



# The Idea of Delay in Climate Action: An Ethical Analysis

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## Introduction

The climate crisis has fuelled the need for a climate ethics. Climate ethics as a discipline, in further response, has advanced exponentially in the last 2-3 decades. It is important that this discipline's peculiar moral dimensions be understood in the hope that the latter would impel more robust action to address the climate crisis. This paper is in the domain of climate ethics and we hope to be addressing one specific moral problem that is of some importance within it. This is the question of moral responsibility for climate action. Rather than taking on responsibility as a whole, in this paper, we shall be addressing one dimension of responsibility only: this dimension is associated with delay. We take as a given that climate change, as we see it today, is anthropogenic and that humanity has a responsibility to address it. However, as the paper notes, despite this climate action is lagged. We will be assessing some of the reasons for this. A short conclusion will bring the attention back to responsibility extending not only to climate action but to immediate and urgent climate action. The latter is an intrinsic part of the former. Acting immediately and in an effective way against climate change is taken here as of utmost importance.

Anthropogenic climate change is truly a thing of concern in today's times. The never seen before rise in temperatures, the havoc and loss of life resulting from typhoons and rainfall, wildfires and famines are a constant reminder that things are not okay. The Arctic caps are melting and scientists foresee a rise in sea levels.

This would wreak devastation in low-lying areas in continents across the world. Animals and other living entities that are not able to adjust to these conditions will be wiped away and become extinct. The temperature has already risen by 1.2 C since industrialization. The burning of fossil fuels among other causes has led to the production of a huge quantity of greenhouse gases that cannot be neutralized through natural processes and whose presence in the outer layer of the earth's atmosphere traps more heat than required. If nothing is done the world could see massive temperature increase (estimated to be as much as 2.7 C by the year 2100) that would make life unfit for humans and other species. (Lyon et al 2021) Some scientists predict that the future generations that after the year 2100 would find 'earth alien to humans.' (Lyon et al 2021)

The need to address an exacerbating climate change has not escaped the attention of governments around the world. By the 1990s the discussions on climate change became more structured and came on to the world stage. The Intergovernmental Panel on Climate Change (IPCC) was set up in 1988 "to provide policymakers with regular scientific assessments on the current state of knowledge about climate change." (IPCC website) The United Nations also leaped into the fray in 1992 by organizing a secretariat which came about as many countries signed on to the United Nations Framework Convention on Climate Change (UNFCCC).<sup>1</sup> Agreements began to be negotiated internationally and one of the first major efforts was the Kyoto Protocol adopted in 1997. Many agreements have been worked on since, including the widely agreed upon Paris Agreement of 2015. Apart from these, preparatory meetings are held by the UN for detailed negotiations and reviews every year at the Conference of the Parties (COP), considered as a central decision-making body. In its 26th year, the next COP is due in November 2021. And yet, despite these meets, reports, and agreements, the target emissions have not been met.

Patricia Espinoza, executive secretary of UN Climate Change, states "If this task [climate action] was urgent before, it's crucial now," while commenting on a UNFCCC report released in early 2021. (Baker 2021) We shall be looking into the question of timing and delay and the reasons why, despite a large-scale understanding of the problems, the world is not on a war footing to combat climate change. Delay seems to be omnipresent: procrastination and lagging in

the world's response to the matter is mentioned often. With science painting an almost doomsday picture, the corresponding effort to reduce global warming does not seem on par. And though targets have been there, action to meet them or upgrade them have been slow. An account of country after country tells the same story.<sup>2</sup> The question of good timing and delay is not an unknown one. For instance, a very commonly used phrase from the legal field "justice delayed is justice denied" suggests that if the remedial action does not address the matter immediately it is as good as saying that justice was not given. Though we are not delving into legality, we have here a similar conundrum: if we don't act on climate change then it may be too late and too hard to address it. We might as well accept the end of the world as we know it.

