## Written Testimony by Bill Gates, Co-Chair, Bill \& Melinda Gates Foundation Appearance Before the Appropriations Committee of the United States Senate (Subcommittee on State, Foreign Operations, and Related Programs) <br> March 26, 2015

Mr. Chairman, Senator Leahy, members of the committee - thank you for this opportunity to talk with you about an important subject: the role of U.S. development assistance in helping people in the world's poorest nations attain greater self-sufficiency.

In January, my wife Melinda and I put out our annual letter. In it, we wrote about "our big bet for the future" - that the lives of people in poor countries will improve faster in the next 15 years than at any other time in history.

In my brief time before you today, I'll make three basic points:

- First, that this "big bet" - while ambitious - is indeed attainable, based on the extraordinary progress that we've seen in recent years.
- Second, that achieving further gains against extreme poverty and disease in the world's poorest countries would have significant benefits for the American people.
- And third, that these gains require sustained U.S. commitment to overseas development assistance. Together with the leadership and commitment of the countries in which we work, we can make historic progress - right now - against extreme poverty and disease.

I'll now touch on each of these points in turn.

First, the progress that the world has made against disease and extreme poverty is truly extraordinary. It should leave no doubt that we now have an opportunity for historic advances in the well-being of humanity - particularly in poor countries.

The most important single measurement of progress in global health is the child-mortality rate and its trajectory has been astonishing to watch.

Worldwide, in 1960 about one child in five died before his or her fifth birthday.
By 1990-25 years ago - that rate had been cut in half, to one in ten.
Since then, it's been cut in half again, to one in 20.
We now have the tools to halve this rate yet again, to one in 40, and to do it even faster - within 15 years.

What accounts for this?

One very important factor is the investment by governments around the world in their own nations' health and development. But that's not the only factor at work here.

Global economic growth; changes in trade policy; and the spread of new technologies have all contributed to fundamental improvements in human health and well-being.

But there's another indispensable factor: overseas development assistance, notably from the United States.

Working with other national governments and donor partners, U.S. government investments have contributed to these amazing declines in child mortality - and to other gains in health and development worldwide.

I'll mention just a few specific examples of U.S.-supported programs that have made an enormous difference.

One of these is Gavi, the Vaccine Alliance. This is a public-private partnership that pools the demand for vaccines among the world's poorest nations. It then provides long-term financing through a number of sources - including from the recipient nations themselves - to meet that demand.

This creates a viable market for pharmaceutical and biotech companies to develop vaccines, and increases healthy competition among them. That, in turn, helps drive down prices for vaccines that protect young children from the most common causes of death and severe illness - including diarrhea, pneumonia, and measles.

It's a brilliant model, and a very effective one. Since its inception in 2000, Gavi has helped immunize close to half a billion children and prevented 7 million deaths.

I'm proud that our foundation is a contributor to Gavi - and, as an American, I'm proud that this country is one of Gavi's biggest donor nations.

At the Gavi replenishment conference in January, the organization met its target amount of $\$ 7.5$ billion. The U.S. made a generous pledge of $\$ 1$ billion to Gavi over four years, including Fiscal Year 2015.

The new replenishment round will allow Gavi to immunize another 300 million children and save the lives of 5 million to 6 million children.

And I can assure you, members of the committee, that the parents of those children would be glad to vouch for a simple fact: Vaccines are safe; vaccines are effective; vaccines save lives.

Speaking of the life-saving power of vaccines, another great example of progress and partnership has been the worldwide campaign against polio. Here too, the policy choices of the U.S. government have been decisive.

The United States has been a strong supporter of the Global Polio Eradication Initiative (GPEI) the Centers for Disease Control and Prevention was one of the original partners, along with Rotary International, the WHO, and UNICEF.

Since 1985, the U.S. has provided more than $\$ 2$ billion to GPEI. At the time of the initial U.S. investment, eradicating polio seemed like a fantasy - the disease was endemic in 125 countries around the world and paralyzed about 350,000 people each year, mainly young children.

Less than three decades later, polio is endemic in only three countries - Pakistan, Afghanistan, and Nigeria. Actually, we may soon be down to two, since Nigeria had only a handful of cases in 2014 and may be on the verge of eliminating the disease there. Worldwide, the number of polio cases last year was less than 400 .

