

Chapter Title: THE LIMITS OF CAPITALIST SOLUTIONS TO THE CLIMATE CRISIS

Chapter Author(s): Dorothy Grace Guerrero

Book Title: The Climate Crisis

Book Subtitle: South African and Global Democratic Eco-Socialist Alternatives

Book Editor(s): Vishwas Satgar

Published by: Wits University Press. (2018)

Stable URL: <https://www.jstor.org/stable/10.18772/22018020541.7>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



This book is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License (CC BY-NC-ND 4.0). To view a copy of this license, visit <https://creativecommons.org/licenses/by-nc-nd/4.0/>.



JSTOR

Wits University Press is collaborating with JSTOR to digitize, preserve and extend access to *The Climate Crisis*

PART
ONE

THE CLIMATE CRISIS AS CAPITALIST CRISIS

THE LIMITS OF CAPITALIST SOLUTIONS TO THE CLIMATE CRISIS

Dorothy Grace Guerrero

There is an increasing acceptance that capitalism is directly connected with climate change and that the apocalyptic consequences of it are already causing deaths, diseases, dislocations and destruction to ecology and people's lives, which will continue as there is no decisive measure being taken to address the climate crisis. Society's relationship with nature under extractivist capitalism follows the principles of ownership and rights of access, modes of production and consumption, the need for permanent added-value, as well as class and gender relations, all of which are associated with profit maximisation and exploitation of people and nature. It is important to emphasise that the privilege to profit, overconsume and overdiscard is reserved for a small portion of society.

The extraction of fossil fuels (oil, coal, natural gas), which is the biggest cause of climate change, enables large-scale production of goods, transportation systems and efficient distribution networks of products and services. Climate change is therefore not just an environmental issue; it is both a social and an ecological crisis. Even modern wars in the last three decades, as exemplified by the invasion of Iraq, were at least partially about access to and control of the production and distribution of oil. As the impacts of climate change intensify, free-market ideology, big business and financial actors increasingly shape the strategies and priorities in addressing it. At the same time, resistance to neoliberalism, efforts to reclaim the commons (land, water and forests, knowledge, etc.),

struggles against 'development aggression' by states and corporations and the promotion of alternative models of development are being globalised.

The United Nations Framework Convention on Climate Change (UNFCCC), established in 1992, is the principal and only universal intergovernmental body to tackle climate change. Its annual high-profile Conference of the Parties (COP) is attended by 196 member states. Despite the inclusion of climate change in policies after the historic 1992 Earth Summit in Rio de Janeiro that gave birth to the UNFCCC, and after more than two decades of meetings, the total global anthropogenic greenhouse gas (GHG) emissions, which cause climate change, have continued to increase.

The scientific literature is clear – an overwhelming majority of climate scientists, over ninety-seven per cent, acknowledge that humans are the primary cause of climate change (Romm 2016). However, despite the most updated and sophisticated information and analyses available to governments now, the climate negotiations are not generating appropriate solutions that match the scale of the crisis. This is because the countries that are most affected by climate change, but have contributed the least to it, have very little say to influence climate politics due to the asymmetry of political and negotiating power between the global North and the global South. At the same time, parties to the UNFCCC do not acknowledge that the capitalist economic model they espouse and rely on is based on plunder, waste and pollution. There is very little understanding of structural conditions since climate change is not seen as a class and gender issue despite the reality that the poor, especially women, who are already feeling its brunt, are left to rely on their resilience while corporations and industries are continuing their usual destructive operations and even making profits in delaying or burying real solutions.

Given this context, it is deeply problematic that Donald Trump, the president of the richest, most powerful and influential country, as well as the biggest historical and current emitter of GHG in the world, is a climate change denialist. Trump's symbolic withdrawal from the substantially weak 2015 Paris Agreement in 2017 was expected, as it was included in his main electoral campaign promises. His appointment of fellow climate change deniers to the Environmental Protection Agency and other related offices, his executive orders reversing previous policies to allow fossil fuel giants to go full-steam ahead, and his rejection of the principle that rich countries should help developing countries cope with GHG emissions by giving them subsidies are major stumbling blocks for future climate initiatives. These moves, together with his

unilateralist stance on global trade and global security, show that the United States as the linchpin of the world order is breaking down the world order.

Given the present reality of global capitalism, it is indeed a huge challenge, even seemingly utopian, to call for a revolutionary strategy of 'system change, not climate change'. However, given the challenges, stopping climate change leaves the world with no other option. It is also urgent, as avoiding climate change-related disaster will be even more difficult, more costly or even impossible if the global population does not act decisively now.

