'This Changes Everything'? Rethinking Fragility and Violent Conflicts from the Climate Crisis Perspective

A think piece

Cordula Reimann and Danny Burns

December 2019

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'Limiting global warming to 1.5°C would require rapid, far-reaching and
unprecedented changes in all aspects of society.'
UN Intergovernmental Panel on Climate Change, October 2018

'This changes everything'[1]? Rethinking fragility and violent conflicts from the climate crisis perspective

1. Introduction

With reports of Arctic fires (e.g. Cockburn 2019) in the summer of 2019 and extreme heat waves and droughts in South Asia and Europe and flooding in the USA becoming more frequent and intense, and weekly worldwide climate demonstrations, we are reminded that climate change is very real, and political action has to be taken urgently.

There is a great scientific consensus that climate change is to a large extent humanmade; i.e. that human activities have largely contributed to climate change (e.g. IPCC 2013; IPCC 2018; World Bank 2010). We know that if we do not cut carbon emissions and stop ecosystem and biodiversity destruction urgently and radically, catastrophic climate consequences are highly probable. Published estimates of the numbers of people who may be displaced by climate crisis-related effects by 2050 range from 25 million to 300 million people (e.g. Kälin 2010; Wilkinson *et al.* 2016).

Countries at the highest risk of climate crisis are concentrated in sub-Saharan Africa and South Asia. These countries in the global South will bear an estimated 75% of the costs of the climate crisis, while the poorest half of the world's population cause just 10% of CO_2 emissions (World Bank 2010).

Given the urgency to act, some climate scientists and activists, such as the Extinction Rebellion movement, speak of a climate crisis or climate emergency.

The challenges ahead are formidable. We argue that only by challenging current assumptions underpinning international donor policies and practices on fragility and conflict will we be able to meet the concrete challenges of the climate crisis. We are

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[1] Title of Naomi Klein's book (Klein 2015).

calling for nothing less radical than a paradigm shift. Business-as-usual or cosmetic changes will not do it now – if they ever did.

We do not claim to be neutral or impartial bystanders in the context of the climate crisis: we are writing this article from the standpoint of practitioner-scholars from the global North who have worked for more than 20 years in the fields of international development, non-violent social change, conflict transformation and peacebuilding.[2] We position ourselves as supporters of the demands of climate justice movements including Fridays for Future,[3] Extinction Rebellion[4] and others. As international social change facilitators, we acknowledge that we most probably have a higher carbon footprint than most citizens in the global North – and certainly the South.

Some argue[5] that to frame the current situation as a crisis is problematic on the grounds that it can support eco-authoritarian action and a politics of despair that stifle hopeful action. We would argue the opposite. The current wave of international climate justice activism has motivated millions of people because hope and action can only come once people acknowledge a problem as an essential crisis, recognise its urgency and want to address it. People will never have hope when they see that little or no action is taken and that most people are ignoring the crisis. Our view is that while it is important to validate knowledge on both the extent and impact of climate change, 30 or more years of expert knowledge have not translated into the necessary action. If action is not taken now – while there is still the opportunity for democratically driven reform – then an unimaginably draconian response from governments will be inevitable.

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[2] Danny Burns is a research professor at the Institute for Development Studies (IDS) at the University of Sussex, UK. Dr Cordula Reimann has worked for more than 20 years as a consultant, trainer and senior lecturer and researcher on conflict transformation. Both have worked for more than 15 years on systems approaches to non-violent social change and conflict transformation. Danny has pioneered systems action research as a conflict transformation methodology in Mali and Myanmar.

[3] See: Fridays for Future

[4] Extinction Rebellion, founded in October 2018, in the UK has become an international climate movement, using non-violence and civil disobedience to raise awareness about the climate crisis and demand urgent political action. Its three demands to governments are: (1) to tell the truth about the climate and ecological crisis and to call for a climate emergency; (2) to act now to halt biodiversity loss and reduce greenhouse gas emissions to net-zero by 2025; and (3) to create and be led by participatory democracy in the form of citizens' assemblies. See: Extinction Rebellion.

[5] Including colleagues at IDS, University of Sussex, UK.

We do not claim to have all the answers. This article maybe raises more questions than it is able to answer. Our aim is to provoke and to initiate deeper self-reflection among those working on fragility and violent conflicts.

The paper is split into two main sections. The first discusses some of the main challenges resulting from the climate crisis for international and local practices and donor policies on fragility and violent conflicts. The second section highlights concrete implications of putting the climate crisis centre stage.

We refer here to some of the key publications and use broad brushstrokes, without claiming to do justice to the complexity of multidisciplinary findings on climate research. Illustrative examples, data and case studies mentioned are largely drawn from published research and reports from research institutes, international government and non-governmental organisations (NGOs), and comprehensive databases of humanitarian crises and climate change.[6]

2. Challenges from the climate crisis perspective

There are many different challenges for practices and policies on the nexus of fragility and violent conflicts. We highlight the following four from a climate crisis perspective.

First, **the climate crisis threatens to undo the last 50 years of progress in (sustainable) development, poverty reduction, global health and human rights** in sub-Saharan Africa and South Asia. Effects of climate change, such as increased frequency and/or intensity of flooding, droughts or hurricanes will destroy the results and achievements of development processes literally overnight – be it physical infrastructure, the fight against epidemics, access to natural resources or transboundary water management. These climate impacts are asymmetric in the sense that those already most vulnerable will be the most affected (Byravan and Rajan 2010).

