Handbook on Climate Change and Human Security

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12. Climate change and human security in Africa

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An examination of climate change and human security debates in and about Africa raises questions about representation and the politics of knowledge. Africa, as a continent, holds a special place in debates about climate change and human security: if human security is understood as living a life of dignity, enjoying freedom from want and freedom from fear, then it is in Africa that global climate change is seen as most likely to compromise personal and human security. There, 'unfreedom' from want and 'unfreedom' from fear are commonly seen as connected in a vicious circle of violence and destitution.

In IPCC and other documents, Africa is held up as the continent that is least responsible for climate change, but is likely to feel the worst of its impacts. High levels of poverty, environmental degradation, weak governance and dependence on natural resources in Africa mean that climate change is seen as likely to devastate livelihoods that are already vulnerable (Boko et al. 2007). Africa is also perceived as exhibiting 'weak adaptive capacity' (ibid.), and least able to make the changes necessary to build resilience to shocks that a changing climate may bring. This resonates with reports that single out Africa's unique vulnerability in terms of human security, such as the seminal report of the UN Commission on Human Security (2003). As livelihoods are devastated, conflict and migration are thought likely to result: 'Societies unable to adjust to the new challenges [of climate change] are left with two main options: fight or flee' (Buhaug et al. 2008: 17). Here Africa is a special case as it demonstrates a spectre of what could be if nothing is done: 'a canary in the coal mine, a foretaste of climate-driven political chaos' (Faris, 2007 cited in Hartmann 2010: 236).

In terms of representation and the politics of knowledge, Africa is also a particular case because it has long been the site onto which foreign, even humanity-wide, hopes, desires and fears are projected. Africa, it has been argued, has often played the part of the 'Other', imagined as lacking or absent, incomplete, incapable and uncivilized, in contrast to an ideal 'West' (Mudimbe 1988; Mbembe 2001; Ferguson 2006). Even in the environmental sphere, where the technical matters of soil erosion, forestry and rangeland management might be thought more neutral, understandings

have long been influenced by pre-formed, highly valorized models and imported stereotypes. For example, it was often taken for granted and 'received wisdom' that African people did not have the knowledge, foresight, rationality or capability to manage their environments sustainably, and that African individuals and communities were responsible for environmental degradation and desertification (Leach and Mearns 1996). Such 'degradation narratives' (Hartmann 2010) turned complex political processes into technical problems to be fixed, and often justified the management of environments shifting to colonial, state or private hands, at the expense of community access and use of natural resources. Facts and objectivity – knowledge and understanding – have too readily mattered little when well-established narratives guide and frame ways of seeing that are convenient and useful.

Paradoxically, the obstinate tendency to cast Africa as an object apart from the world, or a failed reflection of it, reminds of how perennially important 'Africa-and-the-world' is. This is no less true for the global significance of Africa in debates on climate change and human security. Here, the popular imaginary has already been conjured by the likes of Robert Kaplan (1994, 2001), who depicted an anarchical crisis in Africa of violent competition over the environment as portentous of things to come for the world at large. When, in 2007, UN Secretary-General Ban Ki-moon sought to expose the 'climate culprit' for violence in Darfur, Sudan, he had a captive audience.

The critique of the imaginative construction of Africa and its environment is now well accepted. For thirty years, many environment and development policies have tried to reverse the impact of these ideas with projects that take greater cognisance of local realities and attempt to integrate indigenous knowledge and community participation into their work. Despite initial enthusiasm, such work is not as easy as it might seem; work with communities is messy and goals have been hard won. The history of employing clichés and stereotypes has proved hard to shake off, and is still influential. In addition, as poverty, destitution and environmental degradation *are* a reality evident across much of the continent, the challenge has become to tease out projected fantasy – and all its accompanying baggage – from reality (Ferguson 2006). The challenge is also to develop better understandings of the complexities of local realities, without becoming too idealistic or specific or divorcing these understandings from the wider regional and international picture (ibid.).

Discourses about climate change and human security are relatively new, but they do not exist in a vacuum; they are situated within and interact with this wider discursive history. They also bring their own dynamic: As Jasanoff explains, science (in which climate change discourses are based)

operates according to 'abstraction' and that, not uncommonly, 'an impersonal, apolitical, and universal imaginary of climate change, projected and endorsed by science, takes over from the subjective, situated and normative imaginations of human actors engaging directly with nature' (Jasanoff 2010: 235). Global environmental management discourses frequently render local complexities 'illegible' (Adger et al. 2001), and climate change science has prioritized climate change over other drivers of change leading to reductive explanations (Hulme 2011). This chapter examines the ways the problems identified by these writers become magnified when it comes to Africa. There is an inherent danger that, in climate change discourses, the hard-won understandings of the complexities of people-environment relations in Africa may be cast aside and rendered apolitical. The discourses of climate change tend towards monocausal explanations, and prioritize the global scale; again, the local complexities are given insufficient weight in policy matters.

The 'security' optic adds its own urgent dynamic. The human security discourse has also come under considerable criticism for 'securitizing' the field of enquiry, thereby rendering it exceptional. Security crises warrant a kind of 'emergency politics' (Buzan et al. 1998: 24, 29) that unyokes human and social struggles from their embedded context and can justify external intervention from higher scales. The intersection of climate change and human security discourses thus brings to mind earlier critiques of 'environmental security' that arose after the 1987 World Commission on Environment and Development report (see Trombetta 2008). Wolfgang Sachs, writing in 1992, cautioned that,

> the 'survival of the planet' is well on its way to becoming the wholesale justification for a new wave of state interventions in people's lives all over the world . . . while environmentalists have put the spotlight on the numerous vulnerabilities of nature, governments as a result discover a new conflict-ridden area in need of political governance and regulation. (Sachs 1992: 33)

Security discourses readily serve the interests and ideas of actors – from foreign interveners to national states – who enjoy the 'power of naming' and who, in turn, often enact state-centric security logics (Suhrke 1999). When it matters most, freedom from fear dominates over freedom from want, and the fear is a self-referential fear of a world where chaos in peripheries such as Africa destabilizes the global north.

This chapter starts by examining what we know – and what we do not know well enough – about climate change in Africa, and its impact upon freedom from want and freedom from fear. The focus is on how emerging science and local complexity are simplified, reinterpreted and deployed within the new discourse of climate change and human security.

The chapter then shifts to two case studies that exemplify the politics of representation, and of science and politics at different scales. The conflict in Darfur, Sudan, illustrates the ways in which the securitization of climate change activates a particular freedom from fear discourse that gives weight to certain phenomena and causalities over others, directly and indirectly serving selected interests at multiple scales. The case of Marsabit in Kenya, examines the ways in which debates about climate change and freedom from want also tend to overlook certain inconvenient sets of processes, often complex and contingent local ones that are ill-suited to the modalities and objectives of external interveners.