In this paper, we want to put forward the issue of delay and how it may take on a moral character within the context of responsibility. Responsibility is simply due because this unprecedented climate change has happened due to human action. Responsibility becomes moral when that which is at the receiving end of human action is generally taken to have some value. In this case, human beings themselves (present and future generations), environment, and the earth are taken to have value and thus questions may be asked if these are harmed through climatic fury. Responsibility suggests a duty or obligation to act. Another idea closely related to moral responsibility is accountability or answerability. Philosophers often use the terms trust (an agent is entrusted with something), reliability, and commitment when trying to bring out the moral usage of responsibility. (Williams 2008) In climate change, responsibility is commonly seen to rest on collectives such as communities and governments. Furthermore, climatic systems are interconnected and actions in one part of the world can affect another distant part both in relation to time and space. Therefore, the idea of coming together globally and not only nationally and cooperating to mitigate such impacts and subsequent catastrophes should come as no surprise. On a different note, even though much morally debated, we take responsibility for climate action to lie with individuals too.<sup>3</sup> Robin Attfield in the introduction of his book *The Ethics of the Global Environment* speaks of a global ethic that is 'relevant to the environment, and applying both to individuals, institutions and countries' as 'indispensable.' (Attfield 1999, 1) Delay in acting for climate change can be seen on all fronts. Both academia and general social discourse has started to take

notice of this issue of delay in climate change and many works can be seen to be emerging in this area.<sup>4</sup>

As mentioned earlier, we would like to assess some reasons for the delay before we come to the idea of responsibility once again towards the end of our discussion. Though our list is by no means exhaustive, these are certainly important reasons, much discussed in climate ethics and related disciplines and in media sources, as to why there is a delay in acting for climate change.<sup>5</sup> The reasons, whose detailed discussion will subsequently follow, are:

- 1) The difficulty of updating the status quo approach and other economic matters
- 2) Disagreement on emissions
- 3) Denial
- 4) Low awareness and lack of individual responsibility
- 5) Shadows and subterfuge

## **The Difficulty of Updating the Status Quo Approach and Other Economic Matters**

Economic matters are complex and further complicate action for climate change. Economics can be looked at structurally or in terms of how economics is interwoven with climate action today. On the first front one can question economic and development models. It is often said that current models are not ideal: what may be considered good growth and progress may co-exist with some negative features. Let us consider the GDP model, often discussed for its shortcomings, that most countries in the world subscribe to. The GDP (gross domestic product) in very simple terms represents the monetary or fiscal value of goods and services generally calculated within a certain time period and it is an indication of progress. An increasing GDP is of course a good sign. As it has been noted by those critical of the model as well as those who are not, it cannot be taken as a sign of a uniformly widespread success.<sup>6</sup> This is not a holistic model that includes everything of value, it clearly excludes that which has no fiscal value but may well be of significance. Thus, an improving GDP may co-exist with social inequities and poverty and may also go hand in hand with environmental degradation and damage. This model, therefore, has not been seen as the ideal

approach for safeguarding the environment.<sup>7</sup> Such views opine that a more holistic development model is needed, either within the parameter of existing models or through replacing them.<sup>8</sup> However, it is also admitted that changing economic frameworks is no easy task especially since there is a certain level of comfort in following what is familiar.<sup>9</sup> (Philipson 2015, 7) The models moreover are deeply ingrained in terms of societal structures of production, employment etc. over and above their familiarity. To change these patterns is challenging to say the least.

The situation as we know it has led scientists to opine “Existing and planned infrastructure and investments, institutional inertia and a social bias towards the status quo are leading to a risk of locking in future emissions that may be costly or difficult to abate.” (Harvey and Tremlett 2021) Changing or improving economic models is arduous and slow. On the other hand, how the world is dealing with the climate problem currently, within existing models, brings us to the matter of funding. The importance of funding climate action is indeed recognized and we take one example. Some activity on the funding front is seen on the international level where developed countries have promised funds to developing nations in order to support them to adopt suitable means to reduce their carbon footprint.<sup>10</sup> The terms of the agreement named Green Climate Fund, under the aegis of the UNFCCC, notes Sophie Yeo, however, are vague and moreover it is acknowledged that much more ambitious funding targets will be needed to meet the action expense.<sup>11</sup> (Yeo 2019) On another note, a recent extensive study undertaken by Sarah Colenbrander et al. has attempted to analyse a countries’ responsibility on quantitative grounds. The metrics they have used to deduce a country’s fair share are – Gross National Income, cumulative carbon dioxide emissions, and population. (Colenbrander et al. 2021) Their findings suggest that except for three European nations (namely, Germany, Norway and Sweden), the majority of the developed countries fall short of upholding their fair share. They identify one of the largest economies of the world as the one that lags behind the most: it is responsible for over half the emissions from the developed world but provides lesser funds than many smaller nations. (Colenbrander et al. 2021) We’ll like to highlight how the findings of this study are disturbing yet unsurprising as they reflect deflection of both upholding responsibility and acting with urgency to address climate change.

