Climate justice

Dimensions and conflicts

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Ulrich Brasche, Prof. Dr, TH Brandenburg; (ulrich.brasche@online.de)

1 What climate justice is all about

Probably no-one will publicly admit that justice is not important to him. The allegation of injustice is used to describe moral positions and justify demands. However, there is no simple and unambiguous description of a just stance or just behaviour. Inequality per se is also often inadmissibly equated with injustice. In the debate on combating man-made global warming, the demand for justice also involves an allocation of the benefits and burdens of the transformation to "net zero". This involves considerable interests on the part of many stakeholders, who can also use the argument of justice to disguise their interests.

This text reports on attempts to establish an ethical foundation for climate justice and on international political activities that claim to achieve greater climate justice.

The atmosphere, and thus the basis of the climate, is a common good that is free for all; this constellation leads to overuse ("tragedy of the commons") and the associated damage. Man-made climate change therefore makes almost all people perpetrators and victims at the same time. The contributions to causing climate change are distributed just as differently as the resulting suffering and damage.

Climate ethics aims to provide normative guidance for individual and collective action to protect this global commons.[1] Put simply, the question must be answered: *Who may cause how much damage to whom and who must make what efforts to compensate for the damage and prevent future damage?*

An approach to this complex question is attempted below by looking at different dimensions and cases[2] .

2 Strong perpetrators - weak victims

The fight for civil rights in the 1960s and for environmental justice in the 1980s in the USA already focused on the unfair distribution of the negative side effects of industrialisation.[3] Residents of poor neighbourhoods complained about the dumping of toxic waste close to their homes, which led to considerable health risks. The residents of wealthy neighbourhoods kept themselves free from these burdens but consumed the polluting goods produced. This asymmetrical distribution of benefits and burdens was and is an expression of power relations between and within states.

The industrial revolution (from around 1850) not only brought increasing prosperity for a large part of the population in the Global North, but also led to a sharp rise in carbon emissions. Furthermore, prosperity was also based on slavery and colonial exploitation, which was continued in the Global South after independence in the form of post-colonial extractivism.[4] However, progressive global warming as a side effect of carbon emissions is increasingly affecting regions in the Global South that until recently contributed little to emissions. As a result, economically and militarily strong countries are confronting economically and militarily weak, damaged countries. This constellation is criticised as unfair, especially in the Global South.

However, there are also inequalities in the distribution of the burdens and benefits of global warming within the Global North[5]. For example, poorer people are less able to adapt to urban warming if they live in poorly insulated homes and cannot afford air conditioning. The effects of climate events (heavy rainfall, storms, droughts) are particularly severe in regions such as the Mediterranean or some Alpine

valleys. The flooding of coastal regions due to rising sea levels in turn affects both poor and wealthy regions. The strong have more resources to repair damage and protect themselves from further damage.

The distribution of the burden of global warming and the fight against it is negotiated in an international discourse in which the groups involved can enforce their interests to varying degrees. Recognising that they are affected and participating equally in the negotiation of measures is less possible for particularly vulnerable groups (e.g. small island states, indigenous populations, women in Africa). The large states and powerful fossil fuel industries, on the other hand, are more assertive.

3 Critical issues of climate justice

3.1 Who is liable for the carbon emissions of the past?

Countries of the Global South point out that the Global North has caused most of the carbon in the atmosphere today in the past. This also includes emissions in the colonies and the carbon produced by imported products. This justifies claims that are methodologically controversial and, in view of the real distribution of power, hardly seem feasible. These include

- The offsetting of past emissions against the Global North's share of the residual carbon budget that can still be distributed in the future (see next chapter)
- The demand for reparations. Based on the concept of "environmental debt", it was argued that the Global North has accumulated debts to the Global South through the overexploitation of raw materials, environmental damage, dumping of waste and pollution of the atmosphere through greenhouse gases, which they would have to pay off as "climate reparations". [6]

But would the fulfilment of these demands create more justice? There are various arguments against this.[7] For example, the harmful effects of carbon were not known for a long time in the past. Therefore, the generations of that time cannot be accused of deliberate, culpable causation of damages to the climate. It is not the entire emission of carbon that could be blamed, but only the proportion that exceeds a reasonable level. However, it remains unclear how an appropriate amount could be determined. Whether and to what extent today's generations can be held responsible for the actions of their ancestors is debatable. At best, to the extent that today's standard of living is based on excessive emissions from the past, a compensation obligation could be justified - the obligated parties and the extent of compensation payments are unclear.