The good news of the past couple decades even extends to some of the most lethal infectious diseases, such as HIV/AIDS and malaria.

Since 2000, among children under five worldwide, deaths from AIDS have declined by 50 percent, while deaths from malaria have gone down 80 percent.

For the world population as a whole, the global incidence of HIV has gone down by 20 percent since its peak in the mid-1990s, and the mortality rate for malaria has declined by 42 percent since 2000.

These significant gains would not have been possible without major programs supported entirely or in part by the government of the United States: the President's Malaria Initiative, or PMI; the United States President's Emergency Plan for AIDS Relief, or PEPFAR; and the Global Fund to fight AIDS, Tuberculosis and Malaria - to which the U.S. is the top donor.

In addition to historic gains against disease, we are seeing progress in maternal, newborn, and child health. Investing in women and children yields broad economic and social benefits that help build prosperous communities and nations.

The U.S. has been a leader in the campaign to end preventable child and maternal deaths - and worldwide, more women survive pregnancy and childbirth than ever before.

As Melinda and I discuss in our annual letter, we believe that even faster progress is possible and necessary - over the next 15 years.

In this year's annual letter, Melinda and I also predict that Africa will be self-sufficient in food production within 15 years.

This would be an enormously significant milestone. Experience shows that the path for countries to escape poverty is almost always through agricultural development - as it was for the United States itself.

Agriculture is also closely linked to nutrition and health. Every year, undernutrition contributes to 3.1 million child deaths - 45 percent of the worldwide total. It also costs low- and middleincome countries up to 8 percent of their economic growth potential.

Since 1990, the world has seen a 37 percent drop in stunting as a result of better nutrition. The U.S. helped improve nutrition levels for more than 12.5 million children in developing countries last year.

The U.S. has a major impact in improving agricultural productivity in poor nations through USAID and USDA support for agricultural research, in partnership with our land-grant universities.

This research typically generates at least a 20:1 return on investment. In developing countries, the returns are even greater.

And according to the World Bank, every dollar invested in agriculture is twice as effective at reducing poverty as investments in non-agricultural sectors.

Given that 70 percent of all people living in extreme poverty are in rural areas, and most are engaged in farming, the renewed U.S. commitment to agricultural development represents a very sensible, cost-effective approach to reducing global poverty.

In 2013 alone, the Feed the Future initiative helped nearly 7 million farmers and food producers adopt new technologies and management practices. It also supported nearly 91,000 female farmers in homestead gardening - improving access to nutrient-dense foods; increasing income for women and children; and helping families become economically self-sufficient.

This brings me to the second of my three points: While the lives of people in poor countries will improve more than anyone else's over the next decade and a half, that improvement will have very positive consequences for the people of the United States.

One reason for this is that the American people value the qualities of self-sufficiency and independence - for ourselves and for other people around the world. We want people in poorer countries to have the tools to improve their own circumstances in a way that's sustainable and lasting for them.

We don't want to see poor nations stay poor, or to remain dependent on outside aid. We want them to be able to stand on their own two feet - and that's exactly what the people of those countries want for themselves.

When overseas development assistance is done right - as with the programs I've cited today this is exactly what happens.

We have seen this pattern play out across much of the world. Several countries that were once major aid recipients - South Korea, Brazil, Malaysia, Morocco, Botswana, to name a few - are now self-sufficient, and some have even become donor countries themselves.

Several have become U.S. allies and partners, as well as export markets for our farmers and manufacturers: Nigeria is the third-largest U.S. wheat market; Angola is the fourth-largest broiler-meat market; and Ghana ranks as one of the top 10 rice markets.

In short, it's in the interests of the American people to see more and more countries complete this development cycle - to make the transition from aid recipients to full participants in the international system.
U.S. health and development assistance programs have been vitally important in helping countries around the world make that transition. This process is gaining momentum in many low-income nations today - particularly in Sub-Saharan Africa.

But there's another major reason why progress on health and economic development in the world's poorest countries is in the interest of the American people.

As you know, I tend to be very optimistic about what the future holds. But there are a small number of potentially catastrophic events that could seriously set back all the progress of the past few decades. The most plausible - and most frightening - of these threats is a large-scale epidemic.

I discuss this prospect in my recent New England Journal of Medicine and New York Times articles; I'll talk about it briefly here today.

