Tackling climate and environmental change

The broken alarm clock and the problem of urgency

Andrew Norton
Andrew Norton is an applied anthropologist who has worked on a range of sustainable development issues and challenges including the social dimensions of climate change, automation and inequality, social protection and ecosystem stewardship. He has worked in both research institutions and development agencies including the World Bank and the UK's Department for International Development. He is currently Director of the International Institute for Environment and Development. He first met Dirk Messner through the European Think Tanks Group around ten years ago while he was Research Director for the Overseas Development Institute and has enjoyed seeing Dirk shape the sustainable development agenda continually and ever-more strongly in the years following.

> "History, Stephen said, is a nightmare from which I am trying to awake".
> *James Joyce, Ulysses*

1. *The broken alarm clock*

Joyce's *Ulysses* was published a hundred years ago. The quote above resonates now because the climate and ecological crisis increasingly *is* our history – and the nightmare from which we are all trying to awake. Every time a major new IPCC report is issued – be it the remarkably effective Special Report on 1.5 degrees or the recently published output of Working Group 1 of the Sixth Assessment Report – the cry goes out for it to be the 'wake-up call' needed to drive transformational change. But will the grim prognosis in these reports be sufficient to shake us into taking the action needed to avoid the nightmare scenarios?

The Special Report (IPCC 2018) calibrated how very much the difference might be in terms of human wellbeing between 1.5 and 2 degrees and outlined all the many ways in which humanity and the natural world would be better off at 1.5 degrees above pre-industrial temperatures. The clear way in which extreme weather is impacting people and nature already now at just over one degree of warming is a constant reminder of the perils of going anywhere much beyond where we are now. The

more recent report (IPCC 2021) outlines five future scenarios under which humanity does more or less well at curbing global heating. It also predicts that the 1.5 degree mark is likely to be breached under *even the best of the five scenarios* before 2040 – albeit holding out the hope that humanity can develop and operationalise sufficient means to suck enough greenhouse gas emissions out of the atmosphere to bring us back under the 1.5 mark late in the century.

Taking in aggregate all the various efforts to quantify what temperature the world is headed for by 2100, we know that the current trajectory does not get us close to 2 degrees, let alone 1.5. The consequences of, for example, 3 degrees of warming over pre-industrial levels would be clearly disastrous. Avoiding that can only be achieved by a transformational shift in norms and values driving widespread systemic change on a global scale. And we know that the change has to happen very quickly. Even the most conservative estimates indicate that if emissions continue at their present rate there will be enough greenhouse gases in the atmosphere by the early 2030s to breach the 1.5 degree mark.

2. *And there is more …*

The climate crisis is only one of three axes on which human society is turning at a fast and accelerating pace. Biodiversity loss and increasing inequality are compounding the global emergency. These three crisis axes on which our world is turning have multiple inter-connections which, at the moment, are negatively reinforcing. But, perhaps the key to waking us from this nightmare lies here, because these inter-connections also create opportunities for positive change. Strategies that address all three of these axes – the climate crisis, biodiversity loss and global inequality – may provide the leverage needed to stop the extraordinary damage that we continue to inflict on the planet's biosphere and human society.

The crisis of global biodiversity loss poses severe risks and has its own compelling metrics. Research persistently suggests that the world is losing thousands of species per year and is seeing a rate of loss 100–1,000 times greater than the background rate (i.e. what we would expect to see without human influence). The crisis of biodiversity loss has been highlighted by the COVID-19 pandemic. While the precise origins of the pandemic may never be known, there is no doubt that loss of biodiversity – and particularly loss and degradation of tropical forests – played a significant role in creating the context. Future pandemic risk is unquestionably heightened by biodiversity loss because it increases the potential channels for human

contact with many pathogens capable of causing severe damage to human society. Furthermore, species loss at the current precipitate rate can be compared to destroying the biosphere's 'hard drive' – you can't get it back. At a local level the degradation of ecosystems undermines the resilience of human and natural systems.

The pandemic has also shifted the dynamics of global inequality. At the local and national levels, a series of processes are clearly hurting the poor more than the rich, women and girls more than men and boys – including the greater vulnerability of informal sector workers, less access to health services, the inability of workers on the edge of survival to protect themselves from exposure to the virus, the greater burden of care of the sick falling on women and girls. And so on. Some of the impacts will be durable. The pandemic will give a boost to digitalisation of communication and to automation (production and marketing systems which are less dependent on human labour). These processes will – if unchallenged by radical policy responses – drive increasing inequality at multiple scales (Norton 2017).

