

ILL-EQUIPPED TO DEAL WITH A CRISIS

Relevant for: Environment | Topic: Disaster and disaster management

U.S. President Donald Trump listens as Dr. Deborah Birx, White House coronavirus response coordinator, speaks in the James Brady Press Briefing Room of the White House on April 20, 2020. | Photo Credit: [AP](#)

In the U.S., despite egregious failures and missteps, science and informatics have been able to guide [COVID-19](#) policy to some degree. It is time to think about the underpowered investments in science in India and about the stark social inequities that COVID-19 will lay bare, shorn of the protections afforded by science and data-driven policies, and effective decentralised governance.

India has invested very little in the type of science that is needed to meet contemporary environmental challenges. COVID-19 may be its most severe environmental challenge so far, but India faces devastating challenges such as assaults on biodiversity, floods and unmitigated pollution every year. Every disaster underlines national vulnerabilities, accentuated by inadequate science and research infrastructures.

[Unusually inept: Editorial on U.S. surpassing China in coronavirus cases](#)

Amidst the worst pandemic of modern times, India's medical research institutions and epidemiologists have a prominent role to play. In the daily White House press briefings, the two most prominent figures are noted epidemiologists Dr. Deborah Birx and Dr. Anthony Fauci. Every day they provide new data to direct policy. India is a global superpower in information technology, yet it has few scientists or institutes systematically deploying 'big data' and informatics to understand large-scale environmental challenges, including infectious diseases. India is a hotspot for emerging diseases — but to respond adequately, it urgently needs an expanded group of world-class specialists in this area.

The successful mitigation of COVID-19 in India will require rigorous testing, monitoring, and modelling to inform policy and action. In a country where access to data is limited, we will need good data on demographic changes, on how disasters push people into poverty, and the local interventions that pull people out of poverty and build resilience to these cyclic events.

Complex socio-environmental problems can only be addressed by integrating natural and social sciences to generate multidimensional knowledge. Only such knowledge can guide adequate policy responses and action to confront a crisis. In India, very few research centres are capable of doing such work.

But there are some hopeful signs. The Principal Scientific Adviser to the Government of India, one of India's most accomplished scientists, is playing a critical role in policy responses. Directed by the Principal Scientific Adviser's Office, and with the Prime Minister's support, there are nine large national science missions in various stages of implementation. These include a mission in quantum computing and another in biodiversity and human well-being, with an important component on emergent infectious diseases.

India needs substantial investments in a science directed towards the well-being of all social sectors; a science for realising the UN SDGs; a science to build resilience against environmental disasters; and a science for healing humanity's relationship with Nature to ward off biodiversity loss and mitigate climate change — the "epidemic" that has been around us for some time.

A recent editorial in this newspaper rightly pointed out that by saving biodiversity alone can we ensure a sustainable future for ourselves. Yet there are also reports about policy decisions to kill nature — for instance, the Karnataka government's decision to continue with the proposal for the Hubballi-Ankola railway line through the last remaining forests of the Western Ghats. The scientific and environmental considerations underlying these decisions remain unclear.

India aspires to be a \$5 trillion economy. Such aspirations must envision a society that cherishes science and knowledge, enshrines equity, justice and decentralised governance, and respects our natural heritage. We must ensure healthcare as an individual basic right — and Earth-care as a collective right.

Kamal Bawa is Distinguished Professor of Biology at the University of Massachusetts at Boston, and President of the Bengaluru-based ATREE. Views are personal

You have reached your limit for free articles this month.

Register to The Hindu for free and get unlimited access for 30 days.

Already have an account ? [Sign in](#)

Sign up for a 30-day free trial. [Sign Up](#)

Find mobile-friendly version of articles from the day's newspaper in one easy-to-read list.

Enjoy reading as many articles as you wish without any limitations.

A select list of articles that match your interests and tastes.

Move smoothly between articles as our pages load instantly.

A one-stop-shop for seeing the latest updates, and managing your preferences.

We brief you on the latest and most important developments, three times a day.

*Our Digital Subscription plans do not currently include the e-paper ,crossword, iPhone, iPad mobile applications and print. Our plans enhance your reading experience.

Why you should pay for quality journalism - [Click to know more](#)

Please enter a valid email address.

To reassure Indian Muslims, the PM needs to state that the govt. will not conduct an exercise like NRC

Subscribe to The Hindu now and get unlimited access.

Already have an account? [Sign In](#)

Sign up for a 30-day free trial. [Sign Up](#)

To continue enjoying The Hindu, You can turn off your ad blocker or Subscribe to The Hindu.

[Sign up for a 30 day free trial.](#)

END

Downloaded from **crackIAS.com**

© **Zuccess App** by crackIAS.com

crackIAS.com