The global South is and will be particularly affected as a result of geographic location; limited institutional infrastructure, capacity and resources; and serious shortages of

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[6] Such as EDGAR, the Emergency Events Database (EMDAT) and databases provided by the UN Framework Convention on Climate Change.

and deficiencies in food, water, sanitation and health care. As less privileged and poorer countries and members of society will be more directly affected by the climate crisis, the world will increasingly be at risk of 'climate apartheid in which the wealthy pay to escape overheating, hunger, and conflict, while the rest of the world is left to suffer' (UN Human Rights Council 2019).

The most recent findings of the Intergovernmental Panel on Climate Change (IPCC) – the United Nations body for assessing the science related to climate change – confirm these alarming facts and trends (IPCC 2018).

Governments are a long way from keeping temperatures below the threshold agreed in the Paris Agreement on Climate Change[7] – i.e. to limit global average temperature increase to 2°C above pre-industrial levels and pursue a target of 1.5°C. The pledges governments have made to reduce greenhouse gas emissions set us on a path to a 3.2°C rise in average global temperature.[8] Given this, the following scenarios are likely:

- Falling crop yields, mainly in developing regions;
- Sea level rises;
- Species extinction;
- Extreme weather events such as storms, forest fires, droughts, flooding and heat waves; and
- Abrupt and large-scale shifts in the climate system, such as the weakening of natural carbon absorption and onset of irreversible melting of the Greenland and West Antarctic ice sheets.

These scenarios justify to us the need to speak of a climate crisis or emergency.

The European Strategy and Policy Analysis System (ESPAS) underlines this crisis scenario by stressing that:

> An increase of 1.5 degrees is the maximum the planet can tolerate; should temperatures increase further beyond 2030, we will face even more droughts, floods, extreme heat and poverty for hundreds of millions of people; the likely

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[7] For the text of the Paris Agreement, see: Paris Agreement
[8] See: Climate Action Tracker

demise of the most vulnerable populations – and at worst, the extinction of humankind altogether (ESPAS 2019: 9)

Many leading scientists might agree with the alarming statement that the 'climate math is brutally clear: While the world can't be healed within the next few years, it may be fatally wounded by negligence until 2020' (McGrath 2019b).[9]

According to Philip Alston, the UN special rapporteur on extreme poverty and human rights, the impacts of global warming are likely to undermine not only basic rights to life, water, food and housing for hundreds of millions of people, but also democracy and the rule of law.

Second, social conflicts and fragility risks will worsen or emerge as **climate-related risks and challenges will be superimposed on pre-existing social and political dynamics**. These include:

- Social and political power inequalities, and social and political discrimination and exclusion of women, non-binary individuals, ethnic minorities, indigenous groups and underprivileged groups, such as modern-day slaves in India, Bangladesh and Nepal;
- Infectious diseases such as cholera or Ebola and mental health risks, including the traumatic legacy of warfare and violence;
- Current (intra- and inter-state) violent conflicts;
- Unequal income, poverty and wealth stratification;
- Population growth; and
- Unequal access to natural resources.

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[9] Quoting Hans Joachim Schellnhuber, founder and director emeritus of the Potsdam Climate Institute.
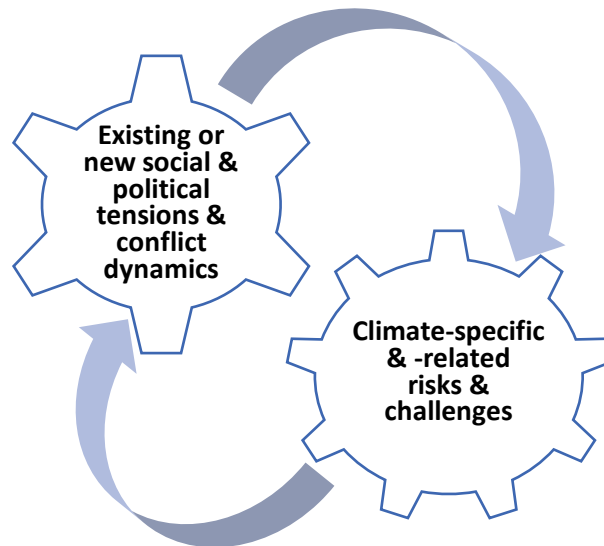
Figure 1 Interaction of social and political dynamics with climate change challenges.
Credit: Cordula Reimann and Danny Burns

The following climate-related, socioeconomic and environmental, risks and challenges stand out (see also adelphi *et al.* 2015):

- Biodiversity loss;

- Land degradation and deforestation;

- Competition over local resources such as water, land, energy, oil and gas;

- Transboundary water management;

- Livelihood and food insecurity;[10]

- Unsustainable patterns of economic growth, consumption and production;

- Forced increases in migration and internal displacement;

- Increased urbanisation with associated pressures on infrastructure;

- Increased frequency and intensity of disasters such as hurricanes, droughts and floods;

- Rising sea levels and coastal degradation;

- Climate-insensitive peacebuilding and development interventions;

- Negative, unintended effects of climate policies; and

- Conflict-insensitive climate adaptation and mitigation policies.

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[10] For an excellent visualisation of possible scenarios of food insecurity in the context of climate change and adaptation policies, see: The Met Office

Some of these risks are primary drivers of the current climate crisis, such as rising sea levels and global warming. Others, such as floods and the resulting internal displacement, constitute more secondary effects of the primary drivers.

Some research (e.g. Burrows and Kinney 2016) and peacebuilding NGOs such as International Alert (e.g. Smith and Vivekananda 2007, 2009) have illustrated how climate change-related effects such as floods or droughts have led to increases in displacement and migration, and contributed to or further accelerated existing violent conflicts. Other examples from the literature illustrate similar dynamics (see Box 1).