Human security approaches claim to provide a more people-centred approach to understanding climate change and one that also employs 'joined up thinking' (Gasper 2010) across scales and across human-environment domains. There is great potential, therefore, in a human security approach which is 'integrative', 'addresses the wellbeing of individuals from multiple and interrelated perspectives' and 'draws attention to present and emerging vulnerability that is generated through dynamic social, political, economic, institutional, cultural and technological conditions and their historical legacies' (O'Brien et al. 2010: 4–5). The human security approach is also highly normative and ambitious. It frequently calls for system transformation or 're-design' in order to avert crises from climate change (Gasper 2010: 33). In practice, in the rush to meet the challenges before it is too late, the approach risks falling short of the ideal of integrating multiple perspectives on vulnerability, and the same old historic motifs about Africa appear. As before, Africa is seen as most vulnerable and most incapable, and most likely to resort to conflict; the continent serves as a reminder of either how far 'we' have come, or a threat of where 'we' might return. The chapter explores these processes within the human security and climate change discourse, and the ways that, unless vigilance is maintained, this discourse – like many of the environmental discourses in Africa before – could be hijacked to serve certain powerful interests.

THE IMPACT OF GLOBAL CLIMATE CHANGE ON AFRICAN CLIMATES AND THEIR HUMAN SECURITY CONSEQUENCES

Evidence suggests that Africa is warming at a faster rate than the global average (Conway 2009: 7). The high variability and diversity of climates across Africa make conclusions about the impact of global climate change on current climates difficult, and predictions of the future uncertain.

Compounding the heterogeneity is very poor availability of data: the average number of weather stations is reportedly eight times below that recommended by the World Meteorological Organization, and large areas are unmonitored (Washington et al. 2006). In addition, the interconnections between processes that drive African climate – the El-Niño Southern Oscillation (ENSO), tropical convection and the alternation of monsoons – are not well understood (Conway 2009). As a consequence, Africa has proved difficult territory for modellers: 'Africa shows the least agreement between models of all the continents and, apart from relatively small regions, for the majority of Africa the models do not agree on even the sign of change, let alone its magnitude' (Williams and Kniveton 2011: 3).

Conway (2009: 7) summarizes what *is* known: Africa in general is very likely to become warmer and drier, but in some areas it may become colder and wetter, and there is a very high likelihood of 'more extreme weather events' such as droughts and floods. In East Africa, it is thought that rainfall will increase by 10–20 percent, and its distribution will change, with more rain falling from December to January, and less from June to August; the temperature in the region is predicted to increase between 1.5° and 5.8° to 2080 (Toulmin 2009: 24).

Despite the variability and uncertainties, in policy documents, climate change is seen as leading to a 'downturn' in human security in terms of an increased inability to maintain a life of dignity in which basic needs are met, and an increased likelihood of conflict (Alkire 2003). In human security terms the ability to lead lives free from want and free from fear is increasingly compromised. In Africa, climate change has been characterized as a multiplicity of 'stresses' that act as a 'threat multiplier'.[1]

In terms of freedom from want, climate change is thought to lead to food insecurity and increased levels of malnutrition. Agricultural yields are estimated to reduce by as much as 50 percent by 2020 (Conway 2009; Boko et al. 2007). Economies will also be hit by the decline in agriculture, as 'crop net revenues could fall by as much as 90 percent by 2100' (Boko et al. 2007: 435). Water availability, ecosystems, tourism and tourist revenues, are all predicted to be negatively affected. Certain regions on the coasts may be inundated, and there are likely to be increased numbers of deaths from extreme weather events (Conway 2009). Diseases are predicted to increase: as well as the abovementioned malnutrition, malaria is predicted to spread into areas of higher altitude, there may be an increase in cardio-vascular diseases from changes in air quality, and increased levels of diarrhoeal diseases. Evidence that an increase in mean temperature would lead to the devastation of many lives and livelihoods led many African participants at COP15 in Copenhagen to criticize the target proposed by northern countries to limit global temperature increase to

only 2°C above pre-industrial levels. Following a speech by Lumumba di-Aping, Sudanese diplomat and Chief Negotiator for the G77 at COP15, many Africans adopted the slogan '2 degrees is suicide'. Di-Aping drew on the IPCC's own calculations to argue that a global temperature increase of 2°C, would mean a 3.5°C increase for Africa, and that '2 degrees Celsius would mean certain death for Africa'.[2]

In terms of freedom from fear, it is a broadly held concern that climate change will lead to large-scale violent conflict in Africa. Emblematic in this logic is the Darfur case, which Ban Ki-moon, UN Secretary-General, described in 2007 as evidence of that war's 'climate culprit':

> Almost invariably, we discuss Darfur in a convenient military and political shorthand – an ethnic conflict pitting Arab militias against black rebels and farmers. Look to its roots, though, and you discover a more complex dynamic. Amid the diverse social and political causes, the Darfur conflict began as an ecological crisis, arising at least in part from climate change. (Ki-moon 2007)

The underlying logic in this and similar claims is that anthropogenic climate change leads to natural resource depletion, scarcity and competition, with disproportionate effects on low-income land and agriculture-dependent households. Wars, of course, need to be fought; the implicitly reductionist and deterministic logic here – inescapable for climate change to remain a meaningful independent variable – is that individuals (especially, idle and disenfranchised young men), political entrepreneurs, communities or even governments, act on the rational calculation that it is worth taking up arms to secure socio-economic position in the struggle over shrinking natural wealth.

The argument is a development from the 'green war' hypothesis (Homer-Dixon and Blitt 1998), which historically has emphasized population growth (Ehrlich and Ehrlich 1970) as one of the major problems and drivers for environmental degradation and natural resources scarcity that leads to conflict and collapse. For one well-known writer, Thomas Homer-Dixon, the population driver underlies an explanation that 'scarcities of critical resources – especially of cropland, freshwater and forests – contribute to violence in many parts of the world . . . stimulat[ing] insurgencies, ethnic clashes and urban unrest' (Homer-Dixon 1999: 12). Hartmann labels this the 'degradation narrative' (Hartmann 2010), that over-population and poverty combine to cause ecological damage, precipitating migration to other ecologically vulnerable areas that in turn fuels political instability.

In recent studies, population growth is still a factor in pressure on resources, but the spectre of rapid resource depletion owing to climate change has come to dominate and, with it, the spectre of devastation has

expanded. Again, Homer-Dixon, popularizing his thesis in the *New York Times* in 2007, wrote: 'Climate stress may well represent a challenge to international security just as dangerous – and more intractable – than [the Cold War arms race or the proliferation of nuclear weapons]' (Homer-Dixon 2007). Homer-Dixon's views were echoed to different degrees by a diverse chorus of notables. During the UN Security Council's first debate on climate security, British Foreign Secretary Margaret Beckett was emphatic regarding the connection: 'What makes wars start? Fights over water. Changing patterns of rainfall. Fights over food production, land use' (Reynolds 2007). From the 2006 Stern Review on the Economics of Climate Change to the Norwegian Nobel committee and Nobel Prize winner Al Gore in 2007, looming climate conflict was linked to resource stresses in already over-populated and poor regions of the world, notably Africa.