Economies are also heavily interconnected with industry, which must do its bit as well. Many industries have set themselves ambitious sustainability targets to achieve within a time period. But these targets can be met only once there is adequate enthusiasm and frameworks are set up in support. Industries of late are pledging support.<sup>12</sup> However, this is not seen as a uniform practice across the industrial landscape and its associated bodies. For instance, banks in many countries are robustly financing the fossil fuel industry.<sup>13</sup> In another instance, environmental activists belonging to a European nation have initiated a lawsuit against certain automobile manufacturers for not meeting IPCC-set budget targets. (Simlai 2021) There is thus a perception that these companies are not meeting their responsibility fully. A report looking into the impact of corporations on the environment studied 70 energy companies including those of the cement and chemical sectors amongst others. Though these companies accounted for “9% of global emissions in 2014,” only six of these companies seemed to be on target to address this.<sup>14</sup> (Moodie 2015) Thus more focused involvement and enhanced target-meeting is required from industries and companies to overcome delay.

## **Disagreement on Emissions**

Since climate change and its prospective harmful consequences extend especially to poor and vulnerable people, its discourse draws in questions not only concerning economics and science but also morality and justice. And it is this characterization of the question of climate change as a matter of justice that has led to recurring disagreements between developing and developed nations in distributing responsibility. Disagreements take time to resolve and thus are indicative of delay.

Climate change redressal can broadly be characterized as a question of justice. This view concerns two key questions of responsibility i.e., who should be held morally responsible to compensate for or remedy the harm caused by climate change and what would be a fair distribution of responsibilities. Climate change is a morally notorious problem. On one hand, the past and present generations and the developed world are more causally implicated. On the other hand, future generations and poor developing nations are more consequentially vulnerable.

Rendered complicated through such intergenerational and international issues along with being burdened with the negative duty not to harm others, policy deliberations have been slowed or stalled entirely. Though there is a realization that the world must not be rendered unliveable for future generations, it's on the international front i.e., distributing responsibility amongst nations, that the disagreements become more contentious.

This is reflected in the posture countries have often adopted in international forums. The Kyoto Protocol was opposed by the Bush administration in 1997 because it was argued that it's unfair to the United States as China and India are exempt from the treaty. The proposed withdrawal of the US from the Paris Agreement under the Trump administration was also woven in the language of fairness on the same grounds.<sup>15</sup> On the other side, when India was criticized for its less ambitious targets, it was argued that India was causally less implicated in the creation of the problem and that for it economic development is urgently needed as a large section of its population is still economically and socially deprived.<sup>16</sup> This opposition in the stances of developed and developing nations is indicative of the fact that they often adopt a different conception of justice. A climate ethicist frames this succinctly: the developed world believes that singling them out to uphold a lion's share of climatic responsibilities is unjust to them as they could not have reasonably foreseen the harmful consequences of early industrialization activities, thus they should be held 'excusably ignorant' of the crisis. (Caney 2018, 25–26) Moreover, it would be prejudicial to argue that the benefits of industrialization were solely reaped by the global north. The developing world has also substantially benefited hence they should also share the burden to ameliorate this crisis.

As a counter to these contentions, the developing nations argue that historically the developed world is more blameable for this crisis.<sup>17</sup> Moreover, it is pointed out by the scholar Eric Neumayer, that the developed nations continue to reap the economic benefits of emissions while compromising the abilities of developing nations to even achieve half the levels of that economic progress, making them not just *causally* but also *morally* responsible (Neumayer 2000, 185–190). Arguing for this view Henry Shue says that "whatever justice may positively require, it does

not permit that poor nations be told to sell their blankets in order that the rich nations may keep their jewellery.” (Shue 1992, 397)

This debate is extensively discussed in the climate ethics literature in the form of ‘polluter pays principle’, ‘beneficiary pays principle’, and the ‘ability to pay principle.’ Though discussing the nuances of these principles is beyond the scope of this paper, it is interesting to note that all these principles point in the direction that though climate change must be addressed collectively by all nations, it is the developed world that must shoulder a larger share of this responsibility.<sup>18</sup> UNFCCC Earth Summit in 1992 adopted the principle of ‘common but differentiated responsibilities’ which attempted to distribute burdens based on different *response-abilities*. But the reservations of the developed world in terms of both moral and political will have considerably stalled the progress. This is not to argue that the developing nations don’t have any responsibility to act on climate change. There is no doubt that they do. But one must not forget that what lies at the helm of these moral contentions is the distorted understanding of development which has failed to take into account the sustainable flourishing of both human and non-human nature. This in fact ties in with the previous section on economics.

