

**TIMES
EVOKE**

A CALL FOR CLIMATE JUSTICE

It is sometimes thought that history and science are polar opposites—yet, the twin meet in climate change. Climate science illuminates the history of global warming from the 19th century when, fuelled by colonialism and the Industrial Revolution, western nations began using fossil fuels intensively. This emitted greenhouse gases that changed Earth's atmospheric balances. The manifestations are clear now — the World Meteorological Organization reports, climate disasters, from heatwaves to floods, have surged five-fold over the last 50 years, with climate hazards accounting for 50% of all disasters and 74% of all economic losses. These losses are neither created, nor borne equally. The IMF finds the world's richest countries caused over 40% of CO₂ emissions while the World Bank estimates the poorest caused under 15%. The world's richest 1% emit more than the poorest 50% — yet, the latter face climate change's harshest impacts. Consider Mozambique which produces only 0.09% of global emissions. Yet, Mozambique faces droughts and a famine where, the World Food Programme finds, 80% people cannot afford adequate food. Such climate injustice prevails within nations too — in Nigeria, the poorest 20% are 130% more likely to be affected by droughts while in India, the poor lose three times more in climate disasters. With four billion people — mostly in the developing global south — facing even chronic water shortages, the World Bank estimates that by 2030, 135 million people could be pushed into climate-caused poverty.

Remedies have been promised. In 2009, developing countries were assured \$100 billion annually for climate adaptations. But these have been honoured more in their breach than observance — ironically, in 2019, 71% climate finance was distributed as loans, not grants, pushing climate-stressed nations into debt. But climate justice is crucial to save the world — it is the only way developing economies can achieve sustainable growth while developed economies can correctly acknowledge their debt to history and science. As Times Evoke's global experts emphasise, climate justice must underpin all effective adaptations. To nurture this hope is crucial for the great pendulum of time does finally swing towards justice. Join Times Evoke in understanding climate justice, so you can help build this too.

How do you define 'climate justice'?

■ This is not a moral issue — it is a prerequisite to mitigating climate change. The science shows us how climate change is the result mainly of emissions of carbon dioxide. This is a very long-lived gas which lasts over 150 to 170 years in the atmosphere. So, what was emitted a century and a half ago still exists in Earth's atmosphere today. This is the stock of greenhouse gases in the atmosphere which is forcing changes in temperatures. Clearly, we cannot wish away historical emissions — this is a natural debt of many countries.

Such carbon dioxide emissions happen because of using fossil fuels, linked to economic growth as we know it. Even today, with the Ukraine crisis, we can see several countries scrambling for more fossil fuels. Such an intensive use of fossil fuels has led to huge prosperity in many countries and caused the problem of climate change for Earth.

Climate justice should be essential to climate adaptation because without an acknowledgement of this, we cannot have truly effective agreements. Large regions have emitted and developed but our data shows 70% of the world still needs the right to grow. As these countries develop, they will also emit and add to greenhouse gas emissions, further jeopardising the situation. Unless we make climate justice a bedrock of climate action, we can't have effective agreements, accompanied by financial transfers, technology sharing and measures to enable countries to grow economically without pollution.

The Framework Convention on Climate Change, signed in Rio de Janeiro in 1992, was based on this principle — it agreed that rich nations would reduce emissions while the poor could develop with access to money and technology for clean growth. But since then, the rich world has mostly undermined the principles of climate justice. The final blow came in Paris in 2015 when the Agreement shed the term 'historical emissions' and dropped the responsibility of the developed world to take on emission reductions. That is why we are



Sunita Narain is director general of the Centre for Science and Environment (CSE). Speaking to Srijana Mitra Das at Times Evoke, she discusses why ensuring climate justice is vital — and inevitable:

■ **Green sea turtles are highly sensitive to ocean temperatures rising with climate change.** The temperature of the sands where their eggs are laid also affects their hatchlings, creating more females, making proliferation harder. As climate change melts polar ice, increasing sea levels, turtles find the beaches they were born on and return to give birth at vanishing, endangering them



