Renewed multilateralism to alleviate chronic risks and enhance human security

‘Past shocks and the current pandemic underscore that tipping points need not be physical alone. It certainly matters what we do to the planet and what the planet does to us. What really matters most, however, is what people do to one other.’

(Ghosh, 2020a).

The new era poses new global-scale challenges for humanity, beyond the usual threats of rogue nations, terror groups, boundary conflicts and financial crises. The climate crisis, pandemics and public health emergencies, heat and water stresses, declining agricultural outputs, coastal degradation, biodiversity collapse, and emergent risks such as digital infrastructure vulnerabilities, are among oft-neglected issues that have become serious international concerns.

Tail-end risks have low probabilities of occurrence but can be catastrophic, especially risks with transboundary impacts such as the Covid-19 pandemic and extreme weather events. Growing climate and health stresses are raising the chances of such high-impact events occurring more frequently – often overlapping – to cause domino effects of associated events that can overwhelm the responsive capacities of communities, governments and multilateral organizations.

The pandemic has fractured an already fragile world. Today, the closed borders, unilateral policies and regulations, financial and resource scarcities, and intense suspicions offer little scope to realize the ‘grand bargains’ of post-Cold War multilateralism based on technology, trade and finance.

Instead, as nations turn inwards in favour of myopic self-preservation, it is time to redefine multilateral cooperation. **Multilateralism for chronic risks would seek to mitigate outcomes that we all prefer to avoid** by installing ‘pillars of transparency and risk pooling’ and strengthening the ‘vulnerability and capacity of countries’ to deal with stresses and shocks (Ghosh, 2020a).
Pandemic and panic: realizations from the ravages of Covid-19

The speed of transmission, the virulence of the variants, the death toll, the imperfect vaccines and lack of a cure, and the sheer global scale of socio-economic devastation of the Covid-19 pandemic since early 2000, have finally changed the priorities of nations and their foreign policy experts.

International politics and strategies have centred on ‘hard power’ machinations built upon military superiority and economic dominance, relegating so-called ‘softer’ issues such as public health or the environment to domestic policy as ‘low politics’ (Olsen, 2017). Ironically, the ‘biggest armies and the biggest economies’ are now victims of a microscopic virus, ‘a weak link undoing decades of progress’ (Ghosh, 2020b).

Since the pandemic started, various degrees of quarantines of people and restrictions on social interactions, education, work, travel and trade have disrupted supply chains and industries, depressed consumer demand for goods and services and pushed millions of people worldwide out of work. Most nations have deported foreign workers.

The United Nations Department of Economic and Social Affairs (UN-DESA), in a 2020 report, projected the global economic output losses to exceed USD 8.5 trillion over two years (United Nations Department of Economic and Social Affairs, 2020). In June 2021, the World Bank estimated that the pandemic had pushed an additional 97 million people into extreme poverty (World Bank, 2021). Many of the new poor are urban dwellers, and in countries with already high poverty rates (World Bank, 2020).

Worldwide infections have crossed 293 million, with over 5.45 million deaths (Center for Systems Science and Engineering – Johns Hopkins University, 2022), as of the first week of 2022. Vaccines of varying efficacies have generally been available only to certain countries and populations. Despite multiple resolutions on ‘equal access to drugs through parallel imports, licensing, and domestic production’ passed by the UN Human Rights Commission, the World Health Assembly and the UN General Assembly in 2001 (World Trade Organization, 2002), the global community has been unable to prevent pharma behemoths from coercing nations to accept their lopsided terms and profiteering from the potentially life-saving medicines.

This has brought the demand for multilateral action to build a ‘more human-centred international trade system’, covering ‘intellectual property and access to medicines; the treatment of indigenous knowledge; and building capacity for trade’ (Ponzio & Ghosh, 2016) back into sharp focus.

