a civil society led event

on *Sustaining Political Commitments to Scaling Up Nutrition*. The event incorporated the inaugural meeting of the Scaling Up Nutrition Civil Society Network. The meeting, held in Washington, DC, included civil society organizations representing 22 SUN countries and produced a declaration on the roles of civil society within the SUN Movement.

Because of a renewed and improved understanding of the causes of malnutrition, these meetings identified civil society as a driving force to deliver results and sustain important nutrition investments. International donors increasingly recognize that civil society organizations—especially those active in rural areas—play an important role in the delivery of community development services, including nutrition.

Many CSOs are long-established in local communities, often in remote areas beyond the reach of government services and donor projects. Local CSOs are a known and trusted presence in the communities in which they work. Many CSOs have long-standing relationships with influential community groups and leaders. They are experienced in all the sectors needed to improve nutrition outcomes, including health, HIV/AIDS, agriculture, nutrition, rural development, social protection, education, and water/sanitation and conservation. They also work across sectors and implement integrated programs. In addition, CSOs can help fill gaps and find solutions to program delivery challenges that confront government officers—especially agricultural extension, health, community development, and nutrition officers. These include budget shortfalls, weak systems, lack of equipment, and lack of transportation to cover multiple communities. CSOs also have an important role to play in policy advocacy: building champions and support for policies and changes that will improve the enabling environment for nutrition.

However, limited organizational capacity and funding shortfalls present fundamental barriers to the fulfillment of these important roles. Many small, effective CSOs need additional capacity and improved skills in administration, financial systems, reporting, organizational development, and advocacy. Efforts to build this capacity have begun but can be further expanded. Smart, value-added investments in CSOs will strengthen local organizations to become more effective partners and ultimately will sustain international donor efforts beyond project funding cycles.

Bread for the World applauds USAID's work to develop an agency-wide nutrition strategy. It is an important step towards recognizing the multi-sectoral nature of nutrition and coordinating nutrition programming work across bureaus and sectors. It takes the long-term view and should set ambitious goals and targets. As such, the nutrition strategy should prioritize working with and strengthening civil society organizations in partner countries.

Statement by Wayne A. Madden, Immediate Past International President, Lions Clubs

International (LCI) to the House Foreign Affairs Committee, FY 2015

The House Committee on Foreign Affairs 2170 Rayburn House Office Building Washington,

**Subcommittee Hearing – "The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition"**

DC 20515 3/25/14

As the Immediate Past President of the world's largest service organization (with 1.4 million members in over 206 countries including 345,000 in the United States), I commend the Chairman and Ranking Member of the House Committee on Foreign Affairs for holding this hearing entitled, "The First One Thousand Days: Development Aid Programs to Bolster Health and Nutrition." This is an important opportunity to explore how we can provide strong support for foreign assistance programs that are of significant importance to the health, nutrition and well-being of millions of people around the world.

Lions Clubs International is dedicated to providing humanitarian and health-related development assistance on a global basis, and I urge the Committee to provide robust support for programs under the jurisdiction of this subcommittee: USAID Global Health Bureau (including the Office of Health, Infectious Diseases and Nutrition and sight-saving activities such as vaccination in child and maternal health, nutrition, vulnerable children, malaria, tuberculosis and neglected tropical disease); USAID Developmental Assistance, as well as maintained funding for vital accounts that provide disaster, refugee and food assistance to world's most vulnerable populations.

Lions Clubs and its charitable arm, Lions Clubs International Foundation (LCIF), support and develop international programs and high impact initiatives that serve people who are overwhelmed by poverty, hunger, and disease. Founded in 1968, LCIF has also been a world leader in serving the vision and hearing needs of millions of people in America and around the world. The foundation works collaboratively with many NGOs and intergovernmental organizations such as the World Health Organization, to accomplish shared humanitarian goals. In 2012-2013, LCIF awarded 489 grants totaling $39.2 million and in 2011-2012, LCIF awarded 513 grants totaling more than $55 million.

Our members, with the support of the foundation, focus initiatives to address many complex global challenges including measles and rubella, diabetes, tropical diseases that result in blindness, as well as natural disasters. Meeting these challenges in an increasingly changing world requires strong partnerships between the Federal government's foreign assistance

programs and global development partners in the non-profit sector. This is especially true within vulnerable populations where the need is very high.

Global Humanitarian/Disaster Relief

Lions Clubs International and the foundation support Lions member's relief efforts within communities immediately following natural disasters. Lions club members are always available to provide basic necessities such as food, water, clothing and first aid supplies through its Emergency grant program. To date, more than 3,700 Emergency grants have been provided. In the last ten years alone, over $100 million in disaster-related grants have been awarded to address immediate and long-term needs for victims following disasters.