At the global aggregate level changes in inequality data are likely to be stark, as and when they become available. The best efforts to quantify what has happened to global inequality of income and consumption over the period since the end of the Cold War show two counter-balancing trends more or less cancelling each other out: the spiralling growth of individual wealth and income at the top end of the global distribution, pushing global inequality up, and the steady convergence of a large group of poorer countries with the OECD industrialised nations, pushing the global inequality figures down (Lakner & Milanovic 2016). All evidence suggests that the pandemic has put the former process on steroids (Forbes data indicates the world's 2,690 billionaires saw their combined wealth rise from $8 trillion on March 20, 2020 to $13.5 trillion as of July 31, 2021), while shoving the latter process (inter-country convergence) into reverse.

Early in the pandemic the big hits to economic growth were being taken in rich countries, where the pandemic was hitting hardest. But the egregious levels of inequality in access to coronavirus vaccines and stimulus finance have turned that on its head, and richer countries are now entering the recovery phase while poorer countries cannot.

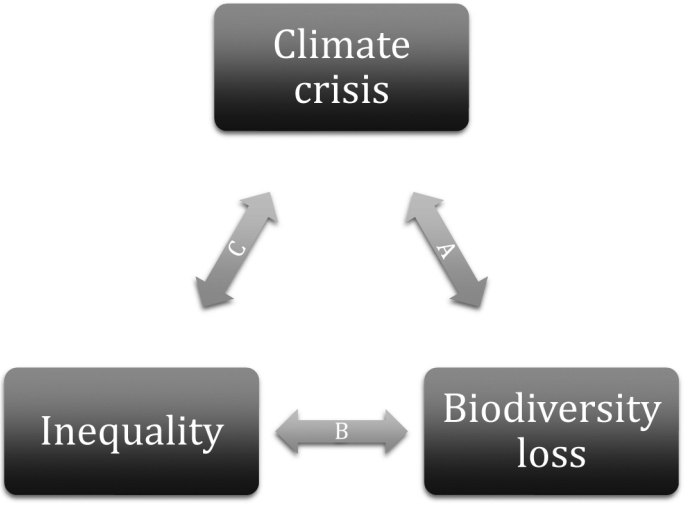
It will be a long time before the data to test the impacts of the pandemic on global income inequality are available. Countries with large levels of informality depend on household surveys to assess trends in income and consumption, and there have been very few conducted during the pandemic. The end of the decades-long process of inter-country wealth and income convergence could be a hugely significant global moment. And the combination of the two pandemic trends outlined above (the rich

getting richer faster and poor countries no longer 'catching up') is likely to result in a significant aggregate boost to global inequality of income and wealth.

The disturbing changes to the distribution of global wealth and income serve to underline the fact that the same global economic system that is rapidly eroding the planet's biosphere and the conditions for broad based human wellbeing is simultaneously creating massive, almost incomprehensible, levels of material wealth for a tiny number of people.

The graphic below outlines, in a highly stylised way, the negative, crisis-reinforcing dimensions of these three axes of climate change, biodiversity loss and inequality.

Figure: Inter-connections of crisis



The connections (indicative examples)

Arrow A

- *Global heating drives biodiversity loss. The most authoritative overview places climate change as the third most important driver of biodiversity loss* (IPBES 2019) – *but as heating rises, it will become more significant .*
- *Biodiversity/nature loss damages carbon sinks, accelerating global heating.*

Arrow B

- *Biodiversity loss heightens pandemic risk driving higher inequality (illustrated by the Covid-19 pandemic).*
- *Disempowerment of Indigenous Peoples drives faster biodiversity loss, as biodiversity does better in areas under management by Indigenous Peoples than elsewhere* (IPBES 2019).

Arrow C

- *Inequality undermines solidarity and capability for global response to the climate crisis.*
- *Climate crisis (fuelled by a global economy increasingly producing massive wealth for a tiny number of people) hits poorest people, communities, countries harder.*

3. Pointers for action

Effective action will need to address the three crisis axes simultaneously. The values of social justice and love of the natural world are essential to imagining and creating the momentum for transformative change to address climate change.

In relation to the climate crisis, pace of action is crucial. Vested interests from the fossil fuel industries are moving from tactics of denial to tactics of delay. But our models for political action and transformation assume long historical periods for struggle. Urgency – in the face of powerful vested interests – is a huge challenge.