The slow-burning chronic risk: the global climate crisis

The 1972 UN Conference on the Human Environment in Stockholm set the foundation for modern environmental diplomacy and the myriad multilateral environmental agreements (MEAs). The first UN conference with ‘environment’ in its title, it led to the foundation of the UN Environment Programme (UNEP) and yielded the Stockholm Declaration, comprising the first set of principles for ‘global cooperation to reconcile economic development and environmental management’ (Chasek, 2020).
The Stockholm Declaration had noted, fifty years ago, the urgent desire of the global community and the duty of all governments to protect and improve the human environment, ‘which affects the well-being of peoples and economic development throughout the world’ (United Nations, 1972).

Today, the world is facing an ever-increasing frequency and range of extreme weather events caused by the climate crisis breaching ‘tipping points’ – thresholds in Earth’s climate system and impacted ecosystems, which, when crossed, can trigger self-reinforcing feedback loops, setting off ‘tipping elements’ like melting ice sheets and sea level rise. In 2019, climate scientists warned that nine tipping points are now ‘active’, including frequent droughts threatening the Amazon rainforest and rapid loss of the Antarctica and Greenland ice sheets (Lenton et al., 2019; Ponzio & Ghosh, 2016).

The World Meteorological Organization estimates that surface temperatures could rise by up to 1.65°C by 2030 (Madge, 2020). The Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), released in August 2021, agreed that the world could reach (and exceed) 1.5°C of warming within the next two decades (Intergovernmental Panel on Climate Change, 2021).

A fraction of the extreme climate events the same month included floods with hundreds of casualties in the Indian states of Bihar, Himachal Pradesh and Maharashtra, China’s Henan and Germany’s Rhineland-Palatinate and North Rhine-Westphalia, over 41 100 wildfires burning through 4.6 million acres in the US and heatwaves killing dozens in Canada’s British Columbia (Adlakha, 2021; Ghosh, 2021a). In 2021, a record 18.8 million hectares of peat-based forest fires burned in Russia, with smoke reaching the North Pole (Allakhverdov, 2021). Most of the 300-odd extreme weather events faced by India during 1990 to 2018 have occurred after 2005; flooding events have increased three-fold since 1980 (Mohanty, 2020).

The Paris Agreement, adopted by 196 parties at the UN Framework Convention on Climate Change (UNFCCC) Conference of Parties (COP-21) in 2015, targeted limiting long-term temperature rise to 1.5°C above pre-industrial levels. The best-case scenario, based on the progress – or lack thereof – since, and assuming all parties achieve their commitments made at COP-26 in Glasgow in November 2021, still only caps global warming at 1.8°C (Roche, 2021).

The real cost of environmental crises: the human development and human security challenge

Between 1999 and 2018, extreme weather events have caused about half a million deaths worldwide (Mohanty, 2020). The gravest impacts are borne by the poorest countries and most vulnerable communities, which have contributed the least to the climate crisis and lack the finance, technology and capacity to significantly alter the status quo. Each set of shocks sets back years of hard-won development. Multilateral action has been deficient in addressing the loss and damages and building the resilience of these communities to chronic risks.
Climate-related disaster death tolls of potentially exposed populations during 2000 to 2017 indicate 16 deaths per million for high-income groups, compared with 60 per million for low-income groups (Figure 1) (United Nations International Strategy for Disaster Reduction, 2018).

Recorded climate-related disaster GDP losses by income groups from 1998 to 2017 also illustrate this stark disparity, ranging from 0.41% for high-income groups on a GDP base of USD 1432 billion, to 1.77% for low-income groups on a meagre GDP base of USD 21 billion (Figure 2) (United Nations International Strategy for Disaster Reduction, 2018).

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**Figure 1: Climate-related disaster deaths per million population potentially exposed, 2000–2017 (United Nations International Strategy for Disaster Reduction, 2018)**

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**Figure 2: Recorded climate-related disaster losses, absolute and percentage GDP per income groups (United Nations International Strategy for Disaster Reduction, 2018)**
A ‘people-centred approach to sustainable human development’ is needed to square the priorities and negotiating positions of rich and poor countries, and **imagine new policy paradigms that address four major issues**: ‘human security; impact of environmental degradation on the poor; different perspectives of the present and the future; and sustainable consumption’ (Ponzio & Ghosh, 2016).