Taking a closer look, recent research has drawn a strong link between rainfall variability and GDP (Ludwig et al. 2009, cited in Richardson et al. 2011: 109). From 1979 to 2001, dry years had a devastating impact on the GDP of African countries; and years of excessive rainfall did not, as well as years of average rainfall. However, the relationship between reduced interannual rainfall and *conflict* is far from certain. For Hendrix and Glaser (2007: 696), interannual variability in rainfall is 'the most significant climatic variable' driving conflict onset. However the authors did not predict increased variability in sub-Saharan Africa. Ciccone (2011) argues that there is statistically no relationship between conflict and reduced rainfall in sub-Saharan Africa, critiquing previous studies that affirmed this connection for not accounting for positive correlations between conflict and earlier increased rainfall. Hendrix and Salehyan (2012) analyse data for a broader definition of conflict and argue, quite opposite to prevailing wisdom, that abundant rainfall correlates more strongly with violent events.

The debate on the drought/water-shortage and conflict nexus continues to rage. In a detailed study of an African dataset for the years 1960 to 2004 that plots sub-national geo-referenced data on annual precipitation with similarly granular data on the location of civil war onset and the political and socio-economic status of ethnic groups (Theisen et al. 2011), the authors find that despite popular discourse, the drought-conflict connection is not supported. Instead, civil war onset is strongly linked to areas of political marginalization, and 'this statistical regularity is unaffected by abrupt local water shortages' (Theisen et al. 2011: 81–2).

The link between conflict in Africa and climatic warming more generally has also been argued. On assessing a longitudinal national-level dataset,

Burke et al. (2009) claimed that a 1-degree *interannual* increase in temperature directly brought about a 4.5 percent increase in civil conflict in sub-Saharan Africa, ostensibly because of the stress on crop yields caused by warming. In what the authors claimed was the 'the first comprehensive examination of the potential impact of global climate change on armed conflict in sub-Saharan Africa', the study warned of a roughly 54 percent increase in armed conflict incidence by 2030, or an additional 393,000 battle deaths, based on current rates of war-related fatalities. Better governance or economic status did not, they argued, change the causal significance of warming. The study was subject to staunch criticism (see Buhaug (2010) and Richardson et al. (2011) for review), albeit sometimes replacing one causal macro-variable with another to predict violent conflict. Nevertheless, it was easy fodder for the popular press, with pictures of human tragedy in Darfur accompanying a BBC headline, 'Climate "is a major cause" of conflict in Africa'.[3]

For Gleditsch et al. (2007), migration is a key factor in creating conflicts. Yet of course, migration can also be a key adaptation strategy for individuals affected by both conflict and climate change. Again, the causal relation is not at all settled, with Theisen et al. (2011: 85) arguing that although transnational refugee flows might have some effect on the outbreak of armed conflict, 'it is far from obvious that environment-induced migration (to the extent migration can be considered monocausal) will have the same security implications.'

An examination of the African case highlights the ways in which climate change is likely to generate new challenges for people across the continent. The climate change and human security debate illuminates the scale of the problem that is occurring and emphasizes the ways in which issues of personal dignity and well-being – in terms of fear and want – are inter-related. But the African case also illuminates the ways in which the new discourse of climate change and human security can be used in ways that simplify complex situations, and obscure many other important processes taking place. The appropriation and distortion of the academic discourse in policy circles occurs despite its unsettled and formative nature. Climate change is a highly complex set of social and material processes that require greater understanding and yet also urgent policies; this tension has proven difficult to resolve for all concerned. In Africa, it has also become a useful discourse that is deployed by many because it serves certain interests. By further examining some elements of these processes through case studies, the rest of this chapter sheds light on benefits as well as dangers of employing the climate change and human security discourse.

FEAR: DARFUR, AFRICA'S CLIMATE CONFLICT *CAUSE CÉLÈBRE*

In Africa, climate change is cast as a 'threat multiplier' amongst multiple, grave threats. Talk of climate change invariably foreshadows upheaval, flight, violence and destruction across the continent. Fears over climate-induced conflict in Africa feed off credible estimations of acute levels of human insecurity where populations are highly reliant on climate-affected livelihoods sectors (notably rain-fed agriculture) and seemingly endemic problems of political instability. They also serve purposes far beyond the continent. Referring to the Darfur case, Brown has lamented that, 'Africans are not really the *intended audience* of the post-Kyoto debate, but they are part of the *evidence* being used to make it' (Brown 2010b: 42, emphasis in original). The 'evidence' is wrapped in a chilling counsel of fear. Yet this fear, abstract and totalizing, is too readily overdetermined, with distorting effects on how specific conflicts and periods of violence are framed, causes interpreted, consequences mitigated and responsibilities attributed. While the climate-induced conflict discourse might be well-meaning in its intentions on one scale (for example, using the spectre of threat to galvanize global governance action), at local scales these distorting effects can interact with conflict dynamics, political contestation and humanitarian and security interventions in not unproblematic ways. Moreover, the scientific debate on causal relationships is far from settled, and this ambiguity allows for a degree of interpretive license in how causal effects are characterized. The risk here is that the very real levels of human insecurity faced by African communities due to violence and upheaval, including in the context of the ecological consequences of climate change, are not more effectively addressed.

We must ground what follows in a basic contextual account of Darfur's history of conflict.[4] Darfur is a large region (the size of France, or Texas) in western Sudan that is relatively under-developed and remote from the capital in Khartoum, and where local inter-group conflicts linked to access to scarce natural resources have intermittently occurred for centuries. The region is home to a diverse and fluid mix of ethnic groups and livelihoods practices that betray simple binary oppositions of 'Arab' *versus* 'African' or 'non-Arab', or 'farmers' *versus* 'pastoralists', and which underlie the complex dynamics of resource governance and conflict. By the 1980s, local conflicts between groups had grown in scale and become more deadly. There is no doubt that ecological crisis – namely, from the early 1970s onwards, a sharp drop in rainfall and desertification in the more arid northern regions and livelihoods stress in semi-fertile and farmed areas – was a structurally relevant condition for this trajectory. However,

one critical ingredient that led to large-scale and more politicized conflict was governance failures, especially the Sudanese state's inadequate and oftentimes partisan response to the worsening situation.

