Review

Replacing Sustainable Development: Potential Frameworks for International Cooperation in an Era of Increasing Crises and Disasters.

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Abstract: This transdisciplinary review of research about international cooperation on social and environmental change builds the case for replacing Sustainable Development as the dominant framework for an era of increasing crises and disasters. The review is the output of an intentional exploration of recent studies in multiple subject areas, based on the authors' decades of work in related fields since the Rio Earth Summit 30 years ago (rather than a keyword search of databases). It summarizes the research which documents failure to progress towards the Sustainable Development Goals (SDGs). Consequently, the extensive scholarship critiquing the conceptual framework behind those 'Global Goals', and the economic ideology they arose from and support, is used to explain that failure. Although the pandemic set back the SDGs, it further revealed the inappropriate strategy behind those goals. This suggests the Global Goals constitute an 'own-goal' scored against people and nature. From this conclusion, alternative frameworks for organizing action on social and environmental issues become more important and are therefore briefly reviewed. It is argued that such a future framework must relate a new eco-social contract between citizen and state, and engage existing organizations and capabilities that are relevant to an increasingly disrupted world. Therefore, the case is made for considering an upgraded form of Disaster Risk Management (DRM) as an overarching framework. The proposed upgrades include detaching from economic ideologies, and recognizing that a wider metadisaster from climate chaos may reduce the future availability of external support. Therefore, self-reliant resilience and locally-led adaptation are identified as important to the future of DRM. Some options for professionals continuing to use the term sustainability, such as this journal, are discussed.

Keywords: Sustainable Development; Sustainable Development Goals; Sustainability; Postdevelopment; Degrowth; Disaster Risk Reduction; United Nations; Permacrisis; Metadisaster

1. Introduction: this reality should unsettle us

"Our world is suffering from the impact of unprecedented emergencies caused by the climate crisis, pollution, desertification and biodiversity loss, the COVID-19 pandemic, by new and ongoing conflicts, and by the ungoverned development of new technologies"

UN Secretary-General António Guterres [1]

Thirty years after the Rio Earth Summit, the report from the United Nations on progress towards the Sustainable Development Goals (SDGs) might justifiably trigger some anger. Greater numbers of people are suffering, environments are being further degraded and the life support systems for both current and future generations are being seriously compromised [1]. For those of us who work in international cooperation on social and environmental issues, this latest news may also generate some sadness and anxiety. There can be sadness that collectively our work has not been effective. There can also be anxiety that we risk becoming irrelevant to a world changing in ways that we have little influence upon. Anxiety might also arise if professionals' sense they are upholding a paradigm for personal identity and income, rather than relevance to the millions who suffer and an environment in ever greater peril. As professionals motivated by a concern for both people and planet, it is reasonable to want to find a framework to guide future endeavours. Through this transdisciplinary review [2] of the latest analysis about global progress and regress on both environment



and development, I will make the case that 30 years after the Rio Earth Summit consolidated the concept of Sustainable Development as a framework for international cooperation [3], it is time to replace that concept, along with the ideologies it embodies. Therefore, I will offer some ideas on what could become a more realistic framework for international cooperation in our new era of increasing crises and disasters. The review draws upon scholarship in international development studies, environmental studies, disaster studies, critical management studies, and critical sociology. I conclude by suggesting that breaking with the conceptual framework that has shaped the vocational careers of myself and many of my readers, could free us to discover a renewed relevance to the lives of billions of people around the world, as well as the wider community of Life on Earth.

Outside of the field of international cooperation for Sustainable Development, people have been attempting to make sense of the recent years of widespread disruption with the help of some new terminology. The term 'crisis' is now in widespread use, with popular terms including polycrisis, permacrisis and metacrisis. The term polycrisis indicates that there are many intersecting crises that could imply general causes [4], whereas permacrisis indicates that these are no longer unusual periods of time [5], and metacrisis [6] indicates that there is some deeper crisis relating to most of the individual crises. Both media and academic use of these terms indicates new awareness of the extent and interrelatedness of disturbances occurring around the world.

I mention this trend because how we choose to talk about the situation in our communities, countries and around the world is of paramount importance. That is because the terms we use carry implications about worldviews, probabilities, and priorities. The popularity of the term Sustainable Development in both national and international policy making over the past 30 years has conveyed such implications [7]. Whatever the many definitions of the term offered over passing years, the ones that predominate in policy have communicated a worldview where material and technological progress is both good and inevitable; where humanity will balance social, economic and environmental issues to progress materially, and; that it is a priority to foreground corporate economic interests [8]. Those are all ideological positions on the nature of our situation, but have become so widespread and accepted, that they can appear to us like common sense [3]. For people like me, such ideas have shaped both our professional identity and strategy in the pursuit of positive impact at both national and international levels. However, as times change, it is essential to allow a reconsideration of all assumptions and a refocusing of our future attention, no matter how initially uncomfortable that might be.

In this review article on the current Sustainable Development realities, policies and research, I will argue for a necessary reframing of the work of international cooperation and policy making. I will summarise the recent data in support of the view that the ideology of Sustainable Development is empirically contradicted by the failure to progress towards the internationally agreed goals based upon it. I will then summarise the critiques on how the economic system of global capitalism - esteemed and promoted by the concept of Sustainable Development - has been driving the increasing damage to the biophysical foundations of contemporary societies. The implications of such an understanding of the situation are multiple. Although some might not see a useful role for either the state or intergovernmental cooperation in future, I contend that the problems faced cannot be addressed through local or private action alone. Therefore, the role of the state remains important, as does the principle that the state has an implicit social contract with citizens in return for exerting power over them. That concept has recently been extended to stress the importance of both environmental and social dimensions of citizen wellbeing, through an 'eco-social contract' [9]. In this review article I will argue that this role for the state is no longer helped by the concept of Sustainable Development. Instead, in an era

of increasing disruption, decline, crisis and disasters, it is time to split an eco-social contract from the counter-productive ideologies implicit in Sustainable Development.

There are many options for alternative frameworks for understanding how to organise human societies. However, for a framework to be used by intergovernmental organisations it will be helpful to connect to existing concepts and institutions. Therefore, I conclude that amongst existing frameworks Disaster Risk Management (DRM) could be the best available to be upgraded to frame future activity, aid and technical assistance, as officers of the state seek to deliver on the eco-social contract with their citizens.

2. Learning from failure to meet goals

In 2015, the United Nations (UN) introduced 17 Sustainable Development Goals (SDGs) and 169 associated targets, addressing poverty, hunger, climate change, environmental degradation, peace, justice and other global issues, as a "blueprint to achieve a better and more sustainable future for all people and the world by 2030" [10]. These SDGs replaced the expiring Millennium Development Goals (MDGs), which had aimed at improving wellbeing in poorer countries by 2015. Building on and expanding MDGs in thematic and geographic scope, the SDGs were claimed to be more universal and holistic, explicitly addressing ecological sustainability in addition to economic and social aims [11].

The use of the term Sustainable Development in the naming of these goals was welcomed by many as indicating a more holistic approach to national policy making and international cooperation. It increased attention on the concept which, since the adoption of the Brundtland Report by the UN General Assembly in 1987, had been promoted as an integrated way to address diverse dilemmas, such as poverty, illiteracy, unemployment, disease, discrimination, environmental degradation, crime, conflict and limited human rights or justice [12]. That 'Sustainable Development' seemed to offer all good things to all people was one reason for its popularity [13]. A simple yet critical analysis of the term itself reveals its linguistic power:

"The term 'Sustainable Development' is a collocation; that is, two-words combined into a single term. It is a risk of collocations that they have the effect of de-problematising their constituent terms - in this case both 'Sustainable' and 'Development' - and replacing them with a new ideologically-loaded term. One risk is that important questions of *what is development* is displaced..." [7] (p. 419).