Environmental security is integral to human security (United Nations Development Programme, 1994), with conflicts arising over water scarcity, desertification due to industrial-scale deforestation, salinization of irrigation systems and worsening pollution, especially in developing countries. Erosion of natural resources is increasing the frequency and intensity of natural disasters due to the decreasing resilience of societies, economies and physical infrastructure dependent on these resources.

At least five risk multipliers – ‘reduced agricultural productivity, greater water insecurity, exposure to coastal flooding and extreme weather events, collapse of ecosystems, and increased health risks’ – demonstrate how the poor face disproportionate impacts of environmental stresses (United Nations Development Programme, 1998).

As early as the mid-1990s, 90% of deaths caused by air pollution were in developing countries, mostly due to indoor air quality in rural areas. China is estimated to lose an average USD 238 billion annually due to floods, droughts, cyclones and related events (World Meteorological Organization, 2021). Findings from the Climate Vulnerability Index of the Council on Energy, Environment and Water (CEEW) show that 463 of India’s 748 districts (home to 968 million people) are extremely vulnerable to climate change (Mohanty & Wadhawan, 2021); just one super-cyclone, Amphan, displaced about 2.5 million people each in India and Bangladesh in May 2020 (World Meterological Organization, 2021). Between 2000 and 2019, China and India accounted for about 70% of all disaster-affected people (Eckstein et al., 2021).

The 2018 Report of the Global Commission on the Economy and Climate calls for four urgent actions to shift the world economy onto a more stable climate pathway: setting a carbon price and moving to mandatory climate risk disclosures by investors and companies; using sustainable infrastructure as a central driver of new growth; harnessing the potential of the private sector; and a people-centred approach to ensure ‘lasting, equitable growth and a just transition’ (The New Climate Economy, 2018).

But international climate negotiations remain mired between the Global North demanding that poor countries assume disproportionate responsibility for climate action while shirking financing obligations by claiming a lack of investable projects, and the Global South protesting that raising ambitions is not translating into finance flows (Ghosh & Harihar, 2021). At COP-26, developing countries asked for investment of USD 1.3 trillion but even the UK COP Presidency’s Climate Finance Delivery Plan, which hinted at delivering USD 100 billion by 2023, was not an explicit part of the COP outcomes.

Four shifts – in scale, regulation, balance and risk – are critical for emerging markets to access investments for sustainable infrastructure (Ghosh & Harihar, 2021). Trillions of dollars are needed by countries that have yet to build the infrastructure and energy systems to meet the developmental aspirations of their people.

Developing countries must also create a conducive regulatory ecosystem for green finance, including building a green taxonomy to improve awareness about green sectors and reduce greenwashing. Public and private sources, and mitigation and adaptation needs, must be balanced. Similarly, transition finance could accelerate a phase-down of fossil fuel infrastructure. Finally, investment risks in emerging markets and developing countries must be addressed proactively. Without multi-country, multi-risk hedging, green finance will remain limited and costly.
Out with the old: the inadequacy of old-world orders to address new-world challenges

The frustration of the poorer nations bearing the brunt of various crises perpetrated by their rich counterparts, and the inaction – or worse, selective actions benefitting favoured nations – of existing multilateral systems have turned the spotlight on their inadequacies to predict, control and alleviate global-scale problems.

Today, the premise of multilateralism, considered a ‘potentially more efficient and legitimate means towards enhanced human development and security’ (Ghosh, 2020a) through global cooperation, is itself at risk alongside rising human insecurity and breached planetary boundaries.

It is important to reflect on the limitations of multilateralism to drive sustainable economic and human development before pressing on with a call for renewed multilateralism to counter chronic risks.

Principle 24 of the Stockholm Declaration asks that environmental protection and improvement be ‘handled in a cooperative spirit by all countries, big and small, on an equal footing’ via multilateral or bilateral cooperation to ‘effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres’, while keeping in mind the sovereignty and interests of these countries (United Nations, 1972).

In 1987, the UN-sponsored World Commission on Environment and Development (the ‘Brundtland Commission’) noted that sustainable development also needs to be intergenerational so that it can meet the ‘needs of the present without comprising the ability of future generations to meet their own needs’ (Brundtland Commission, 1987).