Box 1: Examples of the magnifying and multiplying effects of risks

- Heavy flooding in **Pakistan** (2011–12) aggravated existing tensions between migrants and non-migrants, increased rural-urban migration and led to violent conflict over political power between migrants and non-migrants (Bhattacharyya and Werz 2012)

- Since 2005, a serious drought and water scarcity in **Western Sahara** have led to an increase in labour-related migration of pastoralists, and contributed to clashes between pastoralists and farmers over resources (UNEP 2011; Nyong 2011).

- For more than 20 years, there have been serious droughts in **Peru and Bolivia**. Different analyses stress that these droughts have not only increased labour-related migration of farmers; but also contributed to violent tensions and conflict among farmers on the one hand, and between farmers and indigenous migrants on the other (Hoffman and Grigera 2013; Kaenzig and Piguet 2014; Walker 2017).

While the exact contribution of humanmade climate change to these events cannot be determined precisely, the magnifying effects of climate change are likely to increase dramatically.

While these risks individually aggravate vulnerabilities of local communities, the interplay of the risks may have a potentially even more harmful effect on people's vulnerabilities. For example, studies by Alam *et al.* (2015) and Pearl-Martinez (2012)

showed the disproportionate effects of climate change on women who lacked equal representation in formal decision-making and programme design. Other publications have focused on the gender-specific dimensions of climate change; e.g. looking at the effects on women of deforestation, climate-induced displacement and migration, and flooding (Least Developed Countries Expert Group 2015; Aguilar 2009).

We do not understand the climate crisis as a single driving factor creating fragility, displacement, conflicts and violence – implying a deterministic and linear, cause-effect pathway. Rather, we understand the climate crisis as a 'risk multiplier' or 'risk catalyst', creating vicious circles of risk and fragility as a result of multiple interrelated causalities. As every context is different, these multiple causalities will play out differently from region to region and country to country. The specific magnitude and impact of climate-related risks will be heavily dependent on government mitigation and adaptation policies, local resources and institutions, social and political grievances, and geographic location. In this context, one can read the more critical challenges to the idea of climate change as a risk multiplier, as in the case of the war in Syria (Selby *et al.* 2017).

While on the one hand climate change can be seen as a risk catalyst, creating a vicious circle of tensions, risks and fragilities, on the other hand it has the potential to be turned into a virtuous circle of opportunities for collective resilience, cooperation and social cohesion among affected communities and regions (Smith and Vivekananda 2007: 8). Documentation and research on the Nile Basin Initiative have shown how water management governance and cooperation can lead to forms of mutual coexistence, and effective institutionalised conflict mitigation and resolution mechanisms across countries, boundaries and regions (e.g. Mason 2004; Motlagh 2018). Focusing on how to enhance forms of cross-country and cross-boundary cooperation in the context of natural resource management has been the focus of environmental peacebuilding.[11] Yet, given the sheer extent of short- and long-term effects of the climate crisis, the polarised position of international actors, and weak

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[11] There is no single definition of environmental peacebuilding. Other terms used are peace ecology or environmental peacemaking. For a good overview of case studies and current discussions around climate change and peacebuilding, see: Environmental Peacebuilding. Environmental peacebuilding has been part of the UN's agenda of peacebuilding since the mid-1990s and led to UNEP undertaking environmental assessments of violent conflict/war contexts (see, e.g. UNEP 2004; Carius 2006; Halle 2009; Bruch *et al.* 2016).

national and international implementation of the Paris Agreement, these positive examples are few and far between.

Third, **the countries that most urgently require mitigation and adaptation strategies are usually in the weakest position to deliver them**, and their peoples bear the least responsibility for the predicament they find themselves in. At the same time, **there is little political appetite among governments in the global North to implement and enforce effective mitigation and adaptation strategies** in their own countries, although have the resources and capacity to do so.

According to estimates, the population living in extreme poverty in the global South could increase by 122 million by 2030 (Hallegatte *et al*. 2016: 9). Outbreaks of infectious diseases, including malaria and diarrhoea – e.g. through poor water and food quality and extreme weather events – are very likely (*ibid.*). Also, if a country or region has been affected by abject poverty, and/or violent conflicts and warfare for decades – as in Afghanistan, Bangladesh, Mali or Pakistan – local and indigenous people might not see government climate crisis adaptation policies as a priority.

This raises three questions:

1. First, how can climate change adaptation policies address local realities, risks, vulnerabilities and tensions without further enhancing them? This speaks to the need for context- and conflict-sensitive implementation of adaptation policies. This seems even more relevant if climate change adaptation policies are going to dominate donor agendas at the expense of budget lines badly needed for poverty reduction and peacebuilding.

2. Second, how can climate-change-related questions become an integral part of official peace processes and peace negotiations?

3. Third, how should we respond to national climate adaptation policies that have become or constitute obstacles to peacebuilding processes and thereby a breeding ground for new tensions and violent conflicts? Or, to put it the other way around, how should we deal with climate change policies that aggravate existing social tensions or become a 'carte blanche' for human rights violations in disguise?