Seventeen internationally agreed 'Global Goals' provided the opportunity to test whether the framework of "Sustainable Development" and the economic system and ideology it is based upon can deliver 'progress' according to its own parameters. That moves the agenda beyond a positive mood towards clearer accountability and opportunities for learning. However, the way any goals enable accountability and learning amongst policy makers remains rather unclear, as a brief review of the MDGs will demonstrate. At their deadline, the MDGs were lauded as a success story by the UN, and some of the data showed significant improvements in areas related to poverty, hunger, child mortality, maternal health, drinking water, and infectious diseases during the 15-year MDG period. However, a key architect of the MDGs warned that "no firm conclusions can be drawn about the role played by the MDGs in these stories of success" [14] (p. 83). Moreover, subsequent independent analysis demonstrated that the UN's claims about MDG achievements were misleading, by using "targeted statistical manipulation to make it seem as though the poverty and hunger trends have been improving when in fact they have worsened" [15] (p. 749). In defence of the MDGs, some people argue that they were helpful in driving attention, therefore assuming that the goals would eventually be met [16]. However, the most basic goal that is enshrined in the first MDG has still not been met at the time of writing. *The Millennium Declaration*

called for reduction by half of the proportion of people who suffer from hunger [17]. ¹ The prevalence of undernourished people in the world when that declaration was made was about 15% [18] (p. 8). In 2020, it had reduced to around 10 percent [19] (p. 11) but it has been rising again since then. Importantly, any limited gains of the MDG-period in areas of human development came at a grave cost to the environment, prompting Jan Vandemoortele [14] (p. 85), a co-architect of the MDGs, to summarise the outcome by the one-liner: "Progress for *better-off* people, regress for the planet."

Are the SDGs more helpful than their predecessors in transforming the world and lifting humanity and the planet out of suffering? About halfway through the time period for the SDGs, in March 2022, UN Secretary-General António Guterres warned that humanity is "moving backwards in relation to the majority of the Sustainable Development Goals" [1]. While some of the setbacks could be attributed to the pandemic and associated policies, the SDGs were already way off track before COVID-19 emerged. According to *The Sustainable Development Goals Report 2021*, before the pandemic some uneven "progress had been made in poverty reduction, maternal and child health, access to electricity, and gender equality, but not enough to achieve the Goals by 2030. In other vital areas, including reducing inequality, lowering carbon emissions and tackling hunger, progress had either stalled or reversed" [20] (p. 2). In 2020, UN Secretary General reported that prior to the pandemic, progress on the SDGs was not happening anywhere near the speed or scale required, as the "number of people suffering from food insecurity was on the rise, the natural environment continued to deteriorate at an alarming rate, and dramatic levels of inequality persisted in all regions" [21] (p. 2).

Examining a few of the individual goals helps to highlight the overall regress. SDG 1 seeks to eradicate poverty, but the extreme poverty rate rose in 2020, with the number of poor people increasing by between 119 and 124 million. SDG 2 aims to end hunger, but world hunger has been rising since 2014, with more than a quarter the world population affected by moderate or severe food insecurity in 2019. The gains on the health goal, SDG 3, have experienced enormous setbacks because of the pandemic and associated policies, with data showing that basic health services were still disrupted in 90 percent of countries and territories over a year into the pandemic. SDG 6 aims to provide water and sanitation to all, but water use is growing unsustainably and water stress is increasing, while billions of people are living without access to clean water and sanitation. SDG 7, seeking to ensure accessible and clean energy to all, is also out of reach, as the number of people lacking access to electricity increases, making basic electricity services unaffordable in 2020 for more than 25 million people who had previously enjoyed access. SDG 12 aimed to promote sustainable consumption and production patterns, but instead of falling, the global material footprint per capita has steadily risen, growing 40 per cent from 8.8 metric tons in 2000 to 12.2 metric tons in 2017. There is also miserable failure on climate action - SDG 13, and biodiversity goals - SDG 14 and 15 - as atmospheric concentrations of the major greenhouse gases continue to increase, the oceans grow more acidic, forests continue to be cut down, and biological diversity is declining at alarming rates. All this data is from the official Sustainable Development Goals Progress Chart 2021 [22] and the report of the UN Secretary General in 2021 [22b]. In summary, in 2021, only five countries were on a trajectory to reach these Global Goals by 2030, with 134 not expected to reach them even by the end of the century, including 69 'developed highincome' or 'upper-middle-income' countries [23].

Faced with the seemingly insurmountable challenge to reach these Global Goals, UN leaders have called for doubling down on efforts to "rescue SDGs" [1]. However, an increasing number of researchers both outside and inside the UN

¹ The UN then diluted MDG1 from halving the proportion of hungry people in the whole world by 2015 compared to 2000, to halving the proportion in developing countries only in comparison to 1990 when malnutrition was far higher.

are questioning not only the rationale of such a pursuit, but the key tenets of the SDG framework itself [24]. When exploring the potential implications of SDG failure, it is important to consider again the many deeper critiques of the ideology of sustainable development, to which I will now turn.

3. Learning the flaws of sustainable development

Although it appears to have had little to no influence on international cooperation, the range of scholarly criticism of Sustainable Development is wide. In this section, I will review some key elements of that criticism. It includes recognising the 'non-substitutability' of some environmental phenomena for either economic or social value. (For instance, one cannot eat money.) I will summarise the critical scholarship that includes arguments that there is already overuse of natural resources by humanity. I will show how that view exists alongside analysis on the impossibility of sufficiently decoupling the resource and energy demands of modern societies from economic growth. The critical scholarship also includes recent analysis of the further damage that will be done to fragile environments due to rising demand for renewable energy systems. Therefore it undermines an 'ecomodern' view that environmental problems can be solved with more technology and better management. In this review I will also connect these contemporary critiques with previous post-development, decolonial and anti-imperialist schools of thought. Those perspectives regard Sustainable Development as part of a hegemonic set of ideas and practices which maintain exploitative power relations. I will briefly mention not only the damage done to society by the Covid-19 pandemic, but how it was made more likely and more damaging because of attitudes and policies that were promoted by that same ideology. This part of the review therefore makes the case for exploring alternative frameworks that exist as potential guides for future work on social and environmental issues - which I shall turn to afterwards.

3.1. The primacy of narrow economic interests

In the early years of the elaboration of the concept of Sustainable Development, one of the main criticisms was that it implied an equivalence between economic, social and environmental value, so that key natural phenomena, such as a pristine old growth forest, could be replaced by a cattle ranch and it be regarded as part of Sustainable Development [8]. This concern led to debate about 'strong' and 'weak' commitments to environmental protection within the framework [25]. Decades later this issue has not been resolved, with substitutability being central to the latest ideas on biodiversity offsets. Therefore, the framework does not disallow destruction of key - even essential - ecosystems [26].

Another criticism is that the concept ignores evidence that, globally, human settlement is already overshooting the planet's 'carrying capacity'. That is the total use of natural resources and the amount of pollution from people that the global environment can take without being degraded [27]. Sometimes described as humanity's ecological footprint, this overshoot, or 'overtrampling' of the Earth is occurring with current population levels and current levels of consumption by billions of people living energy and resource intensive consumer lifestyles. The problem of exceeding the Earth's carrying capacity is even worse than it may first seem, because of the amplifying feedbacks which can lead to cascading effects on ecosystems and societies. This led to scientists explaining that there are "planetary boundaries," where breaching them would mean destabilising Earth systems at the planetary scale, in ways that would threaten most of life on Earth [28]. With this devastating possibility in mind, any plan for improving both the environment and people's lives that does not deliberately seek to reduce overshoot, and instead even requires to expand economic systems, is simply adding to the existing problem [29].

This brings us to a widely discussed problem of Sustainable Development in general, and the SDGs in particular - the reliance upon and promotion of economic growth [30]. Sustained economic expansion is not only assumed in SDGs, the pursuit of growth is also enshrined in the framework as a separate goal - SGD 8 on 'decent work and economic growth'. The SDGs therefore reflect the habits of centuries of economic models and political institutions that have promoted a version of human flourishing synonymous with the growth of material wealth. Because while SDGs offer no clear explanation of how global economic expansion will definitely reduce poverty and environmental destruction, the implicit assumption is that such economic growth is essential for achieving the human development objectives on poverty, hunger, and health. That is despite this notion being dispelled by empirical studies: instead, inequalities in ownership, income, status, and rights shape how people experience poverty [30].