In the 1970s, the Sudanese government's partial dismantling and inconsistent use of traditional tribal land governance and dispute resolution systems shifted these functions onto a weak and politically fractured state administration. The authorities' poor response to successive droughts culminated in a deadly famine in the early 1980s (de Waal 2005a). This livelihoods crisis endured thereafter, exacerbated by the retreat of regional authorities and neglect from the central state. Whereas past resource-based conflicts occurred without particular reference to 'Arab' *versus* 'non-Arab' or 'African' distinctions, ethnic polarization had grown during a period when the central government privileged a certain idea of 'Sudanese' identity over pluralism and regional diversity (de Waal 2005b). Because of its strategic location, Darfur was also drawn into the racialized Libya-Chad conflict that lasted until the early 1990s (Burr and Collins 1999). The Sudan government's role in this war, and in manipulating local political structures thereafter, vacillated depending on the tactical alliances of the government of the day. The result was increasingly fractious local politics and vocal anti-government sentiment in a region awash with arms.

The spiral into the civil war that began in 2002–03 also had overwhelmingly political drivers. Divisions within the central ruling party in Khartoum led to the prevailing faction around President Omar el-Bashir conducting a targeted and draconian security operation in Darfur and other regions (Flint and de Waal 2008). Then, amidst the tectonic shifts of peace negotiations to settle the country's long-running 'north-south' civil war, armed rebellion against the government took hold. The conflict escalated rapidly after a major assault on military installations by rebels in April 2003 was answered with a ruthless government counter-insurgency. The situation was evidently one of civil war, not a mere livelihoods conflict. By late 2003, the UN considered the situation in Darfur as the worst humanitarian crisis in the world. By 2006–07, the conflict had forcibly displaced over 2 million civilians and was estimated to have claimed over 400,000 lives (Degomme and Guha-Sapir 2010).

The devastation of violence, death and displacement in Darfur occurred within the context of long-term human insecurity that has roots in livelihoods and ecological crises, but, in line with the argument of Theisen et al. (2011), the degree of fear experienced by Darfur's peoples owes much to the overwhelmingly political factors of marginalization, militarization and manipulation. As the analysis below demonstrates, most of this context, history and political contingency – even the brief account given above – is trivialized with dangerous effects when totalizing frames such as 'climate change', or even 'genocide', take centre stage.

The Darfur conflict had raged for some years before the 'climate change conflict' label rose to prominence in 2006 and 2007. This happened in the context of efforts to put climate change on the agenda of the UN Security Council, for which a foundational link between climate change and 'international peace and security' was essential. When Ban Ki-moon fingered the 'climate culprit' in Darfur in 2007, his was not a lone voice. The United Kingdom Special Representative for Climate Change, John Ashton, also labeled Darfur as the 'first modern climate-change conflict' in April 2007 (see Mazo 2009: 73). In early 2006, the British Defence Secretary, John Reid, had pointed to the 'blunt truth' that Darfur foretold regarding environment, conflict and future dystopias: '[t]he lack of water and agricultural land is a significant contributory factor to the tragic conflict we see unfolding in Darfur. We should see this as a warning sign' (Russell and Morris 2006). Later, in 2008, France's President Nicholas Sarkozy, hosting a so-called Major Economies Meeting on climate change, also deployed this *cause célèbre* to warn of the violent future of climate change: 'In Darfur, we see this explosive mixture from the impact of climate change, which prompts emigration by increasingly impoverished people, which then has consequences in war. If we keep going down this path . . . the Darfur crisis will be only one crisis among dozens of others' (Agence France Press (AFP) 2008).

The economist Jeffrey Sachs perhaps made the claim loudest and longest. As early as November 2004, he told an audience in Oxford University, 'You heard it from me first, Darfur is the world's first climate change war' (Sachs 2004). In 2006, in a piece for *Scientific American*, 'Ecology and political upheaval', Sachs turned again to 'The deadly carnage in Darfur, Sudan . . . which is almost always discussed in political and military terms, has roots in an ecological crisis directly arising from climate shocks' (Sachs 2006).

We must look more closely at the causal explanation relied upon in these general statements. In his book *Common Wealth: Economics for a Crowded Planet* (Sachs 2008), Sachs elaborated his argument regarding Darfur in clear neo-Malthusian terms:

> as the population has soared, the carrying capacity of the land has declined because of long-term diminished rainfall. . . . The striking pattern is the decline of rainfall starting at the end of the 1960s, a pattern that is evident throughout the African Sahel. . . . The results have been predictably disastrous. Competition over land and water has become lethal. (Sachs 2008: 248–9; quoted in Verhoeven 2011: 692)

Ban Ki-moon explained similarly the causal driver:

> Two decades ago, the rains in southern Sudan began to fail. According to UN statistics, average precipitation has declined some 40 percent since the early

> 1980s. Scientists at first considered this to be an unfortunate quirk of nature. But subsequent investigation found that it coincided with a rise in temperatures of the Indian Ocean, disrupting seasonal monsoons. This suggests that the drying of sub-Saharan Africa derives, to some degree, from man-made global warming. (Ki-moon 2007)

This explanation combines a causal vector of reduced rainfall (oddly, and incorrectly, in 'southern Sudan', quite a distance from Darfur, for which he could have cited credible data) with wider continental weather effects of warming. A similar argument had already been made by Faris in *The Atlantic*, that the 'real fault lines in Darfur' were between 'settled farmers and nomadic herders fighting over failing lands' because of lack of rainfall (Faris 2007).

The epistemic interactions between how Darfur's conflict was instrumentalized and leveraged by commentators and political actors operating at a global scale, and how the research and policy community was analysing and studying the conflict, warrant closer scrutiny. Ki-moon cites 'UN statistics', and a seminal report that gave 'credibility' for the Darfur-as-climate-conflict argument was the UN Environment Programme (UNEP) report, 'Sudan: Post-Conflict Environmental Assessment' (2007). In it, UNEP warned against over-determining the causal role of climate in understanding conflict in Sudan, but nevertheless warned of a 'very strong link between land degradation, desertification and conflict in Darfur', such that the conflict there serves as 'a tragic example of the social breakdown that can result from ecological collapse' (UNEP 2007). UNEP drew directly upon the arguments of Homer-Dixon and others, to make the causal link between overpopulation (people and livestock), climate-related water shortages and environmental crises and conflict in the region. They gave particular focus to long-term desertification (a 50 to 200 km southward shift of the boundary between desert and semi-desert since the 1930s) and the sharp drop in rainfall (notably, of over 30 percent over 50 years in Northern Darfur):

> The scale of historical climate change as recorded in Northern Darfur is almost unprecedented: the reduction in rainfall has turned millions of hectares of already marginal semi-desert grazing land into desert. The impact of climate change is considered to be directly related to the conflict in the region, as desertification has added significantly to the stress on the livelihoods of pastoralist societies, forcing them to move south to find pasture. (United Nations Environment Programme (UNEP) 2007: 60)

There is a sense in the foregoing that climate-induced ecological crisis in Darfur had been gradually and inevitably driving people to a tipping point into collapse and large-scale violence. Yet evidence suggests the rainfall

reductions were abrupt rather than incremental. Thus the rainfall effect is less readily understood in terms of interannual variability and reduced rains, which some authors cited earlier have linked causally to violent conflict. Rather, in Darfur as elsewhere in the region, there was a sharp break in long term average rainfall trends around 1970. For Kevane and Gray (2008), the fact that rainfall in Darfur exhibited a flat trend in the thirty years preceding the conflict (1972–2002), albeit with normal interannual variability, underscores a very weak causal relationship between climate change and conflict. A comparative analysis of 38 African countries, 22 of which showed similar structural breaks in rainfall, demonstrated no obvious relationship between such breaks and later conflict.