Box 2: Example of conflict-insensitive implementation of adaptation policies

Bangladesh is one of the most climate-vulnerable countries in the world, due to its topography – just a few metres above sea level, with many parts of the country regularly flooding. Its government has been hailed internationally for its UN-financed and -supported climate change adaptation policies. However, the same government turned a blind eye to, ignored or legitimised unregulated settlement by Bengali settlers, deforestation and land grabbing by security forces and/or multinational companies in the Chittagong Hill Tracts (CHT), a natural habitat that was home to more than 50 indigenous communities. An estimated 400,000–600,000 Bengali people settled in the CHT, where they cleared trees on steep hillsides and began farming, resulting in soil erosion and unsustainable livelihoods (Smith and Vivekananda 2007: 16).

Apart from anything else, the example above stresses that technical climate change mitigation and adaptation approaches may be a necessary short-term measure, but are ineffective if they do not take into account social, political and climate-related realities on the ground. As Smith and Vivekananda stress 'technical fixes will only act as sticking plasters' (2009: 14).

Comparatively speaking, little has been documented or written on the unintended, negative or positive effects of climate mitigation and adaptation practices and policies on peacebuilding efforts. An illustrative example may here be the ways in which large-scale biofuel production – hailed as an alternative to fossil fuels – have affected poor farmers' and indigenous peoples' access to land, leading to increases in food prices and inter-communal violence (Oxfam 2008).

International donors, NGOs and agencies have the power to influence the political and socio-political context by ensuring that support for local stakeholders – be they community-based organisations, NGOs, political elites or institutions – is climate-sensitive *and* conflict-sensitive; i.e. by ensuring their projects, programmes or activities do not (unintentionally) provoke climate-related risks such as increased environmental degradation, loss of biodiversity and livelihoods, and food insecurity, while at the same time taking into account whether existing social tensions and conflicts are (unintentionally) aggravated.

Fourth, in the past five to ten years, we can observe an increased trend toward '***securitization' of climate change*** (see Scott 2012). This begs the question of who has the power of definition and who has not to call a risk or effect a 'security threat'. Without going into speculative scenarios, there is a real danger that powerful permanent members of the UN Security Council will engage in a militarised climate change adaptation strategy: they will use 'climate change issues' in affected countries to legitimise military intervention in 'fragile states' – to support like-minded national governments under the guise of countering 'threats to stability and peace' and 'climate justice'. Along these lines, some commentators go so far to say that:

> (w)hen the military and security forces are the strongest and best-funded institutions in our society, we can't be surprised when they become the default institutions for dealing with climate change impacts (Buxton 2018).

What is striking in the climate and security nexus is that little attention has been drawn in either public or academic discourses to the military as a key actor and its role in enforcing a corporate-dominated fossil-fuel economy. Some may argue that this is another expression of the power of the military-industrial-complex. The role of the army in climate crisis will be further discussed in the next section.

We have highlighted here four different but related challenges for those working on fragility and violent conflicts from a climate crisis perspective, while emphasising that the climate crisis is best understood as a fragility and risks magnifier and catalyst, most likely creating vicious circles of vulnerabilities as a result of multiple interrelated causalities.

'We cannot be radical enough in dealing with this issue.'
David Attenborough, July 2019

3. What are we waiting for? What needs to be done?

While the facts and trends climate scientists and the IPCC have put forward in relation to climate crisis are clear and straightforward, some people are waiting for science to give us an exact picture of future scenarios before they act. But this will never be possible because we are dealing with multi-causal dynamics of factors and impacts. This is especially true in the context of social tensions and violent conflict dynamics worldwide. Unexpected but plausible large-scale shock events such as nuclear war could drastically affect any scenario.

This implies at least three things:

1. First, gaps in evidence and knowledge should not be an excuse for political, organisational, professional or personal inaction or ignorance. We need to encourage a common-sense assessment of risk. If our house is burning down, our first reaction is not normally to seek academic evidence on the chances that it may or not be burned to a cinder. We simply act to put it out. In the same vein, we do not try to prevent firefighters from entering the house and putting out the fire. The fact that the vast majority of climate change scientists agree there is a climate and ecological crisis should prompt us to act. Given the dramatic and irrevocable consequences of climate change on our planet, it is common sense to take a low-risk approach, rather than stick our heads in the sand and hope that the outcomes will not be as bad as everyone is saying.

2. Second, as practitioners, individuals and organisations, we have to learn to deal with high degrees of uncertainty next to complexity, chaos and contradictions – some of us more than others. As Smith and Vinekanada put it: 'In development and peacebuilding in the face of climate change, it is perhaps better to be vaguely right than to risk being precisely wrong' (2009: 24). This would suggest that we, as professionals in the fields of expertise and practice, have to become much better at scenario building. Thinking outside the box needs to become the norm and not the organisational exception. A possible consequence could be that institutions and agencies in development and peacebuilding become more flexible, better at systemic and experiential learning, knowledge sharing and learning to adjust as they go along (Tanner *et al.* 2013). Thinking about these issues though a 'logframe mindset' will not help us to understand the complexity of the non-linear climate change-related risks in the context of development and peacebuilding.

3. Third, the impacts of the climate crisis urge an end to institutional and disciplinary 'silo thinking'. When we think of climate-related risks such as deforestation, drought or flooding, it quickly becomes clear that these interrelated risks and challenges need inter-sectoral analysis and solutions.

Given what we know about the climate crisis, what are the implications? We highlight the following, some of which are clearly more controversial than others.

At a minimum, 'better than nothing' donor strategies must immediately focus on implementing the Paris Agreement. Concretely and practically, this means all development and peacebuilding projects and programmes should undertake climate change impact assessments to analyse how a given project can mitigate or minimise potential harmful climate-related effects and maximise climate-friendly effects. How we design a project and programme in a way that supports local connectors and weakens dividers is central to so-called DnH (Do no Harm) methodology.[12] Looking at how DnH has been used by different development and peacebuilding actors, one could argue that the impacts of climate change (e.g. higher intensity and/or frequency of flooding or droughts) are often raised as important features of the conflict context without necessarily being labelled climate-related or -specific.