## Denial

Another reason for delay in acting against global warming is climate change denial. There is so much data that is available today about the growing threat of warming that it is hard to believe that there are non-believers. Initially there were many such deniers. They believed that climate change was natural and weather systems were resilient enough to make corrections. However, these beliefs have been disproved since. There is no doubt that enough is not known about how bad the situation will be but science shows that extreme effects are highly likely. Questions about the when and how much remain and these too are being addressed in more detail by the day.

Riley E. Dunlap and Aaron M. McCright point out that climate change denial has had many manifestations – including the denial that there is climate change, the

denial that it is anthropogenic, and the denial of its gravity.<sup>19</sup> (Dunlap and McCright 2010) These authors focus largely on the US and they point out that the denialists have encouraged an alternative science that questions mainstream science, much like the tobacco industry did many decades ago. Their modus operandi is a sort of 'environmental scepticism' whose central aim is to undermine the environmental policy.

However, things are changing. With time, the authors note, and as evidence grew, many in the fossil fuel industry have acknowledged global warming and seemed more open to sustainable practices. But even though denialism is marginalized, it is far from over. The authors point out that conservative ideology (such as that upholding capitalism and free markets) is very much around and is being upheld staunchly by its supporters. The authors conclude by saying that the denialists have accomplished much nationally. Additionally, they have also managed to spread their views to other nations.

This above paper was part of a book published in 2010. However much of what has been said, despite even more evidence to the contrary, remains unchanged and continues to slow the response to climate action. In a paper by Kari De Pryck and Francois Gemenne some heads of state are mentioned that have questioned climate science and felt that climate policy would hurt their economies. (Pryck and Gemenne 2017,119) The paper points out that most of these leaders used stratagems to distract and divert focus from those policies and agencies involved in addressing climate change. Speaking of the U.S, the authors of the paper state:

"And whether the U.S. remains a party to the Paris Agreement or not the damage is already done. First, the mere fact that a candidate openly sceptical of climate science can get elected... shows that climate change is not yet a priority for the electorate. Second, the Paris Agreement is a symbolic, political declaration: an important one, but with no binding commitments. The real test will lie in the capacity of all countries to upgrade their commitments in the years to come. And even if the U.S. remains party to the agreement, it seems clear that the country will not commit to drastic emissions' reductions in the future—yet this is absolutely needed, from the U.S. and many other countries." (Pryck and Gemenne 2017, 124)

The US since withdrew from the Paris Agreement and then re-joined, reflecting changing political positions. However, as the authors above state, the damage has been done. We see the damage in terms of time. Precious time has been lost and continues to be lost. Denial tactics are also delay tactics and are not exclusive to the U.S. They can be found in other parts of the world too. What becomes generally clear is that those who deny climate change have different priorities. Their views can cause much harm to climate action and its urgency.

### **Low Awareness and Lack of Individual Responsibility**

So far, we have touched upon the idea of delay at the level of governments and big industries. Both these bodies have enough information at their disposal. But what about regular individuals? We mentioned in our introduction that climate change requires involvement at all fronts, including individuals, and if even one of these is not on board it would mean a delay. Therefore, public awareness shows up as another crucial factor in addressing climate change. If the level of awareness is low among general populations, recognition of responsibility and motivation to act would be low and a delay in addressing climate change would become inevitable.

For this section, we went through some surveys that have been conducted to gauge the levels of public awareness on climate change. We shall draw attention to conclusions drawn in some of these surveys. Individual awareness could be measured on two scales. One is about whether individuals are aware at all. The other is that though aware, whether they know how they can contribute. Individual contribution raises an important philosophical issue as well that shall be discussed briefly at the end of this section.