THE NATURE OF THEIR RIGHTS

■ **Polar bears face a massive loss of sea ice habitat because of Arctic warming.** However, the ice is crucial for polar bears which need to hunt seals and fish across this and move over large home ranges for their foraging habitats. As sea ice continues to shrink with global warming, polar bears and walrus too face a future where a hot and dry world has no place for them



■ **Climate change could have caused a maladjustment in one of the world's most iconic birds — scientists in Spain find with rising temperatures and increased droughts, nightingales have developed smaller wingspans.** This impacts their ability to migrate to sub-Saharan Africa in winter, essential for survival — nightingales have sharply declined recently. Able to produce over 1,000 rich notes of music, a world without a nightingale would be just sound and fury



Research: WWF, IUCN, BBC

'Climate justice should be classed with human rights'

Environmental lawyer **Michael Gerrard** teaches at Columbia University. He tells Times Evoke about existing legal redressals to address climate change:

I founded and direct the Sabin Center for Climate Change Law at Columbia Law School. Its three principle purposes are to discuss legal techniques to fight climate change, train the next generation of lawyers to use these and develop legal research tools for lawyers, judges, applicants and scholars around the world.

A profound injustice underpins the quest for climate law — the countries least responsible for climate change are its greatest victims. Currently, the Paris Climate Agreement of 2015 is the most important international agreement on climate change — however, this depends on each country using its own laws to implement it. The Paris agreement required each country to make its own pledge for how much it would reduce greenhouse gas emissions. Almost every country did — but the pledges do not add up to nearly enough. Many countries aren't even meeting the pledges they made. But there are no binding legal provisions to this — the only really binding portions concern reporting and monitoring. The requirements to reduce greenhouse gas emissions are not enforceable.

Again, there are no real legal provisions to ensure the transfer of climate funds and technology from rich economies to developing ones. This depends on the countries involved fulfilling their commitments. In an ideal world, it would be desirable to have an international court of climate rights — however, I find it hard to envision a situation where the largest emitting countries would agree to be bound by the rulings of such a court.

Today, the existence of several small island nations in the Pacific, the Indian Ocean and the Caribbean is threatened by sea level rise. But there aren't any explicit laws to protect them or ensure their citizens could move to other countries. There is an effort to get the issue of these countries' rights and the obligations of certain developed nations before the International Court of Justice now. The world needs to build an infrastructure of climate justice swiftly — but this is more a matter of politics than law. We need governments to accept the importance of the problem and how essential it is for them to act.

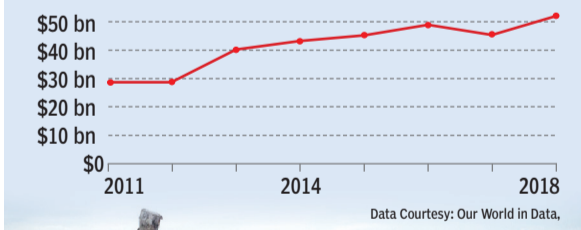
We also have 'the children's crusade' or lawsuits brought by young people seeking to make their governments take stronger action on climate change. Some have been successful in Germany, the Netherlands, France and Colombia, where the courts ordered governments to take more action to save young people from becoming climate victims.

While the legal situation can seem discouraging, there are causes for optimism too. The scientific evidence of the negative effects of climate change is mounting strongly — the current heatwaves over India is one example. We are hopeful that such evidence will spur greater action by those in power. Meanwhile, the brutal Russian invasion of Ukraine is leading to accelerated efforts to reduce fossil fuel use.

A very powerful climate justice case is Urgenda (2019) where the Dutch supreme court ruled that as a matter of inter-national human rights law, the Dutch government was obligated to significantly reduce the country's greenhouse gas emissions. Climate justice should be classed with human rights now — and increasingly the courts of some countries are recognising that.

FOR WHOM THE BELL TOLLS

Climate fund transfers have moved slower than climate change. Rich nations have set a collective goal of mobilising \$100 billion per year for climate adaptation measures. The people of the Sunderbans, facing sea level rise, cyclones and soil salination destroying agriculture, are waiting



HISTORY IS A DEEP WELL: Children in refugee camps in Africa, displaced by climate impacts, seek water in shallow puddles but a deeper depth explains their travails

COUNSEL FOR THE CLIMATE

respond to or ensure their citizens could move to other countries. There is an effort to get the issue of these countries' rights and the obligations of certain developed nations before the International Court of Justice now. The world needs to build an infrastructure of climate justice swiftly — but this is more a matter of politics than law. We need governments to accept the importance of the problem and how essential it is for them to act.