Given that many donors, agencies and NGOs aim to work with conflict-sensitive assessments such as the DnH methodology, peace and conflict impact assessments or peace and conflict assessments, it would not be necessary to reinvent the wheel but rather build on existing methodologies and frameworks and adjust them accordingly. Conflict transformation and peacebuilding projects and processes should be 'climate proofed' (Smith and Vivekananda 2009); that is, they should include climate-specific challenges and risks as part of the (post-) conflict context and build them into the peacebuilding design, project or process.

This is not easy to achieve. Smith and Vivekanda (2009: 17) offer an illustrative example of what they consider to be climate-proofed reintegration of ex-combatants in Liberia: reintegrating ex-combatants usually means socially and economically reintegrating them into society by allowing them to earn a living in their place of origin. For many of them, that means going back to rural areas and earning a living as a farmer. Given that projected climate change effects for Liberia mean crop yields may halve, with bleak prospects for traditional farming, Smith and Vivekanda propose that the climate-sensitive way to go is to introduce new farming techniques and

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[12] The current international and local practices of donors, agencies, international and local NGOs may suggest this methodology is used in multiple ways (e.g. safeguarding criteria, check lists for activities, staff recruitment, conflict-sensitive project and programme design).

alternative crop selection, and shift from crops to animal husbandry. By doing this, former fighters could become accepted members of the community instead of ending as resentful, unemployed farmers, and potential recruits for armed groups or militias (*ibid.*). However, one might argue that this could also be problematic and only of short-term benefit: new farming techniques might depend on chemical fertilisers that deplete the soil; alternative crop selection can lead to monocropping, which reduces bio-diversity and increases dependence on one crop; and animal production is less carbon friendly.

Despite the challenges in managing these trade-offs, we would stress that developing user-friendly climate change impact assessments should be a priority for donors and peacebuilding organisations to mitigate the most obvious harm. Additionally, we suggest context- and conflict-sensitive assessments of existing international and national climate change adaptation policies. This is based on the earlier understanding and discussion that adaptation can aggravate existing social tensions, vulnerabilities and conflicts.

Conflict- and context-sensitive climate change adaptation policies are badly needed. However, given the current extent of the climate crisis, we argue that to limit the worst and immediate harm to the climate, this minimum level of action will not do. Instead, transformative policies should be promoted that challenge the very practice of doing development and peacebuilding (Godfrey-Wood and Naess 2016) by focusing on:

- **Challenging the growth delusion; and**
- **Challenging the military-industrial complex.**

At the same time, we would like to highlight one important locus for making change happen:

- **Supporting collective resilience and resistance.**

Some dimensions of these three areas echo the long-standing demands of (national and international) climate justice and human rights movements and indigenous communities in the global North and South.

4. Challenging the growth delusion

While this is not the occasion to discuss the political economy of development and (international) peacebuilding (e.g. Distler *et al.* 2018; Gonzalez-Vicente 2018; Pugh 2005), much development and peacebuilding practice – supported by UN and other international and national agencies and donors – is based on uncontested principles of 'market integration or liberalisation', or what some scholars call 'market democracy'. This market liberalisation is based on the overriding idea of markets' capacity to deliver prosperity and development. It comes in the form of external – or externally dictated – economic (re)construction of social infrastructure and democratic institutions in poverty-ridden and war-torn societies.

The impacts of the climate crisis challenge the socioeconomic foundation of international peacebuilding and development – i.e. neoliberal models based on perpetual economic growth (Godfrey-Wood and Naess 2016; Maxton 2019). It confronts us with the dramatic and harmful effects of consumption and production in the global North and by elites in the global South.[13]

The global economy is driven by the growth imperative of large multinational corporations to maximise profits. If we take up the argument of Klein (2015) that the climate crisis 'changes everything' and critically challenges economic growth in the form of neoliberal capitalism, what does this mean for our understanding of economic growth underpinning development and peacebuilding practices?

In 2009, UNEP called for a Global Green New Deal (GGND) as a policy response to an international financial and economic crisis. The idea of the GGND was to revive the global economy and boost employment, while at the same time addressing climate change, environmental degradation and poverty. To this end, the GGND called on all governments to focus on economic recovery, poverty eradication, and reduced carbon emissions and ecosystem degradation. The GGND proposed a framework for green stimulus programmes, as well as supportive domestic and international policies (UNEMG 2011; Barbier 2010). Calls for 'green economy models' and 'green stimulus packages' have gained more international attention over

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[13] Scholars such as Lewton (2019) argue that the climate crisis shows us the limits of conventional development as professional practice and ideology.

the past ten years, although they have been on the table for some time, reflected in initiatives such as the UNCED declaration in Rio in 1992[14] or Agenda 21.[15]

While the GGND made reducing carbon dependency and developing renewable energy a top item on the policy agenda and in relation to climate change adaptation, Edward Barbier – a US economist and architect of the GGND – stresses that little additional support for the green transition has materialised in any country (Barbier 2019). Barbier offers important lessons from the GGND initiative in the light of calls for a 'Green New Deal' in the context of US policymaking, such as complementary pricing reforms to transition to green energy, including phasing out fossil fuel subsidies and taxing carbon (*ibid.*).