A growing number of social, environmental and climate justice networks, as well as progressive researchers, now advocate systemic change as the only way to address climate change. They propose:

- A drastic emissions reduction in historically and highly polluting countries through legally binding commitments and without passing the responsibilities to poor countries through carbon trade or other offsetting mechanisms. Emerging economies should already be more responsible now as their production and wealth increases and the rest of the world will follow based on their capacities and development needs.
- Leaving eighty per cent of currently known fossil fuel reserves under the ground and developing new socially transformative and just systems of energy production and consumption.
- Starting a shift in society's relationship with nature through building low-carbon, post-capitalist and gender-fair societies. These steps require radical transformation in the access to and management of resources and relations of production and consumption.

OUR WARMING PLANET: WHERE WE ARE NOW

The last several years have seen all climate-related records being smashed. Since average global temperature record making started in 1850, the global mean temperatures reached 1°C above pre-industrial levels for the first time in 2015 (Met Office 2016). The global levels of atmospheric carbon dioxide (CO₂) breached the 400 parts per million (ppm) average in March 2015 (NOAA 2015), substantially exceeding the generally recognised safe level of 350 ppm. Two years later, scientists at the Mauna Loa Observatory reported that CO₂ passed the 410 ppm mark in April 2017 (Geiling 2017) – something never experienced before.

The Washington-based National Academies of Sciences, Engineering and Medicine report concludes that human-caused global warming is already altering patterns of some extreme weather events (NAS 2016). Global annual GHG emissions grew to an average of one gigaton (Gt) of carbon dioxide equivalent (CO₂e) per year from 2000–2010 as compared with 0.4 Gt per year from 1970–2000 (IPCC 2014: 8).

The much-celebrated COP21 in Paris, France, in December 2015 was the eleventh Meeting of the Parties since 1994. It was clear even before it started that COP21 negotiation results would not measure up to what must be done, especially in light of the lack of progress after more than two decades of high-level climate talks. Despite the aspiration stated in the preamble to the Paris Agreement to keep the increase in the world's temperature below '2°C or not more than 1.5°C', appropriate actions are still missing. James Hansen, the esteemed former National Aeronautics and Space Administration (NASA) scientist, called by many the 'father of global climate change awareness', described the Paris Agreement as a 'fraud' and a 'real fake.'¹ Since COP15 in Copenhagen, Denmark, in 2009, many climate justice and social movements have increasingly distrusted the negotiations and the resulting agreements.

Despite the protest ban in France due to the state of emergency following several terrorist attacks in the country's capital in November 2015, tens of thousands of French and global activists demonstrated in the streets before, during and immediately after COP21 to protest what could be considered an ineffective agreement. Attended by 195 country delegations and over 150 world leaders, it is to date the largest diplomatic conference on climate change. The global People's Climate March ahead of the talks on 28 and 29 November set a new record in climate-related mobilisations. More than 600 000 marched in 175 countries around the world, including Paris, to call for a strong deal. This was bigger than the New York People's Climate March in 2014, which was also organised to put pressure on leaders attending the COP20 in Peru.

COP18 and COP19 set the trend for consolidating new markets and investment opportunities for big business in the name of climate solutions. These business-oriented and market-controlled climate policies and mechanisms differ widely from the just and sustainable solutions needed by the people and the planet.² The intended nationally determined contributions (INDCs) submitted by countries to the UNFCCC, even if accomplished, will together produce at least a 3°C average global temperature rise. The mechanisms to review their execution and effects and the possibility of adjustments to be

done every five years are simply not enough. Of even greater concern is the lack of dramatic immediate action as it only comes into force in 2020. By that point huge quantities of additional CO₂ will have been pumped into the atmosphere, making it all but impossible to limit global warming to 2°C, let alone 1.5°C.

The challenges to democracy and development in general are increasing due to the corporate capture of UN climate processes and other policy arenas. From negotiating for binding commitments, the UNFCCC capitulated to the corporate agenda of voluntary pledges and market-based initiatives that will do more harm than good to the environment and the global climate system (Climate Space 2014). Many responses have been proposed, including Clean Development Mechanisms (CDMs), reducing emissions from deforestation and forest degradation (REDD), climate-smart agriculture and various carbon market schemes. These initiatives are false solutions that will not reduce emissions or address the social crises causing climate change, but rather allow business as usual and create corporate profits in the name of combating climate change. Moreover, such measures further increase inequality by disproportionately targeting forests, territories and lands of indigenous people and small-scale farmers. The widely embraced new concept of a 'green economy' is dangerous and is being exposed and critiqued as a reconfiguration of capitalism which will reduce nature and 'nature's services' to tradable commodities.