The economic growth fixation is also flawed in its reliance on the belief that technological change and resource substitution will allow us to decouple economic growth from resource exhaustion, biodiversity loss and carbon emissions [31]. Instead, empirical data shows that the growth goal of the SDGs is incompatible with the framework's sustainability objectives to reduce the use of global resources and carbon emissions rapidly enough to stay within even the conservatively-derived carbon budget for dangerous 2°C ambient global warming [32]. Even if economic growth could be decoupled from emissions by replacing fossil fuels with renewable energy, this could not be done quickly enough if the economy continues to grow at usual rates [30, 33].

Further recent analyses of the processes required for powering *all* societies with renewable energy, including the battery storage implications, has unfortunately revealed that vision as both implausible and destructive [26]. In 2021, the UN's International Energy Agency (IEA) calculated that a global energy transition off fossil fuels would increase demand for key minerals such as lithium, graphite, nickel and rare-earth metals by 4,200%, 2,500%, 1,900% and 700%, respectively, by 2040. The IEA noted that there is no capacity to reach such demand [34], there are no plans to build enough mines and refineries, and that such expansion is unprecedented and would take decades. The report also noted that the environmental impacts of delivering that level of supply would be massive, including not only the devastation from earth removal, but also the toxic and radioactive wastes produced from the mining and refining processes. Worse still, an analysis of where those critical minerals are located, finds they are typically in locations occupied by people living outside of the urban societies that want the metals from under them. One study concluded that massive investment in renewables for total decarbonisation "could put severe pressure on lands held by Indigenous and marginalized communities and reshape their ecologies into "green sacrifice zones." Such cost shifting risks reproducing a form of climate colonialism in the name of just transition" [35] (p. 543).

This concern with how the myth of Sustainable Development could encourage further environmental damage is also found in relation to increasing vulnerability of communities as their environments become more unstable. For instance, one study from the Caribbean on the impacts of the Hurricanes Irma and Maria in 2017 and Dorian in 2019 found that the logics, practices and debts of colonial-capitalist development and neoliberal exploitation had increased the vulnerability of the affected populations [36]. Such findings have significant implications for the way international cooperation addresses the task of Disaster Risk Reduction, which I will return to below.

If Sustainable Development proponents are ignoring the limits of technology and commerce to solve environmental dilemmas, then they are ideologically aligned with an approach that is now known as ecomodernism. By focusing on technology as the answer, ecomodernists typically argue for an intensification of human activities and more artificial means of production. Whereas such technological projects could be pursued by economic orders other than capitalism,

they are typically imagined as enabling the current economic system to continue, thereby making them attractive to incumbent power [37].

3.2. Deeper critiques of sustainable development

Contrary to an ecomodernist outlook, it is becoming widely recognized that economic growth cannot endlessly continue on an already over-exploited planet. In light of poor performance and contradictions within SDGs, and the potential for further injustices in the name of green energy, calls multiply for abandoning growth in favour of 'degrowth' which would involve a "planned reduction of energy and resource use designed to bring the economy back into balance with the living world in a way that reduces inequality and improves human well-being" [33] (p. 1105). Changing economic direction in this manner is a massive challenge, given that current monetary systems both rely upon and encourage economic expansion [38]. It also involves major cultural changes, such as far less consumerism. Therefore, many researchers conclude we must try to shift societal paradigms, abandoning narrow and outmoded concepts and ideas, to allow a more fundamental rethinking of responses to environmental and social dilemmas [39, 40].

These deeper criticisms of Sustainable Development echo some prior critiques of the paradigm of international development, which are collectively described with the term 'post-development'. Scholars and activists in that field criticised the concept of development as a Eurocentric and hierarchical ideology which denigrates non-Western, non-modern, non-industrialised ways of life as inferior and in need of changing so as to make them more like the 'developed' nations. They argued that such an approach forced a capitalist logic of privileging activities that earn money through the market, thereby marginalising all other forms of social existence including traditionally sustainable lifestyles and forms of production. They argued that the attitudes, policies and activities that result from this ideology help to maintain colonialist, imperialist and racist power relations in the global economy [41-43]. Consequently, these power relations, which include various functions of banking, investment, marketing, advertising, and media, as well as international economic rules (or the absence of them), have helped to spread and maintain the imperial ideology of development in non-Western countries around the world [43]. It is not surprising, therefore, that one of the key theorists of post-development thinking, Wolfgang Sachs, described the SDGs as self-delusional, showing an inability to imagine prosperity without economic growth [43].

These post-development theories mirror the critiques of the ideologies of progress and modernity in general, which have existed for some time in the more radical strands of environmental thought [44]. Such critiques identify a range of underlying cultural assumptions as necessary for societies to organise the destruction of the living world so effectively. One is anthropocentrism, where humans are considered the centre and purpose of all Life. Second is androcentrism, where patriarchal ways of being and organising are privileged so that aspects of being and knowing that are regarded as feminine are systematically marginalised. Third is the desacralisation of nature, where all Life is seen as merely material phenomena with no intrinsic worth, without mystery or sanctity, so it can be utilised or substituted whenever those with the power choose to do so [45, 46].

Perhaps the deepest flaw with Sustainable Development is the power of it as a positive myth to distract from irreconcilable priorities. That meant "existing theories of exploitation of poorer countries by imperial powers could be side-lined, along with critiques of capitalism at a time of hope after the Cold War" [7] (p. 432). That side-lining of radical critiques was convenient to capitalist institutions and the people and organisations they funded. Therefore, Sustainable Development became a systemic greenwash, undermining challenges to structural power that were posed by people

and organisations we might loosely describe as anti-imperialist. Therefore, the apparently apolitical quality of Sustainable Development was actually highly political in its consequences. By framing the generic planetary need as one of more and better management and technology, rather than more freedom from manipulative and oppressive systems, it justified the further extension of managerial power, both corporate and bureaucratic. This process parallels the contemporaneous societal extension of a belief in the benefits of more and better management and hierarchies across society, known as 'managerialism' [7]. With these deeper critiques in mind, it is possible to see the initial enthusiasm for the SDGs or Global Goals was an own goal for both humanity and nature.

3.3. Learning from the Covid-19 setbacks

The societal impacts of policy responses to the COVID-19 pandemic have further reduced progress towards the SDGs [47]. That has led some experts to argue it is time for proponents of the SDGs to admit failure and learn some hard lessons. For instance, when writing as the UN's special rapporteur on extreme poverty and human rights, Philip Alston noted in an official communication that "doubling down on an inadequate and increasingly out-of-date approach is especially problematic" [24] (p. 331). The lessons could be particularly damning for the ideology of Sustainable Development.

First, the damage to the SDGs from the Covid-19 policy responses demonstrates that there is little resilience in a model of human progress which relies on increasing formal economic activity and global trade. This particular disease did not even have a high Infection Fatality Rate [48], and yet the impacts on commerce and trade were significant enough to disrupt progress towards the goals. That is leading even mainstream experts to support the arguments that there must be a separation of both environmental and social objectives from economic growth [47].

The second lesson is more controversial, due to the polarisation that has been produced about the origins of the pandemic. That lesson is from realising that in the thirty years that Sustainable Development has helped to uphold a vision of the complementarity of economic development and environmental sustainability, massive economic changes have increased the likelihood of pandemics. That is for a number of reasons. Importantly, the further destruction of habitats and destabilisation of weather patterns has vastly increased the likelihood of zoonotic diseases spilling over into human populations [49]. Awareness of that situation likely leading to more frequent pandemics in future has meant some scientific institutions justify themselves in funding more risky virology research [50] in a sector where leaks from laboratory-acquired-infections are worryingly regular [51]. For instance, in one of the few systematic analyses of rarely published official data, it was found that in the US alone every week there were two possible release or loss events of pathogens that posed a threat to public health and safety, from the most secure 'Biosecurity Level 3' laboratories [52]. The rapid increase in fast long-distance travel has also meant that any such natural or unnatural infections are more likely to spread before dying out in their locations of origin.