Many surveys conclude that public awareness is highly variable in countries across the world.<sup>20</sup> One survey found, on average, that awareness in developed countries is higher than that in developing countries. (Mcsweeney 2015) Education is often singled out as a solid marker for higher public awareness. Urban communities, another survey concluded, in developing countries appear to have high awareness levels. (Pandve et al. 2011) The levels are low in rural

communities, yet another survey concluded, but familiarity with the rise in extreme weather events is seen. (Kabir et al. 2016) Amongst developed world populations, a survey found that awareness of climate change did not include knowledge of how much humanity was to be blamed for the crisis. Furthermore, the effects of rising temperatures were also underestimated by people: they did not believe they would be impacted in any major way. This survey also found that awareness of climate change was not an indicator of climate action: people did back climate action but were vague about their own performance in such matters. (Eichhorn, Molthof, and Nicke 2020) Another survey reiterated that people lacked information about activities that could help fight climate change. (Bojovic and Dooel 2014, 5) What unites each of these surveys, despite somewhat variable findings, is that almost each has arrived at the conclusion, either directly or through implication, that awareness campaigns and imparting of education and information is of utmost importance. Furthermore, country specific policies would be more effective as opposed to a uniform global policy. One survey stresses on “...the need to develop tailored climate communication strategies for individual nations. The results suggest that improving basic education, climate literacy, and public understanding of the local dimensions of climate change are vital to public engagement and support for climate action.” (Lee, Markowitz, Howe, et al. 2015) Thus customized policies and outreach that integrate with existent cultures and beliefs are suggested. However, matters cannot be left at awareness levels; information on how individuals can contribute also has to be disbursed. The authors of one survey suggest “communication efforts and awareness campaigns alone are unlikely to sufficiently alter people’s sense of urgency and engagement. It is up to policymakers to lead by example, persuade publics of the urgency, and to implement the types of policies that meet the immediacy of the crisis.” (Eichhorn, Molthof and Nicke 2020, 4) The upshot is that much more needs to be done with respect to awareness on both counts.

In our research of surveys on awareness levels of climate change, we found that with passing years the awareness of climate change has indeed increased: a 2021 survey with 1.2 million participants in 50 countries indicates that 64% of individuals see climate change as a ‘global emergency.’ (Flynn et al. 2021) This survey also found that the national governments were rated as having the greatest responsibility in terms of tackling climate change. (Flynn et al. 2021, 9)

If the latter is to be the case, where does it leave individual responsibility? This brings us to a philosophical question often raised in climate ethics on whether individuals can be held responsible for contributing to climate change at all within the parameters of existing ethical theories. This question by no means is a new one. Walter Sinnott-Armstrong amongst others attempts to answer the question of whether individuals have an obligation not to do actions that contribute to climate change. (Sinnott-Armstrong 2010) His conclusion is both thought-provoking and troubling where he states “...it is not individuals who cause it or need to fix it...governments need to fix it and quickly.” (Sinnott-Armstrong 2010, 344). He systematically goes through moral principles commonly accepted in the discipline of ethics and finds that these principles fall short of placing blame on individuals for doing actions that cause and increase global warming. Driving an SUV for fun if the individual did not ‘intend’ to cause climate change absolves the individual of culpability. One way in which individuals can contribute though, he says in his conclusion, is by drawing the attention of governments to the issue and by putting pressure on them. Sinnott-Armstrong’s paper has drawn much attention and many scholars have questioned his conclusion. No one is denying that governments need to take action and immediately, but sparing individuals of all wrongdoing is problematic. Philosophers have attempted to calculate the amount of harm an individual may cause and it is by no account insignificant. (Nolt 2011 and Broome 2021) Ben Almassi is sceptical of Sinnott-Armstrong’s position and offers a counter principle through which the individual can be held responsible for his/her emissions.<sup>21</sup> (Almassi 2012) Almassi concludes by adding that moral responsibility on individuals does not imply that industry and governments are not responsible. He adds that where individuals are concerned both social action and individual action is required, and neither can be replaced by the other. (Almassi 2012, 19–20)

Awareness campaigns lie on the shoulders of governments. Their importance is indispensable to climate advocacy. But, once awareness has set in, action is to be taken by individuals. A laxity of involvement in social action and hesitancy in changing personal behaviour is bound to delay climate action even further.

## Shadows and Subterfuge

There is a certain amount of consensus amongst the scientific community about the reality of climate change and how it will wreak havoc in the coming and distant future. Differences continue to exist about the extent of its consequences, as mentioned earlier, but this does not change the truth of the former part of the statement. In denialism, we see hints of disbelief and sometimes it can be accompanied by smokescreens. However, subterfuge is more widespread and linked to several of the above noted issues. It could range from portraying the actual situation in shadows to creating an image of action when no action or little action is being taken to address climate change. These are definitely delay tactics and lag the response to climate change further.