Although the "Kyoto Protocol" assigns the participating states a joint responsibility for combating climate change, at the same time the past contributions to the problem are taken into account.

3.2 Who gets the rest of the remaining carbon budget?

The atmosphere is a common good that has been heavily overused by industrialised countries in the past - this has been criticised as unfair. There is now a broad consensus on limiting the carbon emissions that can still be accepted in the future, the so-called remaining carbon budget.[8] In order not to exceed this, a rule is needed for its distribution. Open questions are[9]

- Who has the right to utilise the atmosphere - is it companies, consumers, states or all of them at the same time?
- How can the budget be distributed in such a way that the longing for justice is respected?

In the following, we will therefore not consider the political enforceability of an allocation, but rather the fulfilment of the principle of climate justice. It is assumed that a distribution that is perceived as

unfair would not be enforceable. However, this is not intended to imply that a distribution would be enforceable simply because it is fair. Rather, it is economic and political interests and power relations that ultimately determine the distribution.

3.2.1 Would equality be fair?

In the discussion about justice, a relationship between equality and justice is often assumed. However, if unequal things are treated equally or equal treatment leads to injustice, an equation of equal and just applies. This becomes clear in the following examples.

3.2.1.1 Same percentage reduction

The necessary reduction in carbon emissions causes various adjustment burdens, against which resistance evolves. A compromise - like negotiations on cuts in public budgets "with the lawnmower" - could oblige everyone to reduce their existing emissions by the same percentage. However, this equal quota leads to unequal adjustment burdens:

- Countries of the Global South, which have so far lived in (energy) poverty and therefore only had low per capita emissions, would thus be permanently kept in poverty unless they were quickly provided with renewable energy infrastructures, which would only be possible through substantial transfers from the Global North.
- A percentage of actual emissions would disregard the previous overconsumption of the Global North. This could continue the excessively high carbon emissions - albeit at a slightly lower level.

A reduction by an equal percentage must be perceived as unfair and would not be implemented for this reason alone.

3.2.1.2 Equal amount of residual carbon per capita

The atmosphere belongs to all people - and all people are equal. From this, a distribution method can be derived that allocates the same amount of future carbon emissions to each person.[10] At present, for example, people in Germany exceed this amount threefold, while per capita consumption increases with income and wealth. The idea of equal distribution to all people can be found in various proposals: Schellnhuber[11] argues in favour of equal distribution and Hanson/Hanson[12] propose the allocation of an equal amount per capita to a new "ECO climate currency".

The distribution rule of per capita equality can be unjust in the following cases[13] .

- If past emissions are included, people in the Global North have already used up their total budget and would have to buy a considerable amount of carbon certificates.[14] According to a scenario by Fanning and Hickel, the countries of the "Global North" will have exceeded their "fair share" of the remaining carbon budget by more than three times by 2050. They derive from this "over-consumption" a claim by the "Global South" for financial compensation in a considerable amount.[15] However, taking past emissions into account can lead to considerable injustices (Chap. 3.1) - but not taking these emissions into account cannot be described as fair either. This dilemma can only be overcome pragmatically in international negotiations.
- The period in which the remaining budget can still be used ends in 2050, which means that people who have not yet been born must also be considered. However, it is difficult to forecast the number and distribution of future births by country. Furthermore, their entitlement to carbon should not be identical to the amount for people living today, because carbon will be emitted soon for reducing future carbon emissions. The need of future generations for unavoidable carbon emissions would then be smaller.