The policy discussions around the Green New Deal and the GGND should also facilitate a much-needed public and policy debate on the elephant in the room; namely, what kind of economic development we are aiming for in the context of the climate crisis. Are we subscribing to a big – albeit greener – 'growth delusion' (Pilling 2018)?

One could argue that the UN Sustainable Development Goals (SDGs) do not challenge the growth delusion but take it more as an unchallenged and unquestioned policy prerogative, which should inform sustainable development and peacebuilding processes and practices.

Most governments measure and read the economic development performance and social wellbeing of their citizens in the form of gross domestic product (GDP). From the GDP perspective, bigger and more are always better, whereas the effects of climate crisis show us the clear boundaries of and challenges to this logic. The economic benefits of increased GDP in any case overwhelmingly benefit the growing number of rich people, radically increasing the gap between rich and poor – a process which is strongly in evidence in countries such as Brazil, India and Nigeria.

This means that as large companies reap the rewards, international NGOs and development agencies have to pay the costs. Some commentators have argued for inclusive growth strategies and this is explicit in the compromise the SDGs represent.

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[14] See: United Nations Conference on Environment and Development (UNCED), Earth Summit

[15] See: Agenda 21, UN

Inclusive growth, however, still almost exclusively measures growth financially. Growth needs to be measured in relation to carbon emissions. The necessary move towards zero carbon emissions – not just their reduction – will require a complete redefinition of global international development imperatives.

While discussing the economic and analytical shortcomings – and benefits – of GDP as a measurement of economic development is beyond the scope of this article and has been done elsewhere (e.g. Pilling 2018; Stiglitz 2019), it raises important questions about policy priorities and the underlying fundamental understanding of wealth, a 'good life', and the wellbeing of citizens in relatively peaceful and violence-torn societies. Indeed, government policies will need to go hand in hand with consumer demands, and this requires articulating the necessary changes as sustainable, positive and life-affirming alternatives rather than as a reduction in living standards.

Challenges to the economic growth models are anything but new. The Club of Rome with its 1972 *Limits to Growth* report raised critical questions over our potentially harmful and damaging use of the planet earth's limited and finite natural resources (Meadows *et al*. 1972).

In 2012, the UN started promoting other measures of economic growth at the UN High Level Meeting on 'Happiness and Well-Being: Defining a New Economic Paradigm'.[16] The UN introduced the World Happiness Index and the UN Sustainable Development Solutions Network has published the Word Happiness Report annually since 2012. The report documents and ranks 156 countries by how happy their citizens perceive themselves to be (Helliwell *et al*. 2019). The indicators or factors that are measured are GDP per capita, health, life expectancy, social support, freedom to make life choices, generosity and corruption perception. Questions of environmental protection and climate justice have so far not been taken into account.

Bhutan was the first country to put wellbeing and environmental protection over economic growth by introducing the idea of gross national happiness (GNH) as the main philosophy of the country and the government.[17] Since 2008, GNH has been

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[16] See: Defining a New Economic Paradigm, UN 2012

[17] See: www.grossnationalhappiness.com

enshrined in the country's constitution. In late May 2019, the government of New Zealand introduced the *Wellbeing Budget* (New Zealand Treasury 2019), as GDP alone would not guarantee the improvement of living standards, and would capture who benefits and who is left behind (Sigal 2019; Dickenson 2019). Both Bhutan and New Zealand prioritise questions of wellbeing and health alongside those of environmental protection and sustainable and equitable socioeconomic development. New Zealand's wellbeing budget identifies two wellbeing goals that seem particularly relevant: moving to a low carbon emission economy and supporting indigenous communities (New Zealand Treasury 2019).

From a sustainability perspective, growth economies create a range of unintended consequences that are increasingly playing into the mix of social inequality amplified by climate change. For example, creating a landscape in which small-scale subsistence agriculture is no longer viable is a driver of migration from agricultural areas, which is leading to larger and larger urban conurbations. These are increasingly likely to be unsustainable, raising questions such as how food supplies can reach urban populations – even if they can be generated – without increasing investments in road transport, plastic packaging, refrigeration and so on. There is an almost unquestioned assumption that urbanisation is irreversible. What is needed is radical thinking that focuses on how the benefits of urbanisation can be brought to more sustainable urban units, served by more localised agricultural systems.

These initiatives prompt important questions for development and peacebuilding:

- **Focus on well-being not economic growth** – What are the lessons from New Zealand and Bhutan? How could discussions around the UN's World Happiness Index be used to inform emerging debates on reshaping our understanding of wellbeing, sustainable development and climate justice? How could ideas and concepts from the global South and indigenous populations that put wellbeing and environmental protection centre stage more strongly inform international and public and policy debates about sustainable development, peacebuilding and climate change adaptation?

- **Take radical action to regulate and enforce the reduction of CO_2 emissions** – What follows from a radical shift away from growth is that greater attention will need to be paid in both national and international law to regulating private sector practice. This suggests a much stronger role for the

state and international governance at a time when national democracy and international governance are under increasing threat. It requires a balancing act, in which citizens who challenge the state's inaction on climate change, do not undermine it in such a way as to prevent it from regulating large corporations.

- **Eliminate contradictory policies which undermine efforts to tackle the climate crisis** – Governments and donor policies need to be unequivocal in their response to human-induced climate change. They can no longer on the one hand support large-scale agri-businesses and on the other ecological alternatives such as permaculture. They can no longer encourage renewable energy resources while at the same time investing in fossil fuel development in countries such as in Ghana, Mozambique and Tanzania. As we discuss in the following section, they can no longer continue to sell arms while claiming to tackle the climate crisis.

