# Climate Change and Security, Nautilus Weekly, 2012-2015

# Richard Tanter

Note: This document collates the Climate Change and Security segments of the [Nautilus Peace and Security Weekly Report](https://nautilus.org/publications/napsnet/weekly-report/) that appeared between 2012 and 2015, with the last edition appearing on 9 October 2015. The Climate Change and Security segments, edited and written by Richard Tanter, appeared on alternate weeks. The structure of each report consisted of a citation of a leading item, citation of three other items, and a comment strictly limited to about a hundred words drawing attention (positive or critical) to certain themes in the lead article and the others, plus a relevant lead image.

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# 2015

**CLIMATE CHANGE AND SECURITY:**[**Dutch government ordered to cut back emissions in landmark court ruling**](http://www.thestar.com/news/world/2015/06/24/cut-emissions-to-protect-citizens-dutch-court-orders-government.html)**, Mike Corder, Associated Press, the star.com (24 June 2015)**

Three BAU approaches to climate change and security:

* In the Arctic the Russians (and the Americans) are coming;
* Europe’s migration crisis is nothing compared to the likely South Asian version; and
* The devil is in the details of the climate-food-security nexus.

Meanwhile in the Netherlands (and Pakistan) courts are asserting climate security rights of citizens against governmental inaction. Soon, governments will take the same tactic re other climate to coerce climate sleep-walker states.

* [Russia and America prep forces for Arctic war](http://blogs.reuters.com/great-debate/2015/10/04/russia-and-america-prep-forces-for-arctic-war/), David Axe, The Great Debate [blog], Reuters (5 October 2015)
* [Will climate change spark an Asian migrant crisis](http://www.eco-business.com/news/will-climate-change-spark-an-asian-migrant-crisis/), Vaidehi Shah, Eco Business (2 October 2015)
* [The devil is in the details: An investigation of the relationships between conflict, food price and climate across Africa](http://www.sciencedirect.com/science/article/pii/S0959378015000357), Clionadh Raleigh, Hyun Jin Choi, Dominic Kniveton, Global Environmental Change, Volume 32, (May 2015), pp. 187–199 [open access]
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-9-october-2015/attachment/climate-security-image-2-2/>

CLIMATE CHANGE AND SECURITY: [Migration, climate and security: the choice](https://www.opendemocracy.net/paul-rogers/migration-climate-and-security-choice), Paul Rogers, openDemocracy (3 September 2015)

‘The asymmetric nature of climate change means that these large regions surrounding one of the richest parts of the world will have the greatest difficulties. They are likely to become drivers of migration to a far larger extent, with numbers measured not in the hundreds of thousands but in millions. In these circumstances, the consequences of securitising these issues will be huge, far greater than anything yet experienced. For this reason alone, it is essential that the current crisis is handled primarily with humanitarian concern, rather than by trying to “close the castle gates” – which in any case is impossible in a globalised system.’

* [The complexity challenge: the U.S. government’s struggle to keep up with the times](http://nationalinterest.org/feature/the-complexity-challenge-the-us-governments-struggle-keep-13698), Josh Kerbel, The National Interest (26 August 2015)
* [Two degrees of climate change may be too much](http://thebulletin.org/two-degrees-climate-change-may-be-too-much8731), Dawn Stover, Bulletin of the Atomic Scientists (4 September 2015)
* [The most extreme risks: global catastrophes](http://sethbaum.com/ac/fc_Extreme.html), Seth D. Baum and Anthony M. Barrett, in Vicki Bier (editor), The Gower Handbook of Extreme Risk (Farnham, UK: Gower, forthcoming) (pre-print version: 5 February 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/25-september-2015/>

**Climate Change and Security:**[**It’s not climate change — it’s everything change**](https://medium.com/matter/it-s-not-climate-change-it-s-everything-change-8fd9aa671804)**, Margaret Attwood, Matter (27 July 2015)**

*Attwood*: ‘If we fail, we all fail together: we have “just one chance to get it right”.’

*Marshall*: ‘Climate-change denial is in fact highly politically astute, well-informed and strategic. Climate change challenges us at almost every level of our identity and forces us to rethink what we assume to be true.’

*Robinson*: ‘As the window to act gets smaller, the likelihood that this action will be hastily implemented increases and this, in turn, will increase the very real human rights risks associated with rapid mitigation action.’

*Venezuela*: ‘The threats to the small island states are the new forms of colonialism.’

* [Why are we still waiting for a solution to climate change? Because it’s hard](http://www.newstatesman.com/culture/2015/07/why-are-we-still-waiting-solution-climate-change-because-it-s-hard), George Marshall, New Statesman (30 July 2015)
* [Venezuela to UN: ‘Climate change threatening the Caribbean’](http://www.telesurtv.net/english/news/Venezuela-to-UN-Climate-Change-Threatening-the-Caribbean--20150730-0020.html), telesurvtv.net (30 July 2015)
* [Q&A with Mary Robinson: What is climate justice?](http://roadtoparis.info/2015/07/29/qa-with-mary-robinson-what-is-climate-justice/) Germana Canzi, Road to Paris (30 July 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-14-august-2015/attachment/ccs-image-3/>
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-14-august-2015/attachment/ccs-image-3/>

**CLIMATE CHANGE AND SECURITY:**[**Beijing is finally getting serious about climate change**](http://foreignpolicy.com/2015/07/11/china-climate-change-greenhouse-united-states-policy/)**, Barbara Finamore et al, China File, Foreign Policy blog (11 July 2015)**

There is a disjuncture between increasing and productive China-US climate change cooperation and the reciprocal enemy images of their security establishments. China may be ‘trying to hack into everything that doesn’t move’, but we know, post-Snowden, China is not alone in that. Moreover the level of Chinese industrial cross-border collaboration, including in its solar power industries, ‘challenges the idea that climate remediation is necessarily impeded by a structurally-determined, geopolitically-driven “tragedy of the commons.”’

* [U.S.-China strategic & economic dialogue outcomes of the strategic track](http://www.state.gov/r/pa/prs/ps/2015/06/244205.htm), Media Note, Office of the Spokesperson, State Department, Washington, DC (24 June 2015)
* [Teams of rivals: China, the U.S., and the race to develop technologies for a sustainable energy future](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2606000), Edward Steinfeld, Watson Institute for International Studies, Research Paper No. 2015-26 (20 April 2015)
* [China – climate hero or the culprit?](https://www.chinadialogue.net/article/show/single/ch/8086-China-climate-hero-or-villain-) Joe Curtin, China Dialogue (25 July 2015)
* <http://nautilus.org/uncategorized/nautilus-peace-and-security-network-30-july-2015/attachment/xi-obama-scrolleditorial-follow-china-us-diplomacy-1/>

**CLIMATE CHANGE AND SECURITY:**[**Climate Change, Migration, and Non-Traditional Security Threats in China: Complex Crisis Scenarios and Policy Options for China and the World**](http://www.americanprogress.org/wp-content/uploads/2014/05/ChinaClimateMigration.pdf)**, Michael Werz and Lauren Reed, Center for American Progress, May 2014**

Pot meets kettle: a useful US analysis of climate change impacts on Chinese  security and strategy concludes China’s leaders lack a comprehensive approach to climate security. Meanwhile Boko Haram and a doubling of ice loss in the Antarctic exemplify CNA’s view of climate change and security moving from threat multiplier to direct catalyst of conflict with the accelerating risks of climate change.

* [National security and the accelerating risks of climate change](http://www.cna.org/sites/default/files/MAB_2014.pdf), CNA Military Advisory Board (May 2014)
* [Behind the rise of Boko Haram – ecological disaster, oil crisis, spy games](http://www.theguardian.com/environment/earth-insight/2014/may/09/behind-rise-nigeria-boko-haram-climate-disaster-peak-oil-depletion), Nafeez Ahmed, Earth Insight, Guardian blog (9 May 2014)
* [Doubling of Antarctic ice loss revealed by European satellite](http://www.theguardian.com/environment/2014/may/19/doubling-of-antarctic-ice-loss-revealed-by-european-satellite), Damien Carrington, The Guardian (20 May 2014)
* <http://nautilus.org/napsnet/napsnet-weekly/napsnet-weekly-22-may-2014/43601/>

**CLIMATE CHANGE AND SECURITY:**[**Climate change and security: here’s the analysis, when’s the action?**](https://www.opendemocracy.net/dan-smith/climate-change-and-security-here%E2%80%99s-analysis-when%E2%80%99s-action)**Dan Smith, openDemocracy (22 April 2015)**

‘The core message is that climate change is having a multi-faceted impact on many states, societies and communities. It exerts a pressure they cannot tolerate for long. Compound risks emerge as the impact of climate change interacts with other political, social and economic problems. Climate change makes it hard to build resilience in the state or even in local communities, while the fragility of the state makes it hard to adapt to the impact of climate change.’

* [A new climate for peace: taking action on climate and fragility risks – an independent report commissioned by the G7 members](http://www.newclimateforpeace.org/), adelphi, EUISS, International Alert, the Wilson Center (April 2015)
* [Mediterranean dreams, climate realities](https://www.opendemocracy.net/paul-rogers/mediterranean-dreams-climate-realities), Paul Rogers, openDemocracy (23 April 2015)
* [Knowledge problems in climate change and security research](http://onlinelibrary.wiley.com/doi/10.1002/wcc.346/abstract), Kirsty H. Lewis and Timothy M. Lenton, Wiley Interdisciplinary Reviews: Climate Change, Early View (13 May 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-28-may-2015/attachment/climatesec-image-12/>

**CLIMATE CHANGE AND SECURITY:**[**Protecting Indonesia’s forests is a key issue for Paris climate talks**](http://www.theguardian.com/environment/2015/may/08/protecting-indonesias-forests-is-a-key-issue-for-paris-climate-talks)**, Nirarta Samadhi and Nigel Sizer, The Guardian (8 May 2015)**

“We need to talk about Indonesia. Deforestation and land use change drives about 80% of Indonesia’s greenhouse gas emissions, which makes it the world’s fifth biggest emitter.” The problem for the rest of the world is that the current forestry moratorium is too small, with too many loopholes. And the new populist president, Joko Widodo, appears to be little more than a puppet of a corrupt precedessor, unable to stand-up to politically- and militarily-connected forestry interests.