MEAs are, therefore, expected to bring key stakeholders – nations and/or international institutions – together to solve challenges at the intersection of human development and ecological integrity by influencing policies and encouraging innovations in global governance, with due consideration for the current and future needs of humankind.

While these well-meaning ambitions and declarations are accepted, even lauded, by stakeholders, various conflicts arise from all-inclusive clauses such as, ‘all countries, big and small, on an equal footing’ or ‘activities conducted in all spheres’, which attribute universal responsibility for the actions of a few. Protracted negotiations on such common responsibility often lead MEAs to adopt differential standards for countries, such as allowing longer compliance periods or imposing unique standards – with widely varying outcomes.

For example, the 1987 Montreal Protocol to phase down hydrofluorocarbons to protect the ozone layer gave developing countries an additional decade for compliance. By 2013, it had become the first global regime with universal ratification, with 98% of the ozone-depleting substances contained in nearly 100 hazardous chemicals phased out worldwide, and all countries complying with its stringent obligations (United Nations Environment Programme, 2020).

On the other hand, at the 2009 UN Climate Change Conference in Copenhagen, rich nations, accepting their historical emissions, pledged to give USD 100 billion a year to developing nations by 2020 to ‘help them adapt to climate change and mitigate further rises in temperature’ (Timperley, 2021). In 2020, the UN conceded that ‘the only realistic scenarios’ indicated that this target could not be met (Bhattacharya et al., 2020).
Further contentions arise from shared resources and boundaries, and the ‘global commons’ – defined as ‘those parts of the planet that fall outside national jurisdictions and to which all nations have access’. International law identifies four global commons: the high seas, the atmosphere, Antarctica and outer space (United Nations, 2013). Principle 21 of the Stockholm Declaration notes that while countries have the ‘sovereign right to exploit their own resources’, they also need to ensure that their activities do not damage ‘the environment of other States or of areas beyond the limits of national jurisdiction’ (United Nations, 1972). The challenge is obvious: accounting for these transboundary negative impacts of human activities on the global commons.

Ensuring intra- and intergenerational equity in resource allocation and use is also difficult. Even the Brundtland Commission, which avoided both ‘development’ and ‘environment’ in its phrasing to avoid the inherent conflict, faced the contention that while resources had to indeed be conserved for future generations, ‘it could not be at the cost of giving less attention to the needs of the less privileged today’ (Ponzio & Ghosh, 2016).

Access to, and management of, critical resources such as oil, water, fishing grounds, agricultural lands, minerals and rare earths, and the often-iniquitous rules of global or regional trading systems that tend to lock out poor countries from access to various goods, services and ideas, are other flashpoints.

The climate crisis reflects all these challenges. It has led to pitched debate that the fossil fuel-led socio-economic growth of the poorer nations is depleting the already scant global carbon space – though most of this carbon space was and is still being used up by rich nations for their own industrialization and to maintain their high living standards.

A 2021 CEEW report notes that 60% of the cumulative global emissions have been contributed by North America and Europe – with only a quarter of the global population (Figure 3) (Chaturvedi & Malyan, 2021).

At their current rates, the US, the EU and China would consume 45% of the 1.5°C carbon space between 2020 and 2030 (91% by 2050), leaving all other countries, including India – home to almost 1.4 billion people – with only 9% of the carbon space.

Figure 3: Cumulative (historical and projected) CO₂ emissions, GtCO₂ (Chaturvedi & Malyan, 2021)
These three countries could save 28.5% of the global carbon budget to stay below 1.5°C by advancing their net zero years by a decade each (Chaturvedi & Malyan, 2021).

The per capita emissions also illustrate this disparity, with the US (15.52 tonnes), EU (8.2 tonnes) and China (7.38 tonnes) dwarfing India’s 1.91 tonnes, and even the global average of 4.97 tonnes (Worldometer, 2021; Eurostat, 2019). Further, the measurement of ‘territorial emissions’ distorts the reality of the Global North outsourcing their industrial processes and waste management to China, India and other countries in the Global South, along with the related emissions burdens.