- Since energy requirements are objectively different (e.g. more heating is needed in cold regions), the same amount of carbon would enable differing opportunities.
- Efforts to remove carbon from the atmosphere (carbon capture) or the installation of renewable energy systems cause expenditure and additional carbon emissions; they should be considered when determining the per capita amount.
- Trading in carbon certificates can make a meaningful contribution to decarbonisation. The sale of carbon certificates can be expected from two groups of people:
    - People who already have a “green” infrastructure can satisfy their needs with low carbon consumption; they are predominantly wealthy people in the Global North.
    - People who are too poor to afford a carbon -intensive lifestyle.

    Carbon trading takes place on the basis of existing global inequality. Rich people are favoured because they have already been able to finance a low-carbon lifestyle or can buy their way out of carbon reduction by buying up many individual carbon rights from the poor. The latter, in turn, hardly have the means to invest in their own "climate friendliness".

3.2.1.3 Equality for generations

The use of fossil energy has helped previous and current generations to prosper - at least in some regions of the world. However, the resulting negative climate changes are a burden on the living conditions and opportunities of future generations. This shifting of the burden onto the not yet born is described as unfair, since future generations are not able to negotiate climate protection with those living today.[16] In international agreements, the contracting parties have committed themselves to protecting the climate in the interest of future generations. Each state should contribute to this in accordance with its share to causation as well as its capabilities (UNFCCC, Article 3). In 2021, the German Constitutional Court ordered the Federal Government to do more to protect the climate, as otherwise the opportunities of future generations would be unjustifiably curtailed.[17]

Intergenerational justice plays a role in the discussion of the concept of sustainability[18] . Put simply, the earth should be in a state that enables children and grandchildren to live as well as their parents. However, this supposedly fair formula harbours the potential for great injustice: " For a child of the rich „global north“, a life in the standard of their parents may be desirable; this is different for people in the „global south“ who must live in miserable conditions. They want a fundamental improvement of the living conditions for themselves and their descendants: a „balance between the parents and the children“ would only be a continuation of today´s misery."[19]

3.2.2 Fair distribution - further proposals

Most ideas of a fair distribution of the residual carbon budget require a considerable redistribution of current and future resources between the Global North and Global South as well as within countries. If such a far-reaching redistribution is taken into consideration, the narrow focus on carbon could also be overcome in favour of a more far-reaching concept.[20]

People's needs are not centred on a specific (fossil) energy source, but on the availability of energy services (heat, power, etc.). Energy poverty is still widespread, so it is more important to talk about the fair distribution of energy services. To this end, technologies and systems for generating renewable energy could also be made available to the Global South regardless of purchasing power.

In addition to energy, other basic needs are sometimes inadequately and unequally met, meaning that negotiations should focus more on the fair distribution of a bundle of goods such as health, food, education, security, etc. The "Social Development Goals" go in this direction.

If tackling climate change is seen as a major global common task, then broader challenges and solutions could also be addressed in this context, which at the same time reduce the inequality between and within states that is criticised as unjust. However, there is hardly any willingness to do so.

3.3 Who should pay for the transformation - and why?

Combating global warming requires a restructuring of key social systems such as energy production, food production, air conditioning in buildings and mobility. This reorganisation will pay off in the longer term - if only because it will prevent further losses and damages from global warming. However, it requires considerable front up investment. The countries of the Global North can finance this, but many countries of the Global South hardly have sufficient and affordable access to finance.

Unsurprisingly, international negotiations are particularly difficult when it comes to the distribution of payment obligations. The arguments put forward in the discussion also include the demand for fairness or justice in the distribution of burdens. Two principles are frequently cited:

- Polluter pays principle
- capability

3.3.1 Polluter pays principle

The polluter pays principle is perceived as fair, which is also reflected in civil law regulations: The party causing damage is obliged to pay compensation to the injured party. However, the application of this principle to the financing of current damage from climate change is not always fair:

- It is debatable who is to be regarded as the polluter. If the responsibility lies with the companies and states that have extracted, processed and traded fossil fuels globally, then the users of the fuels and the buyers of goods produced with these substances must be implicitly absolved. However, this would not be fair, as they also bear responsibility for their consumption, especially if they had the necessary information and alternatives were available.
- The damage caused today is also due to carbon emissions of the past. Who should bear how much responsibility for this was discussed in the chapter above. The energy-poor countries of the Global South derive an eligibility to compensation from the Global North.
- Until now, it has hardly been possible to provide court-proof evidence of a direct relationship between any carbon emissions and specific damage. Attribution research has made it possible to win court cases against fossil fuel companies based on the polluter pays principle.[21]
- Preventing future carbon emissions - known as mitigation - is the key contribution to limiting global warming. However, carbon is also emitted in the process. The aim is to avoid becoming a polluter in the future. The polluter pays principle cannot be meaningfully applied to these emissions.