At the recent ministerial session held in Milan before the oncoming COP 26, attention was drawn to the fact that current plans to reduce emissions by richer countries are inadequate and that at the rate that has been committed temperature rise would be 2.7 C. This led the environment minister of one small island country in the Caribbean to comment that "We're talking about lives, we're talking about livelihoods, they cannot apply smoke and mirrors to that."<sup>22</sup> (McGrath 2021) The implication is that richer nations' curbing of emissions is more talk and less action. The head of state of one nation has similarly come under fire because he has claimed on a certain platform about reducing some levels of emission within a fixed period and this cannot possibly be done at current levels of commitment of that nation. (Hare 2021) Another example is of a leaked IPCC draft in 2021. This draft, part of a report meant to be released in 2022, is a summary for politicians of Group II of IPCC. (Mahanta 2021) The leaked draft made it to newspapers all over the world and contains a stark warning about the future with extreme heat conditions, eco-systemic collapse, rising ocean levels and other similar outcomes. It also discusses what ails climate action. What is worrying here is that the draft was *deliberately* leaked by some scientists who feared that policymakers would dilute their findings.<sup>23</sup> One journalist commented that this leak "is a sign that people within the organization are seriously concerned about the climate situation and want to deliver the correct data before it is censored at the political level." (Mahanta 2021). This is indeed worrying. Honesty and transparency

are paramount. Shadows and subterfuge on the other hand don't allow trust to be built. They veil the truth and mislead and thus are harbingers of delay.

## Conclusion

There are myriad other reasons for delay in addressing the climate crisis and we acknowledge again that our list is by no means exhaustive.<sup>24</sup> We would also like to add here that there are strong linkages in the reasons mentioned above. Disagreements on emissions can't be divorced from economics; denialism, apart from having roots in economics and conservative ideology, may contain hints of subterfuge; public awareness requires government inputs over and above individual participation. Some reasons may be seen as more foundational than others but there is no doubt that all are complex, interrelated and not easy to address.

We would also like to address the issue of responsibility and immediate responsibility. We see a difference between the two in that the latter imposes a heavier burden. Individuals aware of climate change may look entirely to institutions and governments to remedy the situation. Governments, on the other hand, in their reluctance to forego their current economic growth may not contribute enough to climate funds or commit to carbon neutralization on a large scale. Such failure and reluctance, though capable of correction in the long run, fracture an immediate response. Furthermore, in a world where injustices reign, the climate crisis being treated as just another matter that needs 'urgent' attention is also problematic as it takes the focus away from immediacy of response. We may be asked, are not removing poverty and inequality equally if not more important and ought not enough attention and resources to be devoted to them as well. We would like to admit here that the risked future of our climate is not like any other issue, it is the very foundation on which all our other future concerns and prospects are grounded. The way Peter Singer in his seminal work *All Animals are Equal* treats the capacity to suffer and enjoy as the prerequisite for having any interest at all (Singer 1990, 4), we argue similarly that sustaining a liveable healthy climate for the present and future generations is a pre-condition for existence that must be satisfied. We must thus be battle ready

to take on this particular challenge. At the same time, we must be aware, and as it has been often remarked, that if climate change is unattended, it will only exacerbate poverty and migration. This thus makes the climate crisis a double-edged sword where ‘immediacy’ of response takes on a whole new meaning. This also implies that the methods adopted for addressing the climate crisis can be such that can also, at the same time, to the best extent possible, address poverty issues and biodiversity-related ones.

Ethicist Dale Jamieson in his paper “Ethics, Public Policy and Global Warming” implies that what is needed in the climate change discourse is a paradigm shift. He writes that “it is not surprising that economics cannot tell us what we want to know about how we should respond to global warming...Economics may be able to tell us how to reach our goals efficiently, but it cannot tell us what our goals should be....” (Jamieson 2010, 82) None of the above reasons, we believe in agreement with Jamieson, for delay will disappear entirely unless we reflect on what sort of world we want to live in and how we ought to live our lives.

The climate crisis, it has been suggested, is telling of our failure to focus on the long-term goal to develop sustainably. Our preoccupation with a carbon emission driven economic development has neglected the larger concern to develop holistically by including present and future, rich and poor, humanity and beyond. This resistance to reform our social and economic structures is expressed in the form of denialism, subterfuge, and disagreements as have been explicated above. In effect, the reasons for delay are nothing but symptoms of a central ailment: our inability to reimagine a world defined by low consumption and sustainability.