And yet, there has been little to no accountability for historical polluters failing to meet their obligations. Major industrialized countries, excluding those parts of the erstwhile USSR, reduced emissions by only 3.7% by 2019 compared with the 1990 levels (Prasad et al., 2021).

Most existing MEAs have also become functionally weak, afflicted with fragmented, diffused and officious governance structures that reduce their operational effectiveness, and espouse a general lack of transparency and accountability that has eroded their credibility. The MEAs are also not well aligned with each other, and with other key international legal instruments, and consequently lack the institutional coherence needed for decisive, effective and just action when confronted with ‘regime complexity’ (Alter & Meunier, 2009; Keohane & Victor, 2011).

Collectively, these issues have made all parties extremely wary of their real and perceived gains and losses at any multilateral negotiating table.

**De minimis multilateralism: leveraging common aversions for quicker consensus and collective action**

The pandemic has illustrated, in the cruellest of ways, that in a real global-scale crisis, every country must fend for itself. Today, the ‘axioms of free trade, free movement of capital, or freedom of energy supplies’ are being questioned against the narrow self-interest of each nation.

For now, the world needs to focus on common aversions – such as pandemics, extreme weather and other disasters that everyone would prefer to avoid – and ‘settle for de minimis multilateralism: what is the minimum on which interests converge?’ (Ghosh, 2020a).

**This renewed multilateralism should be structurally more inclusive** and offer poorer countries seats at the big table to set agendas and determine outcomes. Some progress has happened, with the creation of G20 and countries such as China, India and South Africa becoming part of the core groups of many international negotiations. But despite shifts in economic trends and governance systems in the new millennium, deep democratic deficits remain and must be bridged.

The compelling motivator of common aversions could also spur action for industrial decarbonization without deindustrializing the fast-growing emerging economies. This includes finding multilateral solutions to product and process standards for industries that could adversely impact these countries’ competitiveness, and tariff (e.g., carbon border adjustment) and non-tariff (technical standards) barriers that could restrict trade.

Emerging demand for resources like green hydrogen and lithium must be managed collaboratively through rules-bound global governance. Otherwise, countries will
try to secure these on their own, which could lead to serious conflicts, obstructing decarbonization and depriving many developing nations of key resources. Creating collaborative supranational entities would also help faster and more equitable research, development, deployment and market creation than individual efforts of nations.

Further, linking MEAs to the Sustainable Development Goals would increase intersections between MEAs and non-environmental treaties, and increase their compliance and effectiveness (Ghosh, in press).

Leveraging the international community’s collective interest in minimizing acute and chronic health, environmental and financial risks and improving the response to shocks could revive the interest in multilateral action. The UN, formed in the aftermath of World War II to avoid another such calamitous conflict, the G20, founded in 1999 in response to global economic crises, and other platforms need to now regroup and explore ways to ‘prevent environmental crises of planetary scale and significance’ (Ghosh, 2020a).

The economics of chronic risks: assessing and insuring material and human assets

Globally, in 2017, weather- and climate-related disasters led to a loss of USD 320 billion (Low, 2018). This is a conservative calculation, since most losses due to natural disasters in developing countries are uninsured, which conceals the true extent of the damage to lives, livelihoods, infrastructure and economies.

Insurance firms are struggling to calculate rising, non-linear climate risks based on historical data. Wrong signals could create stranded assets worth tens of trillions of dollars over the next two decades. And a large – and increasing – range of risks are driving up insurance premiums globally, and, in turn, will further exclude the poor.

Vulnerability is, therefore, not just exposure to physical harm from climate stresses and shocks, but also the financial consequences of not having a safety net. It is critical to invest in building the resilience of human and non-human systems – their capacity to withstand and respond to climatic changes – for mitigation and adaptation (Kakenmaster, 2018).

However, vulnerability and capacity, either of countries or communities, to deal with environmental shocks are not well measured. Loss and damage due to anthropogenic climate change pose challenges in attributing specific events to climate change and determining the limits to resilience beyond which loss and damage is unavoidable, making them even harder to finance (Ghosh, 2019).