This means that even meeting the conservative target of a 2°C average global warming – as agreed in Copenhagen's COP15 and subsequently recommended in the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC 2013, 2014), as well as by the World Bank (2012), the UN Environment Programme (UNEP 2011) and many other climate studies – will be impossible.

THE CORPORATE CAPTURE OF CLIMATE POLITICS

The climate crisis must be understood as one of the many elements of the deep crisis of capitalism, and has always been both an ecological and a social problem. Scientists have known and warned about climate change for almost 200 years. In Alice Bell's (2014) account of the history of climate change, she identifies French physicist James Fourier's work as the first study on the GHG effect in 1824 and Irish physicist John Tyndall's 1861 pioneering work in identifying

the gases, including CO₂, which could change the atmosphere that protects the planet from warming and determines climate. She also accredited Swedish chemist Svante Arrhenius's study of Europe's atmosphere in 1896 as the first argument for reducing CO₂ in order to lower temperatures, as he linked warming with the burning of coal and oil and the increase of CO₂ in the atmosphere. Charles Keeling started to measure atmospheric CO₂ in 1958 and scientists noted by 1963 that it went up annually (Weart 2004). Warnings about climate change's catastrophic impacts were first raised in John Sawyer's 'Man-Made Carbon Dioxide and the "Greenhouse" Effect', published in the journal *Nature* in 1972, in which he examined the anthropogenic CO₂ GHG distribution and exponential rise. He also accurately predicted the future rate of global warming from 1972 to 2000 (Bell 2014).

Studies linking CO₂ and climate change started in the 1970s, pioneered by the UN World Meteorological Organisation (WMO). In 1988, the WMO jointly established the Intergovernmental Panel on Climate Change (IPCC) with the UN Environment Programme (UNEP). Since then, the IPCC assessment reports – five in total (1990, 1995, 2001, 2007, 2014) – have consolidated global knowledge and political consensus on climate change (IPCC 1995). A limitation of most scientific studies is presenting climate change as a problem of excessive emissions produced by humans without accounting for societal conditions.

The UN Conference on the Environment and Development (UNCED), more popularly known as the Earth Summit, in 1992 produced the UNFCCC, which entered into force on 21 March 1994. Article 2 of the UNFCCC (1992) states that its main objective is to 'stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system'. Under Article 3(1), parties should act to protect the climate system on the basis of 'common but differentiated responsibilities', with developed country parties, referred to in the UNFCCC as Annex I countries,³ taking the lead.

The Kyoto Protocol, an international agreement negotiated under the UNFCCC, set binding targets for Annex I countries' GHG emission reductions. Its pledges are made through assigned amount units of carbon space. It has two commitment periods: from 2005 to 2012 and from 2012 to 2020. In the Lima COP20 in 2014, governments agreed to submit their INDCs for GHG emission reductions in October 2015. This is a step back, as instead of binding commitments in the spirit of the Kyoto Protocol, negotiations are now reduced

to voluntary pledges. Governments can simply do what they want to do. Also, instead of limiting emission reduction to 35 Gt of CO₂e by 2030 to keep average global warming to 2°C (UNEP 2013), the INDC pledges will produce 60 Gt of CO₂e emissions by 2030, proving the ineffectiveness of the UNFCCC process.

Let us recall that the Stockholm Conference on the Human Environment in 1972 and the UNCED in 1992 both emphasised equity as the framework of global environmental politics. However, the emergence of neoliberal capitalism, pushed by the Washington Consensus and deepened by the General Agreement on Tariffs and Trade (GATT) (subsequently the World Trade Organisation [WTO]), demolished this principle. The trend towards globalisation through regulatory rules for trade was consolidated and now characterises the global trade and financial regimes that govern global politics and decision making, including climate politics. In *Climate Capitalism*, Newell and Paterson (2010) explain how the character of neoliberal capitalism has fundamentally shaped global responses to climate change and highlight the need to challenge the entrenched power of many corporations, the culture of energy use and global inequalities in energy consumption.

The Bali Action Plan, adopted at COP13 in 2007, established a framework for negotiations to create a replacement agreement for the Kyoto Protocol in 2012. Initially, it was hoped that the US would return to the Kyoto Protocol negotiating process for the first time since withdrawing from it in March 2001. To encourage the US to agree to the Kyoto Protocol, the CDM became part of the agenda. However, at the end of COP13, the CDM remained but the US stayed away from the Protocol. The CDM is a carbon-trading tool that allows polluting companies, mostly from rich and polluting countries, to purchase credit through projects, mostly in developing countries, instead of reducing their emissions.

