PREFACE

Climate change could not have happened at a worse time in human history. Every year, we are told, is the hottest year, till the next year comes around. It is getting worse: from forest fires to increasing frequency and intensity of storms, from severe cold waves to blistering, spiraling heat conditions. But we are so distracted – from COVID-19 to economic crisis, to the daily skirmishes that are raging across our countries – that climate change is not a priority. We simply do not seem to have the bandwidth to handle it.

But we must. The fact is, climate change is real; it is happening, and is making the poor in our world even more marginalised and insecure. In an increasingly inequitable and climate-risked world, the poor find they cannot cope anymore. They have no option but to migrate, from villages to cities, from their homelands to new countries. This will make the already volatile politics of immigration nastier and will feed insecurity, not just of the poor but also of the already rich.

What we find today is that instead of tough and decisive action, the world is finding new ways not to act at the scale and speed needed. As we move towards the 26th Conference of Parties – that annual gathering of climate negotiators – we must discuss what must be done in our world to make it less insecure, less angry and less carbon-risked. Remember, climate change is a great equaliser; rich and poor, all will be affected.

So, what can we do? Our existence is at stake. Nothing less.

Let's also note that this impending climate crisis will be much worse than today's COVID-19 disruption. The pandemic is unprecedented, no doubt, when a tiny virus has brought the entire world to its knees. You can call it the revenge of nature. I believe that COVID-19 and its shock therapy is a wake-up call. It teaches us what we must do better in the post-COVID world.

Multiple and connected crisis

In many ways, you could argue that our world is paying for years of procrastination and prevarication. Today, multiple crises are unfolding, simply because we did not fix what was broken in the past. We are confronted with COVID-19 which is leading to a health crisis and economic collapse; destroying the livelihoods of the poorest and the most vulnerable. As we can see from the upheaval across the world – from India to the US – the poor have been disproportionately hit by the virus. They have suffered twice: they lost lives to the contagion and they lost livelihoods.

We are so distracted – from COVID-19 to economic crisis, to the daily skirmishes that are raging across our countries – that climate change is not a priority. We simply do not seem to have the bandwidth to handle it. But we must. The fact is, climate change is real COVID-19 has taught us that our world is inter-connected and inter-dependent. We see the same thing in climate change. If the rich continue to pollute and do not create the space for the poor to grow, it will not work. We need cooperation. We need equity and climate justice But even as this health and livelihood crisis is unfolding in front of our eyes, there is another looming disaster which is waving a red flag: climate change. We can see the impacts in India. This year, even as India has battled the virus, it was hit repeatedly by cyclones which devastated lives and property. Then came floods because of extreme rain events. We know that the aftermath of these events is worse because it takes away the development dividend and years of public investment into building infrastructure to improve the lives of people. It cripples local economy; makes communities poorer and more vulnerable. This year, there have also been attacks from locusts which are, once again, destroying fields and livelihoods of farmers – all these disasters are multiplying and magnifying the human distress because of COVID-19.

The link between these events and climate change is incontrovertible. Today, it is the poor of the world who are the worst hit. They are the victims of COVID-19, and climate change impacts them as well – the poor, who are not responsible for the stock of emissions in the atmosphere, but are at the frontline of the devastation. We need to remember this.

We need to remember this because COVID-19 has taught us that the world, our world, is inter-connected and inter-dependent. We are as strong as the strongest link; or as weak as the weakest. The poor are the worst hit today, but if the disease survives, we will all be in danger.

This is the same as climate change. If the rich continue to pollute and do not create the space for the poor to grow, it will not work. We need cooperation. We need equity and climate justice.

This is the same as air pollution. My city of Delhi is battling the battle of its life: combatting toxic air pollution which is filling up its skies and damaging our lungs. But we know that air pollution is a great equaliser – it hits the rich as well as the poor. All the air purifiers in the world cannot save us; we need strategies for clean combustion, which must be affordable for all. The fact is that today, if a poor woman uses biomass to cook her food because she has no alternative, the smoke from her chulha or stove will go into the same airshed which is being used by the rich. We need clean energy for all. If the industrialist continues to use dirty coal because the cost of clean energy is too expensive, then again it will not work.