By a "large-scale epidemic," I'm talking about something much bigger than the terrible Ebola outbreak we've seen in West Africa, which has taken more than 10,000 lives.

Ebola, for all its horrors, is not a disease that spreads very easily. What concerns me most is the prospect of a highly lethal disease that is also highly contagious.

We have seen such outbreaks in the past, such as during the influenza pandemic of 1918 and 1919, which had a worldwide death toll generally estimated between 30 million and 50 million.

That included about 675,000 deaths here in the United States - at a time when the national population was about one-third as large as it is today. The outbreak was so severe in this country that over the course of a single year, life expectancy in the U.S. fell by about 12 years.

Could an epidemic of this scale happen again? Yes, it could - and in today's far more urbanized and interconnected world, it could spread from continent to continent, and from community to community, far more easily than it could a century ago.

Members of the committee, I've come to Congress on other occasions to ask for the sustainment of U.S. overseas development assistance.

I have grounded this appeal not only in our shared moral interest in preventing needless death and suffering, but also in our economic and security interests. All these dimensions remain strong interests of mine, and I know they are strong interests of yours, as well.

The Ebola tragedy has made our national interest in this effort clearer than ever before. I am asking you to support our assistance programs both as a highly effective means of helping other countries become more self-sufficient, and as a necessary means of protecting this country from a future epidemic.

Such an epidemic might start far away, but could spread to the U.S. on a considerably larger scale, and with much greater speed, than any current form of Ebola.

It's impossible to predict the human toll or the economic consequences that would result. According to the World Bank, a worldwide flu epidemic would reduce global wealth by $\$ 3$ trillion, not to mention the immeasurable suffering that would accompany widespread illness and loss of life.

The wise course is to invest manageable amounts now to prevent future outbreaks - rather than trying to contend with the unpredictable and potentially enormous costs of a trans-continental epidemic.

The sensible place to begin is with investments in basic health services in those parts of the world that are most susceptible to outbreaks of infectious disease.

As we have seen with the Ebola epidemic, the world's poorest countries remain acutely vulnerable to health crises that can render them unable to support their own people or build their own economies.

This epidemic is also a reminder that infectious diseases don't respect national borders. In the interconnected world of the $21^{\text {st }}$ century, a non-functional health system anywhere can create problems everywhere.

It is imperative that we learn the right lessons from the Ebola emergency. Perhaps the most urgent of those lessons is the paramount importance of bringing health systems up to a level of at least basic adequacy in as many places as possible.

The process begins, of course, with the recipient nations themselves - which must invest in the health of their own people, in partnership with external donors.

This had already happened in enough areas of Nigeria, Senegal, and Mali to prevent Ebola from spreading farther in those countries - and thank goodness for that, since any expansion of the outbreak to large urban areas like Lagos or Bamako could have immensely increased both the death toll and the complexity of this epidemic.

To its great credit, the United States has played a leading role in responding to the West African Ebola outbreak. Our challenge now is to maintain the effort and the investment required to ensure we're better prepared for future epidemics.

This includes investment in a range of vital systems: primary health-care; disease monitoring; and data collection - as well as such basic medical tools as vaccines, therapeutics, diagnostics, and transfusion processes.

But in some ways, the main problem with U.S. epidemic preparedness is not our level of investment - though that will also need to improve - but our lack of optimal coordination across agencies.

Within the U.S. government, there are multiple agencies engaged in epidemic response at some level - either directly, or indirectly through the development of guidelines or technical expertise.

These include the Centers for Disease Control and Prevention; the National Institutes of Health (NIH); the Food and Drug Administration; the Defense Threat Reduction Agency (DTRA) and the Defense Advanced Research Projects Agency (DARPA) at the Department of Defense; the Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (ASPR); and several others.

Consider the government's response to the Ebola epidemic: Just within the area of research and development, we had the development of ZMapp, which was funded by the Biomedical Advanced Research and Development Authority within ASPR; a lead vaccine candidate funded by NIH; a diagnostic test funded by DTRA; and additional technological approaches funded by DARPA.

Such diversity of agencies engaged in a shared challenge is by no means necessarily a problem. It can even be a strength. But particularly when it comes to R\&D, we need better coordination and transparency. That includes a greater awareness of what is being funded and studied across agencies, so that we may avoid unnecessary duplication of effort; derive maximum leverage from what's already being done; and advance the state of research as much as possible.