Besides the rainfall explanation, there remains a more traditional 'neo-Malthusian' argument tying general competition over scarce natural resources to environmental degradation. Even here, the evidence is ambiguous. Brown's examination of Normalized Difference Vegetation Index (NDVI) data to measure 'eco-scarcity' leads him to conclude that the outbreak of conflict was not linked to a proximate worsening of the ecological situation (Brown 2010a). Rather, vegetation growth in the years preceding the outbreak of conflict were better than average over a 25-year period.

Nevertheless, it is rather the attribution of the reduction in rainfall and consequent desertification to the rise in temperature of the Indian Ocean that underpins the 'climate change' explanation. This explanation seems to lay blame squarely at the feet of the historical 'warmers' of the twentieth century, namely the industrialized 'North', and thus is especially valuable to policymakers and activists seeking global climate governance reform, notwithstanding the actual causal link to conflict incidence. Yet the jury is still out on whether the rise in surface temperature of the Indian Ocean that began in the 1950s was anthropogenic in nature. Just as the propensity in the 1970s to lay blame for desertification and drought in the Sahel on 'bad' local land practices and population stress (Charney et al. 1977; Lamprey 1988 on Sudan) has been largely debunked (Swift 1996; Brooks 2004), any blithe attribution of responsibility for the drop in rainfall in the Sahel to anthropogenic climate change risks being discredited as the state of knowledge improves.

Returning to Darfur, the way in which conflict there was framed and the violence named, had already been politically charged when the 'climate conflict' label came to the fore in 2007. During the early stages of the armed rebellion and ensuing ruthless counter-insurgency operation by the state, the Sudanese government had sought to depoliticize the violence and attribute it to 'banditry', 'lawlessness' and 'local' and 'tribal' grievances over resources. The central authorities were already

looking to the environment and livelihoods as causes that exculpated their political responsibility well before outsiders activated the 'climate change' argument.

Similarly, it was convenient for Western governments invested in a concurrent peacemaking effort to end the country's long-running 'north-south' civil war to 'localize' the Darfur conflict lest it confuse and disrupt their strategy for securing a negotiated 'peace' (Srinivasan 2012). When, in late 2002, a Darfuri activist had the ear of the UK Special Representative on Sudan and pointed to ominous signs of 'ethnic cleansing', he was reportedly educated on the nature of the conflict being due to stresses upon the 'carrying capacity of the land' (ibid.). When Amnesty International sought to bring global attention to the escalating conflict in 2003, they were rebuffed by British officials for being 'peace spoilers' (Srinivasan 2006). The spectre of 'genocide' did bring Darfur into the global spotlight in 2004, when the 'north-south' peace agreement was all but secure, but it also came at the cost of once again downplaying the complex socio-political history of the conflict and with the effect of further politicizing binary ethno-racial identities (de Waal 2005b).

It is thus of little wonder that researchers on Sudan lamented the risks of Ban Ki-moon's focus on Darfur's 'climate culprit' stemming from the UNEP report. The worry that '[global warming] has become such a trendy issue that everything is being packaged as climate change' (IRIN 2007) was not one of a 'climate sceptic' but of a political analyst aware of the real political dangers inherent in parsimonious pronouncements in high places. Sudan's UN ambassador had the wind in his sails when, addressing a US college gathering in late 2007, he cited Ban Ki-moon's *Washington Post* editorial and explained,

> The major cause of the question of Darfur is the environmental degradation from climate change. Darfur is a classic case of climate change. People have witnessed gradual degradation of the environment and erosion of the resources and desertification and drought that was going on for a long time, since the beginnings of the seventies. (Straw 2007)

Global discourses that evidence African examples to further wider agendas at higher scales contain political judgments that actively shape other discursive spheres and might be leveraged and instrumentalized by local actors in unintended ways. In Africa, the policies, norms and ideas of powerful external actors have arguably long been central to the 'extraversion' strategies of domestic political actors (Bayart 2000).

The securitization of the Darfur conflict in climate change terms undermined more than advanced the human security concerns of the people of the region. Darfur shows us that at the heart of the intersection of climate change and human security lie political ecology contestations at multiple scales. Competition over livelihoods resources in a context of major ecological change is a grave threat multiplier in terms of Africans' freedom from fear across the continent, but a sharp focus on the dynamics of this fear and its causes must fully incorporate, and not elide, the highly socio-politically contingent nature of large-scale conflict.

WANT: SECURING CLIMATE-THREATENED LIVELIHOODS IN MARSABIT, KENYA

Climate change and human security debates in Africa have historically focused on the natural resources competition-conflict nexus, but, as the Darfur case indicated, underlying this is a broader concern that climate change is leading to a 'downturn' in human security because of its potential devastating impact on livelihoods. The 'multiple stresses' from changes in weather patterns, and more extreme weather events such as drought or flooding, are thought to lead to an inability to meet basic food security, and to create vulnerability to disease and collapse. Images from newspaper and development reports tell a story in which climate change is likely to mean that people's lives are reduced to 'bare life', 'devoid of rights, choices and possibilities' (Elford 2008, from Agamben 1998). It is also thought that living in these conditions means that people 'have nothing to lose' and are more likely to resort to conflict. Policies to secure human dignity are thus made more urgent.

According to the UN, 2011 saw the worst drought in Eastern Africa for sixty years. Commentators have been cautious of directly linking this drought to climate change, but, still, the drought has been held up as an illustration of the extreme vulnerability of people in the region to climate change, and a taste of things to come. As an Oxfam blog comments:

> Attributing the current drought directly to climate change is impossible, but in the words of Sir John Beddington, the UK government's chief scientific adviser . . . 'worldwide, events like this have a higher probability of occurring as a result of climate change'. Moreover, unless something is done, the current suffering offers a grim foretaste of the future – temperatures in east Africa are going to rise and rainfall patterns will change making a bad situation worse.[5]

Even before the 2011 drought, media and development industry discourses were expressing concern about the devastating impact that climate change was already having on the livelihoods of people in the dryland regions of east Africa. For example, after a visit to Moyale on the Ethiopia/Kenya border in 2009, John Vidal, a prominent and well-informed journalist,

wrote an article in a UK broadsheet newspaper under the heading 'Climate change is here, it is a reality'. He continued, 'as one devastating drought follows another, the future is bleak for millions in East Africa' (Vidal 2009).

