



CLIMATE JUSTICE HOLDING THE GREENHOUSE ELITE ACCOUNTABLE

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Consider Thar – a vast desert spread roughly over 20,000 square kilometers¹ . If it was located in the Persian Gulf, it could have been a separate country. A bit larger in size than Kuwait, it is endowed with massive energy sources -- lignite coal reserves estimated to be 175 billion tonnes² and capable of producing 100,000 megawatts of electricity for 200 years³ – just as several states in that region are. Its population of about 1.7 million⁴ also matches that of Bahrain.

This is as far as the similarities between the two regions go since those living in Thar are among the poorest residents of Pakistan whereas the residents of Gulf have some of the highest per capita incomes in the world. Similarly, per capita electricity consumption in Bahrain is 17,844 kilowatt hour⁵ whereas per capita electricity consumption in Pakistan is merely 399 kilowatt hour⁶ . It is even less than that in Thar where most people use a single electric bulb and a fan in their homes. Yet, there is already evidence that coal-mining and coal-based power generation in Thar are destroying its air quality and poisoning its water resources.

This situation raises an important question: who will benefit from the loss of Thar's natural and environmental resources? The answer involves a concept called climate justice.

This concept rests on two basic premises: Firstly, rich countries and rich individuals living anywhere in the world use disproportionately high amounts of energy largely produced from fossil fuels such as oil and coal and thereby emit greenhouse gases such as methane, carbon monoxide and carbon dioxide in large quantities. These gases, in turn, cause climate change which is characterized by increased temperatures, rising sea-levels and severe weather events such as storm surges and heatwaves. The brunt of these climatic disruptions, in terms of their ecological, economic, social and medical costs, is, however, mostly borne by the poor – non-whites, women and indigenous communities living in rich nations and the residents of global south. Secondly, rich nations and wealthy individuals should be made to “take extra responsibility for fighting this crisis while keeping uppermost in mind the needs of those most grievously affected”⁷ .

1 <https://www.britannica.com/place/Thar-Desert>

2 <https://profit.pakistantoday.com.pk/2022/08/21/going-the-thar-route/>

3 <https://profit.pakistantoday.com.pk/2022/08/21/going-the-thar-route/>

4 <https://www.pbs.gov.pk/sites/default/files/population/2017/results/09901.pdf>

5 <https://www.worlddata.info/asia/bahrain/energy-consumption.php#:~:text=Per%20capita%20this%20is%20an,trade%20energy%20with%20foreign%20countries.>

6 <https://www.worlddata.info/asia/pakistan/energy-consumption.php>

7 <https://www.npr.org/2022/04/22/1093292717/this-earth-day-one-book-presents-global-warming-and-climate-justice-as-inseparable>

Scientists, researchers and scholars have gathered a lot of data about who contributes what to climate change. According to one estimate, wealthiest one percent of the world's population has "produced more than twice as much carbon emissions as the poorest half of the world"⁸. On the other hand, the World Bank predicts that, by 2050, climate change will force 86 million people to leave their homes in the poor states of Sub-Saharan Africa alone⁹. This is despite the fact that these states are responsible for only two percent emissions of greenhouse gases. In South Asia, that includes Pakistan, the estimated number of people to be displaced because of climate change over the next 25 years could be 40 million¹⁰.

The injustice these statistics highlight is certainly too obvious to ignore.

Scholars have devised two different approaches to understand its causes and effects: isolationism and integrationism. The former approach "holds that it is best to treat the ethical issues posed by climate change in isolation from other issues (such as poverty, migration, trade and so forth)". Its proponents seek "to bracket [out] these other considerations and treat climate change on its own". The champions of the latter approach hold "that it is best to treat the ethical issues posed by climate change in light of a general theory of justice and in conjunction with other issues (such as poverty, development and so on)"¹¹.