* [Jokowi must strengthen Indonesia’s forest moratorium, not just extend it: activists](http://news.mongabay.com/2015/0425-jacobson-forest-moratorium-strengthened-or-extended.html), Philip Jacobson, Monga Bay.com (25 April 2015)
* [Indonesian President Widodo under corrupt thumb of Megawati](http://www.smh.com.au/comment/indonesian-president-widodo-under-corrupt-thumb-of-megawati-20150428-1muhkk.html), Peter Hartcher, Sydney Morning Herald (28 April 2015)
* [Reductions in emissions from deforestation from Indonesia’s moratorium on new oil palm, timber, and logging concessions](http://www.pnas.org/content/112/5/1328.full.pdf), Jonah Buscha et al., PNAS vol. 112, no 5 (3 February 2015) [PDF, 679KB]
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-14-may-2015/attachment/154809_842219_jokowi_kongres/>

CLIMATE CHANGE AND SECURITY: [China and other big emitters challenge Australia over its climate change policies](http://www.smh.com.au/federal-politics/political-news/china-and-other-big-emitters-challenge-australia-over-its-climate-change-policies-20150420-1mnqt3.html), Adam Morton and Tom Arup, Sydney Morning Herald (20 April 2015)

As the effects of climate change become socially visible in global power centres, climate change security concern will shift abruptly from fragile states and conflict multipliers to threatening talk on national mitigation targets. In the runup to the UNFCCC COP21, questions of the industrialised parties – polite for now – are a harbinger of calls to account to come – with Australia’s denialist government facing questions from the US, China and Brazil on its “low level of ambition”.

* [A compilation of questions to – Australia,](http://unfccc.int/files/focus/mitigation/the_multilateral_assessment_process_under_the_iar/application/pdf/sbi42_australia_questions_web.pdf) United Nations Framework Convention on Climate Change (1 April 2015) [PDF, 307KB]
* [Annual compilation and accounting report for Annex B Parties under the Kyoto Protocol for 2014](http://unfccc.int/resource/docs/2014/cmp10/eng/07.pdf), Mitigation, United Nations Framework Convention on Climate Change, FCCC/KP/CMP/2014/7 (17 November 2014) [PDF, 650KB]
* [Climate change, international security and the way to Paris 2015](http://www.nato-pa.int/Default.asp?SHORTCUT=3767), Draft Special Report, Philippe Vitel (France), Special Rapporteur, NATO Parliamentary Assembly, Science and Technology Committee (20 March 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-23-april-2015/attachment/screen-shot-2015-04-24-at-10-19-32-am/>

CLIMATE CHANGE AND SECURITY: [My country or my planet? Exploring the influence of multiple place attachments and ideological beliefs upon climate change attitudes and opinions](http://www.sciencedirect.com/science/article/pii/S0959378014001794), Patrick Devine-Wright, Jennifer Price, Zoe Leviston, Global Environmental Change, Vol. 30 (2015)

Response to threats to security derive from the narrative frames within which they are set, as are arguments for rights, blame, and compensation. Geographers – along with insurance companies and security practitioners – stress the spatial dimensions of such narratives, and their related attachments. Opinion research shows a reality of planetary attachments are beginning to approach national attachments.

* [How to compensate small island nations for tropical cyclone damage](http://www.scientificamerican.com/article/how-to-compensate-small-island-nations-for-tropical-cyclone-damage/), Lisa Friedman and ClimateWire, Scientific American (17 March 2015)
* [That 2 degrees climate goal is ‘utterly inadequate,’ says expert report](http://www.natureworldnews.com/articles/13764/20150328/2-degrees-climate-goal-utterly-inadequate-expert-report.htm%20), Brian Stallard, Nature World News (28 March 2015)
* [Australia’s climate change policy on course for ‘disastrous’ 4C warming](http://www.theguardian.com/environment/2015/mar/30/australias-climate-change-policy-on-course-for-disastrous-4c-warming), Lenore Taylor, Guardian (30 March 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-2-april-2015/attachment/climate-sec-image-23/>

**CLIMATE CHANGE AND SECURITY:**[**Reflections on climate-conflict research: More confusion than knowledge**](http://www.carbonbrief.org/blog/2015/03/reflections-on-climate-conflict-research-more-confusion-than-knowledge/)**, Halvard Buhaug, The Carbon Brief (6 March 2015)**

Much climate-conflict analysis is hampered by poor data, naïve assumptions re causality, actor motivation and the role of other drivers. But even absent such problems, “we will never be able to predict the onset of a new violent conflict with certainty based on data alone.” Moreover, “civil war is development in reverse. Therefore, ending violent conflict may be the most efficient and cost-effective way to improve resilience to climate change.”

* [Scientists discuss the role of climate change in the Syrian civil war](http://www.carbonbrief.org/blog/2015/03/scientists-discuss-the-role-of-climate-change-in-the-syrian-civil-war/), Robert McSweeney, The Carbon Brief (2 March 2015)
* [Climate change in the Fertile Crescent and implications of the recent Syrian drought](http://www.pnas.org/content/112/11/3241), Colin P. Kelley et al., PNAS,  vol. 112 no. 11 (online 17 March 2015) [Supplementary material](http://www.pnas.org/content/suppl/2015/02/23/1421533112.DCSupplemental/pnas.201421533SI.pdf)
* [Losing paradise: the people displaced by atomic bombs, and now climate change](http://www.theguardian.com/environment/2015/mar/09/losing-paradise-the-people-displaced-by-atomic-bombs-and-now-climate-change), Karl Mathiesen, The Guardian (10 March 2015)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-19-march-2015/attachment/ccsec-image/>

**CLIMATE CHANGE AND SECURITY:**[**Climate-chaos migrants set to face increasingly closed borders**](https://www.opendemocracy.net/opensecurity/april-humble/climatechaos-migrants-set-to-face-increasingly-closed-borders)**, April Humble, openSecurity (2 March 2015)**

Contradiction: “an unparalleled era of border securitisation”, “with more fortified borders than at any previous point in history”; yet “the nexus of climate change, migration, and conflict will test the U.S. and the world to manage global security in ways never thought of before.” Can a place for climate change in the National Security Strategy open up “notions of collective and human security” and rebalance “the three tools of foreign policy—defense, diplomacy, and development”?

* [Climate change, migration, and conflict: addressing complex crisis scenarios in the 21st Century](https://cdn.americanprogress.org/wp-content/uploads/issues/2012/01/pdf/climate_migration.pdf), Michael Werz and Laura Conley, Center for American Progress and Heinrich Böll Stiftung (January 2012) [PDF, 913KB]
* [The Pentagon & climate change: how deniers put national security at risk](http://www.rollingstone.com/politics/news/the-pentagon-climate-change-how-climate-deniers-put-national-security-at-risk-20150212), Jeff Goodell, Rolling Stone (12 February 2015)
* [National Security Strategy 2015](http://nssarchive.us/wp-content/uploads/2015/02/2015.pdf), The White House (February 2015) [PDF, 400KB]
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-network-5-march-2015/attachment/ccs-image-2/>

**CLIMATE CHANGE AND SECURITY:**[**As Davos meeting closes, climate ‘warning shots’ from Africa and Pacific**](http://www.climatecentre.org/site/news/590/as-davos-meeting-closes-climate-warning-shots-from-africa-and-pacific?type=)**, Maarten van Aalst, Red Cross/Red Crescent Climate Centre (29 January 2015)**

Davos global actors talked “complexity, fragility and uncertainty” this year, with “extreme weather events” as the second most likely Global Risk in 2015. Clued into complexity by their task, Red Cross/Red Crescent aims “to quickly provide indications of the role of climate change in current events – within days rather than months or years after the event.” But climate and society early warning systems require messages with conflict consequences to be heard – as did not happen in Syria.

* [Global Risks 2015 10th Edition](http://www.weforum.org/reports/global-risks-report-2015), World Economic Forum (January 2015) [PDF]
* [International Federation of Red Cross and Red Crescent Societies: Forecasts in Context](http://iridl.ldeo.columbia.edu/maproom/IFRC/), International Center for Climate and Society (IRI)
* [Climate, scarcity and conflict](http://www.iiss.org/en/publications/survival/sections/2014-4667/survival--global-politics-and-strategy-october-november-2014-be95/56-5-11-fetzek-and-mazo-533a), Shiloh Fetzek and Jeffrey Mazo, Survival: Global Politics and Strategy, 56:5, 143-170 (2014)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-5-february/>

# 2014

**CLIMATE CHANGE AND SECURITY:**[**Good COP, bad COP: Winners and losers at the Lima climate conference**](http://www.carbonbrief.org/blog/2014/12/winners-and-losers-from-the-lima-climate-conference/)**, Mat Hope, The Carbon Brief (15 December 2014)**

The fundamentals of climate security centres on mitigation strategies. A year out from Paris decision-time, the Lima preliminary conference does not augur well. Previous rounds of negotiation fatigue have been followed by renewed interest in geo-engineering, including carbon capture and storage, with largely ignored complex, and simple, security implications. Meanwhile, fed by unbearable anxiety, denial largely rules, albeit with a lot of help from power, providing global tinder for profound future visceral conflict.

* [Even climate change experts and activists are in denial about climate change](http://www.washingtonpost.com/posteverything/wp/2014/12/04/even-climate-change-experts-and-activists-are-in-denial-about-climate-change/), Aanka Batta and Steffen Böhm, Washington Post (4 December 2014)
* [Geoengineering: The good, the MAD, and the sensible](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3251148/?tool=pmcentrez), Hans Joachim Schellnhuber, Proceedings of the National Academy of Sciences USA, (20 December 2011) 108(51): 20277–20278.
* [Climate change: you can’t ignore it](http://www.theguardian.com/environment/2012/nov/30/climate-change-you-cant-ignore-it?INTCMP=SRCH), Anne Karpf, The Guardian (1 December 2012) (Review essay on Sally Weintrobe, editor, Engaging with Climate Change: Psychoanalytic and Interdisciplinary Perspectives, Routledge, 2013.)
* <http://nautilus.org/wp-content/uploads/2014/12/CCS-1218.jpg>

**CLIMATE CHANGE AND SECURITY:**[**The security implications of geoengineering: blame, imposed agreement and the security of critical infrastructure**](http://geoengineering-governance-research.org/perch/resources/workingpaper18nightingalecairnssecurityimplications.pdf)**, Paul Nightingale and Rose Cairns, Climate Geoengineering Governance Working Paper 018 (12 November 2014)**

Perennial appraisal optimism aside, thinking about the costs of geoengineering soon reveals security aspects of global consensus-formation, governability, allocation of blame, and military control of securitised climate management that will “make geoengineering untenable as a policy option”. Deeper arguments about whether to research geoengineering now, or, to remain, counter-intuitively, intentionally ignorant, reveal alternative rational judgements and choices about modes of science, values, and human capacity.

