'India's doing it right': Microsoft cofounder & Bill & Melinda Gates Foundation co-chair says local innovations in tackling climate change and health are worth emulating elsewhere

More than two decades ago, I set out to give the vast majority of my resources back to society. My goal from the beginning was to help reduce the awful inequities I saw around the world.



Illustration by Chad Crowe

The twin problems

When I started this work, my biggest focus was global health, because it's the worst inequity in the world and it's a solvable problem. That's still the case today. But as time went on – and as the disastrous consequences of a warming world became more evident – it became clear that you can't improve life for the world's poorest without also tackling climate change.

Climate change and global health are inextricably linked. Hotter temperatures will make poverty reduction harder by increasing food insecurity and the prevalence of infectious

diseases and diverting resources away from those who need them the most. It's a vicious cycle. The poorer a community is, the more vulnerable it is to climate change. And the more impacted a community is by extreme weather events, the more entrenched in poverty it becomes. To break the cycle, we need to make progress on both problems at the same time.

I'm stubborn in my belief that with the right innovations and delivery channels to get them to the vulnerable, we're capable of making progress on lots of big problems at once – even at a time when the world faces multiple crises. There is no better proof than the remarkable progress that India has accomplished.

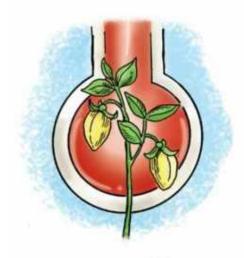


Illustration by Chad Crowe

India's innovative approach

Consider the field of next-generation chickpea plants currently growing at the Indian Agricultural Research Institute, or IARI, in Pusa.

- Chickpeas are a staple crop in India. They provide an important source of income for many smallholder farmers, and families across the country rely on them for nutrition.
- But the chickpea harvest is threatened by climate change. Higher temperatures could reduce yields by as much as 70%, putting lives and livelihoods at risk.
- So, the Gates Foundation joined hands with India's public sector and CGIAR institutions to support the work of researchers at IARI.

- They found a new solution: Chickpea varieties that have more than 10% higher yields and are more drought-resistant.
- One variety is already available to farmers, and others are currently in development at the institute.
- As a result, India is better prepared to keep feeding its people and supporting its farmers even in a warming world. It's no exaggeration to say that India's agricultural future is growing right now in a field in Pusa.

India as a whole gives me hope for the future. It's about to become the world's most populous country – which means you can't solve most problems there without solving them at scale. And yet, India has proven it can tackle big challenges. The country eradicated polio, lowered HIV transmission, reduced poverty, cut infant mortality, and increased access to sanitation and financial services.

How did they do it? India has developed a world-leading approach to innovation that ensures solutions reach those who need them. When the rotavirus vaccine – which prevents the virus that causes many fatal cases of diarrhea – was too expensive to reach every child, India decided to make the vaccine themselves. They worked with experts and funders (including the Gates Foundation) to build factories and create large-scale delivery channels to distribute the vaccines. By 2021, 83% of one-year-olds had been inoculated against rotavirus – and these low-cost vaccines are now being used in other countries around the world.



Illustration by Chad Crowe

A model for the world

There is no question today's challenges will test the limits of that ingenuity and cooperation. India is on the frontlines of climate change. But the progress it has made on health will make its people more resilient and provide helpful insights for how to tackle other major challenges. And the pace of its development, its skill in rolling out large-scale programmes, and its people's innovative expertise mean that India can be a key part of making progress on today's biggest challenges.

I'm going to India next week to see firsthand the work being done by innovators and entrepreneurs.

- Some are working on breakthroughs that will help us mitigate the effects of climate change, like the work being done by Breakthrough Energy Fellow Vidyut Mohan and his team to turn waste into biofuels and fertilisers in remote agricultural communities.
- Others are finding new ways to help people adapt to a warmer world, such as IARI's
 efforts to create more drought-tolerant crops. I'm looking forward to seeing the
 progress that's already underway by both the Gates Foundation's and Breakthrough
 Energy's amazing partners.
- Like every other country on the planet, India has limited resources. But it has shown us how the world can still make progress in spite of that constraint.
- By collaborating and trying novel approaches, the public, private and philanthropic sectors can turn limited resources into big pools of funding and knowledge that lead to progress.

If we work together, I believe we can fight climate change and improve global health at the same time.