Integrationists believe that energy usages which cause climate change are "causally intertwined with economic growth, poverty alleviation, urban design, and land use." According to them, factors such as "poverty, existing infrastructures, and the responsiveness of political authorities" are crucial in determining who will be impacted how much and in what ways by climate change. Even on the flip side, they say, the "policies proposed to tackle climate change themselves affect a wide range of other phenomena...such as land use, access to food, health, poverty alleviation, biodiversity loss, individual liberty, and so on". The flag-bearers of integrationism, therefore, propound that "any attempt to cordon off climate change and apply principles of justice to it in isolation seems misguided and quixotic"¹².

8 <https://www.npr.org/2022/04/22/1093292717/this-earth-day-one-book-presents-global-warming-and-climate-justice-as-inseparable>

9 <https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050>

10 <https://www.worldbank.org/en/news/press-release/2021/09/13/climate-change-could-force-216-million-people-to-migrate-within-their-own-countries-by-2050>

11 <https://plato.stanford.edu/entries/justice-climate/#:~:text=One%20approach%E2%80%94Isolationism%E2%80%94holds%20that,climate%20change%20on%20its%20own.>

12 <https://plato.stanford.edu/entries/justice-climate/#:~:text=One%20approach%E2%80%94Isolation->

Within integrationists, however, there are those who want to tackle climate change through what they call “antipoverty principle”¹³, emphasizing the impacts of climatic disruptions on poverty. Critics of this principle, however, object that “it is unduly narrow in its focus, for climate change has harmful effects that cannot simply be reduced to its effect on poverty levels (such as its effects on ...people’s ability to practise their traditional ways of life, and their right not to be displaced)”¹⁴. These critics, instead, underscore the need for calculating the social cost of carbon which essentially means a “monetized value of the present and future damages caused by the emission” of a ton of carbon dioxide¹⁵.

Another aspect of the integrationist approach is to see climate change, its impacts and their resolution in inter-generational terms. This perspective is premised on the idea that “it is objectionable to discriminate against people on the basis of when they are alive”. Current generations, therefore, “have a duty to act in such a way that they do not create stark inequalities within future generations [particularly because] many of the impacts of climate change will fall on future generations”¹⁶.

The inter-generational debate boils down a single question: who should have the right to emit how much greenhouse gases in the coming years and decades, given that global conventions require us to cap global temperature at only 1.5 degree centigrade higher than what it was before 1900. Some scholars answer this question by taking what they call “equal per capita” view which holds that rights to emit greenhouse gases should be distributed equally across the globe¹⁷. Its supporters argue that atmosphere is part of the “global commons which should be shared equally among the people of the world on a per capita basis”. They, therefore, say that “countries should be ascribed rights to emit greenhouse gases and that the size of their quota should vary in line with the number of people in their society.”¹⁸

Others say that even though each country’s right to emit greenhouse gases must be determined through some equitable formula, its “past emissions should be debited from its quota”¹⁹. A third group of scholars and climate change activists calls for “disregarding past emissions” whereas a fourth group argues that we should

ism%E2%80%94holds%20that,climate%20change%20on%20its%20own.

13 <https://ndpr.nd.edu/reviews/the-moral-challenge-of-dangerous-climate-change-values-poverty-and-policy/>

14 <https://plato.stanford.edu/entries/justice-climate/>

15 <https://plato.stanford.edu/entries/justice-climate/>

16 <https://plato.stanford.edu/entries/justice-climate/>

17 [https://stephenschneider.stanford.edu/Publications/PDF_Papers/15-Ch15\(393-408\).pdf](https://stephenschneider.stanford.edu/Publications/PDF_Papers/15-Ch15(393-408).pdf)

18 <https://plato.stanford.edu/entries/justice-climate/>

19 <https://plato.stanford.edu/entries/justice-climate/>

introduce “the equal *per capita* view gradually over time”. They, thus, are willing to allow the current high emitters “more-than-equal emission rights at the start of the transition period, with their share decreasing until it reaches equality”²⁰ .