Vidal's observations relate to a dryland area, where rainfall is low and unpredictable. In Marsabit County on the Kenyan side of the border, the people are pastoralists who have historically depended on camel or cattle herding, combined with sheep and goats. Mobility was important to these livelihoods as it allowed herders to move to areas where grass had grown following rain, and to move away from grazed areas to allow grass to recover. In the media and development industry discourses, these pastoralist livelihoods are now seen as particularly precarious and under threat from climate change. As climate change begins to bite, the suggestion is that this livelihood is no longer sufficient. For example, as Vidal continued, quoting a 'climate advisor' to a development NGO:

> [Climate change is] not in the imagination or a vision of the future. [And] climate change adds to the existing problems. It makes everything more complex. It's here now and *we have to change*. (ibid.; italics ours)

These ideas are also propounded by development organizations working in the region. One of the largest NGOs in the area claimed in a report that:

> As a result of climate change, *the ecosystem within Marsabit is no longer favourable to pastoralism*. The communities need to diversify their livelihood in order to reduce risk to natural disaster like drought. (NGO Report 2010; italics ours)

These views of the situation in Marsabit are not unique: they are just one example of a wider mainstream perspective on climate change, human security and pastoralism. Catley and Aklilu, for example, found that the view that 'pastoralism is in crisis and non-viable, as evident from increasing levels of pastoral destitution' (2013: 85) was a prominent narrative among humanitarian and development actors in the Horn of Africa in 2010, and that it gained strength from 'an emerging sub-narrative around climate change' (ibid.: 85). Returning to Marsabit, we find that little evidence is presented to support claims that the 'ecosystem is no longer favourable to pastoralism'. As Catley and Aklilu (2013) suggested for the Horn of Africa more generally, the existence of large numbers of people in the area who have lost animals and depend on food aid is considered evidence enough, despite the fact that their pathways into destitution are likely to have been various and not necessarily climate-related.[6]

In Marsabit, two further lines of argument that relate to climate change and human security are marshalled as evidence for the 'pastoralism

is non-viable' view. The first is the argument that conflict has already resulted from competition for resources, and that therefore, unless something is done, further conflict is likely to result.[7] The simplifications of, and problems with, this logic have been discussed above. In the second line of argument, references are made to scientific analyses of livestock's impact on the environment – at a global scale – in order to make the case that, even if pastoralism were 'working' at the local level, it is now understood to be too environmentally damaging *at a global scale* to be an option. For example, alongside a discussion of the problems facing pastoralist livelihoods in Marsabit, a report of the NGO discussed above cites a prominent Food and Agriculture Organization (FAO) study by Steinfeld et al. (2006) called *Livestock's Long Shadow*. A UN press release that accompanied the launch of this FAO report captures its main message:

> What causes more greenhouse gas emissions, rearing cattle or driving cars? Surprise! According to a new report published by the United Nations Food and Agriculture Organization, the livestock sector generates more greenhouse gas emissions as measured in CO_2 equivalent – 18 percent – than transport. It is also a major source of land and water degradation.[8]

By referring to the Steinfeld et al. report, the NGO implies that livestock-based systems are problematic from a wider global climate perspective, because they are high greenhouse gas emitters and sources of environmental degradation. Yet the relevance of these claims to Marsabit can be questioned (see below). First, however, more general questions can be raised about the 'pastoralism is non-viable' narrative and the extent to which climate change is leading to such a downturn in human security. These narratives and ideas are often unquestioned because they fit with the common sense expectations of observers that pastoralists, who live in 'harsh' and 'marginal' environments and who are so closely dependent on nature, should easily be pushed into destitution by climate change. They appear as the archetypal people living on the edge, for whom the smallest nudge will push them over, with sometimes violent consequences for many others near and far. Here, fears about climate change have been used to breathe new life into older narratives in which:

> for many decades, governments regarded pastoralism as 'backward', economically inefficient and environmentally destructive, leading to policies that have served to marginalise and undermine pastoral systems. (Nassef et al. 2009: ii)

The main premises of this historic narrative have been critiqued before (Niamir-Fuller and Turner 1999). But the premises that relate to climate change are new and merit further investigation.

First, it may seem obvious that 'marginal' and dryland environments may be the first and worst hit by climate change, but in practice no easy conclusions can be made (Ayantunde et al. 2011). It is extremely difficult to make accurate or certain statements about climate change's impact on the environment on which pastoralists depend (Thornton et al. 2009). The impact of climate change on grasslands and livestock systems depends on complex interactions between temperature, rainfall and CO_2 emissions. Thornton et al.'s (2009) review of scientific research in this area concluded, unsurprisingly, that under rising temperatures 'average biomass generally increased for warm-season grasses and decreased for cool-season forbs and legumes'. . . but also that 'there are likely to be smaller impacts on livestock yields per se . . . because of the ability of livestock to adjust consumption' (2009: 116). A reduction in rainfall is likely to have a stronger negative effect on pasture and livestock productivity. But, predictions suggest that, if anything, rainfall in East Africa may increase and, despite anecdotes and fears, as yet no overall drying trend in the region has been measured (Catley and Aklilu 2013). Thornton et al. (2009: 120) also make the point that 'the tropics and sub-tropics contain a wealth of animal genetic resources that could be utilized in relation to heat-stress-related issues' as local livestock breeds are well-adapted to heat-stress. In summary, the science relating to the impact of climate change on dryland pasture is not yet comprehensive or certain. If the ecosystem in Marsabit is 'no longer favourable to pastoralism', it has not yet been conclusively demonstrated that this is as a consequence of climate change (as claimed), or that such an outcome is inevitable.

Second, questions can be raised about the extent to which Steinfeld et al.'s (2006) study is helpful for understanding the local processes taking place in, for example, northern Kenya. Steinfeld et al.'s (2006) study focuses on the global impact of livestock and is an enormously complex subject. It involves combining data on the environmental impact of different types of livestock (pigs, chickens, cows, small ruminants, etc.), reared under different conditions (extensive, intensive; small-scale, large-scale; commercial, subsistence; high-tech, low-tech; global north, global south), and it explores the impact of livestock on direct pollution through emitting nutrients and organic matter, pathogens and drug residues, gases such as methane (directly and from waste). It also explores the impact of livestock on water use, biodiversity and on the degradation of land used for grazing and feedstocks. The study also calculates that there is an opportunity cost to grazing lands – if trees were grown there instead, for example, then a more positive (instead of negative) impact could be made on the global environment.