* [To know or not to know? A note on ignorance as a rhetorical resource in geoengineering debates](http://geoengineering-governance-research.org/perch/resources/workingpaper10raynertoknowornottoknow-1.pdf), Steve Rayner, Climate Geoengineering Governance Working Paper 010 (2 may 2014)
* [Costs and economics of geoengineering](http://geoengineering-governance-research.org/perch/resources/workingpaper13mackerroncostsandeconomicsofgeoengineering.pdf), Gordon MacKerron, Climate Geoengineering Governance Working Paper 013 (9 July 2014)
* [Anyone can geoengineer: should we try to stop them?](http://theconversation.com/anyone-can-geoengineer-should-we-try-to-stop-them-11883) David Hodgkinson, The Conversation (2 March 2013)
* Alireza Teimoury - Spring clouds: http://www.creativityfuse.com/2011/05/spring-in-photos/spring-clouds-by-alireza-teimoury-on-flickr/

**CLIMATE CHANGE AND SECURITY:**[**Climate Change ‘Will See More UK Forces deployed in Conflicts around World’**](http://www.theguardian.com/environment/2014/nov/10/climate-change-will-see-more-uk-forces-deployed-in-conflicts-around-world)**, Damian Carrington, The Guardian (11 November 2014)**

Massive GHG emissions reductions are the sine qua non of security on climate change. The good news: China and the U.S. have cooperated to promise to a first, albeit non-binding, move on GHG emissions. The bad news: this is nothing like enough to keep a 2oC limit, with the chances of a 4oC hotter world, with adaptation possibilities severely constrained, still rising. “We could probably secure a 2C world,” said Rear-Admiral Neil Morisetti. “I think it most unlikely we would be able secure a 4C world.”

* [Tomgram: Michael Klare](http://www.tomdispatch.com/post/175924/tomgram%3A_michael_klare%2C_the_new_congress_and_planetary_disaster/), The New Congress and Planetary Disaster, Michael Klare, Tom Dispatch.com (18 November 2014)
* [Food, Fossil Fuels and Filthy Finance](http://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp191-fossil-fuels-finance-climate-change-171014-en.pdf), Oxfam International (October 2014)
* [‘Adapt and Survive’: The British Establishment’s Answer to the Security Threat of Climate Change](http://www.huffingtonpost.co.uk/guy-shrubsole/climate-change_b_6138654.html), Guy Shrubsole, The Blog Huffington Post United Kingdom (11 November 2014)
* <http://nautilus.org/wp-content/uploads/2014/11/sddSDds.jpg>

**CLIMATE CHANGE AND SECURITY:**[**A Disagreement over Climate-Conflict Link Heats Up**](http://news.sciencemag.org/climate/2014/10/disagreement-over-climate-conflict-link-heats)**, John Bohannon, Science (28 October 2014)**

Risk management is the motif of the latest IPCC synthesis longer report on climate change impacts: “*Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread, and irreversible impacts globally (high confidence),”* Meanwhile econometricians trade insults over the use and misuse of climate change and conflict meta-analyses.

* [One effect to rule them all? A comment on climate and conflict](http://link.springer.com/article/10.1007/s10584-014-1266-1), H. Buhaug (and 25 others), Climatic Change (27 October 2014).
* [Reconciling climate-conflict meta-analyses: reply to Buhaug et al.](http://emiguel.econ.berkeley.edu/assets/miguel_research/59/Hsiang-Burke-Miguel-RESPONSE_2014-10.pdf), Solomon M. Hsiang, Marshall Burke, and Edward Miguel, Climatic Change (28 October 2014)
* [Longer Report, Synthesis Report, Climate Change 2014: Impacts, Adaptation, and Vulnerability](http://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_LONGERREPORT.pdf). Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (1 November 2014)
* <http://nautilus.org/wp-content/uploads/2014/11/carbon.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Solar Dimming Reflects Complexity of Climate Change**](http://www.eco-business.com/news/solar-dimming-reflects-complexity-climate-change/)**, Eco-Business (14 October 2014)**

Australian PM Tony “Coal is good for humanity” Abbott may have missed the memo on climate complexity and the nature of uncertainty. A 10% (1950-2005) fall in Indian summer monsoonal rainfall – on which billions depend – can only be explained by the sun-dimming effects of air pollution. Absent US mitigation policy, the DoD is now talking climate adaptation. But uncertainty means greater risk, deeper insecurity.

* [2014 Climate Change Adaptation Roadmap](http://www.acq.osd.mil/ie/download/CCARprint.pdf), Department of Defense.
* [Why climate ‘uncertainty’ is no excuse for doing nothing](http://theconversation.com/why-climate-uncertainty-is-no-excuse-for-doing-nothing-32924), Richard Pancost and Stephan Lewandowsky,  The Conversation – UK ( 17 October 2014)
* [United Nations Climate Summit Opening Ceremony – A poem to my daughter](http://jkijiner.wordpress.com/2014/09/24/united-nations-climate-summit-opening-ceremony-my-poem-to-my-daughter/), Kathy Jetnil-Kijiner, Iep Jeltok  (24 September 2014) (Video and text)
* <http://nautilus.org/wp-content/uploads/2014/10/Kathy-Jetnil-Kijiner-clip-2.jpg>

**CLIMATE CHANGE AND SECURITY:**[**How Climate Change Helped ISIS**](http://www.huffingtonpost.com/charles-b-strozier/how-climate-change-helped_b_5903170.html%C2%A0)**, Charles B. Strozier and  Kelly A. Berkell, Huffington Post, (6 October 2014)**

Climate had a role in the now forgotten Arab spring and the rise of ISIS, but where and how much? Acknowledging complexity requires sighting the underlying conditions, the role of catalysts, the triggering events, and capacities for state. Doing so predictively requires going beyond sentences with “could” and “may be”. At the same time, deep divergences in understanding the causes and solutions to climate change also shape thinking about “security”.

* [Understanding instability: Lessons from the ‘Arab Spring’](http://www.ahrc.ac.uk/What-We-Do/Strengthen-research-impact/Inform-public-policy/Documents/Understanding_Instability.pdf). Florence Gaub, Report for the ‘History of British Intelligence and Security’ Research Project, (December 2012)
* [Climate change, resource scarcity & conflict](http://www.anglia.ac.uk/ruskin/en/home/microsites/global_sustainability_institute/our_research/resource_management.Maincontent.0021.file.tmp/Climate%2520Change_Resource%2520Scarcity_Conflict%252019-09.pdf), Global Sustainability Institute at Anglia Ruskin University, September 2014
* [Naomi Klein or Al Gore? Making sense of contrasting views on climate change](https://theconversation.com/naomi-klein-or-al-gore-making-sense-of-contrasting-views-on-climate-change-32072), Matthew C. Nisbet, The Conversation, 6 October 2014
* <http://nautilus.org/wp-content/uploads/2014/10/20090612-monsoon-clouds.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Gardens of Eden or Hearts of Darkness? The genealogy of discourses on environmental insecurity and climate ars in Africa**](http://www.tandfonline.com/doi/full/10.1080/14650045.2014.896794%C2%A0%20%C2%A0)**, Harry Verhoeven, Geopolitics (online 8 August 2014)**

History counts. Climate change is complex, and its intersection with human agency in particular, more so. The Montreal Convention’s success in slowing ozone depletion marks the failure of climate politics. And the climate change – conflict focus on Africa is marked by the reinvention of imperial tropes that depoliticise and dehistoricise relations of power about Africa and its environment, neglecting both complexity and agency. Complex then, complex now – but always politically inflected.

* [Ozone layer on track to recovery: success story should encourage action on climate](http://www.unep.org/newscentre/default.aspx?DocumentID=2796&ArticleID=10978), UNEP News Centre (10 September 2014)
* [Yale study shows how conversion of forests to cropland affected climate](http://www.sciencecodex.com/yale_study_shows_how_conversion_of_forests_to_cropland_affected_climate-141170), Science Codex (8 September 2014)
* [Climatic disasters and radical politics in Southern Pakistan: the non-linear connection](http://www.tandfonline.com/doi/abs/10.1080/14650045.2014.920328%C2%A0), Ayesha Siddiqi, Geopolitics (online 8 August 2014)
* <http://nautilus.org/wp-content/uploads/2014/09/Screen-Shot-2014-09-24-at-11.06.26-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Climate change 2014: House Bills Would Make it Harder to Fight the National Security Threats Posed by Global Warming**](http://www.ibtimes.com/climate-change-2014-house-bills-would-make-it-harder-fight-national-security-threats-posed-1630376%C2%A0)**, Maria Gallucci, International Business Times (16 July 2014)**

Houston, we have a problem…

Item 1: Amendment to the National Defense Authorization Act: “None of the funds authorized to be appropriated or otherwise made available by this Act may be used to implement the U.S. Global Change Research Program National Climate Assessment, the Intergovernmental Panel on Climate Change’s Fifth Assessment Report, ….”

Item 2: “The climate change we are currently seeing is largely the result of human activity.” Agree – China 93%, U.S. 54%.

* [Americans more skeptical of climate change than others in global survey](http://www.cbsnews.com/news/americans-more-skeptical-of-climate-change-than-others-in-global-survey/), Michael Roppolo, CBS News (23 July 2014)
* [Environment](http://www.ipsosglobaltrends.com/environment.html), Global Trends 2014, Ipsos MORI
* [Harvard historian: strategy of climate science denial groups ‘extremely successful’](http://www.theguardian.com/environment/planet-oz/2014/jul/25/harvard-historian-strategy-of-climate-science-denial-groups-extremely-successful), Graham Readfearn, Planet Oz blog, The Guardian (25 July 2014)
* <http://nautilus.org/wp-content/uploads/2014/08/Screen-Shot-2014-08-06-at-9.49.51-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Pathways to Deep Decarbonisation: Interim 2014 Report**](http://unsdsn.org/wp-content/uploads/2014/07/DDPP_interim_2014_report.pdf)**, Sustainable Development Solutions Network and the Institute for Sustainable Development and International Relations (July 2014)**

A 4oC warmer world is increasingly likely for people alive today, with prospects of even a risky 2oC limit by mid-century now, a year before global climate talks, “way off track” (Jeffrey Sachs). Deep decarbonization pathways – technology shifts for steep declines in carbon intensity in all energy systems – for individual countries are not that complicated – just hard. But the UK MoD identifies GHG mitigation failure as a low probability but still foreseeable catastrophic outcome.

* [Global strategic trends – out to 2045](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/328036/DCDC_GST_5_Secured.pdf) (Fifth Edition), U.K. Ministry of Defence (30 June 2014)
* [Valuing national security: climate change, the military, and society](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2460022), Sarah E. Light, UCLA Law Review, Vol. 61 (July 2014)
* [Climate suffering](http://www.mitpressjournals.org/doi/pdf/10.1162/GLEP_a_00224), Paul Wapner, Global Environmental Politics, Vol. 14, No. 2 (May 2014)
* <http://nautilus.org/wp-content/uploads/2014/07/Alternative_Energies.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Complexity and Determining Dangerous Levels of Climate Impacts**](http://iopscience.iop.org/1748-9326/9/1/011001/pdf/1748-9326_9_1_011001.pdf)**, Chris Huntingford, Environmental Research Letters, 9: 1-3 (2014)**

Water scarcity is central to climate security, especially in the water-energy-food nexus. Yet temperature rise effects on water scarcity for people, as opposed to those on terrestrial ecosystems, are both threatening and non-linear, but in opposite ways. Recognizing complexity, and hence uncertainty, in the interaction of ecological systems with other systems brings security benefits, even at the cost of making pathways to security more tentative. But then there’s also simple water-grabbing.