5. Challenging the military-industrial complex

In 2015, a report commissioned by the G7 countries for the G7 summit titled 'A New Climate for Peace. Taking Action on Climate and Fragility Risks' recommended '[making] climate-fragility risks a central foreign policy priority' (adelphi *et al.* 2015: 13). Foreign policy is heavily influenced by the military-industrial complex in any country. The military, arms industry and multinational companies driving the military-industrial complex have a major impact on carbon-driven growth, but they are often ignored in policymaking.

While the USA is considered the world's single-largest consumer of oil and top greenhouse gas emitter (Crawford 2019), there is no clear information on the extent of the climate impacts of the entire military and security sector. According to different estimates, the USA's military engagement in the 2003–07 Iraq War generated more than three million metric tons of CO_2 pollution per month (Smith 2016; Crawford 2019).

While it is beyond the scope of this paper to go into the history of military emissions and climate impacts and discuss why they have not been placed at the centre of international climate change negotiations, one can safely assume that the level of

emissions put forward by the Emissions Gap Report (UNEP 2018) and recent reports by the IPCC (IPCC 2018, 2019) would almost certainly be much higher if military emissions were included. The automatic exclusion of greenhouse gas emissions from military action was removed in the 2015 Paris Agreement. The administration of President Donald Trump refused to sign the agreement, and it is not mandatory for signatory countries to track and reduce their military carbon emissions.

While military and security forces have started to improve their use of green, sustainable energy, critical voices consider this to be mainly 'greenwashing', a form of environmental marketing (Harris 2015). Commentators in the USA (Light 2014a, 2014b) see the military as having the potential to be a key change-maker. They argue that by linking climate change with national security risks, the military could be seen as an 'unequivocal validator of climate science' (Light 2014a: 1799) and in a position to influence individuals' attitudes, beliefs and behaviour on climate change, and thereby their use of fossil fuels and renewable energy.

Whether the US military – or for that matter any military – is the best institution to influence society's values and belief systems about climate change is debatable, not least because the current US president and commander-in-chief is an open 'climate denier'. Furthermore, Light's concept of the 'military-environmentalist complex' leaves the military logic unchallenged and uncontested: illegal arms trading and war-making are accepted forms of defence and foreign policy, and modern warfare is not possible without the profligate use of fossil fuels. By accepting the greenwashing of the military, we legitimise a 'new' military growth doctrine that justifies increased arms production and associated global risks.

As Buxton (2018) and Buxton and Hayes (2015) remind us, to understand the current power of the military-industrial complex, one must understand that the arms industry does more than sell weapons: it offers 'security solutions' against terrorism, illegal immigration, smuggling, natural disasters and cyber fraud. The Homeland Security industry in the USA has paved the way for this all-encompassing security concept. According to market research, the industry will be worth US$418 billion by 2022.[18] According to SIPRI (the Stockholm International Peace Research Institute), military

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[18] See: Allied Market Research, Homeland Security

spending is at an all-time high, reaching US$1,739 billion in 2017, equivalent to US$230 for every person on earth.[19]

Reducing military CO_2 emissions must urgently be put be on the agenda of climate change adaptation policies, which must go hand in hand with demilitarisation and disarmament. As the International Peace Bureau stressed in its most recent report, 'without the demilitarization of the economy, deep decarbonization cannot be achieved' (Lorincz 2014: 9).

According to the CDP Carbon Majors Report 2017, published by NGO CDP Worldwide, just 100 multinational companies are responsible for 71 per cent of global emissions (CDP Worldwide 2017). More than 50 per cent of global industrial emissions since 1988 can be traced back to 25 corporate and state-owned entities. The most recent update and research by the Climate Accountability Institute in October 2019 confirmed that 20 fossil fuel companies have contributed to 35 per cent of all energy-related CO_2 and methane emissions worldwide.[20] They range from investor-owned firms – household names such as ExxonMobil, BP and Shell – to state-owned companies – including Saudi Aramco and Gazprom. Other critical actors in the military-industrial complex and an equally carbon-intensive and environmentally destructive sector are the multinational mining companies, which often pay lip service to or ignore international jurisdiction and regulation on climate change adaptation.

The implications for development and peacebuilding as professional fields are the following:

- Climate change research and negotiations **must include military and multinational companies' emissions** in analysis, reporting and policymaking.
- Climate change adaptation and mitigation **policies must go hand in hand with disarmament** – one cannot be meaningfully achieved without the other.

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[19] See: Stockholm International Peace Research Institute, Global military spending remains high at $1.7 trillion

[20] See: Climate Accountability Institute

- **Support is needed for action research, innovation and activism** that challenge the military-industrial complex and promote non-violence, climate justice and disarmament.

- **Investment in innovative green start-ups and businesses** that promote or have a track record in renewable energy, deep decarbonisation or sustainable development, and contribute to and enhance peaceful relations should be accelerated and their scale-up supported. Much research along those lines has already been undertaken by initiatives such as the Deep Decarbonization Pathways Project,[21] which consists of scientific research teams from leading research institutions in 16 of the world's largest greenhouse gas-emitting countries.[22]

- **Climate-specific accountability and regulatory mechanisms for transnational companies** need to be developed alongside conflict-sensitive and climate-related impact assessments of existing trade and investment agreements, which drive transnational corporations' practices.

6. Supporting collective resilience and resistance

All questions around climate justice and climate change adaptation raise issues of local ownership, social change and collective resilience. While we are aware that 'the local' is not by definition always good – or more effective than national or international actors and policies – sustainable solutions will be highly dependent on local knowledge, power and ownership.