For Steinfeld et al. (2006: xx), pastoralists like those of Marsabit contribute to land degradation ('extensive grazing still occupies and degrades vast areas of land'), and they have a negative impact on biodiversity through habitat destruction and conflict with wildlife. The report points to the enormous significance to global greenhouse gas levels of negative externalities from livestock systems which are intensive, vertically integrated, geographically concentrated and in which production has been up-scaled through various technological innovations. And this suggests that, in terms of greenhouse gas emissions, extensive grazing systems may do better. But at the same time, it criticizes extensive pastoralism systems because of their use of wide areas of land which could be put to other more productive purposes, and concludes that

> intensification – in terms of increased productivity both in livestock production and in feed crop agriculture – can reduce greenhouse gas emissions from deforestation and pasture degradation (Steinfeld et al. 2006: xxi–xxii)

A careful and systematic analysis of this influential report is still awaited, but reservations have already been expressed about the application of this kind of analysis to areas like northern Kenya (NRI 2010; Oba 2011), where it serves to cement the view that pastoralism is not part of the planet's sustainable future. The low concentration of livestock in regions like northern Kenya – and the types of livestock reared – raise further questions about whether its share of the 18 percent of global greenhouse gases calculated as produced by the livestock industry is large enough to warrant concern. Caution might also be exercised in relation to the broad and generalized claims that pastoralists are environmentally degrading. As discussed already, the environmentally degrading pastoralist is a 'received wisdom' that has often proved wrong in the past (Swift 1996; Sandford 1983; Scoones 1994). The stereotype was present in Hardin's 'tragedy of the commons' (1968) thesis, in which pastoralists graze in competition with each other, and with no concern for the future. An enormous amount of scholarly work has demonstrated how pastoralists cooperate together to regulate access to and use of grazing, and employ impressive reserves of knowledge in their use of grasslands and their grazing practices (Ostrom 1990). It has also shown how dryland environments are non-equilibrium environments, and how grazing patterns are flexible in order to maintain a livelihood under conditions of uncertainty (Scoones 1994):

> Unlike ecologists, herders can distinguish between landscapes that are vulnerable to heavy grazing and degrade rapidly, and those that resist degradation. Where there is greater risk of degradation, landscapes are grazed for brief periods during the wet season . . .. Using the trajectories of vegetation change, herders are able to alter their herd composition and modify grazing movements. (Oba 2013: 32)

Where pastoralists do overgraze and degrade their lands, all too often it is because their patterns of movement have been disrupted, and key resources have been lost (Oba 2013; Feyissa and Schlee 2009).

The discourse that climate change is driving human insecurity in terms of livelihood devastation occludes many of these positive dimensions of pastoral livelihoods. As with the discourse about violent conflict, many people and organizations 'buy in' to the discourse for multiple reasons. As well as fears about the scale of the impact of climate change (which, as it is difficult to precisely determine, is in some ways a fear of the unknown), for NGOs and other organizations, the climate change and human security discourse gives new impetus to their activities and combats compassion fatigue.

The discourse that 'pastoralism is non-viable given the challenge of climate change' is totalizing, but it is not uncontested: in some research and development domains a strong counter-argument has been made that pastoralism developed in the first instance as an adaptation to high climate variability, and – particularly because of its use of mobility – is very well placed to cope with challenges posed by further climate variability and unpredictability (Grahn 2008; Davies and Nori 2007). Research has suggested that pastoralists already make significant and unrecognized contributions to local, regional and national economies (Hesse and MacGregor 2006; Nassef et al. 2009), and are engaged in entrepreneurial and long-distance trade (Catley et al. 2013; Pavanello 2009). In this literature, pastoralist areas are not without problems, but they are considered one of the most efficient, resilient and productive uses of dryland environments: 'the weight of evidence suggests that "modern", commercialized forms of livestock-keeping and irrigated farming are not as productive as customary forms of pastoralism' (Catley et al. 2013).

There are signs that the 'pastoralism is resilient' discourse has begun to influence development policies and practices, particularly with the publication in 2010 of a forward-looking African Union policy document (see Catley et al. 2013; Schlee and Shongolo 2012). But in many cases the older dominant 'pastoralism is non-viable' narrative has prevailed, in which older motifs of pastoralists as anachronistic and environmentally degrading have tended to be reproduced. Here global-scale science about climate change and downturns in human security triumphs over understandings of complex local situations. Pastoralists are cast as global polluters as well as degrading their own environments. This framing of people-environment relations matters because it misrepresents pastoralists and legitimizes a shift to support for quite different forms of livelihood or uses of land and resources and major external interventions. Steinfeld et al. (2006) for example, advocate soil carbon sequestration programmes for rangelands,

which they envisage would generate revenues when combined with mechanisms such as the Clean Development Mechanism. They acknowledge, however, that such sequestration programmes are still in their infancy and that ensuring the participation of local people in these programmes is difficult. More generally, carbon finance projects rely on a win-win philosophy that the problems of a global climate can be addressed while also improving the lives of the poor; unfortunately experience so far suggests the latter part of this equation has so far often failed to materialize (Fairhead et al. 2012; Sandbrook et al. 2010).

Two other kinds of alternative developments underway ought also to be mentioned: the first is the Kenyan Government's ambitious national 'blueprint' for development, 'Vision 2030'. This 'Vision' emphasizes infrastructure development such as road, railway and pipeline construction across northern Kenya in order to facilitate trade and oil-related development. Other avenues for development emphasized in Vision 2030 include tourist development (such as the construction of two 'Sun City'-type 'resort cities' in northern Kenya), irrigation development and livestock marketing. Many of these development goals appear to represent a return to a large-scale top-down high-tech modernizing style of development which relies on a 'trickle down' of economic growth that historically often failed to occur. But the poor are not forgotten. A Social Protection Programme is also envisaged, and as part of this, the UK Department for International Development is funding the Hunger Safety Net Programme which provides cash transfers to the most destitute in northern Kenya. In this programme, beneficiaries and other members in the communities are being registered 'biometrically' for smartcards which ostensibly enable more efficient targeting, delivery and monitoring of the cash transfers. Under a 'security optic' one might wonder if the Kenyan state, which has long found the mobile pastoralist populations difficult to manage, finds this biometric registering of its population a fortuitous by-product of this pro-poor initiative. As November 2012 has seen 'the most deadly attack on Kenya's police since independence',[9] when 42 security personnel were killed in an ambush by Turkana cattle rustlers, the very real and pressing need for this security is underlined.

The second area of development that must also be mentioned is the wider context of Africa in general as the site of foreign investment – 'the last investment frontier'[10] – and that lands and water are increasingly sought for development by new investors. Where countries (like Qatar) are investing in lands for agricultural production (as they are reported to be in Kenya), these investors aim to protect themselves from perceived potential global and national food insecurities, but their actions are likely to have impacts on the food securities of others.