A Climate Risk Atlas for Developing Countries, covering critical vulnerabilities to extreme weather events such as floods, droughts and cyclones, coastal degradation, heat and water stress, and crop loss at a granular level should be a priority for multilateralism structured around chronic risks.

The Atlas should draw inputs from agencies such as the UNFCCC, the UN Office for Disaster Risk Reduction (UNDRR), the UN Convention on Biological Diversity (UNCBD), the UN Convention to Combat Desertification (UNCCD), the UN Development Programme (UNDP) and the UNEP, as well as empanelled banks and insurance companies. It should be formalized through intergovernmental processes and linked to national and subnational disaster risk reduction plans of countries, and international bodies like the Sendai Framework for Disaster Risk Reduction and the Coalition for
Disaster Resilient Infrastructure (Mohanty & Wadhawan, 2021). The data from the Atlas should feed a Global Climate Risk Index.

Moreover, a series of overlapping and related shocks – such as a combination of cyclones, landslides, drought and crop losses – could overwhelm insurance firms. As seen during the Covid-19 pandemic, even the richest countries can slide into financial and institutional crisis when faced with shocks of a certain magnitude compressed into a short time frame.

A multilateral mechanism – a Global Resilience Reserve Fund – for countries with varying levels of vulnerability to pool their risks to climate shocks to avert common disaster would partially overcome this challenge, given that different countries face different kinds of climate risks. By pooling risks, the peaks of risk curves could be lowered for each country. The fund could be based on a voluntary allocation of a share of a country's special drawing rights in the International Monetary Fund, and be drawn on only for disasters above a certain threshold (Ghosh, 2020b).

The pandemic has underscored the critical need for information, crisis assessment and transparency before, during and after a shock. This is also relevant for climate risks, where the ‘frequency and intensity of shocks rise with time, and the resilience of communities erodes with time (unless corrective measures are taken)’ (Ghosh, 2020a). Modular finance can shorten the time horizon and allow smaller investments now that will reduce adaptation needs later.

**Conclusion: weathering perfect storms – multilateral response to the domino effects of overlapping tail-end risks**

The Covid-19 pandemic and the climate crisis are perfect storms of shocks: a series of environmental, economic and social crises that are overwhelming the capacity of countries and communities to ‘respond, adapt, and rejuvenate’ (Ghosh, 2020a) – especially when conditions are already precarious.

Humans have never experienced the imminent outcomes of such climatic changes because carbon dioxide concentrations in the atmosphere ‘have never been as high in at least the last two million years’. The climate crisis and its accompanying risks are set to hit the core of modern society – and legitimate governance, through loss of lives to extreme climate events, and loss of livelihoods through degraded agriculture, at-risk industries and weakened infrastructure. (Ghosh, 2021b).

Despite the uncertainties and ‘unknowns’, the acute and chronic risks of climate change are too high to condone inaction. Collective action for more sustainable development will need accountability for past behaviour from industrialized nations, proactive resolution of environmental issues by developing nations and a conscious change in the current and future patterns of consumption.

Multilateral institutions must return to the core principles of cooperation – ‘joint monitoring and data sharing, building trust, investing in institutional and human capacity, enforceable legal instruments, raising more financing, and equitably sharing the gains’ (Ponzio & Ghosh, 2016) – to reclaim lost ground.
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References


Intergovernmental Panel on Climate Change. (2021). AR6 Climate change 2021: The physical science basis.


Timperley, J. (2021, October 20). The broken $100-billion promise of climate finance – and how to fix it. https://www.nature.com/articles/d41586-021-02846-3#:~:text=Twelve%20years%20ago%20at%20That%20promise%20was%20broken
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This background paper was written as part of a collection supporting the scientific report

Suggested citation: Ghosh, A., & Raha, S. (2022). Renewed multilateralism to alleviate chronic risks and

The report and background papers have been independently produced with funding provided by the
Swedish Ministry of the Environment. They also received funding from the Swedish International
Development Cooperation Agency (Sida) core support to SEI, and the Swedish Foundation for Strategic
Environmental Research (MISTRA). The content of this paper lies with the authors and does not
necessarily reflect the positions or opinions of the funding organizations.

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