The Bali Action Plan established a two-track process (UNFCCC and Kyoto Protocol) aimed at identifying a post-2012 global climate regime from the 2009 COP15 and the Fifth Meeting of the Parties to the Kyoto Protocol in Copenhagen. COP13 did not introduce binding commitments to reduce GHG emissions. It only started the discussions on enhanced actions on adaptation, technology development and the provision on financial resources, as well as measures against deforestation that later developed into REDD. Developing country parties agreed to a '[nationally] appropriate mitigation actions context of sustainable development, supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner' (COP13 2008: 55).

Since the COP15 in Copenhagen, more than a hundred developing countries (members of the small island states, least developed countries, African group blocs in the UN process) have called for Annex I parties to increase their emission reduction targets in the second commitment period to forty-five per cent below 1990 levels by 2020. The 2007 IPCC report earlier indicated that the Annex I parties should reduce their emissions to between twenty-five and forty per cent below 1990 levels by 2020. The Copenhagen Accord was signed by 114 parties, but was not formally adopted by the COP due to the strong disagreement of some developing countries. However, many aspects of the Copenhagen Accord were brought into the formal UNFCCC process the year after in Mexico and were adopted as part of the Cancun Agreements. These agreements state that future global warming should be limited to below 2°C (3.6° Fahrenheit) relative to the pre-industrial level. Cancun's non-binding pledges totalled fifteen per cent emission reduction by 2020.

Many developing countries were unhappy about the 2°C target in the negotiations in Copenhagen. Climate justice activists argued against this threshold too as it is more of a political target, and a distinctly ideological one, forwarded by northern interests. Feminist groups assailed the inherent idea that humans can 'master' climate change, as if the climate is a machine that humans can control and that can be turned on and off. The framework of values based on power, as well as the questions of in whose agenda or interest 2°C is acceptable, and who determines what acceptable risk is, must be revealed (Seager 2009). Feminists and climate justice activists from the global South point out that considerable ecosystem and livelihood damage is already occurring and that poor countries face greater threat due to their higher vulnerabilities and lower adaptive capacities.

Real catastrophes in the global South and in pockets of communities in the global North, such as destruction of livelihoods through floods and droughts, death and starvation, are already happening. Climate change is in fact advancing at a faster rate than predicted (Archer & Rahmstorf 2010).⁴ According to the 2013 Fifth Assessment Report of the IPCC, each of the last three decades was warmer than all of the preceding decades since 1850 and the first decade of the twenty-first century was the warmest thus far. The International Energy Agency also warned that failure to reduce fossil fuel consumption would result in at least 6°C of global warming (IEA 2013). All this is already occurring at the current 0.8°C rise in the average global temperature since the Industrial Revolution; a 2°C temperature increase will be even more dangerous. Hansen

and colleagues (2015) predict higher sea-level rises because of indicators that were not included before.

A report by the Climate Vulnerable Forum (2012) states that five million deaths occur annually from air pollution, hunger and disease as a result of climate change and carbon-intensive economies, and that this toll will likely rise to six million annually by 2030 if current patterns of fossil fuel use continue. More than ninety per cent of those deaths will occur in developing countries. Climate change is already costing the global economy a potential 1.6 per cent of annual output or about US\$1.2 trillion a year, and this could double to 3.2 per cent by 2030 if global temperatures are allowed to rise. Even developing countries may suffer GDP loss. China could see a 2.1 per cent reduction by 2030, while India could experience a more than five per cent loss of output. According to a UN Development Programme report, global warming most threatens the poor and the unborn, the 'two constituencies with little or no voice' in governance (UNDP 2007: 13).

In 2011, parties at the COP17 in Durban, South Africa, agreed to adopt the Durban Platform for Enhanced Action. This treaty was adopted in 2015 at the twenty-first COP in Paris and will be implemented in 2020. In both Durban and Doha (COP18), parties as well as observers from civil society groups expressed grave concern that current efforts to hold global warming to below 2 or 1.5°C relative to the pre-industrial level appear inadequate. Since the 2005 COP in Montreal, Annex 1 countries have found ways to avoid deep emissions cuts and have weakened this commitment. The much-needed technology and financial transfers from rich countries to developing countries are not happening, nor are those aimed at helping the latter address the increasing impacts of climate change and supporting the costs of mitigation and adaptation.

The UN's Global Compact, which encourages the role of big business in global efforts to advance UN treaties and programmes on human and socio-economic rights and environmental protection, ushered in big corporations' influence in the thinking and outcomes of climate politics. The green economy, promoted as a new and superior development concept, also follows business thinking. UNEP's (2011) green economy report argues that the environment could be saved if environmental services were given economic value.