* [Food, energy and water: the politics of the nexus](http://www.theguardian.com/science/political-science/2014/jun/24/food-energy-water-politics-nexus), Jeremy Allouche, Political Science, The Guardian blog (25 June 2014)
* [Nexus nirvana or nexus nullity? A dynamic approach to security and sustainability in the water-energy-food nexus](http://steps-centre.org/wp-content/uploads/Water-and-the-Nexus.pdf), Jeremy Allouche, Carl Middleton and Dipak Gyawali, STEPS Centre Working Paper 63 (2014)
* [Global land and water grabbing, Journalists’ Resources](http://journalistsresource.org/studies/environment/food-agriculture/global-land-water-grabbing), Harvard Kennedy School/Shore stein Center (23 January 2013)
* <http://nautilus.org/wp-content/uploads/2014/06/5368721115_7248743d10_z.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Forget the World Cup – Brazil Posts Double Win with Simultaneous Soy Boom and Deforestation Drop**](http://dotearth.blogs.nytimes.com/2014/06/05/forget-the-world-cup-brazil-posts-double-win-with-simultaneous-soy-boom-and-deforestation-drop/#more-52435)**, Andrew C. Revkin, Dot Earth, New York Times blog (5 June 2014)**

Granted the mediating factors, the sustainability of food supply chains is a fundamental security concern. In a complex story, a “70% decline in deforestation in the Amazon provides lessons on the importance of public policies, monitoring systems, and supply chain interventions in slowing the advance of a vast, complex agricultural frontier.” But at sea, climate change and acidification impacts “are negative on a global scale; severely so in many regions”.

* [Climate change: implications for fisheries and aquaculture – Key findings from the Intergovernmental Panel on Climate Change Fifth Assessment Report](http://cmsdevelopment.sustainablefish.org.s3.amazonaws.com/2014/05/27/IPCC_AR5_Fisheries_Summary_FINAL_Web-1001a188.pdf), Institute for Sustainability Leadership, University of Cambridge and Sustainable Fisheries (June 2014)
* [Brazil’s cattle industry holds key to cut world’s greenhouse gas emissions by 26%](http://www.landscapes.org/brazils-cattle-industry-holds-key-cut-worlds-greenhouse-gas-emissions-25/#.U6E4yCjfbpA), Global Landscapes Forum (29 April 2014)
* [More than weather: the strategic importance of remote environmental monitoring capabilities to DOD](http://smallwars.org/jrnl/art/more-than-weather), Andrew Pfluger and William Wright, Small Wars Journal (20 January 2014)
* <http://nautilus.org/wp-content/uploads/2014/06/5228685794_f663eb9052_z1.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Third National Climate Assessment**](http://www.globalchange.gov/)**, U.S. Global Change Research Program (May 2014)**

All discussion of climate change and security is fundamentally irrelevant without concerted, comprehensive and cooperative global policy intervention on mitigation and adaptation. Should Barack Obama’s attempt to re-set the US domestic agenda fail, then a US role in shaping a new global agreement in Paris in 2015 will be either negligible, obstructive, or both. Meanwhile, Australian PM Tony Abbott has refused to put the issue of climate change on the coming G20 meeting agenda.

* [UN climate change chief praises new US pollution regulations](http://www.theguardian.com/environment/2014/jun/01/un-climate-change-chief-praises-us-pollution-regulations), Suzanne Goldenberg, The Guardian (2 June 2014)
* [Is that a lump of coal or are you feeling happy?](http://www.smh.com.au/federal-politics/political-opinion/is-that-a-lump-of-coal-or-are-you-feeling-happy-20140602-39f13.html#ixzz33Y0GskaD) Tom Arup, The Age, June 3, 2014
* [Governing Energy: Asia’s Future and the G20](http://www.brookings.edu/research/opinions/2014/05/13-asia-energy-g20-florini), Ann Florini, Brookings East Asia Commentary 78 (May 2014)
* <http://nautilus.org/wp-content/uploads/2014/06/NCA-2014-Damage-to-coastal-roads.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Climate Change, Migration, and Non-Traditional Security Threats in China: Complex Crisis Scenarios and Policy Options for China and the World**](http://www.americanprogress.org/wp-content/uploads/2014/05/ChinaClimateMigration.pdf)**, Michael Werz and Lauren Reed, Center for American Progress, May 2014**

Pot meets kettle: a useful US analysis of climate change impacts on Chinese  security and strategy concludes China’s leaders lack a comprehensive approach to climate security. Meanwhile Boko Haram and a doubling of ice loss in the Antarctic exemplify CNA’s view of climate change and security moving from threat multiplier to direct catalyst of conflict with the accelerating risks of climate change.

* [National security and the accelerating risks of climate change](http://www.cna.org/sites/default/files/MAB_2014.pdf), CNA Military Advisory Board (May 2014)
* [Behind the rise of Boko Haram – ecological disaster, oil crisis, spy games](http://www.theguardian.com/environment/earth-insight/2014/may/09/behind-rise-nigeria-boko-haram-climate-disaster-peak-oil-depletion), Nafeez Ahmed, Earth Insight, Guardian blog (9 May 2014)
* [Doubling of Antarctic ice loss revealed by European satellite](http://www.theguardian.com/environment/2014/may/19/doubling-of-antarctic-ice-loss-revealed-by-european-satellite), Damien Carrington, The Guardian (20 May 2014)
* <http://nautilus.org/wp-content/uploads/2014/05/c77661a4-8b05-419b-8690-96d8119e14fa-460x394.jpeg>

**CLIMATE CHANGE AND SECURITY:**[**Beyond Scarcity: Rethinking Water, Climate Change and Conflict in the Sudans**](http://www.sciencedirect.com/science/article/pii/S0959378014000119)**, Jan Selby and Clemens Hoffmann, Global Environmental Change, 21 February 2014**

The two Sudans have long served as textbook cases within environmental security thinking based on scarcity. Selby and Hoffman recommend more attention to the impacts of resource abundance, militarised state power and global political economic forces on potential conflict impacts of environmental and especially climate change. Meanwhile cooperative management of the Nile catchment is hostage to zero-sum thinking, political turmoil, and great power interests.

* [Why a ‘water war’ over the Nile River won’t happen](http://www.aljazeera.com/indepth/opinion/2013/06/2013612105849332912.html), Harry Verheoven, Opinion, Al Jazeera (13 June 2013)
* [Unstable power structure, regional disagreement: water politics along the Nile](http://mondediplo.com/2014/05/09egypt), Nizar Manek, Le Monde Diplomatique (May 2014)
* [Russia launches spy satellite for Egyptian military](http://www.tesfanews.net/russia-launches-spy-satellite-for-egyptian-military/), Tesfa News (23 April 2014)
* <http://nautilus.org/wp-content/uploads/2014/05/Screen-Shot-2014-05-07-at-4.36.04-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Call Climate Change What it is: Violence**](http://www.theguardian.com/commentisfree/2014/apr/07/climate-change-violence-occupy-earth)**, Rebecca Solnit, The Guardian, April 7 2014**

“The message is that ordinary people will behave badly in an era of intensified climate change. All this makes sense, unless you go back to the premise and note that climate change is itself violence. Extreme, horrific, longterm, widespread violence…Climate change is global-scale violence, against places and species as well as against human beings. Once we call it by name, we can start having a real conversation about our priorities and values.”

Climate Change 2014: Impacts, Adaptation, and Vulnerability, Contribution of Working Group II to the Fifth Assessment Report of the International Panel on Climate Change (April 2014)

[Summary for Policymakers](http://ipcc-wg2.gov/AR5/images/uploads/IPCC_WG2AR5_SPM_Approved.pdf)

* [Chapter 12](http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap12_FGDall.pdf). Human Security
* [Chapter 24](http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap24_FGDall.pdf). Asia
* [Chapter 29](http://ipcc-wg2.gov/AR5/images/uploads/WGIIAR5-Chap29_FGDall.pdf). Small Islands

<http://nautilus.org/wp-content/uploads/2014/04/Image-for-10-April-20141.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Climate and Security: Evidence, Emerging Risks, and a New Agenda**](http://link.springer.com/article/10.1007/s10584-014-1074-7)**, François Gemenne, Jon Barnett, W. Neil Adger,  and Geoffrey D. Dabelko, Climatic Change (March 2014), Volume 123, Issue 1, pp 1-9.**

The IPCC Fifth Assessment Report will reflect a more mature approach to climate-security links than most recent work, incorporating complexity in causation, the role of power, historically unprecedented conditions, and maladaptation. Yet the picture is more complex still: impacts of methane from melting Siberian permafrost alone have been compared to the size of the global economy. Far beyond the Arctic, even just this will radically change security calculations.

* [Why a melting Arctic could sink the global economy](http://www.americanprogress.org/issues/green/report/2014/03/19/85967/why-a-melting-arctic-could-sink-the-global-economy/), Cathleen Kelly, Center for American Progress (19 March 2014)
* [Vast costs of Arctic change](http://www.nature.com/nature/journal/v499/n7459/full/499401a.html), Gail Whiteman, Chris Hope and Peter Wadhams, Nature 499, 401–403 (25 July 2013)
* [Global campaign to combat climate change has become too complex to manage, study suggests,](http://insurancenewsnet.com/oarticle/2014/03/16/global-campaign-to-combat-climate-change-has-become-too-complex-to-manage-study-a-475110.html#.UzC6pK2SwZc) Insurance Net (16 March 2014)
* <http://nautilus.org/wp-content/uploads/2014/03/Screen-Shot-2014-03-27-at-9.16.37-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Billions Needed to Fund Deforestation Prevention Plan: Report**](http://in.reuters.com/article/2014/02/04/us-carbon-intervention-report-idINBREA1304620140204)**, Reuters (4 February 2014)**

Maladaptation security warning. Poorly conceived REDD+ schemes for rich countries seeking to reduce their carbon debt by paying poorer countries to not destroy rainforest carbon sinks face well-known problems including indigenous dispossession, corruption, and baseline metrics. But there is a huge deficit between willingness to pay, and what is needed. Meanwhile, Indonesia burns, and the government is shocked, shocked. Neighbouring Singapore plans corporate fines.

* [Stimulating interim demand for REDD+ emission reductions: the need for a strategic intervention from 2015 to 2020](http://www.globalcanopy.org/sites/default/files/IFF%20report%20Jan%202014-Stimulating%20Interim%20Demand%20for%20REDD%2B.pdf), Global Canopy Programme in collaboration with the Amazon Environmental Research Institute, Fauna & Flora International, and UNEP Finance Initiative (January 2014)
* [Indonesian government may buy carbon offsets from domestic forest conservation](http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=10223&section=news_articles&eod=1), Steve Zwick, Ecosystem Marketplace (26 February 2014)
* [Indonesian fires bring more haze to Southeast Asia](http://www.wri.org/blog/indonesian-fires-bring-more-haze-southeast-asia), Ariana Alisjahbana Ariana Alisjahbana, James Anderson, Susan Minnemeyer, Fred Stolle and Nigel Sizer, World Resources Institute (3 March 2014)
* <http://nautilus.org/wp-content/uploads/2014/03/fire.jpg>

**CLIMATE CHANGE AND SECURITY:**[**High Seas Need International Police Force, says Former UK Foreign Secretary**](http://www.theguardian.com/environment/2014/feb/25/david-miliband-international-oceans-police-force)**, Suzanne Goldenberg, The Guardian (26 February 2014)**

Overfishing + global warming = militarisation of fish conservation? Climate–security pathways are manifold, and sometimes direct. Just as “policing assistance” is occasionally bruited as a necessary condition for REDD+ rainforest schemes to succeed, the inevitable has happened on the other side of the equation. News of the NSA protecting US interests in climate change negotiations both confirms the climate–security linkage and screws it tighter by corroding trust.