The third lesson is even more controversial, due to the unhelpful demonisation that occurs in discussions about pandemic policy responses. It is that the responses to the pandemic in many countries were overly shaped by the managerialist ideology that leans towards the control of people and nature and is uncritical of technology. It was not ill health that significantly interfered with the schooling, commerce, incomes, non-Covid medical procedures, mental health, and government budgets, that have been summarised in various sobering reviews [20]. Rather, it was the policy choices of some governments to close schools, business, and borders, and then to discriminate within their populations on biomedical status, that influenced a range of negative societal outcomes [47]. It would require more study to explore

whether Sustainable Development ideology and institutions played a role in shaping the overly managerialist responses to the pandemic in some countries.

The unfortunate situation we are facing now is where a pandemic-fuelled backlash to managerialism, and even perceived authoritarianism, could disrupt commitment to social change and environmental conservation. With some members of the public suspicious of the claims from authorities that medical experts are unbiased and objective, establishment institutions have responded by "doubling down on the guise of disinterested objectivity," while most independent media commentators have not used a critique of capitalism and instead offer "paranoid modes of interpretation [that] depoliticize politics, rendering collective democratic action difficult or even impossible to conceive or enact" [53] (p. 143). One example is the attention of pandemic critics on the World Economic Forum's call for a 'Great Reset' in how societies are organised, rather than focusing on the broad system of corporate power and the managerialist ideology involved in shaping responses to the pandemic and other challenges [54].²

Even prior to the Covid-19 pandemic, some scholars concluded that not only is the concept of Sustainable Development unhelpful, but a non-capitalist concept of 'sustainability' is also now unhelpful for informing policy, due to the disruptive era we have entered, widely referred to as the Anthropocene. The argument is that this new era of unprecedented rates of biodiversity loss and climate mayhem, with rising impacts on human societies, means that the future is characterised by inevitably increasing loss and damage, of uncertain amounts and frequencies, depending on factors both within and beyond human influence [55]. Although such a view has been marginal in the professional fields of environment and development, it has been growing in recent years, as the reality of environmental mayhem becomes more apparent [56]. It typically involves an emotionally difficult realisation of the extent of loss and damage already underway and certain to occur in the coming years [39].

This review of the flaws of Sustainable Development and summary of the unlikelihood of any form of sustainability at this point would seem rather negative, if not without alternatives. Fortunately, there are myriad frameworks, each with different relevance for different audiences and purposes. In the latter half of this review on replacing Sustainable Development, I will explore a few alternative philosophies for organising human societies, before focusing on options for frameworks which could be relevant to the commitment of a nation state to its people and as a guide for future international cooperation.

4. Seeking alternatives for a future eco-social contract

² Far from being a break with current power, the Great Reset proposals are for a further extension of ecomodernist and managerialist approaches to societal challenges. A managerialist attitude from people in positions of power means they regard other people as needing or benefiting from more management of their lives. Therefore, it is not surprising that a backlash has grown against the ideas of a Great Reset, even if some criticisms are embellished with exaggerations and falsehoods. The political ramifications of both this agenda and the backlash to it are still to be seen, but neither bode well for generating widespread public support for changes to reduce poverty and environmental destruction. By providing fertile ground for polarising policy agendas, the original benefit of Sustainable Development in avoiding political dispute might finally collapse from the original sin of avoiding the problem of unequal power relations.

Now that we know 'Sustainable Development' is a failing promise from a false premise, how might we talk about the objectives of human societies in future? Once we set aside a narrowly modernist and economic expansionist perspective, a diversity of ideas from a multiplicity of different cultures on social change can be appreciated more fully. At times, these different approaches will have some resonance with each other. For illustration, here are two philosophies from very distant cultural histories. First, the Encyclical Laudato si of Pope Francis renounced development discourse by emphasising relationships – to nature, others, oneself and God – and our interdependence. It recommended degrowth in commercialised countries and advocated a cultural revolution to overcome both a technocratic paradigm and the human-centred conception of creation [43]. Second, in Bali, the ancient philosophy of Tri Hita Karana provides a basic framework for community organising. 'Hita' means happiness and 'Karana' means cause, so Tri Hita Karana means the three causes of the generation of happiness. The three causes identified by Tri Hita Karana are seen as the three key relationships in human life - with fellow humans, the environment, and the divine [57]. Both frameworks are explicitly integrating both spiritual and material aspects. Their 'trans-materialist' character means that the success of the framework is not dependent on whether they maintain the quantity of human lives and experiences on planet Earth. Rather, they are philosophies about the nature of reality and living in right relationship, without focusing on human longevity. Philosophies from indigenous cultures around the world share some similarities, as do the ways that many women of colour express their activism on the environment [58]. When international professionals working on environment or development adopt and promote culturally specific philosophies of social organisation, they risk introducing their modernist perspective of linear material progress. Therefore, when engaging with an international professional's rendering of such philosophies, it is worth exploring whether the original ideas do not include modernist ideas of material progress.

As the failure to progress towards Sustainable Development is perceived by many more people working on social organisation in the West, many terms are being offered as new aspirational concepts and frameworks. These include: ecological civilisation, transformation, transition, regeneration and thrivability [6]. The ideas that are promoted with all these terms are helpful in many ways and can encourage positive local action. Unfortunately, they are limited in two ways. First, they all suffer from a lack of evidence that they can be achieved at a large scale despite the planetary-wide trends in the opposite direction to their desired outcomes. Second, they maintain the modernist assumption of social organising being dependent on a linear process of material improvement towards a future beneficial state. Therefore, they may be of limited use as situations continue to become more unstable for human habitation.

Because visions of environmental stability now appear somewhat delusional, the concepts, policies and practices in the fields of climate adaptation, community resilience and disaster risk management may be more realistic, despite being less 'optimistic' [39]. In addition, such concepts are relevant to both national and international cooperation, as there are existing policies, agreements and intergovernmental institutions related to them. That is a crucial factor for our consideration of what philosophies and frameworks could be useful at scale in the years ahead. Although some critics argue that the state and therefore intergovernmental organisations are beneficiaries of the fossil fuel economy, and thus agents in the oppression of people and destruction of nature [11], the state is not likely to disappear in the near future. Moreover, it is a huge organiser of people and resources, so rethinking policy paradigms for the state and international cooperation is a necessary activity. Therefore, as UNRISD and the Green Economy Network have recognised, it could be useful to revitalise the idea of the role of the state in meeting the eco-social needs of citizens [9]. One argument is that if the state can more clearly demonstrate its commitment to delivering on an eco-social contract with the public, then we might find more commitment to support the state in its efforts dealing with social and environmental difficulties. Therefore, it is worth considering what an eco-social contract between the state and the citizen might involve in future.

When considering that, it is important to recognise that an eco-social contract does not need to be framed by Sustainable Development ideology or limited to the already failing and delusional SDGs. Indeed, the concepts from both the Vatican and Bali remind us that an eco-social contract between leaders and followers, governors and the governed, does not need to be based on a mythic belief that current crises can be overcome to achieve a situation of environmental stability.

The concept of a social contract, between an authority and those governed, is a way of finding agreement about the balance between rights and responsibilities of the individual, and the balance of personal freedoms and public requirements. It makes it explicit what an individual can expect from the authorities in return for contributing to their activities or having their personal freedoms curbed. Therefore, the concept of an eco-social contract needs to address such matters of political philosophy directly. Failure in relation to the SDGs is an indicator of the failure of the state in delivering on its existing social contract. The deep critiques of sustainable development, and development more generally, that we have summarised in this review go further than that. They suggest, whether or not there was intention, that most governments have been involved in supporting systems that manipulate and oppress their citizens so that they compete in the destruction and over-utilisation of the natural environment, without contributing sufficiently to the needs of the poorest in their society. That manipulation has produced ideologies and identities which mean people selfpolice in maintaining destructive systems [59]. Monetary systems have been key to this process, which all require state regulation and force to operate [38]. Therefore, the tragedy of poverty and climate chaos can both be regarded as resulting from that oppression. Such an analysis informs an environmentalism that seeks liberation from the systems of oppression that have been driving people into the insanity of destroying our natural life-support systems. With such an analysis, environmentalists could therefore strive for us all to be freer, to connect to, honour and sustain our environments.

