

COVID19, climate and carbon neutrality

In the post COVID19 world, we should make efforts to ensure that the 'G' in GDP is not 'Gross' but 'Green'



History is divided into two periods: Before the Common Era or BCE and Common Era or CE. But given our experience this year, BCE could well stand for Before the COVID19 Epidemic and CE for the COVID19 Epidemic. To say that 2020 has been cataclysmic is to state the obvious and actually make an understatement. Our lives have been turned upside down. The COVID19 crisis and its aftermath can be seen either as a longish pause on the button of economic growth or as an opportunity for reset, recalibration and rethink.

ECOLOGICAL DISEQUILIBRIUM

COVID19 is undoubtedly a public health catastrophe and certainly calls for enhanced investments in research and development that impinges directly on public health. But more fundamentally, the pandemic reflects fundamental ecological disequilibrium. Evidence has accumulated that loss of biodiversity and everincreasing human incursions into the natural world have contributed heavily to the outbreak and spread of epidemic diseases. Understanding the three Es — evolution, ecology and the environment — will be key to identifying potential pandemics. COVID19 also reinforces the need to pay far greater attention to the biosciences that underpin agriculture, health and the environment that are going to be profoundly impacted by the current pandemic.



"Our environmental problems have profound public health consequences both in terms of morbidity and mortality and hence demand urgent actions." File photo of thick smog in Kolkata. — AIRRANJAN KISHOR CHOWDHURY

There is also now robust scientific evidence to show, for instance, how air pollution exacerbates the impacts of COVID19. Public health science and environmental science are two sides of the same coin. In fact, I have been saying for over a decade now that our environmental problems — such as air pollution, water pollution, chemical contamination, deforestation, waste generation and accumulation, land degradation and excessive use of pesticides — all have profound public health consequences both in terms of morbidity and mortality and hence demand urgent actions. The traditional 'grow now, pay later' model is not only unsustainable in the medium to long term but also dangerous to public health in the short term.

We live in a world where climate change is a reality. No longer can we argue about uncertainties in the monsoon, the frequency of extreme events, the retreat of the Himalayan glaciers and the increase in mean sea levels. A recent report of the Ministry of Earth Sciences called 'Assessment of climate change over the Indian region' is an excellent and up to date analysis that deserves wider debate and discussion. It also points to the need for making our future science and technology strategy in different areas anchored in an understanding of the impacts of climate change caused by continued emissions of greenhouse gases. This scientific understanding is essential for what may be a solution at one point of time but becomes a problem at another point and may even become a threat in a different context. Take the example of HFCs, or hydrofluorocarbons, that were at one time seen as the panacea to fix the depletion of the ozone layer. The depletion of the ozone layer has been fixed more or less, but HFCs are a potent threat from a climate change perspective since their global warming potential is a thousand times that of carbon dioxide.

In September 2018, the American State of California — the world's fifth largest economy in itself — was the first to commit itself to carbon neutrality. The aim was to achieve this by 2045. In December 2019, a few weeks before the world became aware of the COVID19 catastrophe, the European Union followed California's example but with the year 2050 in mind. In September 2020, China stunned the world by declaring its goal of carbon neutrality

by 2060. And just a few weeks ago, Japan and South Korea joined the club by announcing their intention to do so by 2050, like the EU. India too has to begin thinking very seriously about its level of ambition in this regard, especially since this will have public health consequences as well. We cannot always hide behind the fact that our per capita emissions will continue to be low — that is obvious given the continued increase in the denominator. At the Paris climate change conference in December 2015, we committed to having 40% of our electricity-generating capacity from nonfossil fuel sources by the year 2030. I have no doubt that we will reach this level.

A BOLDER, MORE WORTHWHILE GOAL

However, carbon neutrality is something different. Definitions vary but in simple terms — and I am deliberately not getting into complications introduced by instruments like offsets — it should mean that for a country, carbon emissions are equal to absorptions in carbon sinks, of which forests are one. Both sides of the equation are important and have to be addressed simultaneously. At Paris in December 2015, we made a commitment on carbon sequestration through forests but I have serious doubts on its credibility. To my mind, this is a matter of overriding priority. We will definitely become a \$5 trillion economy in a few years. That is an arithmetical inevitability — give or take a few years. Carbon neutrality, on the other hand, is a far bolder and worthwhile goal, the attainment of which has to be consciously engineered. It will involve massive scientific invention and technological innovation especially when it comes to removing greenhouse gases from the atmosphere. But let me add one note of caution here based on our disappointing experience with nuclear energy: there is simply no silver bullet waiting for human ingenuity to harness. Every solution being put forward these days, the most recent of which is what we refer to as geoengineering, is riddled with complications that are not easy to resolve. Of course, renewables are an integral part of the solutions we seek but they have to be seen as more than just devices: they open up avenues for rearchitecting systems as a whole. This has happened, for instance, in the German electricity sector over the past decade and a half.

POST-COVID-19 WORLD

The post COVID19 world is an opportunity for us to switch gears and make a radical departure from the past to make economic growth ecologically sustainable. Much of the infrastructure we need for the future is still to be put in place — one estimate widely quoted that something like 70% of the infrastructure required in India by the year 2050 is waiting to be established. GDP growth must, without doubt, revive and get back to a steady 7%-8% growth path. However, in this post COVID19 world, we should make efforts to ensure that the 'G' in GDP is not 'Gross' but 'Green'. In fact, some years back, Sir Partha Dasgupta, Professor at Cambridge University and one of the world's greatest environmental economists, had prepared a fairly detailed framework for this. India can and should show to the world how the measurement of economic growth can take place while taking into account both ecological pluses and minuses.

Jairam Ramesh is an MP (Rajya Sabha) and a former Union Minister