* [For the NSA, espionage was a means to strengthen the US position in climate negotiations](http://www.information.dk/486360), Sebastian Gjerding, Anton Geist, Henrik Moltke and Laura Poitras,  Information (30 January 2014)
* [Kerry Implores Indonesia on Climate Change Peril](http://www.nytimes.com/2014/02/17/world/asia/kerry-urges-indonesia-to-help-stem-climate-change.html?_r=0), Michael R. Gordon and Coral Davenport, New York Times (16 February 2014)
* [Safeguarding the Future of REDD+: Indonesia Risk Assessment](http://www.ti.or.id/media/documents/2013/12/10/s/a/safeguarding_the_future_of_redd_indonesia_web1_1.pdf), Transparency International Indonesia, (25 November 2013)
* <http://nautilus.org/wp-content/uploads/2014/02/Bluefin_tuna_253467.jpg>

**LIMATE CHANGE AND SECURITY:**[**Migration and Environmental Change in Asia**](http://link.springer.com/book/10.1007/978-94-007-6985-4)**, Graeme Hugo and Douglas K. Bardsley, in People on the Move in a Changing Climate: The Regional Impact of Environmental Change on Migration, Etienne Piguet and Frank Laczko (eds.), Springer, pp. 21-38. (2014)**

Though pathways are complex, the security consequences of climate change involve global equity and justice. Minimally, without a shared global norm of fairness, climate agreements will be difficult. Migration will very likely induce conflict in Asia, but, optimistically, “if sound policy could be implemented in a timely manner, new forms and scales of population mobility could be harnessed to reduce poverty and enhance economic and social development.”

* [Special Issue: Equity, sustainable development and climate policy](http://www.tandfonline.com/toc/tcpo20/14/1), eds. Sonja Klinsky and Harald Winkler, Climate Policy, Volume 14, Issue 1 (2014)
* [Atoll Island States and International Law: Climate Change Displacement and Sovereignty](http://link.springer.com/book/10.1007/978-3-642-38186-7), Lilian Yamamoto and Miguel Esteban, Springer (2014)
* [Atoll Island States and Climate Change: Sovereignty Implications](http://i.unu.edu/media/unu.edu/publication/20972/atoll-island-states-and-climate-change_unu-ias-working-paper-166.pdf), Lilian Yamamoto and Miguel Esteban, United Nations University, UNU-IAS Working Paper No. 166 (October 2011) [PDF, 1.5MB]
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-13-february-2014/attachment/climatesec-image-11/>

**CLIMATE CHANGE AND SECURITY:**[**Global Risks 2014,**](http://www3.weforum.org/docs/WEF_GlobalRisks_Report_2014.pdf)**Ninth Edition, World Economic Forum (2014)**

Something does not fit. Global economic and political elites see climate change as one of the highest global risks – both in terms of likelihood and impact. Stressing systemic risk interconnections, they see climate change as having pivotal importance and the strongest linkages, closely connected to global governance risks. Meanwhile, a statistical analysis of civil conflict in Asia maintains “climatic events appear to play a trivial role”.

* [On climate variability and civil war in Asia](http://link.springer.com/article/10.1007/s10584-013-1004-0/fulltext.html), Gerdis Wischnath and Halvard Buhaug, Climatic Change (22 January 2014)
* [Climate risk assessments need to go big](http://www.trust.org/item/20140122115937-9ij4v/?source=hppartner), Francesco Femia and Caitlin Werrell, Thomson Reuters Foundation (22 January 2014)
* [Global problems: introduction](http://nautilus.org/gps/intro/), Richard Tanter and Peter Hayes, Nautilus Institute
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-30-january-2014/attachment/climatesec-image-9/>

# 2013

**LIMATE CHANGE AND SECURITY:**[**Abrupt impacts of climate change: anticipating surprises**](http://www.nap.edu/catalog.php?record_id=18373)**, National Research Council (3 December 2013)**

‘An example of an abrupt change is the opening of shipping lanes in the Arctic. The timescale of concern is years to decades. A key characteristic of these changes is that they can come faster than expected, planned, or budgeted for, forcing more reactive, rather than proactive, modes of behaviour. An Abrupt Change Early Warning System (ACEWS) would allow for the prediction and possible mitigation of such changes before their societal impacts are severe.’

* [Gazprom’s over-reaction to Arctic oil protest is a sign their fortune is at stake](http://www.theguardian.com/environment/2013/dec/13/gazprom-arctic-oil-protest-climate-change), Kumi Naidoo, The Guardian (13 December 2013)
* [Media failure on Iraq War repeated in climate change coverage](http://www.theguardian.com/environment/climate-consensus-97-per-cent/2013/dec/06/media-failure-iraq-war-climate-change), Stephan Lewandowsky, Climate Consensus – the 97% [blog], The Guardian (6 December 2013)
* [From climate change and security impacts to sustainability transition: two policy debates and scientific discourses](http://link.springer.com/book/10.1007/978-3-319-00729-8), Hans Günter Brauch, in U. Oswald Spring et al. (eds.),  Expanding Peace Ecology: Peace, Security, Sustainability, Equity and Gender, SpringerBriefs in Environment, Security, Development and Peace 12 (2014)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-19-december-2013/attachment/climate-sec-image-22/>

**CLIMATE CHANGE AND SECURITY:**[**Loss and damage is a reality today**](http://www.trust.org/item/20131120115704-706cv/)**, Kees van der Geest and Koko Warner, UN University, Thomson Reuters Foundation (20 November 2013)**

What do people do to deal with climate change impacts, and what happens when all they do is not enough? Loss and damage is already a significant consequence of inadequate mitigation of, and adaptation to, climatic changes across the world. This research in 9 countries tells of ‘just getting by’, suggesting that at some scales and in some regions human societies already exist precariously between the borders of ‘safe’ and ‘unsafe’ operating spaces at the adaptation frontier.

* [Loss and damage from climate change: local-level evidence from nine vulnerable countries](http://www.inderscience.com/info/inarticletoc.php?jcode=ijgw&year=2013&vol=5&issue=4), Koko Warner and Kees van der Geest, International Journal of Global Warming, Special Issue on Loss and Damage from Climate Change, Vol. 5 No. 4 (2013)
* [Introduction: human security in the age of carbon,](http://www.elgaronline.com/view/9780857939104.xml) Michael R. Redclift and Marco Grasso, in Handbook on Climate Change and Human Security, Michael R. Redclift and Marco Grasso (eds.) Edward Elgar (31 October 2013)
* [Global environmental change and human security](http://www.annualreviews.org/doi/abs/10.1146/annurev-environ-032112-100655), Karen O’Brien and Jon Barnett, Annual Review Environmental Resources, Vol 38: 373-391 (October 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-5-december-2013/attachment/climate-security-image-2/>

**CLIMATE CHANGE AND SECURITY:**[**Cameron links typhoon Haiyan to climate change**](http://www.theguardian.com/environment/2013/nov/16/david-cameron-climate-change-typhoon-haiyan)**, Rowena Mason and Damian Carrington, The Guardian (16 November 2013)**

‘“As a practical politician, I think the sensible thing is to say let’s take preventative and mitigating steps given the chances this might be the case.”

Cameron’s comments also coincide with the United Nations talks on climate change in Warsaw, which has seen Japan slash its commitment to reducing CO2 emissions and Australia fail to send a minister to the conference for the first time in 16 years.’

* [US military-led humanitarian intervention in the Philippines: a message to China](http://theconversation.com/us-military-led-humanitarian-intervention-in-the-philippines-a-message-to-china-20070), Jonathan Bogais, The Conversation (15 November 2013)
* [Impacts of climate change observed in global precipitation patterns](http://arstechnica.com/science/2013/11/impacts-of-climate-change-observed-in-global-precipitation-patterns/), Kate Prengaman, Ars Technica (17 November 2013)
* [REDD+ and the underlying causes of deforestation and forest degradation](http://globalforestcoalition.org/wp-content/uploads/2013/11/REDD-and-UC-report-final.pdf), Global Forest Coalition (November 2013) [PDF, 2MB]
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-21-november-2013/attachment/cc-sec-image/>

**LIMATE CHANGE AND SECURITY:**[**Rethinking geopolitics: climate security in the Anthropocene**](http://www.globalpolicyjournal.com/articles/climate-change-energy-and-sustainability/early-view-article-rethinking-geopolitics-climate-)**, Simon Dalby, Global Policy, DOI: 10.1111/1758-5899.12074 (25 October 2013) (subscription required)**

“In the new geological epoch of the Anthropocene simplistic assumptions of environmental change leading directly to conflict are misleading at best and dangerous at worst. Climate security in the long run is not a matter of environmental change causing political difficulties, but rather a matter of contemporary political difficulties causing accelerating climate change. Economies that don’t further destabilize the climate are key to future security.”

* [Handbook on climate change and human security](http://books.google.com.au/books?hl=en&lr=&id=_ePDAQAAQBAJ&oi=fnd&pg=PR3&dq=%22climate+change%22+security&ots=22ZdDgVofY&sig=d5LXOTZcuC9K1v3PoUAkw4ibKb4#v=onepage&q&f=false), Michael Redclift and Marco Grass (eds.) Edward Elgar (December 2013)
* [Iran’s environment: greater threat than foreign foes](http://iranprimer.usip.org/blog/2013/oct/28/iran%E2%80%99s-environment-greater-threat-foreign-foes), David Michel, Iran Primer, United States Institute for Peace (28 October 2013)
* [The forest mafia: how scammers steal millions through carbon markets](http://www.theatlantic.com/international/archive/2013/10/the-forest-mafia-how-scammers-steal-millions-through-carbon-markets/280419/), Ryan Jacobs, The Atlantic (11 October 2013)

**AUSTRAL PEACE AND SECURITY:**

[**Re-thinking colonialism to prepare for the impacts of rapid environmental change**](http://link.springer.com/article/10.1007/s10584-013-0783-7)**, Nicholas James Reo and Angela K. Parker, Climatic Change (2013) 120:671–682**

Historical analysis of linked ecological and societal rapid changes may help determine pathways to desirable futures. By the close of King Phillip’s War in 1676 New England was transformed from a heterogeneous patchwork of ecosystems supporting diverse food systems into a depauperate hash of fields and forests susceptible to pest outbreaks and erosion. The concept of coupled human and natural systems (CHANS) helped quiet the noise in the chaotic colonial history.