This emphasis on freedom from manipulation and oppression, arises from scholars, activists and practitioners in the diverse fields that critique Sustainable Development which have been summarised in this review. Post-development, anti-imperialist, decolonisation, or deep ecology perspectives all advocate for communities to retain or restore the freedom to choose their own priorities for the use and allocation of resources. That is why they are suspicious of the effects of external interventions in communities deemed by 'experts' to need 'development', and instead they argue for a 'downwards accountability' to the intended beneficiaries of any such intervention (no matter how well intended it might have been) [43]. In addition, when one understands how economic expansionism is imposed onto societies in part through monetary systems and neo-colonialist economic relations, then arguments for 'degrowth' are actually about restoring freedom of choice to a population about whether and how they might wish to grow economic activities. Without the monetary growth imperative, a country might choose to expand its economic activity or not - it would become a conscious choice for political discussion [38].

If a concept of 'eco-freedom' were to become an organising principle for future cooperation on social and environmental issues, then further elaboration on what freedom constitutes and where most unfreedom exists would be important considerations. A central precept, however, would be a perspective on the human condition, and the matter of human-nature relationship. Although it is beyond the scope of this review to explore relevant political theory, an 'eco-libertarian' perspective would likely contend that people who are not manipulated and oppressed, but connected to feedback and dialogue, will naturally seek to pursue personal preferences which do not undermine the basic conditions of life. Currently this perspective appears marginal within mainstream environmentalism. Instead, the dominance of Sustainable Development ideology involves framing the environmental problem as one of side effects and accidents that need our better management and control, or even as an opportunity for more consumer self-expression and heroism.

Such a framing requires ignoring the evidence that not only is that view incorrect, but that the view itself is a result of cultural manipulation [59]. Worryingly, to not recognise ecological destruction as arising from manipulation and oppression could mean implicitly assuming that it is human nature that has produced the damage. Therefore, as hope of success through reform fades, people might regard human nature as bad, stupid, suicidal or insane. All of those assumptions are misanthropic. Indeed, some people who realise everything is falling apart, and that the environment has been destroyed, can in their grief and anger, arrive at a form of misanthropy. They can adopt a disdainful attitude towards our own species. Such a perspective could fuel commitment to aggressive and authoritarian policies in the future [60].

Whereas all these ideas could be given more airtime in international cooperation with the retreat of Sustainable Development ideology, there is a clear need for frameworks that will help governments and intergovernmental organisations to refocus in a more disrupted world. Therefore, in concluding the review, I summarise one potential candidate for such a framework to be adopted and adapted for that purpose.

4.1. The potential of disaster risk management as an overarching framework

At the beginning of this review, I discussed the way more social commentators are characterising the current period as one of multiple, interconnected and ongoing crises. I regard the concept of crisis, however extensive or permanent, to be of limited use to us individually and collectively in making sense of the planetary situation and what to do about it. Whereas a crisis is a time of intense difficulty or danger, what is happening today is more than difficulties and dangers. However, a credible case can be made that we have entered a new era of ongoing damage to existing resources, arrangements and ideas about life [61]. Whereas an implicit suggestion of agency and change means that the concept of crisis may be attractive, that can be misleading about the nature of the predicament we are in. The recognition of a crisis can be used to imply people and societies will overcome the difficulties through better policy and management, to achieve a new stable and favourable state. Unfortunately that may now be beyond the realistic expectations of humanity [39].

Although some journalists are using the term 'permacrisis' when claiming that societies are going to be permanently disrupted, the term crisis still involves that sense of transience and agency [62]. Unfortunately, *disaster* more accurately describes what millions of people are already experiencing in many parts of the world. Even worse, disaster is what far more people will face over the coming years, in an ongoing and increasing way [39, 61]. That is a harrowing realisation, and therefore not an attractive one for many analysts and commentators. However, it is now a credible way of making sense of our predicament. To do so is not fatalist, as 'disaster' can be a useful concept for informing action, as it relates to existing institutions, policies and practices, which could be usefully drawn upon to reduce harm - and the conditions for harm - over the coming years.

A disaster is a serious difficulty that occurs over a short or long period of time, causing widespread human, material, economic or environmental loss which exceeds the ability of a community or society to cope from its own resources [63]. Whether natural, manmade, or a mixture of both, a disaster typically involves a geographically specific event, such as a hurricane or oil spill. Because richer countries have the financial power to draw upon the resources of regions distant to their own locations, they can cope more easily with local disturbances. For a lower income country, damage to harvests, for instance, has a more significant impact on food availability than within richer economies. That is one reason

why lower income locations currently suffer the greatest impact when a disaster hits. With relatively less purchasing power, they rely on the humanitarian support of other regions and countries to help them survive and then recover [61].

There is a large group of organisations and related skills for reducing the risks of disaster, responding to them, and recovering from them. Disaster Risk Management (DRM) is the term given to a systematic approach to identifying, assessing and reducing risks of all kinds associated with hazards and human activities. Done properly, DRM "involve[s] fundamental changes in the attributes of a system, including value systems; regulatory, legislative, or bureaucratic regimes; financial institutions; and technological or biophysical systems" [64] (p. 437). A key aim of DRM is to try to reduce risks, so that disasters are less likely and less damaging. However, there remains a widespread assumption of there being the probability of support external to any disaster zone. Recent evidence on the impacts of climate and ecological change demonstrates that for both financially richer and poorer societies, that ability to obtain external support is beginning to be compromised [61]. That is in addition to the social, economic and political ramifications of such weakened capacity, which can reduce government commitment to internationalism and humanitarian support.

The increasing frequency, type, scale and concurrence of disasters, as well the declining capacity for external support, means it can be said that we are entering an era of metadisaster. I offer this term 'metadisaster' to describe the increasingly irreparable loss and damage occurring over long periods of time and affecting most parts of the world, albeit differently, including locations that were previously the sources of external support during more geographically-limited disasters. Within the DRM field, this term could invite more attention to the need for greater self-reliant resilience, as external support can no longer be assumed. For policy making more generally, it could support a paradigm shift away from the limitations of assuming material progress. Although suggesting new terms can seem superfluous in a situation as difficult and urgent as the one I describe in this review, it is clear that professionals need concepts to help them bridge their activities with the changing realities. Although the term 'permacrisis' might feel less challenging than 'metadisaster,' the latter provides a more relevant bridge to the existing constellation of relevant organisations, as I will briefly explain.

The concept and practice of Disaster Risk Management (DRM) could become an organising principle for all policy making, including all key areas like economics, education, health and defence. In addition, International Disaster Risk Management could become the overarching paradigm for international cooperation, replacing Sustainable Development. As an organising principle, it does not offer a positive mood, but people need policy makers to be dealing unflinchingly with realities, rather than choosing terms that keep their spirits up. It might also inspire some humility amongst donors and international bureaucrats, where they recognise that positive visions are locally emergent and culturally specific. To switch in this way would mean a reversal of recent attempts by people and organisations working in DRM to justify their efforts in relation to the achievement of the SDGs [61]. Whereas it is true that the SDGs would not be achieved without successful attention to reducing disaster risk, this review has shown it is also true that the SDGs will not be achieved anyway, and they promote a policy paradigm that actually increases disaster risk, through increased ecological overshoot [56] and local vulnerabilities [36]. Unlike the term Sustainable Development, the term 'metadisaster' may be useful in bringing attention to those socio-political-economic systems that have led to the unfolding situation of increasing disasters around the world. Disasters would no longer be regarded as only resulting from unfortunate separate events, whether natural or human-influenced, but as an increasingly pervasive aspect of modern life that is caused by the systems maintaining that same modern way-of-life.