Climate politics, even in poor and developing countries, has yet to – or refuses to – question, challenge and problematise the key role of capital in the causes and effects of climate change. The fundamental reality that climate change affects people differently and that the poor, who contribute very little to

it, are the first to suffer its impacts, was acknowledged in the principle 'common but differentiated responsibilities' in the first Earth Summit in Stockholm in 1972, long before the UNFCCC's adoption of it in its basic principle in 1992.

The powers of the WTO, international financial institutions (IFIs), transnational corporations and other agents of neoliberal capitalism must be confronted as they move to eliminate environmental policies defined as 'barriers to trade' and to prevent governments from discriminating against polluting products through bilateral and multilateral trade negotiations. New, aggressive and comprehensive trade and investment agreements (e.g. the European Union–US Trans-Atlantic Trade and Investment Partnership [TTIP] and Trans-Pacific Partnership) that are being negotiated by governments in highly secretive and exclusive processes include an extremely dangerous element, the investor–state dispute settlement (ISDS) mechanism. Once implemented, corporations can use ISDSs to sue governments for passing laws that protect the environment but diminish corporate profits, like closing or banning polluting coal mines.

Powerful corporations, through their lobbyists, have been influencing climate negotiations. A paper prepared by Corporate Europe Observatory explains how powerful European business lobbies protect business interests, especially in COP21, through promoting the global carbon market as the solution to climate change and ensuring that climate policies do not conflict with business interests (Tansey 2015). IFIs, which historically and currently still fund climate change-inducing large-scale projects like fossil fuel development, huge hydropower schemes and those that are under CDMs, play a key role in climate finance and pushing loans to victims of climate-induced natural calamities.

Climate change will not be solved through negotiations dominated by corporate interests. The governments that are supposed to lead in climate change solutions are also the ones pushing corporate trade deals like the TTIP that will benefit the fracking industry and support big agribusiness companies that undermine the ability of farmers to adapt to climate change, as well as various free trade agreements and bilateral investment treaties.

CHANGE THE SYSTEM TO STOP CLIMATE CHANGE

Climate solutions must be appropriate to the enormity of the crisis, and must also be just and sustainable. Criticising current socio-ecological problems must not be reduced to individual consumption patterns which can be solved by

individual alternative lifestyles alone. Structural, political, social and economic mechanisms shape consumption. For climate change to stop, our economic, social and environmental relations must change. A crucial element of this is acceptance of the imperative for system change, climate justice and confronting capitalism. There is now a growing understanding of the need for a paradigm shift and the need to find the politics and processes for fundamental change towards more democratic and inclusive/collective ownership and control of resources and key industrial sectors along with access to their benefits. Naomi Klein describes the climate crisis in her book *This Changes Everything* as a confrontation between capitalism and the planet. The problem is neoliberal capitalism itself, which is unsustainable and needs to be transformed into a system that does not aim for a model of infinite growth but for harmony between human beings and nature and one that meets the needs of the majority (Klein 2014).

There is a need to build a politics that is strong enough to realise that process for change, ensure its course and defend it against attacks from those that want to maintain the status quo. It is not enough just to be convinced and to want this change. The actors, institutions and processes that support the status quo are powerful and will not easily give up their privileges. A growing number of groups within the climate justice movement are now organising and mobilising to promote various principles, discussed next.

Social inequalities

Climate change is linked to social inequalities between the global North and the global South, as well as to inequalities within the global North and South, as there are people living in extreme poverty in rich countries. Similarly, the elite in poor countries have access to and control over resources and use that power to exploit people and nature in their countries.

Climate debt

According to Matthew Stilwell (2012), it is important to recognise rich countries' climate debt to poor countries, for two reasons. Firstly, historically, in the course of their development, rich countries used more than their fair share of the atmosphere, which enriched their societies and disproportionately contributed to climate change. Poor countries should not follow their growth model. Rather, due to climate change, they should instead adopt more sustainable economic activities. This will, however, significantly diminish and limit their options. Stilwell refers to this as emissions debt. Secondly, what Stilwell calls

adaptation debt concerns the challenges that poor countries face as escalating losses and damages and loss of development opportunities increase. The climate debt concept was submitted to the UNFCCC by over fifty countries, including Bhutan, Bolivia, Malaysia, Micronesia, Paraguay, Sri Lanka, Venezuela and the group of least developed countries in COP14 of 2008. Rich countries' failure to sufficiently reduce their emissions, passing the responsibility of emissions reductions to poor countries through CDMs and other mechanisms, while continuing to consume far more than their fair share of fossil fuels and atmospheric space, is a recolonisation of the global South.