The formal model for global collective action on the climate crisis is the Paris Agreement. This is founded on sovereign states taking action as they see fit – and the seriousness of purpose they display then giving signals to 'the market' (corporates and investors) of the necessity and urgency of change. The text of the Paris Agreement contains significant shifts towards a climate justice framing, through recognising differential impacts, disparities in vulnerability, human rights dimensions and gender inequalities. Frequent references to the particular challenges for the Least Developed Countries and small island states reinforce the climate justice framing as does the emphasis on transfers from richer to poorer countries (climate finance) and the path-breaking recognition of the issue of Loss and Damage. However, implementation and follow-up in these areas has been strikingly weak, with little forward movement towards practical operational approaches on Loss and Damage and with the stark failure of OECD countries

to come up with the promised level of finance at the 2020 point of $100 billion per year.

The element of the Paris Agreement that provides the potential for raising ambition and urgency in action on all dimensions is the provision for countries to submit stronger climate action plans (termed Nationally Determined Contributions) every five years. The bet was that a combination of raised awareness, improved measurement and transparency in relation to government actions would provide sufficient bottom-up pressure to drive up ambition.

But country-by-country action in the form of policy-driven pledges will not be enough on its own. Social movements will need to drive change at multiple levels and to co-ordinate with global purpose. In order to achieve coherence there is a need for both a vision of positive change and umbrella strategies which can provide a framework for globally effective action.

The vision for positive change must encompass a new emphasis on values of global solidarity and mutual aid, respect for the natural world, and the promise of delivering healthy and equitable societies and communities at the local level. The umbrella strategies should be sufficient to make progress across the three dimensions of the global crisis moment – climate, biodiversity loss and growing inequality. They should provide clarity of action and direction and could look like this:

- A rapid pathway to the complete abolition of fossil fuels – rich countries first. We know what this looks like – decarbonising electricity, transportation and buildings. Technologies and policies exist to do this (though they can still improve). Other actions will be needed (e.g. ending deforestation), but retiring fossil fuels needs to be the cutting edge of change.
- A global social safety net to ensure that those suffering egregious impacts are protected before, during and after damaging events from the climate crisis and biodiversity loss.
- A global framework for the provision of public climate finance to support action at appropriate levels (community, local government, national government) to enable actors to build resilience and decarbonise production and consumption.
- A global framework for the protection of indigenous peoples' and local communities' natural resource rights – as this clearly emerges as both an action to protect the livelihoods of people suffering multiple layers of disadvantage, and also the most effective single action to prevent biodiversity loss (IPBES 2019).

Clearly these changes will take significant investment capital, and it will be necessary for the basic driving force to be public investment, as the purpose is essentially public and market motivations cannot be assumed to be workable for these purposes at this scale.

This will require those countries that have the monetary and fiscal clout to borrow at the necessary scale to do so. The pandemic has clearly demonstrated that northern states with hard currencies can mobilise vast resources when they need to. The scale of investment in military action has been estimated at five trillion dollars for the US 'war on terror' between 2001 and 2020. Rich countries can mobilise investment if they want to at a scale that would be sufficient to drive transformational and rapid change. In the end it amounts to a political choice – the means exist to finance a recovery from the pandemic at a scale that would match the challenge of the climate crisis. A global framework enabling countries to tax extreme personal wealth (as suggested by Thomas Piketty) would underpin this shift and would have the added benefit of acting to curb growth in global wealth inequality. Public finance is critical and possible at the scale necessary for catalysing innovation, for driving rapid domestic decarbonisation and for international solidarity.

Investment at this scale would radically restructure the social contract for the era of climate action, provoking citizens and businesses to align their own actions with the requirements of addressing the climate crisis in ways that harness creative action at multiple levels, and providing support to communities and individuals needing to exit from high carbon industries and activities. The means exist to accelerate transformative change; now the next steps are to develop the public demand and the political imagination to act at the scale and speed that the crisis moment demands. And there are some encouraging signs. The way that a strategy for climate action built on a foundation of advocacy for social justice – the Green New Deal proposal to the US Congress of 2019 – informed a mainstream political platform for the Biden administration indicates the political potential. As of now the momentum is not where it needs to be – but we may be closer to the awakening we need than we think.

References

IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), 2019: Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Bonn, Germany: IPBES secretariat.

IPCC (International Panel on Climate Change), 2018: Summary for Policymakers, in: IPCC, Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. Cambridge: Cambridge University Press, 3–24.

IPCC, 2021: Summary for Policymakers, in: IPCC, Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, 1–41 (in press).

Lakner, Christoph, Branko Milanovic, 2016: Global Income Distribution: From the Fall of the Berlin Wall to the Great Recession, in: World Bank Economic Review, 30(2), 203–232.

Norton, Andrew, 2017: Automation and inequality: The changing world of work in the global South. Issue Paper, London: IIED.