4.2. Self-reliant resilience and adaptation beyond sustainable development

Within the field of DRM, a key aim is enhancing the resilience of communities and societies. One widely-accepted definition of resilience comes from the UN: "The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions" [65] (p. 24). By recognising we are in an era of metadisaster, our attention is brought to the problem where the efforts at one location to develop resilience could increase damage and vulnerability elsewhere. For instance, huge resources that would likely be drawn from other countries would be needed to protect low lying coastal cities from increasing storm damage. Therefore, we return to the need for more *self-reliant resilience* to become the aim for high income countries, involving a rapid consumption and energy descent. Policy ideas associated with 'degrowth' should therefore become essential to the future of DRM in advanced economies. It is therefore unfortunate that degrowth and associated policies for relocalisation of economies are almost absent from scholarship on DRM [66], has been absent from the key summits of the DRM policy community and from the mandate of UNDRR, which is the specialist UN organisation for this topic [61]. The significant presence and likely influence of commercial interests, in fields like construction, within the DRM field and related policy-making circles could become a concern for how well the DRM field can play a useful catalytic role in a post-sustainability policy agenda.

If the DRM policy community upgrades its approach to incorporate relevant policies for the degrowth and relocalisation of high-income countries, in pursuit of self-reliant resilience, then they will be better able to help professionals and agencies working on other policy areas to respond to the planetary predicament. As part of that process of a rapid refocusing of all policy making around the world, in future the UNDRR could become a catalyst of risk reduction and self-reliant resilience approaches from all areas of international cooperation, both with and beyond the UN system. If it does that, then it might help more people adapt to some impacts of climate change.

Research on adaptation to climate change has identified the first challenge is simply not to make matters worse with inappropriate adaptation efforts that are overly influenced by commercial interests. For instance, many climate adaptation projects have been assessed by independent researchers as being money-grabbing infrastructure or agricultural commercialisation projects that further marginalised vulnerable communities [67]. Even if the adaptation efforts are useful for a specific community, like new sea defences, they might still contribute to the wider problem. For instance, if they require huge inputs of raw materials and vast amounts of fossil fuel consumption, while enabling a high-income country to continue its resource consumption and pollution levels, and necessitating further sea defences in years to come, then at some point it needs to be asked if this is counter-productive and what other options there might be. That is the conversation which both the concepts of 'transformative adaptation' (where adaptive responses are more environmentally appropriate [68]) and 'deep adaptation' (where adaptive responses are allowing the collapse of industrial consumer societies [39]) have been encouraging, albeit on the margins of mainstream policy making.

The ideology of Sustainable Development, and its alignment with global capitalism, means that in the latest UN reports on Climate Adaptation [69] and Disaster Risk Reduction [61] there was nothing substantial about addressing the vulnerabilities that arise from economic globalisation. Such globalisation requires the smooth operation of complex value chains that are exposed along their length to the direct and indirect impacts of climate chaos, and that makes communities increasingly dependent on international processes that they have no control over. Freed from that ideology, efforts to remove impediments to, and further support, local resilience to both local and external shocks to societies and economies could be better pursued. That includes the overriding priority for upscaling locally-led adaptation to climate

change. That is climate adaptation in which community-based organisations, local governments, and networks of local businesses are decision-makers in the interventions that affect them. For a national or international organisation to support locally-led adaptation begins with seeking to remove the impediments for local leadership, and not imposing initiatives on them. Fortunately, principles for locally-led adaptation have already attracted support from over 70 governments as well as key international organisations [70]. It is worth noting that the emphasis on locally-led approaches echoes the views of the range of critics of Sustainable Development and the idea, mentioned earlier, that eco-freedom could be an ethos shaping policies and initiatives. But without a fundamental break with the ideology and power structures of economic globalisation, it is unlikely that international organisations will be able to reduce barriers to locally-led adaptation, let alone enable it in a systematic way.

4.3. Rediscovering relevance post-sustainability

Ditching Sustainable Development as a framework does not mean giving up. Instead, it could allow professionals in international cooperation to find new relevance to people living in an increasingly uncertain and risky world. There are many options for new frameworks. What is key is that they do not repackage existing ways of working in service of existing economic power relations. Making Disaster Risk Management (DRM) a central focus of the transformative and Deep Adaptation of people and communities to this tragic era of metadisaster might provide a more realistic framing for future policy making. Although that might seem uninspiring to policy makers, they will need to become more able to experience their own difficult emotions while working on psychologically challenging situations and scenarios. That will help them to be present to changing circumstances, and find emergent and provisional answers that are responsive to local needs. The sooner more professionals make this shift, the greater chance they might do less harm and enable more good.

Where does this shift leave the organisations that use the term Sustainable Development or sustainability. For instance, this journal? I recommend ditching the term Sustainable Development altogether, and reimaging what 'sustainability' could mean. A critical approach to sustainability could explore what we wish to sustain now that we recognise what is lost and will be lost. It could provide space for ideas and approaches that are not limited by the ideologies that produced Sustainable Development and the corporate versions of sustainability. When modernist and anthropocentric assumptions do not dominate research, topics like how to sustain the conditions for Life itself, or how to sustain compassionate relations with all Life despite increasing disturbances, could be better explored. Although a new term like 'endurability' might be preferable to describe personal and collective capabilities that retain only what is important through increasing loss and damage, a more realistic use of the term 'sustainability' could hold such explorations. This means that contributions to the discussion in this journal could be more widely sourced, including indigenous wisdoms, as recommended in the 2022 *Global Assessment Report* of the UNDRR [61]. Although this review has been transdisciplinary, future contributions to the topic of social and environmental change could draw on anthropology, human security, international relations and political science, amongst other subject disciplines. Systematic reviews of the scholarship that critiques Sustainable Development and alternative frameworks would also be useful.

5. Conclusion

Seventeen internationally agreed Sustainable Development Goals (SDGs) provided the opportunity to test whether the framework of Sustainable Development and the economic system and ideology it is based upon can deliver 'progress' according to its own parameters. Halfway into the period allocated for those goals, official analysis shows that there is no significant progress, much regress, and the goals cannot be met. A transdisciplinary review of criticisms of

Sustainable Development reveals that this failure was anticipated, due to the ideological flaws of both the concept and the economic systems it aligns with. Therefore, the elevated status of this concept in both national and international policy making over the past 30 years has shaped worldviews and priorities with damaging results, by providing support for continued exploitation of people and the planet. The Covid-19 pandemic has further revealed the limitations and fragility of the SDG framework and the systems it aligns with.

Therefore, it is time for replacing Sustainable Development as the overarching framework for international cooperation with alternative frameworks, better suited for our new era of increasing crises and disasters. A useful future framework would align with an eco-social contract between citizen and state, and engage existing organisations and capabilities that remain relevant to an increasingly disrupted world. Therefore, an upgraded concept and practice of international Disaster Risk Management (DRM) could become the overarching paradigm for international cooperation. Given the need for a rapid consumption and energy descent in high income countries, ideas associated with 'degrowth' should infuse an upgraded DRM. In addition, DRM can be improved from recognising we are entering an era of 'metadisaster' due to climate chaos, which may reduce the future availability of external support to badly affected communities. Therefore, more attention to self-reliant resilience and locally–led adaptation will be key.

More systematic reviews of critiques of Sustainable Development and related ideologies, as well as the myriad alternatives, will help future deliberation on the options for conceptual frameworks at this difficult time of disappointment and reassessment. The result could enable professionals in international cooperation to find new relevance through a more realistic framing for their work.