Besides these apparently irreconcilable points of view, the biggest problem with equal *per capita* view is that it, indeed, follows an isolationist position in spite of its claim to the contrary because it not just ignores inequality in emissions within each country, it also rather simplistically suggests that climate justice can be ensured merely by deciding how much greenhouses a country can be allowed to emit. Its critics argue that the emission of greenhouse gases does not matter in itself. In their view, it matters because of “energy use (for building, heating, cooling, transporting, manufacturing, lighting and so on) and because of agriculture and land use change” which not just differ vastly across countries, depending upon the level of their economic growth, but also vary within each country, depending upon the level of economic development of various communities and regions in it. So, they point out, “it makes sense to focus on protecting and promoting these interests (bearing in mind, of course, limits to emissions) not the distribution of emissions in *themselves*.”²¹

20 <https://plato.stanford.edu/entries/justice-climate/>

21 <https://plato.stanford.edu/entries/justice-climate/>

Their argument seeks to define climate justice not simply on the basis of number of people living in a country but also by taking into account the following factors:

1. the levels of consumption
2. the extent of waste being produced
3. the nature of energy system being used (to determine if it includes renewable sources of energy or not)
4. the distribution of access to clean technology
5. the extent to which energy efficiency programs are in place
6. the extent to which fossil fuels are being subsidized
7. the nature of public transport system (to see if it offers mass transit schemes or encourages privately owned cars)
8. the urban infrastructure and the spatial organization of cities (to find out if they are designed to rationalize energy consumed by transport system or not)
9. building design that can minimize the use of energy for cooling and heating purposes
10. the extent to which deforestation is reversed, and programs of afforestation and reforestation are pursued.

Assigning responsibility

Scholars of climate change as well as some international organizations, such as the United Nations, advocate three approaches to address climate change. These are mitigation, adaptation and compensation. “Mitigation involves either reducing the emission of greenhouse gases or creating greenhouse gas sinks (which absorb greenhouse gases), or both. Adaptation involves making changes to people’s context so that they can cope better with a world undergoing climatic changes. Examples of adaptation might be constructing buildings that can cope better with extreme heat, or building seawalls that can cope with storm surges.”²² Compensation is usually paid in situations in which mitigation and adaptation do not work and people have to leave their homes and hearths to avoid the harmful impacts of climate change.

The problem with these approaches in general and compensation in particular is that they do not consider non-material losses even though it is obvious that history, community, culture and unique knowledge may also vanish as a result of climatic

22 <https://plato.stanford.edu/entries/justice-climate/>

disasters. This is borne out by the fact that those living in small island states stand to lose all these things as the ice melts and their homes disappear because of rising sea levels.

These clearly unequal impacts of climate change give rise to three fundamental questions about the approaches mentioned above: “First, who should engage in mitigation and adaptation, and to what extent? Let us call this the Climate Action Question. Second, who should bear any cost involved in mitigation and adaptation? Let us call this the Burden-Sharing Question. Who has the responsibility to ensure that (a) those designated to engage in mitigation and adaptation do so and (b) those designated to bear any financial burdens discharge their responsibilities? Let us call this the Political Action Question.”²³

These questions are mostly addressed by following three basic principles: 1) Polluter pays principle; 2) beneficiary pays principle; 3) the ability to pay principle.

The first principle holds that the burdens of climate change should be borne in proportion to how much greenhouse gases an individual, community, corporate organization or country has emitted. Those who oppose this principle argue “that many of those who have emitted greenhouse gases in the past were excusably ignorant [about their harmful effects] and so cannot be held liable”. The other side responds to this argument by stating that “there are limits to the extent to which one can plead excusable ignorance” because awareness about climate change and its hazardous effects has been around for several decades now²⁴ .

Others challenge this principle by averring that “many emitters are no longer alive”. Why, their objection goes, “should those alive now foot the bill for the acts of previous generations?” The strongest response to this argument draws attention to the idea of benefiting. According to it, “individuals alive today [and those who will be alive in the future] enjoy benefits that result from previous emissions-generating activities and so have a duty to pay at least some of the costs incurred” during the production of those benefits²⁵ .