* [Preventing and resolving future climate and natural resource-related conflicts in the Zambezi basin: a study of Bulawayo and Chinde districts](http://allafrica.com/stories/201310181088.html), Tigere Chagutah, Southern Africa Institute for International Affairs, Occasional Paper 155 (September 2013)
* [Climate change to have double impact – study](http://www.theguardian.com/environment/earth-insight/2013/sep/18/climate-change-double-impact-study), Nafeez Ahmed, Earth Insight, Guardian blog (18 September 2013)
* [Climate science in climate security scenarios](http://link.springer.com/article/10.1007/s10584-013-0945-7), Kirsty Lewis, Climatic Change (published online 11 October 2013)
* <http://nautilus.org/wp-content/uploads/2013/10/kingphilip.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Climate Change, Water Conflicts and Human Security: Regional Assessment and Policy Guidelines for the Mediterranean, Middle East and Sahel**](http://www.ecologic.eu/files/publications/2013/Report%20No.%2010_CLICO.pdf)**, Julia Kloos et al, CLICO and the Institute for Environment and Human Security, United Nations University, Report No. 10 (August 2013)**

A complex nexus connects climate change, water conflicts and security. Climate and hydrological factors, socio-economic, institutional and political conditions are all important drivers of human (in) security, but their relative importance depends on the specific context. Adaptation processes can both reduce and increase insecurities, including through maladaptation and divergent adaptation – where the adaptation of one group lowers the adaptive capacity of another.

* [Hydro-climatic change, conflict and security](http://link.springer.com/article/10.1007/s10584-013-0893-2), Giorgos Kallis, Christos Zografos, Climatic Change, DOI 10.1007/s10584-013-0893-2, October 2013
* [Kenya grapples with governance of climate change projects](http://www.trust.org/item/20130930110828-38kq6/), Justus Bahati Wanzala, Thomson Reuters Foundation – Mon, 30 Sep 2013 11:08 AM
* [A view from the ninth floor](http://japanfocus.org/-D_H_-Garrett/4006), D.H. Garrett, The Asia-Pacific Journal, Vol. 11, Issue 40, No. 3, October 7, 2013
* <http://nautilus.org/wp-content/uploads/2013/10/Screen-Shot-2013-10-09-at-9.35.09-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Haze: Asia’s New Weapon**](http://www.theglobalist.com/haze-asias-new-weapon/)**, Robert Hathaway, The Globalist, September 8, 2013**

Haze may be the new weapon of mass destruction. Smoke from burning forests and peat on Sumatra moved east to envelope Singapore and Malaysia. Until state oversight capacity is enhanced, Indonesia will almost certainly fail in surmounting its haze challenges even when the political will exists. Yet top-down responses are seldom sufficient for dealing with a threat of this nature. Nearly every country in the region is upping its arms spending.

* [Nearly a Quarter of June Fires in Indonesia Occurred in Industrial Plantations](http://www.trust.org/item/20130730132911-smgq7/), David Gaveau and Mohammad Agus Salim, CIFOR (Center for International Forestry Research), Thomson Reuters Foundation (30 July 2013)
* [LANCE – FIRMS Web Fire Mapper](https://firms.modaps.eosdis.nasa.gov/firemap/), NASA
* [Today’s Weather Forecast, Brought to You by China?](http://fcw.com/Articles/2013/09/05/NOAA-satellite-gap-China-solution.aspx?p=1) Frank Konkel, FCW, 5 September 2013
* <http://nautilus.org/wp-content/uploads/2013/09/Screen-Shot-2013-09-25-at-10.55.18-PM.png>

**CLIMATE CHANGE AND SECURITY:**[**Climate Change Will Bring More Surprises to Security Community**](http://blogs.ei.columbia.edu/2013/09/05/climate-change-will-bring-more-surprises-to-security-community/)**, Interview with Mark Levy, State of the Planet, Earth Institute (5 September 2013**

The collapse of the government in Madagascar a few years ago from opposition to the sweetheart deal that the government made in a long term land lease to the South Korea government was not on anybody’s radar. But it’s a direct response to a climate-triggered policy response. Korea is worried about how it’s going to feed its people in a climate-stressed, water-scarce world. They sought out these long-term land deals and it led to the collapse of a government.

* [India’s Assam Shows Second-Order, Dangerous Effects of Climate Change in South Asia](http://www.newsecuritybeat.org/2013/08/indias-assam-shows-order-dangerous-effects-climate-change-south-asia/), Ashley Ziegler, New Security Beat (13 August 2013)
* [Climate Change, Water Conflicts and Human Security: Regional Assessment and Policy Guidelines for the Mediterranean, Middle East and Sahel,](http://reliefweb.int/sites/reliefweb.int/files/resources/Climate%20Change%20Water%20Conflicts%20and%20Human%20Security.pdf) Julia Kloos, Niklas Gebert, Therese Rosenfeld, Fabrice Renaud (coordinating authors), Institute for Environment and Human Security, United Nations University, Report No. 10 (August 2013)
* [The breadbasket of South Korea: Madagascar,](http://content.time.com/time/world/article/0%2C8599%2C1861145%2C00.html) Vivienne Walt, Time (23 November 2008)
* <http://nautilus.org/wp-content/uploads/2013/09/madagascar_lightbox.jpg>

**CLIMATE CHANGE ADAPTATION:**[**Using Science for Disaster Risk Reduction: Report of the ISDR Scientific and Technical Advisory Group**](http://www.preventionweb.net/files/32609_stagreport2013assembled.pdf)**, Southgate RJ et al., The United Nations Office for Disaster Risk Reduction – UNISDR (2013)**

The more widespread integration of science into disaster risk reduction policy will depend on science being ‘useful’, ‘useable’ and ‘used’. The science can: (i) be driven by the need to address the adverse effects of disasters on lives, livelihoods, economies and societies (ii) enable more focused disaster risk assessment (iii) reduce the impact of disasters by better forecasting, and (iv) improve disaster risk mitigation programs.

* [Disaster impacts/2000-2012](http://www.preventionweb.net/files/31737_20130312disaster20002012copy.pdf), The United Nations Office for Disaster Risk Reduction – UNISDR (2013)
* [Reducing disaster risks through science: issues and actions](http://www.unisdr.org/files/11543_STCReportlibrary.pdf), Scientific and Technical Committee, The United Nations Office for Disaster Risk Reduction – UNISDR (2009)
* <http://nautilus.org/wp-content/uploads/2013/08/Image-CC-adapt-for-29-Aug-2013.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Icelandic academics warn independent Scotland would be at ‘deep strategic disadvantage’**](http://www.heraldscotland.com/politics/referendum-news/icelandic-academics-warn-independent-scotland-would-be-at-deep-strategic-di.1375112738)**, HeraldScotland (29 July 2013)**

An independent Scotland would be at a deep strategic disadvantage to Russia in the conflict that is expected to emerge from climate change, and would need shelter from stronger allies. While the US does not want an independent Scotland, the five Nordics have lived for decades with the same strategic asymmetry that would face Scotland.

* [Scotland as an Independent Small State: Where would it seek shelter?](http://www.stjornmalogstjornsysla.is/wp-content/uploads/2013/06/a.2013.9.1.1.pdf) Alyson JK Bailes, Baldur Thorhallsson and Rachael Lorna Johnstone, Stjórnmál & stjórnsýsla: Icelandic Review of Politics and Administration, vol. 9, issue 1
* [Will global warming lead to more war? It’s not that simple](http://www.washingtonpost.com/blogs/wonkblog/wp/2013/08/05/will-global-warming-lead-to-more-war-its-not-that-simple/), Brad Plumer, wonkblog, Washington Post, (5 August 2013)
* [World food security more vulnerable than ever to climate change](http://phys.org/news/2013-08-world-food-vulnerable-climate.html), Phys.org (2 August 2013)
* <http://nautilus.org/wp-content/uploads/2013/08/scotland-decides.jpg>

**CLIMATE CHANGE AND SECURITY:**[**Missing the poorest for the trees? REDD+ and the links between forestry, resilience and peacebuilding**](http://www.international-alert.org/sites/default/files/publications/Economy_2013_Forestry_LSEConsultancy.pdf)**, Tobias F. Dorr et al., International Alert and LSE International Development (May 2013) [PDF, 8MB]**

How will REDD+ impact peace and security? To be effective and equitable, REDD+ will require large areas of land with clear tenure arrangements. Yet many developing countries suffer from conflicts over land ownership and continue to exclude local communities from land use decisions. The absence of a formal REDD+ agreement could provide an opportunity to promote the development of a conflict-sensitive REDD+ framework.

* [Backdraft: the conflict potential of climate change adaptation and mitigation](http://wilsoncenter.org/sites/default/files/ECSP_REPORT_14_2_BACKDRAFT.pdf), Geoffrey D. Dabelko et al., Woodrow Wilson International Center for Scholars, Environmental Change and Security Program Report, vol. 14, no. 2 (2013) [PDF, 2.9MB]
* [Australia shuts down the Kalimantan Forest Carbon Partnership: “A lot of funds spent and very little progress”](http://www.redd-monitor.org/2013/07/04/australia-shuts-down-the-kalimantan-forest-carbon-partnership-a-lot-of-funds-spent-and-very-little-progress/), Chris Lang, REDD Monitor (4 July 2013)
* [REDD+ finance: Who’s counting?](http://www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=9854&section=news_articles&eod=1)Marigold Norman and Charlene Watson, Ecosystem Marketplace (25 July 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-1-august-2013/attachment/peacbuilding-and-redd-international-alert/>

**CLIMATE CHANGE AND SECURITY:**[**Climate change, security and peace: the role of the European Union**](http://www.ccsenet.org/journal/index.php/res/article/view/28777/17212)**, Angela Liberatore, Review of European Studies, vol. 5, no. 3 (5 July 2013)**

The European Union’s active securitisation of climate change through proposed incorporation into the Common Security and Defence Policy tests the EU’s project of bringing to “international problems the sense of common responsibility and structures of contractual politics”. Debate anticipates sharply conflicting choices about civilian-military repertoires of response and the aims and modalities of future interventions through Union Common Security missions.