'Just transition' from fossil fuel

This transition must start as soon as possible since the current model of production and consumption is based on fossil fuel energy, which is ecologically destructive. There needs to be a steep decrease in extractivism, with the remaining eighty per cent of known fossil fuel reserves kept in the ground. This is more than merely transitioning to renewable energy – the process must be emancipatory and transformative and address issues of ownership and access to resources, democratic control of energy and priority of use.

Food sovereignty

A major component of food production is not foreign investments, but rather a healthy ecosystem and the capacity of small-scale farmers to continue feeding the world. The close relationship between climate change, food production and vital decisions over land use made farmers' groups like La Via Campesina link their campaign for food sovereignty with climate justice. Food sovereignty is the right of people to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It is simultaneously a political project and campaign, an alternative, a social movement and an analytical framework.

Deglobalisation

More than a decade ago, the transnational policy group Focus on the Global South proposed deglobalisation as a strategy for addressing social inequality and promoting alternatives to neoliberal globalisation. Deglobalisation rests on two pillars: deconstruction of the existing order and reconstruction of an alternative development paradigm (Bello 2002; Focus on the Global South 2003). Deglobalisation argues that we must change the framework of the political

economy by protecting and prioritising domestic economies and local needs. Instead of overproducing for export, we should reorient the economy and support small, local, peasant and indigenous community farming. We should promote local production and consumption of products by reducing the free trade of goods that travel long distances and use millions of tons of CO₂.

Buen vivir, or living well

Vivir bien (Bolivia) or *buen vivir* (Ecuador) is a Spanish term that emerged in the late twentieth century to refer to the practices and/or visions of indigenous peoples of the Andean region of South America. The practice of *vivir bien/buen vivir* may differ, but regardless of particularities some common elements have been identified and developed into a concept now codified in the constitutions of Ecuador and the Plurinational State of Bolivia (Focus on the Global South 2014). *Buen vivir* is a contrast to the capitalist way of life. It sees humans as an integral part of nature and not separate from it. Humans should thus not control nature but take care of it as one would take care of one's mother, the one who has given life. The goal is harmony, not growth (Solon 2014). Without growth, the current capitalist system cannot exist.

Although challenging, we must not turn away from the tasks of reconstructing or recreating processes, or the collective effort to articulate and popularise the need for alternative systems of national and global economic and political governance. Also gaining ground is the idea that the law of nature and the processes of the ecosystem, articulated as the 'Rights of Mother Earth' (World People's Conference on Climate Change and the Rights of Mother Earth 2010), must be respected as much as we respect the principles of our rights as humans.

Given what is needed and the reality on the ground, as well as the current status of the climate negotiations, there are challenges ahead for everyone. None of the 196 negotiating countries has presented a concrete plan to meet the needed emissions reductions; none has mentioned the need to keep eighty per cent of known fossil fuel reserves in the ground. The prescriptions or alternatives described above have no government or business champions to make these vital steps happen. Rather, the systemic alternatives are being promoted by social, economic and ecological justice movements and groups that are organising, doing political and development education and solidarity building aimed at putting life and the environment first in order to build an alternative world. Neoliberal capitalism's structure and institutions have perfected the art of sustaining the status quo and the leadership of hegemonic powers, not only through their control of

the policy process but, more importantly, in presenting themselves as knowledge-bearers and experts on the economy, poverty, climate change and society.

CONCLUSION

A growth-driven and market-dependent system is incompatible with environmental security. Rethinking the ways that states and societies value nature and how resources are allocated and managed must be done now by those who believe in a meaningful and productive life. The climate crisis is not just an environmental issue – it is a global social and ecological crisis requiring an overhaul of the global political and economic systems. There is no time to lose.

Linking various social justice issues with the problem of climate change, coupled with radical anti-capitalist analysis and out-of-the-box solutions favouring equity and sustainability, has great potential for bottom-up social transformation. For climate justice activists, the severity of the climate crisis reaffirms the eco-socialist argument that capitalism not only generates war, poverty and insecurity but also potentially threatens human survival in vulnerable areas. The right to development and the need for alternative development also raises class issues and the divide not only between rich and developing countries, but also between the rich and poor within countries. Solving the climate crisis affects all aspects of society – the economy, technology, trade, equity, ethics, security, as well as relations within and between countries.

The only alternative is to resist the decapitating grip of exploitative capitalism and to take on the responsibility of educating oneself and being a conscious political subject, organising, mobilising, forging unities and exposing the false solutions peddled by those who created the crisis in the first place. The work of questioning reality and concepts, asking who wins and who loses in various processes and who gains from injustices, is a key component of building alternatives. It is a complex and challenging task, and not one that can be comfortably executed. It is a task where expansion and forging of new alliances and new unities beyond the usual partners is needed.