It is impossible to do justice here to the range of developments taking place in the region, but even this cursory overview suggests a pattern in the processes is evident. Policy discourses about climate change draw on global scale science and calculations to rethink policies that are appropriate for regions like Marsabit. The human security approach claims to be integrative, to examine issues across scales and across the human-environment divide, but, all too often, the more detailed local level investigations are brushed aside because of the complexities of such endeavours, and the uncertainties inherent to them. Larger scale, generalized narratives dominate and stereotypes of African pastoralists as incapable, environmentally degrading, quick to fight and fatalistic are re-deployed (Galaty 2013; Mortimore 2010). These narratives help to make the case for 'system re-design' (Gasper 2010), and for more radical and top-down forms of development. While this global scale, universal, impersonal and apolitical imaginary continues to dominate, it seems unlikely that the pastoralists themselves will be able to influence the nature of developments, or that their own human security will be improved.

CONCLUSION

Africa has featured prominently in debates about climate change and human security for both compelling and troublesome reasons. A strong narrative has emerged in which climate change is understood as driving a downturn in freedom from fear and freedom from want, and that it is in Africa, that the two 'unfreedoms' are linked in particularly pernicious and dangerous ways. Here Africa appears as a cautionary tale that raises awareness of the urgency of the problem and the need to galvanize action to tackle climate change and its impacts. A benign interpretation would be that the climate change and human security discourse has the capacity to galvanize action across the usual divides (north, south, rich, poor) because of the global nature of climate change, or even that it draws attention to the need for richer countries to take responsibility for the problems they have caused. The evidence presented here suggests a less generous interpretation is in order: that the climate change/human security narrative relies heavily on older motifs of Africa as more likely to resort to violence, more unstable, more environmentally degrading, and less able to meet the challenges that life (or the climate) may bring. Paradoxically, in Africa 'the future is now' for climate change and human security precisely because of discursive frames that trap contemporary African societies, economies and polities in distant places and times. Such elements to the narrative risk placing conceptual distance between writers, their intended audiences and

the subjects of such analyses, perhaps comfortably, suggesting that the challenges of climate change and human security are elsewhere.

The nature of ideas about Africa influence and constitute relations between actors in the international effort to address climate change and to define who has the power to decide and to act. It also has an impact on what happens in Africa, and the policies that are considered legitimate and desirable. In the climate change and human security narrative, climate change tends to dominate as the main driver of, and explanatory variable for, physical and livelihood security at the expense of other factors upon which its effects are highly contingent. Such recourse to monocausal explanations has happened, and has been critiqued, before (for example with regard to population growth). But here the focus on climate change and human security brings with it very particular dynamics which impact on both local politics and international policy.

First, because climate change is global in nature it gives impetus to the idea that the 'problem' is beyond the control and capacity of local communities, and inadvertently risks helping to exculpate other local actors from responsibility. Secondly, and relatedly, specific geographies and histories are occluded. For example, the eliding of specific geographies was clearly seen in the Darfur case, where Darfur and South Sudan were equated. Where exactly the problem is, and what exactly is happening, does not matter much, given the scale of the problem. In addition, as seen in the Marsabit case, the ways in which local environmental changes and management practices intersect with longer-term climate dynamics are poorly understood and integrated into policies. Histories are similarly elided. Many of the vulnerabilities of local communities are a result of their relationship to the state, or to conflicts, or to forms of development (such as the expansion of commercial agriculture or conservation areas), and yet – if discussed at all – they are relegated to secondary factors when compared to the scale of the climate change and human security challenge. By giving little recognition to the geographical and historical specificities, human insecurities (political or livelihood; fear or want) are depoliticized.

Thirdly, the climate change and human security narrative with regard to Africa has a very particular emotional register: that of fear. Climate change invokes fear because it is not known what its impacts will be, or how it might be controlled. The ease with which older motifs of Africa as a space of chaos and anarchy (Ferguson 2006) are reproduced in amplifying this fear is tremendously worrying, given how much work has been done.

These dynamics of the climate change and human security narrative matter because they legitimize the idea that Africa and Africans need to be 'saved' by new and powerful technologies, forms of transnational governance, waves of humanitarian relief and modes of investment. Where

these initiatives misunderstand local realities and pay little heed to the primary importance of working with and for local populations and from their historical and social worldview, they are unlikely to improve the human security of communities in Africa. The 'survival of the planet', as Sachs presciently put it, again risks being 'the wholesale justification for a new wave of state interventions in people's lives all over the world'. Now, the domestic state is not the only actor at play – foreign states, NGOs and investors (foreign and domestic) are increasingly influencing what takes place in Africa, frequently in the name of addressing climate change.

Securing Africans' freedom from fear and want is enmeshed with others' fear of climate conflicts, of the burdens of widespread destitution and of climate change more generally. We know that human security discourse owes its central 'freedom from want and fear' motif to US President Franklin D. Roosevelt's 1941 State of the Union address. Yet Roosevelt famously made another reference to fear, at his inaugural address in 1933, in which he urged Americans that 'the only thing we have to fear, is fear itself,' a 'nameless, unreasoning, unjustified terror which paralyzes needed efforts to convert retreat into advance.' Especially when a focus on human security is weakly integrative and locally grounded, the securitization of climate change risks fomenting a somewhat unbounded and totalizing fear that, while useful at higher scales and for various intervening actors, might perniciously distract away from the real work needed to address the more proximate drivers of unfreedom and insecurity experienced by African populations.

NOTES

1. http://www.fco.gov.uk/en/global-issues/climate-change/priorities/global-security/ Accessed 16 August 2012. See also Council of the European Union (2008): 'Climate change is a threat multiplier which threatens to overburden states and regions which are already fragile and conflict prone.'
2. Lumumba Di-Aping, 2009, http://www.youtube.com/watch?v=aAcp0uHDBBU.
3. http://news.bbc.co.uk/2/hi/science/nature/8375949.stm.
4. For overviews of the conflict that pay close attention to history, politics and context, see: Flint and de Waal (2008), Daly (2010) and Prunier (2008). The cursory summary here draws on these and other more detailed analyses.
5. Green (2011), 'Famine and climate change – what's the link?' http://www.oxfamblogs.org/fp2p/?p=6440 Accessed 18 July 2012.
6. See Fratkin and Roth (2005) for further information on reasons for destitution.
7. For example, a 2006 Christian Aid report uses the case of the 2005 'Turbi massacre' near Marsabit, in which 53 people were killed, as evidence of climate-related conflict (http://www.christianaid.org.uk/Images/climate-of-poverty.pdf). Mwangi's (2006) more detailed investigation of the conflict finds its causes in regional political struggles and also points to the involvement of foreign-based militias. He concludes that any relationship between conflict and competition for scarce resources is 'debatable' (2006: 89).
8. http://www.un.org/apps/news/story.asp?newsID=20772&CR1=warning Accessed 19 July 2012.
9. http://www.bbc.co.uk/news/world-africa-20392510.
10. http://www.forbes.com/sites/moneybuilder/2012/08/08/africa-the-last-investment-frontier.

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