Conclusion: Although the polluter pays principle is intuitively accepted, it is - as explained above - only partially suitable for distributing the burden of climate change fairly.

3.3.2 Capability, solidarity and self-interest

The image of humanity and the concept of society also determines which distribution of the burden is considered fair. If it is assumed that all people are equal and that everyone is responsible for their own happiness, then it also follows that everyone must make an equal contribution to limiting global warming. This contrasts with the demand for solidarity with the weaker members of society. In some countries, the tax system and social benefits are based on the principle that "stronger shoulders should bear more". Solidarity presupposes a "us-feeling", according to which the members of a group stand

up for each other. This exists - if at all - within nations or states. There exists hardly any transnational, global solidarity. [22]

The economically and politically weaker states are demanding that the Global North make a disproportionate contribution to tackling climate change. They claim that the Global North is economically more powerful today because it has passed on the costs of overuse of the atmosphere to the whole of humanity and has also gained its economic strength from exploitation, slavery and colonialism.

Irrespective of whether one agrees with this position, it may also be in the Global North's own interest to bear a significant share of the costs of limiting global warming. Firstly, this is because the damage caused by increasing global warming also occurs in the Global North and exceeds the "saved" costs of combating climate change. Secondly, the sale of renewable energy technologies can become an attractive business segment. Thirdly, further negative effects can be avoided. These include conflicts and wars in particularly affected regions of the world, which would disrupt supply chains and access to raw materials.

3.3.3 Compensation also for perpetrating parties?

Another complaint about injustice is being raised by some companies that must change or give up their business model for decarbonising. They are demanding compensation for having to phase-out emitting carbon. In Germany and other EU member states, for example, coal-fired power plants are being compensated for having to cease operations. These funds are motivated as a social and structural policy measure to alleviate the hardships of the transformation. They are the result of a political negotiation between those affected and their representatives within the wealthy states of the Global North.[23] In the EU, there is also a certain degree of solidarity between the member states ("Green Deal"). The subsidy for the purchase of electrically powered cars as a contribution to the costs of decarbonisation in the transport sector is a similar case. Whether these compensations are fair in each case cannot be assessed across the board.

A special case are lawsuits for damages brought by companies against states. They demand compensation for their fixed assets that are stranded because of climate policy, as well as for lost future profits from fossil business areas. These proceedings take place not only before national courts, but also out of court before international arbitration tribunals. They are conducted in accordance with the 1994 Energy Charter Treaty (ECT), which was originally concluded to create legal certainty for investors in fragile states. They are now used to obtain high payments from the state for the loss of fossil fuel business models. It is questionable whether there can be a moral right to continue a business activity that significantly harms the common good. The exit from this contract has been initiated but cannot take effect quickly for legal reasons.[24]

The situation is different in the countries of the Global South, whose income is heavily dependent on the sale of fossil fuels and whose energy system is fuelled by relatively cheap local coal. They need support in developing alternative sources of income and in transforming their fossil fuel infrastructure. In some international agreements, "Just Energy Transition Partnership" (JETP) projects have been financed for this purpose.[25] These are (relatively small) flagship projects that cannot life up to the actual financial requirements. These projects carry elements of compensation, solidarity and self-interest.

4 Global problem - global cooperation

As global warming is due to the overuse of the atmosphere as a global common good, a solution can only be found in global agreements between countries with very different interests. The majority of countries in the global community have been meeting regularly for a long time within the framework of the UN for such negotiations; these are listed as COP (Conference of the Parties).