Spiritual teacher Thich Nhat Hanh has said, “As well as the carbon dioxide pollution of our physical environment, we can speak of the spiritual pollution of our human environment: the toxic and destructive atmosphere we’re creating with our way of consuming. We need to consume in such a way that truly sustains our peace and happiness. Only when we’re sustainable as humans will our civilization become sustainable.” (Thich Nhat Hanh, 2014) Sustainability is famously defined by the World Commission on Environment and Development as “development that meets the needs of the present without compromising the ability of the

future generations to meet their own needs.” (Brundtland 1987) Christian Becker while discussing aspects of sustainability, speaks of its relational aspect that urges us to reassess our relationship with nature. (Becker 2013, 9-12) He believes that climate change and other associated ecological predicaments show us that human identity, rather than being viewed as autonomous and controlling, must be understood through its ‘inextricable relationship’ with other human beings, future generations, and nature.’ (Becker 2013, 16) We must acknowledge that human beings indeed “are part of an interconnected and interdependent system.” (Ehrenfeld 2005, 24) German philosopher Hans Jonas in a similar vein has proposed a principle of ‘imperative of responsibility’ that he defined as “act so that the effects of your actions are compatible with the permanence of genuine human life on earth.” (Jonas 1985) This way of thinking suggests that the most responsibility lies with human beings of today, a responsibility that has not been borne well. The delay in addressing climate change is also an indicator of this malaise.

We are not suggesting that nothing has been done on the climate change front. The fall in the prices of renewable energy that can assist a rapid transition towards the greening of energy and the growing worldwide demand for action on climate change in the form of citizen’s movements have been pointed out by Bill McKibben as signs of optimism in our stumbling journey to address climate change. (McKibben 2021) But by highlighting the above reasons, we aim to comprehend what is stalling meaningful progress on climate action, even after scientific warnings, growing awareness and decades of deliberations and dialogue around this issue. The moral need of the hour is to act upon this responsibility with the immediacy and sincerity that it so demands, or else our concerns will soon be turned into regret and remorse.

Note: As this paper goes to publication, COP 27 (Nov 2022) has concluded in Sharm El Sheikh, Egypt. However, expert opinion suggests that the urgent climate action required is not reflected in its final agreements. A ‘Loss and Damage’ fund has been set up but its modalities are unclear. Much of what has been said in the course of this paper thus remains relevant.

## Notes

<sup>1</sup> Currently the UNFCCC has 197 member countries.

<sup>2</sup> One example can be found in Angela Dewan. 2021. "COP26 Chief Alok Sharma Calls on the G20's Climate Laggards to 'Step Up'". October 12, 2021. <https://keyt.com/news/national-world/cnn-world/2021/10/12/cop26-chief-alok-sharma-calls-on-the-g20s-climate-laggards-to-step-up/>

<sup>3</sup> Why this is so will be taken up briefly in a later section.

<sup>4</sup> One example is William F. Lamb et al. 2020. "Discourses of Climate Delay." *Global Sustainability* 3, e17, Cambridge University Press. (July): 1-5 <https://www.cambridge.org/core/journals/global-sustainability/article/discourses-of-climate-delay/7B11B722E3E3454BB6212378E32985A7>

<sup>5</sup> The COP 26 is on the horizon while we pen our views. The media is reporting on current developments as they emerge day by day related to this. We have gone through several such reports and have relied on media resources to a large extent as we wanted to build on and organize what is being presented to the public at large.

<sup>6</sup> Examples are Jeroen C.J.M. van de Bergh. 2007. "Abolishing GDP." Tinbergen Institute Discussion Paper No. 07-019/3, <https://ideas.repec.org/p/tin/wpaper/20070019.html>. and, Tim Callen. 2020. "Gross Domestic Product: An Economy's All." *International Monetary Fund- Finance and Development* February 24 2020. <https://www.imf.org/external/pubs/ft/fandd/basics/gdp.htm> respectively.