We also have 'the children's crusade' or lawsuits brought by young people seeking to make their governments take stronger action on climate change. Some have been successful in Germany, the Netherlands, France and Colombia, where the courts ordered governments to take more action

'From India to Africa, today's climate crisis reflects a history of colonialism'

Olufemi O. Taiwo teaches philosophy at Georgetown University. Speaking to Times Evoke, he explains the history of the climate crisis — and the case for climate reparations:

I work on social and political philosophy in a way that focuses on thinkers and themes in anti-colonial, anti-capitalist and black radicalist traditions of thought. One connection between colonialism, capitalism and climate change is directly historical — the developments of the last 500 years linked much of the world in a planetary scale system of politics and economics. This system led to the Industrial Revolution which was, among other things, an energy revolution. These energy changes are where scientists link anthropogenic global warming to.

The same revolution explains who the haves and have-nots of both energy systems and climate change are. These questions of power will determine the future too, in terms of who is most vulnerable to climate impacts and who is protected from these. This history therefore has a deeply practical connection towards ensuring a future of climate justice.

The term 'climate colonialism', used by many academics including Doreen Martinez, the influential indigenous studies scholar, means climate impacts themselves as well as the kinds of policies that countries, corporations and other actors pursue to respond to these — importantly, these can result in a world where colonial power hierarchies are deepened. Whether it is mining minerals for making green batteries to dispossessing indigenous people living near sites of extraction or the distributive effects of climate disasters themselves, all of these can actually deepen colonial hierarchies. We must keep this reality in mind to



HISTORY IS A DEEP WELL: Children in refugee camps in Africa, displaced by climate impacts, seek water in shallow puddles but a deeper depth explains their travails

respond effectively to climate impacts — this is not just about rain and temperature. This is about our whole social system and how it responds to this colonial history.

There is a real argument for climate reparations now — the global north's governments refuse climate reparations. This allows social conditions in other countries to deteriorate under climate impacts, leading to an increase in climate-related disasters and displacements. This then creates a kind of self-justifying reality around xenophobia and border violence in the global north. These conditions are not practical. Consider the pandemic — it can only be brought under control when the world population develops immunity by equitably distributing vaccines. The

urge to protect only the elite interests of the global north is inhumane, morally wrong — and self-defeating from a practical perspective.

People often make the argument that large developing economies like India and China are also responsible for emissions now — I think this argument shows the need for a historical and political analyses that moves beyond just tracking carbon emissions. If we analyse emissions per capita, on a cumulative historical basis, India and China are clearly not the real problems here. But even if they were, the historical question of why these countries and others like them have pursued the particular development paths they have has everything to do with who was in power in previous generations and what forms of

READERS WRITE

Dear Times Evoke,
Thank you, TE, for another beautiful article on our marine world (7th May). Marine life must be explored with great sensitivity and David Gruber's work is just stellar. Thank you, TE, for doing such great work.
—Dipankar Jena, Balasore

Kudos to TE for the article on David Gruber and his discoveries of biofluorescence. Every Saturday, reading Times Evoke is like a breath of fresh air. Thank you, Times Group, for creating this lovely page!
—Manish Rakesh Verma, Mumbai
I was mesmerised reading TE on fluorescent species of the seas. Their biology and symbiotic relationships are wonders!
—K. Balakrishnan, Professor, MKU (Retd.), Madurai

TOI's Times Evoke publishes only solid academic work. David Gruber's study of marine life was very aesthetic and richly informative.
—Madhu A., Delhi
Share your thoughts at: timesevoke@timesgroup.com
You can also read Times Evoke online at: www.timesofindia.indiatimes.com/india/times-evoke

A REVIEW BY YOU

Dear readers, we are so delighted by your warmth for 'To Nature, With Love'. We invite you to email us your review of the book (250 words) by 31st May. We will publish the best. See you in TE!
Available on Amazon & Flipkart