* [Report on the role of the Common Security and Defence Policy in case of climate-driven crises and natural disasters](http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A7-2012-0349&format=PDF&language=EN), Committee on Foreign Affairs, European Parliament, A7-0349/2012 (23 October 2012)
* [UN Security Council: playing a role in the international climate change regime?](http://www.tandfonline.com/doi/abs/10.1080/14781158.2013.787058#.UdOAoj5fbls) Stephanie Cousins, Global Change, Peace and Security, vol. 25, no. 2, (2013)
* [The end of the Pacific? Effects of sea level rise on Pacific Island livelihoods](http://onlinelibrary.wiley.com/doi/10.1111/sjtg.12021/full), Patrick D. Nunn, Singapore Journal of Tropical Geography, vol. 34, no. 2 (July 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-18-july-2013/attachment/climate-sec-image-18/>

**CLIMATE CHANGE AND SECURITY:**[**Back to the land? Legitimation, carbon offsets and Australia’s emissions trading scheme**](http://www.tandfonline.com/doi/full/10.1080/14781158.2013.758098#.UdN9UD5fbls)**, Rebecca Pearse, Global Change, Peace and Security, vol. 25, no.1 (22 February, 2013)**

The complications arising in the attempt to create a market in land carbon in Australia and the Asia-Pacific caution against the global pursuit of a REDD+ market. The market rules and governance norms established in Australia’s carbon market are likely to filter up and across to other jurisdictions. Compounded legitimation crises will continue outside and within Australian borders.

* [Turn down the heat: climate extremes, regional impacts, and the case for resilience](http://documents.worldbank.org/curated/en/2013/06/17862361/turn-down-heat-climate-extremes-regional-impacts-case-resilience-full-report), Hans Joachim Schellnhuber et al., World Bank (June 2013)
* [Egypt sees Ethiopian dam as risk to water supply](http://www.guardian.co.uk/world/2013/jun/18/egypt-ethiopia-dam-blue-nile), Griff Witte, Guardian (18 June 2013)
* [Amendment would give legal status to people displaced by climate change,](http://thinkprogress.org/immigration/2013/06/20/2187831/climate-refugee-immigration-bill/?mobile=nc) Rebecca Leber, Think Progress (20 June 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-4-july-2013/attachment/climate-sec-image-17/>

**CLIMATE CHANGE AND SECURITY:**[**Climate Change and Conflict: Avoiding small talk about the weather**](http://onlinelibrary.wiley.com/doi/10.1111/misr.12030/abstract)**, Emily Meierding, International Studies Review, Vol. 15, No. 2 (June 2013)**

Rather than developing claims that are specific to climate change–conflict relationships, analysts tend to import arguments from the earlier environmental literatures. It is often unclear whether the climate change–conflict relationship is actually being tested. Recommendations: incorporation of agricultural variables into models; emphasis on conditional effects, with attention to local institutions; and a shift from climate change to climate uncertainty.

* [For Southeast Asia, climate change is just as dangerous](http://www.themalaysianinsider.com/sideviews/article/for-southeast-asia-climate-change-is-just-as-dangerous-le-dinh-tinh), Le Dinh Tinh, Malaysian Insider (3 June 2013)
* [Forest carbon won’t be tradable commodity, climate expert says](http://www.businessweek.com/news/2013-06-14/forest-carbon-won-t-be-tradable-commodity-climate-expert-says), Stefan Nicola and Alessandro Vitelli, Bloomberg News (14 June 2013)
* [Peak soil: industrial civilisation is on the verge of eating itself](http://www.guardian.co.uk/environment/earth-insight/2013/jun/07/peak-soil-industrial-civilisation-eating-itself), Nafeez Ahmed, Earth Insight, The Guardian (7 June 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-20-june-2013/attachment/climate-security-image/>

**CLIMATE CHANGE AND SECURITY:**[**The Sumatran rainforest will mostly disappear within 20 years**](http://www.guardian.co.uk/world/2013/may/26/sumatra-borneo-deforestation-tigers-palm-oil)**, John Vidal, The Observer, Guardian (26 May 2013)**

This is the fastest, most comprehensive transformation of an entire landscape that has ever taken place anywhere. Indonesia’s deforestation has been accompanied by rising violence. In 2012 more than 600 major land conflicts were recorded in palm plantations. Many turned violent as communities that had lost their forest fought multinational companies and security forces. More than 5,000 human rights abuses were recorded, with 22 deaths and hundreds of injuries.

* [Indonesia is seeing a new corporate colonialism](http://www.guardian.co.uk/world/2013/may/25/indonesia-new-corporate-colonialism), John Vidal, The Observer, Guardian (26 May 2013)
* [Indonesia’s indigenous peoples wins court rule regarding land rights but skepticism needs to remain](http://finalrationalist.wordpress.com/2013/05/22/indonesias-indigenous-peoples-wins-court-rule-regarding-land-rights-but-skepticism-needs-to-remain/), lastplacesonearth (22 May 2013)
* [Will California fall into the REDD trap?](http://www.aljazeera.com/indepth/opinion/2013/05/20135613232989660.html) Manuela Picq, Al Jazeera (7 May 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-6-june-2013/attachment/climate-sec-image-13/>

**CLIMATE CHANGE AND SECURITY:**[**Backdraft: the conflict potential of climate change adaptation and mitigation**](http://www.scribd.com/doc/141918893/Backdraft-The-Conflict-Potential-of-Climate-Change-Adaptation-and-Mitigation)**, Environmental Change & Security Program Report, Vol. 14, Issue 2, Woodrow Wilson International Center for Scholars (May 2013)**

One potentially dangerous – but counterintuitive – dimension has been largely ignored. Could efforts to reduce our carbon footprint and lower our vulnerability to climate change inadvertently exacerbate existing conflicts? How do we ensure mitigation and adaptation strategies do not create new conflicts? How can policymakers anticipate and minimize these potential risks? More ambitiously, can these efforts actually help build peace?

* [Obama’s Arctic strategy sets off a climate time bomb](http://www.guardian.co.uk/environment/earth-insight/2013/may/17/obama-arctic-energy-security-climate), Nafeez Ahmed, Earth Insight, The Guardian [blog] (17 May 2013)
* [Who pays for climate change? U.S. taxpayers outspend private insurers three-to-one to cover climate disruption costs](http://www.nrdc.org/globalwarming/files/taxpayer-climate-costs-IP.pdf), Daniel Lashof and Andy Stevenson, Natural Resources Defense Council, Issue Paper 13-05-A (May 2013)
* [USA suffers severe climate induced migration](http://www.rtcc.org/usa-suffers-severe-climate-induced-migration/), John Parnell, Responding to Climate Change (15 May 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-23-may-2013/attachment/climatesec-image-7/>

**CLIMATE CHANGE AND SECURITY:**[**White House warned on imminent Arctic ice death spiral**](http://www.guardian.co.uk/environment/earth-insight/2013/may/02/white-house-arctic-ice-death-spiral)**, Nafeez Ahmed, Earth Insight, The Guardian (2 May 2013)**

Senior US government officials are to be briefed on the danger of an ice-free Arctic in the summer within two years. “This situation has the momentum of a runaway train.” New research suggests that the Arctic summer sea ice loss is linked to extreme weather: “Arctic amplification”.

* [Arctic Death Spiral – March 2013](http://www.youtube.com/watch?feature=player_embedded&v=2Qae244T9o8), Andy Lee Robinson, You Tube (11 April 2013)
* [New report highlights the complexity of climate change across the Antarctic](http://blog.journals.cambridge.org/2013/05/new-report-highlights-the-complexity-of-climate-change-across-the-antarctic/), Charlotte Porter, Cambridge Journals Blog (3 May 2013)
* [Is Antarctica demilitarised?](http://www.aspistrategist.org.au/is-antarctica-demilitarised/) Sam Bateman, The Strategist, ASPI (23 April 2013)
* <http://nautilus.org/?attachment_id=30456>

**CLIMATE CHANGE AND SECURITY:**[**Redirect military expenditure to ensure a sustainable future, Kumi**](http://www.guardian.co.uk/sustainable-business/blog/redirect-military-expenditure-sustainable-future)**Naidoo, Guardian Sustainable Business Blog (17 April 2013)**

Last year $1.75tn was spent on the world’s military. People are entitled to question whether this is money well spent to ensure security. Climate change and a carbon-intensive economy are already responsible for 5 million deaths each year. More than $3.5tn is spent annually on the world’s military and on subsidising fossil fuels. We can no longer allow governments to spend recklessly on the wrong things, when so many right things remain neglected.

* [Kiribati holds national hearings on climate change](http://www.abc.net.au/news/2013-04-19/an-kiribati-national-hearings-on-climate-change/4638512), Australian Network News (19 April 2013)
* [The United States and China to increase dialogue on climate change](http://www.cnas.org/blogs/naturalsecurity/2013/04/united-states-and-china-increase-dialogue-climate-change.html), Natural Security Blog, Center for a New American Security (13 April 2013)
* [Brazil soya and beef exports driving 30% of deforestation emissions](http://www.rtcc.org/brazil-soya-and-beef-exports-driving-30-of-deforestation-emissions/), Ed King, Responding to Climate Change (19 April 2013)
* http://nautilus.org/wp-content/uploads/2013/04/climate-sec-image.png

**CLIMATE CHANGE AND SECURITY:**[**Climate change: source of conflict or**](http://clisec.zmaw.de/fileadmin/user_upload/fks/publications/working-papers/Working_paper_CLISEC-26.pdf)[**promoter of cooperation?**](http://clisec.zmaw.de/fileadmin/user_upload/fks/publications/working-papers/Working_paper_CLISEC-26.pdf)**Tobias Ide and Jürgen Scheffran, University of Hamburg Research Group Climate Change and Security, Working Paper CLISEC-26 (2013) [PDF, 415KB]**

Three perspectives provide a different answer to the question whether climate change is a source of violent conflict onset: the Climate Conflict perspective, the Social Conflict perspective, and the Environmental Peace perspective, which suggests that environmental problems, resource scarcity and natural disasters may provide opportunities for cooperative behavior. The central question is under which conditions the claims of each perspectives are valid.

* [Discourses of climate security](http://www.sciencedirect.com/science/article/pii/S0962629813000188), Matt McDonald, Political Geography, Volume 33 (March 2013) pp 42–51
* [A clear and present danger: the Security Council and climate change](http://thediplomat.com/flashpoints-blog/2013/03/30/a-clear-and-present-danger/), Andrew Holland and Xander Vagg, Flashpoints [blog], The Diplomat 31 March 2013)
* [Experts: Corruption could threaten global efforts to slow forest loss](http://blog.cifor.org/14695/experts-corruption-could-threaten-global-efforts-to-slow-forest-loss/#.UWFDhKtfblt), Gabriela Ramirez Galindo, Forest News, CIFOR (1 April 2013)
* <http://nautilus.org/napsnet/napsnet-weekly/nautilus-peace-and-security-weekly-11-april-2013/>

**CLIMATE CHANGE AND SECURITY:**[**The secure and the damned**](http://www.redpepper.org.uk/the-secure-and-the-damned/)**, Nick Buxton and Ben Hayes, Red Pepper (March 2013)**

The climate security discourse is predicated on winners and losers – the secure and the damned – and based on a vision of ‘security’ that envisages disposable people in place of the international solidarity required to face the future in a just and collaborative way. We must be prepared to reclaim the climate adaptation agenda from one based on acquisition through dispossession to one based on universal human rights and the dignity of all people.

