

Atmospheric Colonisation and Ecological Imperialism in the World System

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Elvis Myeni Mthunzi (Swaziland), *Swazi Art*, 2013.

Greetings from the desk of the Tricontinental Pan Africa,

One of the most damaging myths about the global ecological crisis is that humans *as such* are responsible for

it. In reality, the crisis is being driven by our particular economic system, capitalism, and is caused almost entirely by the states and corporations of the Global North (the imperial core), primarily to the benefit of their elites.

We can see this very clearly when it comes to emissions. The safe planetary boundary for cumulative emissions is 350 ppm concentration of CO₂ in the atmosphere. Global emissions exceeded this boundary in 1988, pushing us into an era of accelerating climate breakdown. However, not all countries are equally responsible for this overshoot. Our **research shows** that the Global North is responsible for 86% of all emissions in excess of the planetary boundary (updated to the most recent year of data). That means they are also responsible for 86% of all the damages caused by climate breakdown, all around the world.

By contrast, China is responsible for only 1%. It has only barely exceeded its fair share of the planetary boundary. This flies in the face of dominant narratives that seek to cast China as the main culprit of climate change. Meanwhile, the majority of Global South countries – including most of Africa, South Asia, and Latin America – are still *within* their fair share of the planetary boundary and have *not contributed to climate breakdown at all*.



Esselen Street (South Africa), Banele Khoza, 2016.

Climate breakdown is best understood as a process of atmospheric colonisation. The atmosphere is a shared commons on which all of us depend for our existence. Rich countries have appropriated it for their own enrichment, with devastating consequences for all life on Earth.

Meanwhile, the Global South, which has done very little to cause this problem, suffers the overwhelming majority of the damage and deaths. For countries that have a **multidimensional climate vulnerability score** of greater than 0.36, all of them are in the Global South. Of the twenty most vulnerable countries, thirteen are African countries, four are small island nations, and two are South Asian countries. A recent paper in *Nature Sustainability* found that, on our current policy trajectory, which is projected to reach over 2.7 degrees of warming, **two billion people** will be exposed to extreme heat, with severe risk of increased heat-related mortality rates. 99.7% of this exposure will be in the Global South, mostly in countries that have done nothing to cause this crisis.

In other words, not only does climate breakdown represent a process of atmospheric colonisation, the consequences are also playing out along colonial lines. The disaster that is being wrought is a direct continuation of colonial violence. It would be difficult to overstate the scale of this injustice. Indeed, when we understand that this is the trajectory that our ruling classes are currently *planning* to achieve (and which could very easily be avoided), it is difficult to see it as anything other than genocidal.

And climate is not the only crisis we face. We also need to pay attention to *material* use, which is the major driver of biodiversity loss and ecosystem damage. Total global material use – including all biomass, minerals, and metals – has reached over 100 billion tons per year, exceeding what industrial ecologists define as the sustainable guardrail by a factor of two.



Zizipho Poswa (South Africa), *Mam'uNoNezile*, 2023.

But again, we find that rich countries are **overwhelmingly responsible** for this problem. On average, high-income countries currently use about 28 tons of materials per capita per year, which is four times over the safe limit, and vastly in excess of what is required to ensure good lives for all. Yet, because so much of their production is organised around capital accumulation and elite consumption, tens of millions of people in these countries are still deprived of access to basic needs. By contrast, lower-income countries have more sustainable use patterns, remaining well within their fair share. In fact, in most cases they need to *increase* material use in

order to build out the infrastructure required for their industrial sovereignty and human development.

Here too, excess resource use in the imperial core represents processes of colonisation. The Global North relies on a massive net appropriation of resources from the Global South through dynamics of unequal exchange in international trade. In other words, the world economy is characterised by a *net flow* of resources from south to north, from the periphery to the core. This happens because northern states and firms suppress the prices of southern labour and resources, which enables them to import substantially more than they export.

In a recent paper **published** in *Global Environmental Change*, we measured the full scale of net appropriation from the Global South in empirical terms, over the period from 1990 to 2015. We found that, in the final year, the Global North net appropriated 12 billion tons of materials, 21 exajoules of energy, and 822 million hectares of embodied land from the global South.

These numbers are so large it can be difficult to wrap our minds around them, so think of it this way. That quantity of materials and energy would be enough to develop the infrastructure required to provide universal healthcare, education, modern housing, heating and cooling, refrigerators, freezers, washing machines, sanitation systems, public transit, internet and mobile phones to the *entire* population of the Global South, meeting human needs at a good standard. Instead, it is appropriated to fuel corporate growth and capital accumulation in the Global North. As for the physical land mass that the north appropriates each year, it is twice the size of India. That land *could* be used to provide nutritious food for some six billion people (depending on their diet), permanently eliminating hunger and undernutrition in the Global South, but instead it is used to produce things such as sugar for Coca-Cola and beef for McDonalds, consumed in the north.



Margaret Mitchell (Swaziland), *Faithfull Sun*, 2013.

Unequal exchange is a massive feature of the world economy. Our results show that the economies of the Global North depend utterly on these patterns of appropriation. Without it, Northern material consumption would decline by half.

While the North enjoys the benefits of high resource use, enabling their elites to own mansions and yachts and SUVs, the social and ecological impacts are offshored, or ‘externalised’, to the global South. That’s where the damage happens. You don’t see it in the green and pleasant hills of England or in Sweden, you see it in Indonesia, Brazil, and the Congo – at the frontiers of capitalist extraction. This drain through unequal exchange causes extraordinary ecological damage in the South. But it also perpetuates mass deprivation. We found that the value appropriated from the South each year is worth trillions of dollars, and would be enough to end poverty many times over. But instead the South is maintained in conditions of deprivation *in order to* shore up accumulation in the North.

The good news is that none of this is inevitable. Empirical evidence from ecological economics **shows it is**

possible to provide good lives for 8.5 billion people on this planet, permanently abolishing human deprivation, with *less* material and energy than the global economy currently uses, *if that was the objective of production*. If production was not organised around capital accumulation and imperial privilege. To achieve such a future, we must fight to **regain democratic control** over the means of production and organise it around human well-being, including through planning and public services provision. In the Global South, this requires **strategies for delinking from the imperial core** and using socialist policies to build economic sovereignty. That is the horizon.

Warmly,

Jason Hickel



Jason Hickel

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