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Conflicts of Interest

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References

- 1. United Nations. World Moving Backwards on Sustainable Development Goals, Secretary-General Tells Economic and Social Council, Deploring 'Fundamental Lack of Solidarity'. Press release, 2022. Available online: www.un.org/press/en/2022/sgsm21196.doc.htm (accessed on 12 May 2022).
- 2. Augsburg, T. Becoming transdisciplinary: The emergence of the transdisciplinary individual. *World Futures* **2014**, *70*, 233-247. https://doi.org/10.1080/02604027.2014.934639
- 3. Castro, C.J. Sustainable Development: Mainstream and Critical Perspectives. *Organ. Environ.* **2004**, *17*, 195-225. https://doi.org/10.1177%2F1086026604264910

- 4. Homer-Dixon, T.; Renn, O.; Rockström, J.; Donges, J.F.; Janzwood, S. A Call for An International Research Program on the Risk of a Global Polycrisis. *SSRN* **2021**. http://dx.doi.org/10.2139/ssrn.4058592
- 5. Borges de Castro, R. Anticipatory democracy: Harnessing the power of people and strategic foresight. European Policy Centre, 2021. Available online: https://epc.eu/en/Publications/Anticipatory-democracy-Harnessing-the-power-of-people-and-strategic-f~3ed3fc (accessed on 12 May 2022).
- 6. Künkel, P.; Ragnarsdottir, K.V., Eds. *Transformation Literacy: Pathways to Regenerative Civilizations*. Springer: Cham, Switzerland, 2022.
- 7. Bendell, J.; Sutherland, N.; Little, R. Beyond unsustainable leadership: Critical social theory for sustainable leadership. *Sustain. Account. Manag. Policy J.* **2017**, *8*, 418-444. https://doi.org/10.1108/SAMPJ-08-2016-0048
- 8. Banerjee S.B. Who sustains whose development? Sustainable development and the reinvention of nature. *Organ Stud.* **2003**, *24*, 143-180. https://doi.org/10.1177/0170840603024001341
- 9. UNRISD (UN Research Institute for Social Development). Global Research and Action Network for a New Eco-Social Contract. 2021. Available online:

http://unrisd01.bsky.net/UNRISD/website/projects.nsf/(httpProjects)/A7FF7E884687170080258764002ED0EC?OpenDocument (accessed on 12 May 2022).

10. United Nations. Sustainable Development Goals. Available online:

https://www.un.org/sustainabledevelopment/sustainable-development-goals/ (accessed on 12 May 2022).

- 11. Eisenmenger, N.; Pichler, M.; Krenmayr, N.; Noll, D.; Plank, B.; Schalmann, E.; Wandl, M-T.; Gingrich, S. The Sustainable Development Goals prioritize economic growth over sustainable resource use: a critical reflection on the SDGs from a socio-ecological perspective. *Sustain Sci.* **2020**, *15*, 1101-1110. https://doi.org/10.1007/s11625-020-00813-x
- 12. World Commission on Environment and Development. *Our Common Future*. Oxford University Press: New York, NY, USA, 1987.
- 13. Perez-Carmona, A. Growth: A Discussion of the Margins of Economic and Ecological Thought. In *Transgovernance: Advancing Sustainability Governance*, Meuleman, L., Ed.; Springer: Heidelberg, Germany, 2013, pp. 83-162.
- 14. Vandemoortele, J. From simple-minded MDGs to muddle-headed SDGs. *Dev. Stud. Res.* **2018**, *5*, 83-89. https://doi.org/10.1080/21665095.2018.1479647
- 15. Hickel, J. The true extent of global poverty and hunger: questioning the good news narrative of the Millennium Development Goals. *Third World Q.* **2016**, *37*, 749-767. https://doi.org/10.1080/01436597.2015.1109439
- 16. Fukuda-Parr, S.; Greenstein, J.; Stewart, D. How should MDG Success or Failure be Judged: Faster Progress or Achieving the Targets?. *World Dev.* **2012**, *41*, 19-30. https://doi.org/10.1016/j.worlddev.2012.06.014
- 17. United Nations. Millennium Declaration. Press Release, 2000. Available online:

https://www.un.org/en/development/devagenda/millennium.shtml (accessed on 12 May 2022).

- 18. FAO, IFAD and WFP. The State of Food Insecurity in the World 2015. Meeting the 2015 international hunger targets: taking stock of uneven progress. FAO: Rome, Italy, 2015.
- 19. FAO, IFAD, UNICEF, WFP and WHO. The State of Food Security and Nutrition in the World 2021: Transforming food systems for food security, improved nutrition and affordable healthy diets for all. FAO: Rome, Italy, 2021.

https://doi.org/10.4060/cb4474en

- 20. United Nations. The Sustainable Development Goals Report 2021. Available online: https://unstats.un.org/sdgs/report/2021/ (accessed on 12 May 2022).
- 21. United Nations. The Sustainable Development Goals Report 2020. Available online:

https://digitallibrary.un.org/record/3887571/files/The-SustainableDevelopmentGoalsReport2020.pdf (accessed on 12 May 2022).

- 22. United Nations. Sustainable Development Goals Progress Chart. 2021. Available online:
- https://unstats.un.org/sdgs/report/2021/progress-chart/ (accessed on 12 May 2022).
- 22b. United Nations. Progress towards the Sustainable Development Goals: Report of the Secretary-General. 2021. Available online: https://unstats.un.org/sdgs/files/report/2021/secretary-general-sdg-report-2021-EN.pdf (accessed

on 12 May 2022).

- 23. Grochová, L.I.; Litzman, M. The efficiency in meeting measurable sustainable development goals. Int. J. Sustain.
- Dev. World Ecol. 2021, 28, 709-719. https://doi.org/10.1080/13504509.2021.1882606
- 24. Nature. Time to revise the Sustainable Development Goals. *Nature* **2020**, *583*, 331-332.
- https://doi.org/10.1038/d41586-020-02002-3
- 25. Dyllick, T.; Hockerts, K. Beyond the business case for corporate sustainability. Bus. Strategy Environ. 2002, 11, 130-
- 141. https://doi.org/10.1002/bse.323
- 26. Menton, M.; Larrea, C., Latorre, S.; Martinez-Alier, J.; Peck, M.; Temper, L.; Walter, M. Environmental justice and the SDGs: from synergies to gaps and contradictions. *Sustain Sci.* **2020**, *15*, 1621-1636. https://doi.org/10.1007/s11625-020-00789-8
- 27. Brown, J.H. The Oxymoron of Sustainable Development. *BioScience* **2015**, *65*, 1027-1029.
- https://doi.org/10.1093/biosci/biv117
- 28. Steffen, W.; Richardson, K.; Rockström, J.; Cornell, S.E.; Fetzer, I.; Bennett, E.M.; Biggs, R.; Carpenter, S.R.; de Vries,
- W.; de Wit, C.A.; Folke, C.; Gerten, D.; Heinke, J.; Mace, G.M.; Persson, L.M.; Ramanathan, V.; Reyers, B.; Sörlin, S.
- Planetary boundaries: Guiding human development on a changing planet. Science 2015, 347, 1259855.

https://doi.org/10.1126/science.1259855

- 29. Blühdorn, I. Post-capitalism, post-growth, post-consumerism? Eco-political hopes beyond sustainability. *Global Discourse* **2017**, 7, 42-61. https://doi.org/10.1080/23269995.2017.1300415
- 30. Hickel, J. The contradiction of the sustainable development goals: Growth versus ecology on a finite planet.
- Sustain. Dev. 2019, 27, 873-884. https://doi.org/10.1002/SD.1947
- 31. Hickel, J.; Kallis, G. Is Green Growth Possible?. New Polit Econ. 2020, 25, 469-486.
- https://doi.org/10.1080/13563467.2019.1598964
- 32. Vadén, T.; Lähde, V.; Majava, A.; Järvensivu, P.; Toivanen, T.; Hakala, E.; Eronen, J.T. Decoupling for ecological sustainability: A categorization and review of research literature. *Environmental Science & Policy* **2020**, *112*, 236-244. https://doi.org/10.1016/j.envsci.2020.06.016
- 33. Hickel, J. What does degrowth mean? A few points of clarification. *Globalizations* **2021**, *18*, 1105-1111.

https://doi.org/10.1080/14747731.2020.1812222

- 34. IEA. *The Role of Critical Minerals in Clean Energy Transitions*. IEA: Paris, France, 2021. Available online:
- https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions (accessed on 12 May 2022).
- 35. Zografos, C.; Robbins, P. Green Sacrifice Zones, or Why a Green New Deal Cannot Ignore the Cost Shifts of Just Transitions. *One Earth* **2020**, *3*, 543-546. https://doi.org/10.1016/j.oneear.2020.10.012
- 36. Gahman, L.; Thongs, G.; Greenidge, A. Disaster, Debt, and 'Underdevelopment': The Cunning of Colonial-
- Capitalism in the Caribbean. *Development* **2021**, *64*, 112-118. https://doi.org/10.1057/s41301-021-00282-4
- 37. Crist, E. The Reaches of Freedom: A Response to An Ecomodernist Manifesto. *Environmental Humanities* **2016**, 7, 245-254. https://doi.org/10.1215/22011919-3616452
- 38. Arnsperger, C.; Bendell, J.; Slater, M. Monetary adaptation to planetary emergency: Addressing the monetary growth imperative. *Institute for Leadership and Sustainability (IFLAS) Occasional Papers* **2021**, *8*, 1-39.
- 39. Bendell, J.; Read, R., Eds. Deep Adaptation: Navigating the realities of climate chaos. Wiley: London, UK. 2021.