We need to discuss access to clean energy for all, and clean air for all. We need to discuss affordable and convenient mobility for all. We cannot keep investing in private transport to meet the needs of some; we need transformational solutions.

Too much time has been wasted in denial, or plain laxity in getting our act together to move at the speed and scale that is needed. We do not have the luxury of time anymore. My generation has squandered the privilege away.

How then do we move ahead?

This is where, post-COVID-19, lies an opportunity to re-imagine work and production. On one hand, we can build local economies and resilient futures; on the other, we can create value for work, which then reduces consumption as the cost of production will increase. If we can re-invent work and production, we will be able to combat climate change.

First, if we can improve our management of land and water, we can shave off the worst impacts of climate change. This will build wealth for the poorest and improve livelihoods. And by doing this, we mitigate greenhouse gases, as growing trees sequester carbon dioxide; improving soil health captures carbon dioxide; and most importantly, changes in practices of agriculture and diets will reduce emissions of greenhouse gases. This is where the real answer is.

We have to invest in the economies of the poor; we have to build their capacities so that they can not only withstand the next calamity, but indeed, overcome it. For this, we must invest in creating ecological assets – from rainwater harvesting to better food systems that are resilient.

We must also redefine what we mean by resilience – often, high-input agricultural systems are seen to be productive, but they are less resilient. Farmers are more vulnerable to shocks when their debts are high. We need, therefore, to understand the strength of small-holder agricultural systems that are multi-crop, low-input and built to withstand shocks. We must strengthen those and not replace them with our own variations. The knowledge of the poor is not poor. The poor might be illiterate, but they are extremely resource literate. Our effort must be to learn.

Secondly, let's redefine the future of production – the biggest problem of our contemporary world's economic model is how it has discounted the cost of labour and environment. When the world signed the agreement for combatting climate change in the early 1990s, it also signed on the free-trade agreements that were built on taking production to where it is cheapest. We have, in this model, disregarded the cost of environmental protection. We must correct this.

In India, we have seen how workers have gone back home during the pandemic lockdown. Their value as producers has become apparent, and now there is much more recognition in the public and private sector of the need to invest in their wellbeing. This will increase costs – but that is good, not bad. So, we have to talk about this. We have to talk about how we can move beyond a consumption-based economic model.

If we work seriously on this, we can also find solutions to climate change. It is not about investment in renewables. That is important, but it is about investment in energy access for the poor. It is about building local and resilient economies and moving beyond consumption. We have to invest in the economies of the poor; we have to build their capacities so that they can not only withstand the next calamity, but indeed, overcome it. For this, we must invest in creating ecological assets – from rainwater harvesting to better food systems that are resilient

The road to CoP-26

As the world prepares for CoP-26 in 2021, let's not beat around the bush any more. Global emissions may have reduced marginally in the past year because of COVID-19, but this slowdown is temporary. The UNEP's Emissions Gap Report 2020 finds that global GHG emissions have continued to rise in the past three years; in 2019, emissions were at a record high.

It is also clear that at the current levels of emissions, the world will 'exhaust' the carbon budget for 1.5°C target by 2030. This, when large parts of the world, including India, will need the right to develop. This in today's context – where coal and natural gas, both fossil fuels, remain the most competitive fuels – would mean increase in emissions. It is clear that the transformation to new energy systems, driven by renewables, is still a way away. Even in most low-carbon advanced regions like the European Union, talk aside, coal is still as large a part of the energy system as is the new renewable technology, wind or solar. So, it is necessary to move towards this transformation in the still emerging world, but there are no enabling conditions that will make this happen. Talk is cheap. Transformation is not.

But the goal-post is already being shifted. The new buzz-word is 'net zero'. Already, many countries in the world have declared net zero targets for 2050; China has joined the climate-emancipated to say it will be net zero by 2060. Now the pressure is on all governments, including India, to set their future targets.