<sup>7</sup> Examples are Mirjana Radovanović, and Noam Lior. 2017. "Sustainable Economic-Environmental Planning in Southeast Europe – Beyond-GDP and Climate Change Emphases," *Sustainable Development*. 25, no. 6 (March): 580-594. <https://doi.org/10.1002/sd.1679>, And Clive L. Spash. 2007. "The Economics of Climate Change Impacts à la Stern: Novel and Nuanced or Rhetorically Restricted?" *Ecological Economics* 63, no. 4, (September): 706-713. <https://www.sciencedirect.com/science/article/pii/S0921800907003497>

<sup>8</sup> The DICE and RICE models of Nobel prize winning economist William Nordhaus have been suggested to aid policy making in calculating the economic cost of carbon.

<sup>9</sup> The first part of the heading of this section is inspired by Philipson's discussion.

<sup>10</sup> For more details see Matt McGrath, 2021.

<sup>11</sup> Sophie Yeo notes that trillions and not the promised billions are going to be needed according to some estimates. (Yeo 2019)

<sup>12</sup> Recently, Facebook and KPMG have pledged goals to reduce emissions. See Nick Clegg. 2021. "Facebook Supports Climate and Clean Energy Provisions in the Budget Reconciliation Bill". *Facebook*. 11 October 2021. <https://about.fb.com/news/2021/10/facebook-supports-climate-budget-reconciliation-bill/> And, Simon Freeman. 2021. "KPMG Launches \$1.5 Billion Sustainability Drive in Run-Up to COP26 Climate Crisis". *Evening Standard*. October 5 2021. <https://www.standard.co.uk/business/kpmg-climate-change-sustainability-drive-cop26-boris-johnson-b958900.html>.

<sup>13</sup> In India, for instance, banks are financing the fossil fuel industry. Though the RBI, India's regulatory bank, has included renewable energy sector funding as a priority, phasing out the former will take time. See Flavia Lopes and Gokulananda Nadan. 2021. "Where do Indian Banks Stand in the Global Fight against Climate Change?" *Scroll.in*. Oct 10, 2021. <https://scroll.in/article/1007245/where-do-indian-banks-stand-in-the-global-fight-against-climate-change>

<sup>14</sup> The italics are ours. This article is based on a report prepared by CDP, a non-profit organization based in London that researches in the area of the impact of corporations on the environment.

<sup>15</sup> Trump's 2017 official statement on Paris Climate Accord can be accessed on the internet at <https://it.usembassy.gov/statement-president-trump-paris-climate-accord/>

<sup>16</sup> "India's Nationally Determined Contribution – Towards Climate Justice", Government of India, *Ministry of Environment, Forest and Climate Change*, 4–6, <http://moef.gov.in/wp-content/uploads/2017/08/INDIA-INDC-TO-UNFCCC.pdf>

<sup>17</sup> Historically developed countries are responsible for around 79% of carbon emissions. Centre for Global Development. n.d. "What Caused Climate Change Historically." Access on 16 October 2021 <https://www.cgdev.org/media/who-caused-climate-change-historically#:~:text=The%20historical%20concentration%20of%20industry%20and%20wealth%20in,Source%3A%20CO2%20emissions%20excluding%20LUCF%2C%201850%E2%80%932011%20%28CAIT%20v2.0%29>

<sup>18</sup> For an extensive account of these principles refer to Simon Caney, 2010. "Climate Change and the Duties of Advantaged", *Critical Review of International, Social and Political Philosophy* 13, no. 1, 203–228.

<sup>19</sup> This and the next paragraph are a short summary of the authors' views.

<sup>20</sup> One example is Lee, Markowitz, Howe et al. 2015.

<sup>21</sup> Almassi calls this the threshold-contribution principle. He says "We have a moral obligation not to take the gas-guzzling joyrides Sinnott-Armstrong describes, because (all other things being equal, given the evidence available to us) doing so makes crossing climatologically negative thresholds more likely and crossing climatologically positive thresholds less likely." (Almassi 2012, 19)

<sup>22</sup> This comment was made by the environment minister of Grenada, Simon Steill.

<sup>23</sup> For more see Fiona Harvey and Giles Tremlett, 2021. The full reference is given in 'Works Cited' below.

<sup>24</sup> For instance, Lamb et al speak about technology. A blind belief in technology and its ability to provide answers to all climate troubles, without acknowledging the associated risks and uncertainties has also substantially contributed to delaying a timely response to this crisis. It may be over-optimistically supposed that science will come up with some magical solution to sequester bad carbon dioxide without demanding much effort on the social and political front. Such an attitude would add more hesitancy in the response of policymakers. (Lamb et al. 2020, 3) The full reference is given in end note 3.

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