This, in fact, is the second principle. Its opponents, however, argue that it “should not be applied in cases where it would push someone beneath a decent standard of living”. This essentially takes us to the third principle which states that the costs of climate change should be borne primarily by those who can afford them --- the

23 <https://plato.stanford.edu/entries/justice-climate/>

24 <https://plato.stanford.edu/entries/justice-climate/>

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most advantaged individuals, communities, corporations and countries -- and not by the world's poorest even when they, too, have benefited from the climate disrupting activities²⁶ .

All the three principles, though, are concerned with what scholars call direct, or first-order, responsibilities whereas there are, indeed, also second-order responsibilities that ensure that the bearers of first-order responsibilities fulfil them. For example, a government can fulfil its second-order responsibilities by imposing carbon taxes or by laying down quotas for the emission of greenhouse gases or by devising carbon emission regulations that everyone must comply with. A government can also discharge its second-order responsibilities by subsidizing clean sources of energy or by designing urban spaces so as to encourage people to walk or cycle or use public transport rather than drive ²⁷.

26 <https://plato.stanford.edu/entries/justice-climate/>

27 <https://plato.stanford.edu/entries/justice-climate/>

The origin of climate justice movement

Environmental groups began to recognize the disproportionate impact of climate change on marginalized communities as early as 1980s. This realization gained significant momentum in the early 2000s, with the emergence of campaigns like the Global Climate Justice Movement and the World Social Forum. Given below is a brief history of this phenomenon:

1992	Member countries of the United Nations adopt United Nations Framework Convention on Climate Change (UNFCCC), committing themselves to reducing greenhouse gas emissions.
2001	The World Conference Against Racism adopts the Durban Declaration on Climate Justice which calls for climate justice as a key principle of global climate policy.
2007	Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) is released, underscoring the disproportionate impact of climate change on vulnerable populations.
2010	The World People's Conference on Climate Change and the Rights of Mother Earth in Bolivia adopts the People's Agreement that calls for a new model of development based on the principles of climate justice.
2015	UNFCCC's Conference of Parties (COP21) adopts the Paris Agreement that aims at limiting global warming to well below two degrees Celsius above pre-industrial levels
2019-2020	The youth-led movement Fridays for Future, inspired by Swedish activist Greta Thunberg, stages global climate strikes, demanding urgent action on climate change.

The search for solutions

For some scholars, ensuring climate justice means that the destruction caused by “greenhouse gangsters” – rich individuals, powerful communities, large corporations and developed, industrialized countries – must be opposed “at every step of the [capitalist] production and distribution process”. Yet, as others have pointed out, this opposition does not mean that the capitalist system should be overthrown overnight. It, indeed, can take much less drastic forms which range from seeking “a moratorium on new oil exploration to stopping the poisoning of communities by refinery emissions, from drastic reductions in [automobile] emissions to the promotion of efficient and effective public transportation”²⁸ .

Other scholars argue that this opposition might be a necessary condition for attaining climate justice but it is certainly not sufficient on its own. They point out that climate justice accrues only when the earth is allowed to continue to nourish not just human lives but also those of all living beings inhabiting it. Their argument is based on two fundamental considerations: (a) attention to the inseparability of human and nonhuman natures and (b) attention to the role that power and social inequality play in shaping human/nonhuman interactions. As is obvious from the second consideration, they see a clear relationship between capitalism and the destruction of nonhuman nature. When struggles over means of production tend to favor the capitalist classes, they argue, these classes “produce greater ecological damage and mass social suffering”²⁹ .

Even when the supporters of current global system of production, distribution and consumption of goods agree to the approach outlined above, they contend that the cure for the ills of capitalism is more capitalism -- not less of it. They believe that the same process of technological modernization that initiated and has sustained the capitalist system can encourage states and corporate sector to come up with policies and practices that can stop and even reverse climate change. “Continued modernization,” they claim, “is actually necessary for societies to achieve ecological sustainability”. To support their argument, they point out how the capitalist society “has entered a new period — that began in the 1980s — marked by new