In the age of Trump, Brexit and the rise of new authoritarian/far-right politics, the phenomenon of far-right populism or extreme right-wing politics that promotes aggressive nationalism, racism, patriarchy, authoritarianism and militarism is gripping developed and developing countries alike. Various movements in the Left are already in a dangerous moment – many of our strategies as

progressive organisations and movements are no longer working as effectively as we had hoped in the face of the intensified power of capital, the impunity and greed of corporations and the callousness of governments in terms of the needs of the poor majority.

Recent developments – such as the re-emergence of mass movement politics that is energising new politics in Greece, Spain and Portugal; the resistance that impeached Park Geun-hye in South Korea; the daily resistance against Trump's policies in the US; and the inspiring developments in UK politics that saw a Labour Party surge in the recent snap election – are hopeful reminders that there is always resistance and organising in the midst of seemingly chaotic political situations. Those energies should be organised sustainably to push for alternative systems of local, national and global economic governance that respect the diversity that exists in society and that ensure ecological equilibrium. More than ever, what needs to be globalised is the principle of reciprocal solidarity, the struggle for decommmodification and collective action against all the bad solutions being presented as a way out of the economic and ecological crises.

NOTES

- 1 O. Milman, 'James Hansen, father of climate change awareness, calls Paris talks "a fraud"', *The Guardian*, 12 December 2015.
- 2 D.G. Guerrero, 'Time to take power away from the polluters', *The Bangkok Post*, 19 December 2014, <http://www.bangkokpost.com/opinion/opinion/450770/time-to-take-the-power-away-from-the-polluters> (accessed 20 August 2017).
- 3 These countries are Australia, all members of the European Union, Belarus, Croatia, Iceland, Kazakhstan, Norway, Switzerland and Ukraine.
- 4 See also A.A. Costa, 'Haiyan/Yolanda: Inside each new-born violent storm is the DNA of the fossil fuel industry and capitalism', *International Viewpoint*, 21 November 2013, <http://www.internationalviewpoint.org/spip.php?article3183> (accessed 17 August 2017).

REFERENCES

- Archer, D. and Rahmstorf, S. 2010. *The Climate Crisis: An Introductory Guide to Climate Change*. Cambridge: Cambridge University Press.
- Bell, A. 2014. 'A very short history of climate change'. *Road to Paris: Science for Smart Policy*. Accessed 17 August 2017, <http://roadtoparis.info/2014/09/05/history-climate-change-research>.
- Bello, W. 2002. *Deglobalisation: Ideas for a New World Economy*. London and New York: Zed Books.

- Climate Space. 2014. 'Mobilise and organize to stop and prevent planet fever!' Statement of the Climate Space for the Climate March and Global Mobilisations, 19–23 September. Accessed 17 August 2017, <https://climatespace2013.wordpress.com/2014/09/16/mobilize-and-organize-to-stop-and-prevent-planet-fever/>.
- Climate Vulnerable Forum. 2012. 'Climate vulnerability monitor, 2nd edition: A guide to the cold calculus of a hot planet'. Accessed 17 August 2017, <http://daraint.org/climate-vulnerability-monitor/climate-vulnerability-monitor-2012/report/>.
- COP13. 2008. Report of the Conference of the Parties (COP) on its thirteenth session, held in Bali from 3 to 15 December 2007. Addendum. Part Two: Action taken by the Conference of the Parties at its thirteenth session. Geneva, Switzerland: United Nations Office. Reference: FCCC/CP/2007/6/Add.1.
- Focus on the Global South. 2003. *Programme Plan 2003–2005*. Bangkok: Focus on the Global South.
- Focus on the Global South. 2014. *From Latin America to Asia: Learning from our roots – a conversation on Vivir Bien*. Manila and Bangkok: Focus on the Global South.
- Geiling, N. 2017. 'The Earth just reached a CO2 level not seen in 3 million years'. *Think Progress*, 21 April. Accessed 17 August 2017, <https://thinkprogress.org/410-ppm-carbon-dioxide-atmosphere-71aa17fef076>.
- Hansen, J., Satom, M., Hearty, P., Ruedy, R., Kelley, M., Masson-Delmotte, V., Russell, G., Tselioudis, G., Cao, J., Rignot, E., Velicogna, I., Kandiano, E., von Schuckmann, K., Kharecha, P., Legrande, A.N., Bauer, M. and Lo, K-W. 2015. 'Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2 °C global warming is highly dangerous'. *Atmospheric, Chemistry and Physics Discussion* 15, 20059–20179. Accessed 17 August 2017, <http://www.atmos-chem-phys-discuss.net/15/20059/2015/acpd-15-20059-2015.pdf>.
- IEA (International Energy Agency). 2013. 'How the IEA says we can avoid six degrees of warming – In three graphs'. *Carbon Brief*, 12 November. Accessed 18 August 2017, <http://www.carbonbrief.org/blog/2013/11/three-graphs-showing-how-the-iea-says-we-can-avoid-six-degrees-warming/>.
- IPCC (Intergovernmental Panel on Climate Change). 1995. *Climate Change 1995: A Report of the Intergovernmental Panel on Climate Change*. Cambridge: Cambridge University Press.
- IPCC. 2013. 'Summary for policy makers'. In *Climate Change 2013: The Physical Science Basis*. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, pp. 3–29.
- IPCC. 2014. 'Summary for policymakers'. In *Climate Change 2014: Mitigation of Climate Change*. Working Group III Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press, pp. 1–30.
- Klein, N. 2014. *This Changes Everything: Capitalism vs the Climate*. New York: Simon & Schuster.
- Met Office. 2016. 2015: 'The warmest year on record, say scientists'. Accessed 18 August 2017, <http://www.metoffice.gov.uk/news/releases/2016/2015-global-temperature>.
- NAS (National Academies of Sciences, Engineering, and Medicine). 2016. *Attribution of Extreme Weather Events in the Context of Climate Change*. Washington, DC: The National Academic Press.