There's one more reason why improvements in cross-agency coordination - and, where needed, additional investments - make enormous sense: They will be worth it even if a large-scale epidemic never happens.

That's because the measures that will enable us to respond effectively to a major disease outbreak are the same ones that will equip us to help other countries:

- limit the spread of infectious disease;
- reduce child mortality;
- protect the health of expectant and delivering mothers;
- and otherwise contribute to the increasing self-sufficiency of their own people.

In other words, these are investments and policies that are proven to pay off for the American taxpayer - no matter what happens.

I'll conclude with my third point: The progress we've made in recent years would not have been possible without development assistance from the United States. The progress we need to make in years to come won't be possible without it, either.

Whether we're talking about preventing the next epidemic or building upon the enormous global-health gains of the past two decades, the time to act is now.

As I've noted, this means increased investment from developing countries as they assume greater responsibility for their own health and development.

This also means the U.S. should at least maintain global-health investments at the Fiscal Year 2015 level - and, if possible, increase them.

Even though the progress we've seen is quite impressive, much remains to be done.
While child mortality is declining, it remains too high in too many places. Nearly 22 million children worldwide remain under-immunized each year, and more than 6 million die before the age of five - with about 1.5 million of these deaths resulting from vaccine-preventable diseases like diarrhea and pneumonia. To address this, it is vital that the U.S. fully fund its recent Gavi pledge.

Despite some gains in maternal and child health, progress on newborn health has lagged, and far too many women still die in childbirth. Cost-effective and proven solutions are available to treat or prevent the causes of most newborn deaths.

These include such relatively simple and affordable measures as umbilical-cord care; exclusive breastfeeding; and access to skilled birth attendants. Our ability to end these preventable deaths will depend on an even stronger commitment of U.S. funding for maternal and child-health programs.

Toward this end, we also need to ensure that women are fully supported in achieving healthy timing and spacing of pregnancies. U.S. investment in women's access to contraceptives and information not only contributes to better maternal, newborn, and child health - it also helps girls stay in school, and expands economic opportunities for women throughout their lives.

As I mentioned earlier, we may be on the threshold of a polio-free Africa - and of the eradication of polio itself. That's due in no small part to the initiative and generosity of the United States.

But this progress is hard-won, and the final eradication phase is the most difficult of all. But once we achieve eradication, we can turn those resources and that expertise toward other global-health challenges. Now is not the time to let up - we need to eradicate polio now, once and for all.

The Global Fund to Fight AIDS, Tuberculosis and Malaria is crucial to building health systems in poor countries. I urge you to maintain strong U.S. support for this highly effective organization.

Continued American leadership on the Global Fund now will set the pace for the upcoming 2017-2019 replenishment, and will help ensure strong support from other donors.

In addition, it is vital that the U.S. provide robust funding for PEPFAR and PMI - and maintain its current level of support for bilateral tuberculosis and neglected infectious disease programs. I am hopeful that new data will allow PEPFAR to support recipient-country efforts to focus resources on areas of greatest need in the campaign against HIV.

It's also especially important that we eliminate malaria now in certain areas, such as the Mekong River delta of Southeast Asia, to prevent the spread of drug-resistant strains of the disease.

We need to bolster funding for research and development through the various USAID globalhealth budget lines. USAID plays an essential leadership role on R\&D, in concert with other U.S. government programs funded by the Labor-HHS bill - including through the National Institutes of Health; the Centers for Disease Control and Prevention; and the Food and Drug Administration.

The U.S. government is also uniquely qualified to make vital investments in agricultural development. I urge continued strong support for the Feed the Future program - as well as for land-grant university research programs and the Millennium Challenge Corporation.

The Global Agriculture and Food Security Program has helped to ensure that developing countries have sound investment plans for agriculture - and that they put their own resources against those plans.

This program exemplifies a rising trend in global development and health: an emphasis on deriving leverage from the contributions of other donors - and from the domestic resources of the recipient nations themselves.

This makes development assistance an even better investment for the Congress, and for the American taxpayer. The need for such investment remains strong, and recent events demonstrate its urgency.

Thank you for inviting me to join you today. I look forward to your questions. \#\#\#