28 [file:///C:/Users/Hp/Downloads/Martinez-Alier%20et%20al.%20-%202016%20-%20Is%20there%20a%20global%20environmental%20justice%20movement%20\(1\).pdf](file:///C:/Users/Hp/Downloads/Martinez-Alier%20et%20al.%20-%202016%20-%20Is%20there%20a%20global%20environmental%20justice%20movement%20(1).pdf)

29 [file:///C:/Users/Hp/Downloads/Pellow%20and%20Brehm%20-%202013%20-%20An%20Environmental%20Sociology%20for%20the%20Twenty-First%20Ce%20\(1\).pdf](file:///C:/Users/Hp/Downloads/Pellow%20and%20Brehm%20-%202013%20-%20An%20Environmental%20Sociology%20for%20the%20Twenty-First%20Ce%20(1).pdf)

technologies [through which] innovative entrepreneurs, and farsighted financiers [are] bringing about a generation of industrial innovation that can secure ecologically sustainable futures”³⁰ .

“Treadmill of production theory” is another concept that says something similar though not in entirely technological terms. It “contends that capitalist economies behave like a treadmill; as economic development intensifies, so does the degree of ecological degradation” but the capitalist state takes it upon itself to address this ecological degradation. Under this concept, the capacity of the state to do so is directly proportional to the investment and economic activity it encourages. Essentially, it is premised on the claim that “ever greater investments toward economic growth will [help the state acquire the capacity to devise and implement] solutions to the socioecological crises the system caused in the first place”³¹ .

Opposing these two theories is the idea of metabolic or ecological rift which “refers to the general relationship of exchange between human societies and nonhuman natures”. It points to the “disruptions of ecosystem processes and the environmental harm produced by humans in general and capitalism in particular [which have] dire consequences for socioecological inequalities and for relations that characterize the domination over nonhuman nature and over human beings by elites”. The force that drives this metabolism “is a society based on class, inequality, and acquisition without end”³² .

The proponents of this idea, therefore, believe that “wealthy nations gain disproportionate access to capital and externalize the costs of capital accumulation onto nations in the Global South.” This, according to them, explains why some core capitalist nations are not just successfully dumping their toxic industrial and urban waste in the countries on the periphery, they are also “exporting [their] most hazardous production facilities” to the poorer countries. At the same time, however, they are “extracting energy and other forms of ecological wealth from the periphery and paying less than market value for it”. This system, these proponents contend, creates a paradox: while “core nations may appear to be greening their industrial

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32 file:///C:/Users/Hp/Downloads/Pellow%20and%20Brehm%20-%202013%20-%20An%20Environmental%20Sociology%20for%20the%20Twenty-First%20Ce%20(1).pdf

policies...peripheral nations might seem to be less committed to ecological sustainability”³³ .

Consequently, “the changing social metabolism of industrial economies (including the excessive production of carbon dioxide) gives rise to increasing numbers of ecological distribution conflicts that sometimes overlap with other social conflicts related to class, ethnicity or indigenous identity, gender or caste and which may be further related to institutional configurations such as property regimes or territorial rights”³⁴ . The supporter of this theory, therefore, argue that climate justice cannot be attained merely by imposing various types of costs on individuals, communities and countries responsible for polluting the planet or just by developing mechanisms for the payment of compensation for loss and damages to individuals, communities and countries being destroyed by climate change. Instead, it can only be guaranteed by addressing the larger structural inequalities and disruptions being caused by capitalism and its accompanying imperialist world order.

Activists for water rights in Latin America summarize this solution with an apt aquatic metaphor: “Water should not run towards money, or towards power. It should go to those needing it for livelihood”³⁵ .

An abridged version of this piece was first published by United Nations Development Programme (UNDP) Pakistan’s journal. To access it, [click here](#).

33 file:///C:/Users/Hp/Downloads/Pellow%20and%20Brehm%20-%202013%20-%20An%20Environmental%20Sociology%20for%20the%20Twenty-First%20Ce%20(1).pdf

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35 file:///C:/Users/Hp/Downloads/Martinez-Alier%20et%20al.%20-%202016%20-%20Is%20there%20a%20global%20environmental%20justice%20movement%20(1).pdf