The problem is not with the ambition or intention to turn net zero. I say this because I see new efforts to find half-solutions to the problem of climate change. Net zero really means that the world will have to learn to live within planetary boundaries. We cannot emit more than what our planet can absorb through global and national sinks. But living within this 'assimilative' capacity of the planet is not going to be so easy. We have massively transgressed the natural boundary. But saying that we will be net zero in 2050 merely seems to be an easy-sell.

The fact is that unless we reduce our emissions drastically, we cannot be net zero. Today, there is some comfort in saying this; it staves off the inevitable pain – it pushes it to the next generation and after. But we know that we cannot buy ourselves out of this crisis. We need to act; and action has to be transformational.

The problem is that in most cases, this grandstanding declaration has no flesh – it is devoid of a plan to get there, or a pathway that would make greenhouse gas emissions go away. In very few cases, countries have come up with hard targets for this decade on how to get to reductions in 2030. In most cases, this drastic reduction in the immediate future is not clear; but the ball has been kicked into the future.

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Given this reality, net zero sounds like a really good idea to sell. In this way, countries will find the means of soaking up or burying the emissions so that in their balance sheets, they can claim they are net zero.

How does this great carbon soak-up-burial work? One, emission sums would calculate the carbon dioxide (CO_2) sequestered in trees; what is emitted and how much is absorbed. Then, there are new technologies (still mostly on the drawing board), which would suck tonnes of CO_2 from the atmosphere and bury it deep underground. This would mean that countries can now plan not just to cut emissions, which is turning out to be more difficult than they imagined, but to continue to emit and then clean up. They can also buy credits – invest in carbon-friendly projects in other countries – and add them to their balance sheets.

This is where the discussion on markets becomes critical. It is also a fact that planting trees in vast villages of Africa or Asia is much cheaper than doing that in Europe or Japan. In our world, there are still low-hanging fruits – cheaper options to cut emissions. So, markets are being designed so that there can be 'investment' (that's a sweet word) in developing countries for carbon capture and credits. For most of us who have worked in this contentious climate territory, these are familiar terms: in the 1997 Kyoto Protocol, the Clean Development Mechanism started with the same lofty ideas of paying for technology transitions in the developing world, but soon deteriorated into becoming a cheap and convoluted, and even corrupt, development mechanism.

Now, under the Paris Agreement, all countries have to undertake emission reductions domestically. Therefore, if India, for instance, 'sells' off its cheap emission reduction options to a rich country, what and how will it take on the real cuts that the world needs? Let's remember, this is a crisis for all – if the poor are impacted today, even the rich will be hit tomorrow as temperatures increase. And they will, in this scenario.

So, what should be done? There is nothing wrong with setting a net zero target per se. But the objective should be to incentivise countries to do more at home and then to buy whatever remains through global trading systems. But this means setting a base price on carbon trading – below this rate (say US \$100-150 per tonne) projects would not qualify. This would mean that only those projects would be funded that would be transformational, and not transitional, in the still-to-be-developed world. Countries like India could leapfrog to much cleaner futures. We could avoid first polluting and then cleaning up. We could actually move ahead to combat climate change.

Consider what has happened in the US: energy-related emissions are down 30 per cent in the past decade. But the country will still miss its small Paris commitments – commitments totally disproportionate to its contribution to

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the problem. Why? Because it has increased its emissions targets in all other sectors, from transport to industry. Unless the cost of energy increases, unless it works on doing much more with less, it cannot, climate change. And in this the world will fail.

This is why we need more reality checks in the climate change narrative. The impacts are certain, but as yet, action is pusillanimous. We deserve better. In these COVID-19 times, we have seen disorder and disruption at a scale that we never imagined. So, now we need the same scale to fix what is broken in our relationship with nature. The future, like never before, is in our hands. Nature has spoken. Now we should speak gently back to her. Tread lightly on the Earth.

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