But to what extent does the demand for justice play a role here? [26]

In 1992, the Rio Declaration laid down the principle of common but differentiated responsibility, taking into account the respective responsibilities and possibilities. This means that both the carbon emissions of the past (polluter pays principle) and the capacity of the individual states are used as criteria.

The COP in 2021 addressed the issue of justice by recognising that climate damage primarily affects poor and vulnerable countries that have contributed the least to carbon emissions. The damage caused by rising temperatures was localised both in the economy and in people's health.

The sixth IPCC report (2022) emphasises that the issue of equity must be a cross-section theme in all measures and approaches.

The COP in 2023 focussed on the establishment of a "Loss and Damages" fund, with which the Global North is to support the Global South in remedying climate damage of the past. There was an agreement in principle - the necessary details of payments and distribution of funds was postponed.

It can be considered a major achievement that a continuous international negotiation mechanism has been established with the COP.[27] Expectations are always high and are therefore regularly disappointed - but there is no alternative.

No common view has (yet) been found on the issue of justice; the demand for justice is always put forward to assert particular interests. As the states have not been able to agree on a systematic approach to distributing the remaining carbon budget, each country has committed to reducing its emissions by an amount determined by itself (nationally defined contributions (NDC)).[28] It would be rather coincidental if these voluntary agreements were to lead to a globally equitable distribution of the burden.

5 Justice, interests and power

What is (in)justice cannot be determined according to a generally binding standard. Ultimately, everyone makes judgements according to their own values and interests. But even if it were possible to agree on a definition in a specific situation, this would not result in a "victory for justice". Thus, the commitment to justice is often lip service[29], while one's own interests dominate the actions. The actors do not genuinely strive for a just world, but for their own - usually short-term - advantage.

Although justice plays a role in the discourse and international negotiations on the fair distribution of the burdens of the transformation to a way of life that is compatible with the Earth system, in practical politics, the groups that are interested in the continued existence of the fossil world - at least in the short term - prevail. On the side of the persisting forces is an alliance of countries with fossil natural resources, industries that process and use fossil fuels as well as the upscale, consumption-orientated middle and upper classes of the Global North and of the emerging Global South. The better the lifestyle, the larger the per-capita emission of carbon. The people who are being driven out of their

"climate niche" by the already impactful global warming need a rapid transformation. This is vividly illustrated, for example, by the island states that will be submerged in the Pacific in the foreseeable future.

The persistent forces usually have economic, political and military power, which they use - supported by large lobby organisations and "friendly" media[30] - to protect their imperial way of life[31] and fossil fuel business models.

If the pursuit of justice does not lead to the rich polluters paying for the weak victims, what else could motivate them to contribute? As is so often the case, the self-interest of the polluters may play a role. As the climate is a global phenomenon and there are no regional or political boundaries for the consequences of climate change, all countries are affected by the negative consequences of global warming. This is no longer being driven primarily by the economically strong countries of the Global North, but by the growing populations of the Global South, who are working their way up from poverty to the middle class with the help of fossil fuels. Only if this rise can be achieved without significant carbon emissions ("green leapfrogging") can global warming be kept within manageable limits for everyone. Ultimately, it is cheaper to use abundant capital to avoid carbon emissions than to compensate for considerable damages and incur expenditure to limit the impact of climate change (adaptation).

It is therefore in the well-understood self-interest of the Global North to contribute to limiting global warming through decarbonisation in its own country and through co-financing and technology transfer for the Global South. This is neither "development aid" nor "generosity", but a commercial calculation. The problems with implementation lie in the asymmetrical structure of contribution and benefit: Funding that creates benefits also for those who do not pay - they can benefit as "free riders". This reduces the willingness to contribute.

In the context of the development of a multi-polar world order, some co-operations and projects that are conducted under the heading of climate policy and justice are also motivated by geo-strategic considerations. This is also about attaching states in the Global South to an alliance and securing access to raw materials.

Outlook

The efforts being made by the major carbon emitters in the Global South to de-carbonise their economies are cause for cautious optimism. China, for example, can be described as a pioneer in the development, production and introduction of renewable energy.

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