- 40. Moore, H.L. Global Prosperity and Sustainable Development Goals. *J. Int. Dev.* **2015**, *27*, 801-815. https://doi.org/10.1002/jid.3114
- 41. Sachs, W., Eds. The Development Dictionary: A Guide to Knowledge as Power. Zed Books: London, 1992.
- 42. Rahnema, M.; Bawtree, V., Eds. The Post-Development Reader. Zed Books: London, UK, 1997.
- 43. Ziai, A. Post-development 25 years after *The Development Dictionary*. *Third World Q.* **2017**, *38*, 2547-2558. https://doi.org/10.1080/01436597.2017.1383853
- 44. Schumacher, E.F. Small Is Beautiful: A Study of Economics As If People Mattered. Blond & Briggs: London, UK, 1973.
- 45. Machado de Oliveira, V. *Hospicing Modernity: Facing Humanity's Wrongs and Implications for Social Activism*. North Atlantic Books: Berekely, CA, USA. 2021.
- 46. Bendell, J.; Carr, K. Group facilitation on societal disruption and collapse: insights from Deep Adaptation. *Sustainability* **2021**, *13*, 6280. https://doi.org/10.3390/su13116280
- 47. Naidoo, R.; Fisher, B. Reset Sustainable Development Goals for a pandemic world. *Nature* **2020**, *583*, 198-201. https://doi.org/10.1038/d41586-020-01999-x
- 48. Ioannidis, J.P.A. Reconciling estimates of global spread and infection fatality rates of COVID-19: An overview of systematic evaluations. *Eur. J. Clin. Investig.* **2021**, *51*, e13554. https://doi.org/10.1111/eci.13554
- 49. Carlson, C.J.; Albery, G.F.; Merow, C.; Trisos, C.H.; Zipfel, C.M.; Eskew, E.A.; Olival, K.J.; Ross, N.; Bansal, S. Climate change increases cross-species viral transmission risk. *Nature* **2022**. https://doi.org/10.1038/s41586-022-04788-w
- 50. Morens, D.M.; Fauci, A.S. Emerging Pandemic Diseases: How We Got to COVID-19. *Cell* **2020**, *182*, 1077-1092. https://doi.org/10.1016/j.cell.2020.08.021 (erratum in: *Cell* **2020**, *183*, 837).
- 51. Petts, D.; Wren, M.; Nation, B.R.; Guthrie, G.; Kyle, B.; Peters, L., Mortlock, S., Clarke, S., Burt, C. A Short History of Occupational Disease: 1. Laboratory-Acquired Infections. *Ulster Med J.* **2021**. *90*, 28-31. (erratum in: *Ulster Med J.* **2021**, *90*, 126).
- 52. Henkel, R.D.; Miller, T.; Weyant, R.S. Monitoring Select Agent Theft, Loss and Release Reports in the United States-2004-2010. *Appl Biosaf.* **2012**, *17*, 171-180. http://doi.org/10.1177/153567601201700402
- 53. Saltman, K.J. Education, New Technology, and the Paranoid Politics of Disinterested Objectivity. *symploke* **2021**, 29, 143-162. https://doi.org/10.1353/sym.2021.0008
- 54. Roth, S. The Great Reset. Restratification for lives, livelihoods, and the planet. *Technol Forecast Soc Change* **2021**, 166, 120636. https://doi.org/10.1016/j.techfore.2021.120636
- 55. Benson, M.H.; Craig, R.K. The end of sustainability. *Soc Nat Resour.* **2014**, *27*, 777-782. https://doi.org/10.1080/08941920.2014.901467
- 56. Servigne, P.; Stevens, R.; Chapelle, G. Another end of the world is possible. Polity Press: Cambridge, UK, 2021.
- 57. Roth, D.; Sedana, G. Reframing Tri Hita Karana: From 'Balinese Culture' to Politics. *Asia Pacific J. Anthropol.* **2015**, 16, 157-175. https://doi.org/10.1080/14442213.2014.994674
- 58. Vaitkute, S. An environmentalism from and for the majority. 2021. Available online:
- https://jembendell.com/2021/03/19/an-environmentalism-from-and-for-the-majority-insights-from-women-in-deepadaptation/ (accessed on 12 May 2022).
- 59. Bendell, J. Deeper implications of societal collapse: Co-liberation from the ideology of E-s-c-a-p-e. In *Deep Adaptation: Navigating the realities of climate chaos*, Bendell, J., Read, R., Eds.; Wiley: London, UK, 2021, 123-154.
- 60. Bendell, J. Psychological insights on discussing societal disruption and collapse. *Ata: Journal of Psychotherapy Aotearoa New Zealand* **2021**, *25*, 45-63. https://doi.org/10.9791/ajpanz.2021.05

- 61. United Nations Office for Disaster Risk Reduction. *Global Assessment Report on Disaster Risk Reduction* 2022: Our World at Risk: Transforming Governance for a Resilient Future. UNDRR: Geneva, Switzerland, 2022.
- 62. Glancy, J. Will the permacrisis ever end? The Sunday Times, 2022. Available online: https://www.thetimes.co.uk/article/permacrisis-ever-end-covid-pandemic-brexit-ukraine-crisis-latest-fpznr05qk (accessed on 12 May 2022).
- 63. UNISDR. Living With Risk: A Global Review of Disaster Reduction Initiatives. 2004. Available online: https://www.un.org/press/en/2004/iha922.doc.htm (accessed on 12 May 2022).
- 64. O'Brien, K.; Pelling, M.; Patwardhan, A.; Hallegatte, S.; Maskrey, A.; Oki, T.; Oswald-Spring, U.; Wilbanks, T.; Yanda, P.Z. Toward a sustainable and resilient future. In *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation: Special Report of the Intergovernmental Panel on Climate Change*, Field, C.B., Barros, V., Stocker, T.F., Dahe, Q., Dokken, D.J., Ebi, K.L., Mastrandrea, M.D., Mach, K.J., Pattner, G-K., Allen, S.K., Tignor, M., Midgley, P.M., Eds.; Cambridge University Press: New York, NY, USA, 2012, pp. 437-486.
- 65. UNISDR (United Nations International Strategy for Disaster Reduction). 2009 UNISDR terminology on disaster risk reduction. UNISDR: Geneva, Switzerland, 2009. Available online: https://www.undrr.org/publication/2009-unisdr-terminology-disaster-risk-reduction (accessed on 12 May 2022).
- 66. Ajulo, O.M.; von Meding, J.; Tang, P. Relocalisation for degrowth and disaster risk reduction. *Disaster Prev. Manag.* **2020**, 29, 877-891. https://doi.org/10.1108/DPM-01-2020-0012
- 67. Schipper, E.L.F. Maladaptation: When Adaptation to Climate Change Goes Very Wrong. *One Earth* **2020**, *3*, 409-414. https://doi.org/10.1016/j.oneear.2020.09.014
- 68. Shi, L.; Moser, S. Transformative climate adaptation in the United States: Trends and prospects. *Science* **2021**, 372, eabc8054. https://doi.org/10.1126/science.abc8054
- 69. IPCC. Climate Change 2022: Impacts, Adaptation, and Vulnerability, Pörtner, H.-O., Roberts, D.C., Tignor, M., Poloczanska, E.S., Mintenbeck, K., Alegría, A., Craig, M., Langsdorf, S., Löschke, S., Möller, V., Okem, A., Rama, B., Eds. Cambridge University Press: Cambridge, UK, 2022.
- 70. IIED. Principles for locally-led adaptation. International Institute for Environment and Development. 2021. Available online: https://www.iied.org/principles-for-locally-led-adaptation (accessed on 12 May 2022).