- Newell, P. and Paterson, M. 2010. *Climate Capitalism: Global Warming and the Transformation of the Global Economy*. Cambridge: Cambridge University Press.
- NOAA (National Oceanic and Atmospheric Administration). 2015. 'Greenhouse gas benchmark reached'. Accessed 18 August 2017, <http://research.noaa.gov/News/NewsArchive/LatestNews/TabId/684/ArtMID/1768/ArticleID/11153/Greenhouse-gas-benchmark-reached-.aspx>.
- Romm, J. 2016. 'One fact about climate change that's worth repeating'. *Think Progress*, 6 April. Accessed 18 August 2017, <https://thinkprogress.org/one-fact-about-climate-change-thats-worth-repeating-39ffa04bdf0e/>.
- Sawyer, J. 1972. 'Man-made carbon dioxide and the "greenhouse" effect', *Nature*, 239: 23–26, doi:10.1038/239023a0.
- Seager, J. 2009. 'Death by degrees: Taking a feminist hard look at the 2°C climate policy', *Women, Gender and Research*, 34: 11–20.
- Solon, P. 2014. 'Notes for the debate: Vivir Bien/Buen Vivir'. *Systemic Alternatives*. Accessed 18 August 2017, <http://systemicalternatives.org/2014/07/30/1099/>.
- Stilwell, M. 2012. 'Climate debt: A primer'. In *Development Dialogue: Climate, Development and Equity*, edited by Niclas Hällström. Uppsala: Dag Hammarskjöld Foundation and the What Next Forum, pp. 41–46.
- Tansey, R. 2015. 'Dirty hands on dirty deals: TTIP and COP21 shaped by same big business interests'. *Corporate Europe Observatory*, 21 October. Accessed 18 August 2017, <http://corporateeurope.org/environment/2015/10/dirty-hands-dirty-deals>.
- UNDP (United Nations Development Programme). 2007. 'Human Development Report 2007/2008: Fighting climate change: Human solidarity in a divided world'. Accessed 18 August 2017, http://hdr.undp.org/sites/default/files/reports/268/hdr_20072008_en_complete.pdf.
- UNEP (United Nations Environment Programme). 2011. 'Towards a green economy: Pathways to sustainable development and poverty eradication – a synthesis for policy makers'. Accessed 18 August 2017, https://sustainabledevelopment.un.org/content/documents/126GER_synthesis_en.pdf.
- UNEP. 2013. 'The emissions gap report 2013: A UNEP synthesis report'. Accessed 18 August 2017, http://www.unep.org/sites/default/files/EGR2013/EmissionsGapReport_2013_high-res.pdf.
- UNFCCC (United Nations Framework Convention on Climate Change). 1992. 'United Nations framework convention on climate change'. Accessed 18 August 2017, <http://unfccc.int/resource/docs/convkp/conveng.pdf>.
- Weart, S.R. 2004. *The Discovery of Global Warming*. Cambridge, MA: Harvard University Press.
- World Bank. 2012. 'Turn down the heat: Why a 4°C warmer world must be avoided'. Accessed 18 August 2017, <http://documents.worldbank.org/curated/en/865571468149107611/pdf/NonAsciiFileName0.pdf>.
- World People's Conference on Climate Change and the Rights of Mother Earth. 2010. 'People's agreement of Cochabamba'. Accessed 17 August 2017, <http://pwccc.wordpress.com/2010/04/24/peoples-agreement/>.