Looking at the long history of environmental protection and climate justice, one finds that a particular set of actors stand out: indigenous communities, urban poor, farmers and pastoralists. They are highly dependent on their lands for their livelihoods, and are typically either very directly affected by climate change and/or have a deep spiritual relationship with their traditional lands. Indigenous populations are endangered and their immediate livelihoods threatened when rainforests are

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[21] For more information, see: Deep Carbonization Pathways Project

[22] Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, South Africa, South Korea, the United Kingdom and USA.

destroyed (as is currently happening in the Amazon in Brazil). At the same time, indigenous climate activists have been exposed to gross human rights violations, including being killed or tortured for standing up for environmental protection and land rights, and against land grabbing. Female activists have disproportionately faced gender-based and sexualised violence such as rape. Activists from Brazil, Colombia, the Democratic Republic of Congo, Guatemala, India, Mexico and the Philippines engaged in environmental protection, who criticise the malpractice of governments and companies in sectors such as mining and extractives, agribusinesses, water and dams, and logging are in great danger of prosecution, intimidation, human rights violations and murder (Global Witness 2019).

Farmers cannot cultivate their lands if the soil is barren and infertile due to drought. As a result, there has been an alarming increase in serious mental health disorders such as depression, alcohol abuse and suicide among indigenous people and farmers in many countries heavily affected by the impacts of climate change; e.g. in India (Carleton 2017) or the case of the indigenous people living in the circumpolar North (Willox *et al.* 2015).

Over the past decades, and as mentioned earlier, NGOs, agencies and research institutes have documented the climate-sensitive development practices and peacebuilding initiatives of indigenous communities, farmers, pastoralists and the urban poor (Bahadur and Tanner 2014). What many of these local initiatives have in common is that they strengthen planning strategies for adaptation to climate change, as they draw on existing grassroots governance mechanisms and support inter-generational knowledge systems, integrating local and inter-generational knowledge to define patterns of vulnerability (see, e.g. the case study of the urban poor in Bangladesh in Johnson *et al.* 2019).

There are also good working examples of how local communities have used participatory research – action research, in particular – to develop an understanding of the local drivers of climate change impacts and meaningful responses to climate change. Tanner and Seballos (2012) offer examples of how children were able to generate responses to disasters and climate change through action research. Similarly, Harvey *et al.* (2012) show how the Ghana Community Radio Network build their programming on climate change around an extended participatory process of

systemic action research. Radio station activists facilitated community inquiries into issues, then created complex system maps to understand the complex causalities and drivers that explained how climate change directly and indirectly affected communities. One of the most interesting aspects of this work was how it surfaced the ways in which local vested interests and power holders were radically exacerbating very local impacts of climate change. It became clear, for example, how critical land tenure was to the issue of coastal erosion, as were plans to develop the coastal area for tourism. They turned this knowledge into radio programmes, which were then broadcast to a wide audience. Working through community radio stations, which had high levels of trust among local communities and wide coverage, meant that meaningful participatory processes could operate at scale.

If we believe that local communities know what is best for them when it comes to (non-violent) social change and climate change mitigation and adaptation, then it is critical for communities to make meaningful choices to help mitigate the impacts of climate change and develop innovative solutions to it.

Empirical evidence from different parts of the world underlines that participatory and inclusive climate change adaptation processes are well positioned and suited for building resilient communities, as they give marginalised groups the opportunity to voice their concerns, and promote social cohesion and inter-group inclusion (Rahman and Hickey 2016; Smith and Vivekananda 2007).

Resistance to participatory approaches is likely from those who have vested interests in the current status quo and inequalities. In fact, resistance might breed new socio-political conflicts. Peacebuilders have a role to play in including actors and stakeholders such as potential 'troublemakers', 'spoilers' and the so-called 'hard to reach', such as multinational companies and armed groups. But peacebuilding organisations will be limited in their ability to shift those with vested economic interests in control and power who are engaged in, for example, land grabbing and land deforestation. In this context, it is vital to support local political resistance and global climate justice movements. This will put pressure on donors and governments alike to take a principled political approach to climate justice.

Some of the most important implications for development and peacebuilding are:

- **A radical shift away from the 'projectisation' of funding and social change is required** – Grassroots and social movements know best what works in their cultural and climate-affected contexts. Donors should be willing to stop funding single and short-term climate change adaptation projects and invest instead in grassroots, local and regional movements for social change and climate justice.
- **Focus on the local** – Donors should finance extensive localised, participatory climate change mitigation and adaptation processes.
- **Protection provisions for climate justice activists** – Governments and donors should adopt a zero-tolerance policy on intimidation and violence against climate justice defenders (as discussed earlier).

7. Conclusions

This article has argued that the climate crisis 'changes everything' in so far as it demands a change in practice and in government and donor policies on fragility and violent conflicts. While a few peacebuilding organisations have been challenging the military-industrial complex and supporting collective resistance and resilience for many years, the climate crisis makes this work imperative and requires it to be politically mainstreamed. Challenging the growth delusion has to be understood as an overarching challenge for government, donor, and NGO practices and policies, as it radically questions our own lifestyles and consumer patterns.

We can carry on with business as usual, pretending that the growth economy and the military-industrial complex are doing no harm. But this is not the truth. The first demand of Extinction Rebellion is to 'tell the truth'. It is only once we collectively tell the truth and align ourselves with indigenous communities and international social movements, that we will be able to transform the systems which perpetuate climate injustice.

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