LCIF and Lions around the world have played key roles in some recent relief efforts. Lions Clubs International Foundation directly provides funds to local Lions to implement disaster relief aid. Lions were among the first to respond during both the 2011 Joplin, Missouri tornado and the 2013 tornado that destroyed Moore, Oklahoma. The Lions worked with local social service organizations, churches, food banks and shelters to address the needs of those displaced by the disasters. Because Lions live in the communities they serve, they have a permanent presence in helping to restore and rebuild these communities.

LCIF is presently working with Lions in the Philippines to address victims' needs following the November 2013 typhoon, which impacted more than 9 million people. This local effort is supported by the 380 Lions clubs and 12,600 Lions members in the Philippines. LCIF, with the help of Lions members from around the world has mobilized more than $2 million for the Philippines disaster relief; in addition to providing critical supplies – hundreds of tents for temporary shelter and water purification units. Lions Clubs International Foundation's history in disaster relief includes $21 million in funding for the Japan tsunami disaster relief effort; $15 million for the South Asia Tsunami; $6 million to Haiti in the aftermath of its earthquake; and $3 million for the China Earthquake. We urge our Federal partners to collaborate with NGO's whenever possible to maximize the impact of this aid.

Lions' SightFirst Programs – The Need to Combat Global Blindness

Initiated in 1990, SightFirst is the Lions humanitarian initiative to combat blindness on a global scale. SightFirst has prevented serious vision loss for more than 30 million people around the world. Accomplishments of SightFirst include: saving the sight of millions of people at an average cost of $6 per person; establishing hundreds of need-based Lions eye care centers around the globe that provide sight restoration and eye care services; provided treatments to millions of people for river blindness in Africa and Latin America; establishing 34 childhood blindness centers around the world; and training more than 675,000 eye care specialists to provide better or expanded care.

Vaccines and Immunization for Children

Lions Clubs International strongly supports efforts to improve life-saving vaccination of children in more than 70 of the world's poorest countries. Each year 22 million children in poor and remote communities do not have access to the most basic vaccines. One in five of all children who die before the age of five lose their lives to vaccine-preventable diseases. In fact, we have recently joined forces with the GAVI Alliance (a public-private partnership to increase access to immunizations in poor countries) to raise $30 million toward improving life-saving vaccines for tens of millions of children in the fight against measles.

We urge the committee to consider its support for vital immunization programs where a small investment can lead to dramatic improvement in peoples' lives.

Cataract Blindness

Cataracts are the leading cause of blindness in the world as 20 million people experience cataract blindness (representing 51% of all cases). Access to cost-effective cataract surgeries, (proven to be one of the most affordable surgical interventions in the world according to WHO), corrects this problem and reverses needless disability, must be improved, especially in under-resourced countries. The SightFirst program awarded $7.16 million in grants to combat cataract blindness, including funds that underwrote 7.84 million sight-restoring surgeries. Our current focus is on supporting comprehensive eye care solutions through equipment upgrades, facilities improvement, human resource training and hospital management courses. The federal government can make a positive impact on this global problem by drawing attention to human resource and capacity needs in developing countries, and supporting innovative and cost-effective programs and institutions.

Neglected Tropical Diseases

Lions clubs are working toward the elimination of neglected tropical diseases like onchocerciasis (river blindness) and trachoma, the world's most prevalent form of infectious causes of blindness, as public health threats. We support the important work of the World Health Organization, The Carter Center, other international NGOs and partner governments to bring needed therapies to impacted communities. The U.S. Government, through USAID and other agencies, has been an international leader in this fight. Thanks to this leadership, other governments, multilateral agencies and donors have mobilized significant resources and there is now hope that these diseases, and other neglected tropical diseases, will be eliminated as public health threats in the very near future. We commend Congress for its past and current support and call for the maintenance of current allocation levels so that the important work being conducted in the field is not interrupted.

Lions Quest Youth Programs

Over the past 30 years, 13 million young people in 86 countries have benefited from LCIF's principal youth program, Lions Quest. Lions Quest is a comprehensive social and emotional learning (SEL) youth development program that promotes character education, bullying prevention, drug awareness, and service-learning. Lions Quest also promotes a caring, well-managed, and participatory learning environment that allows students to develop 21st century life skills through quality educator training. More than 550,000 educators have been trained in Lions Quest curriculum and methodology around the world equipping students with essential life skills to be successful, well-adjusted adults. Lions Clubs International Foundation has supported Lions Quest program implementation since 1984 through a total of $20 million in grant funding along with volunteer school support from Lions locally.

Today we face great humanitarian challenges, and Lions Clubs International understands the importance of foreign assistance in addressing ever-expanding global health, development, nutrition, and disaster relief crises. Our success shows what the service sector can do for economic and social development, and we look forward to working with you and your colleagues on taking up the important challenge of increasing global health and humanitarian services. Thank you. We appreciate the opportunity to provide our perspective.