* [The Global Security Defense Index on climate change: preliminary results, national security perspectives on climate change from around the world](http://americansecurityproject.org/ASP%20Reports/Ref%200121%20-%20Global%20Security%20Defense%20Index%20P-Results.pdf), Andrew Holland and Xander Vagg, American Security Project (21 March 2013) [PDF, 956KB]
* [Statement for the record, worldwide threat assessment of the US](http://www.dni.gov/files/documents/Intelligence%20Reports/2013%20ATA%20SFR%20for%20SSCI%2012%20Mar%202013.pdf) [intelligence community](http://www.dni.gov/files/documents/Intelligence%20Reports/2013%20ATA%20SFR%20for%20SSCI%2012%20Mar%202013.pdf), Senate Select Committee on Intelligence, James R. Clapper, Director of National Intelligence (12 March 2013) [PDF, 183KB]
* [Heavy weather: climate and the Australian Defence Force](http://www.aspi.org.au/publications/publication_details.aspx?ContentID=354&pubtype=10), Anthony Bergin and Anthony Press, ASPI, Special Report Issue 49 (25 March 2013)

**CLIMATE CHANGE AND SECURITY:**[**Chief of US Pacific forces calls climate biggest worry**](http://www.bostonglobe.com/news/nation/2013/03/09/admiral-samuel-locklear-commander-pacific-forces-warns-that-climate-change-top-threat/BHdPVCLrWEMxRe9IXJZcHL/story.html?s_campaign=sm_tw)**, Bryan Bender, Boston Globe (9 March 2013)**

Admiral Samuel J. Locklear III said upheaval related to the warming planet “is probably the most likely thing that is going to happen … that will cripple the security environment. If it goes bad, you could have hundreds of thousands or millions of people displaced and then security will start to crumble pretty quickly.’’

* [Resilience and the Asia-Pacific rebalance](http://www.pacom.mil/media/news/2013/02/08-adm-locklear-us-indonesia-society-resilience-asia-pacific-rebalance.shtml), Admiral Samuel J. Locklear III, Commander U.S. Pacific Command, U.S. – Indonesia Society (8 February 2013)
* [The changing Arctic: strategic opportunities and challenges](http://www.cna.org/sites/default/files/events/Goodman_Arctic.pdf), Sherri Goodman, CNA, Presentation to IISS Forum for Arctic Climate Change and Security Geopolitical Workshop (19 December 2012) [PDF, 2.6MB]
* [The Arab Spring and climate change: a Climate and Security](http://climateandsecurity.files.wordpress.com/2012/04/climatechangearabspring-ccs-cap-stimson.pdf) [Correlations Series](http://climateandsecurity.files.wordpress.com/2012/04/climatechangearabspring-ccs-cap-stimson.pdf), Caitlin E. Werrell and Francesco Femia (eds.), preface by Anne-Marie Slaughter, Center for American Progress, the Stimson Center, and the Center for Climate and Security (February 2013) [PDF, 1.9MB]

**CLIMATE CHANGE AND SECRUITY:**[**Arria formula meeting on the security dimensions of climate change**](http://www.mfat.govt.nz/Media-and-publications/Media/MFAT-speeches/2013/0-15-feb-2013.php)**,  Statement to the United Nations Security Council, Stephanie Lee, Chargé D’Affaires, New Zealand Permanent Mission to the United Nations, New York (15 February 2013)**

Climate change is an issue that must be addressed across most of the international agenda. The Security Council should add its weight to the case for an effective and global response. We share the concern of Pacific Island countries. It is time to think hard, and quickly, about how solutions to climate change can reflect the desire of people to continue to live in their own countries. New Zealand calls on the Security Council to take up this issue again.

* [Don’t talk to us about your sinking island: How the U.N. Security Council takes a pass on global warming](http://www.slate.com/articles/video/slate_v/2013/02/u_n_global_warming_why_the_united_nations_won_t_make_bold_proposals_on_climate.html), Slate (22 February 2013)
* [Arria formula meeting on climate change](http://www.whatsinblue.org/2013/02/arria-formula-meeting-on-climate-change.php), What’s in blue: Insights on the work of the UN Security Council (14 February 2013)
* [Climate change’s links to conflict draws UN attention](http://www.bloomberg.com/news/2013-02-15/climate-change-s-links-to-conflict-draws-un-attention.html), Flavia Krause-Jackson, Bloomberg (16 February 2013)

**CLIMATE CHANGE AND SECURITY:**[**Climate extremes: recent trends with implications for national security**](http://environment.harvard.edu/sites/default/files/climate_extremes_report_2012-12-04.pdf)**, Michael McElroy and D. James Baker, Center for the Environment, Harvard University (October 2012) [PDF, 7.8MB]**

Focusing on near-term impacts of climate change, the study funded by the CIA employed statistical analysis, physical understanding, and basic energy balance models to interpret the physics on a global scale, as well as historical temperature and precipitation data, together with a literature review on climate change, weather extremes, and links to climate drivers. “Lessons from the past are no longer of great value as a guide to the future.”

* [Climate change, migration and security: best-practice policy and operational options for Mexico](http://www.rusi.org/downloads/assets/WHR_1-13_web.pdf), Elizabeth Deheza and Jorge Mora, RUSI (February 2013) [PDF, 1.55MB]
* [‘Huge consequences’ of climate change, Syrian crisis must be faced, Ban tells think tank,](http://www.un.org/apps/news/story.asp?NewsID=44121&Cr=syria&Cr1=#.URrHaFpfbls)UN News Centre (11 February 2013)
* [Carr calls on Council to combat climate change](http://www.abc.net.au/worldtoday/content/2013/s3688357.htm), The World Today, ABC Radio (12 February 2013)

**CLIMATE CHANGE AND SECURITY:**[**Climate change and security threats: time to call a spade a spade?**](http://sustainablesecurity.org/article/climate-change-and-security-threats-time-call-spade-spade)**Ben Zala, Sustainable Security (January 2013)**

The notion of the ‘securitisation’ of climate change pre-supposes that we get to choose whether climate change is a security threat or not – it emphasises human agency. We can choose to label something as a threat or not. We can talk about security threats posed by climate change regardless of whether we can link instances of conflict and climate change in the past. Because something may pose a security threat does not mean that we have to throw military force at it.

* [Scientists call for war on climate change, but who on earth is listening?](http://www.climatecodered.org/2012/12/scientists-call-for-war-on-climate.html) David Spratt, Climate Code Red (7 December 2012)
* [Over the horizon – the big thaw](http://www.foreignpolicy.com/articles/2013/01/18/over_the_horizon?page=0,4), Martin Indyk, Foreign Policy (18 January 2013)
* [Update of Greenland Ice Sheet mass loss: exponential?](http://www.columbia.edu/~jeh1/mailings/2012/20121226_GreenlandIceSheetUpdate.pdf) James Hansen and Makiko Sato (26 December 2012) [PDF, 291 KB]

# 2012

**CLIMATE CHANGE AND SECURITY:**[**Disentangling the climate-conflict nexus: empirical and theoretical assessment of vulnerabilities and pathways**](http://www.ccsenet.org/journal/index.php/res/article/view/19277/13740)**, Jurgen Scheffran et al., Review of European Studies, Vol. 4, No. 5 (December 2012)**

The prime objective of the framework suggested here is to combine quantitative empirical analyses, qualitative case studies, and modeling of the complex human-environment interactions. Models could build on a rich set of modeling tools from complexity science, multi-agent systems, social network analysis, and conflict assessment that extend previous data and experiences into future scenarios, covering different social, economic, and political contexts.

* [Impacts of sea level rise on the coastal zones of Egypt](http://clisec.zmaw.de/fileadmin/user_upload/fks/publications/working-papers/Working_paper_CLISEC-25.pdf), P. Michael Link, Jasmin Kominek, and Jürgen Scheffran, University of Hamburg, Research Group Climate Change and Security, Working Paper CLISEC-25 (2012)
* [Enabling strategic intelligence on energy and environmental security impacts and consequences](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1069129), David Bray, International Design Team Meeting, Glasgow, Scotland (8-9 November 2007)
* [Battling climate change and conflict in Pakistan](http://inec.usip.org/blog/2012/dec/17/battling-climate-change-and-conflict-pakistan), Natalie Nasrallah, International Network for Economics and Conflict, United States Institute of Peace (17 December 2012)

**LIMATE CHANGE AND SECURITY:**[**Worst fortnight ever for carbon markets**](http://www.redd-monitor.org/2012/12/13/worst-fortnight-ever-for-carbon-markets/)**? Chris Lang, REDD Monitor (13 December 2012)**

“With very few exceptions, investment banks, commercial banks, commodity based hedge funds and specialised carbon funds with exposure to the CDM have either closed shop and laid off their deal teams or appointed caretakers to manage portfolios of assets with residual value. Those business still active in the CDM are the ‘walking dead’ of the carbon market. They are living on deals done at higher prices years back and are living on borrowed time, if not borrowed money.”

* [Doha dispatches: Carbon market collapse creates another fine mess](http://reneweconomy.com.au/2012/doha-dispatches-carbon-market-collapse-creates-another-fine-mess-21440), Giles Parkinson, Renew Economy (6 December 2012)
* [Indonesia approves landmark forest protection project](http://www.reuters.com/article/2012/12/05/indonesia-forest-idUSL4N09F12X20121205), David Fogarty, Reuters (5 December 2012)
* [Palming off: Indonesia’s forests and REDD](http://www.economist.com/blogs/banyan/2012/12/indonesias-forests-and-redd), The Economist (6 December 2012)
* [Achieving climate security in the Pacific: alternatives to the UNFCCC](http://www.stakeholderforum.org/sf/outreach/index.php/component/content/article/166-cop18day11-disasters/1292-achieving-climate-security-in-the-pacific-alternatives-to-the-unfccc), Ben Sims, Pacific Institute of Public Policy, Outreach (7 December 2012)

**CLIMATE CHANGE AND SECURITY:**[**Climate change, migration, and conflict in South Asia: rising tensions and policy options across the subcontinent**](http://www.americanprogress.org/wp-content/uploads/2012/11/ClimateMigrationSubContinentReport_small.pdf)**, Arpita Bhattacharyya and Michael Werz, Center for American Progress (December 2012) [PDF, 2.68MB]**

U.S. policymakers need to include India in their Asia pivot, which boasts the added benefit of making clear the pivot is not about outdated Cold War theories of containment. Tensions over Chinese claims on Arunachal Pradesh and Tawang are likely to be heightened by climate change. It seems unlikely India would allow crucial water supplies to be lost, particularly as climate change increases the overall stress on agriculture and basic livelihoods.

* [Climate change and security:  the test for Australia and Indonesia – involvement or indifference?](http://nautilus.wpengine.netdna-cdn.com/wp-content/uploads/2012/02/Allan-Behm-SR.pdf)Allan Behm, Nautilus Institute, APSNet Special Report 09-01S (12 February 2009) [PDF, 164KB]
* [Defence firms seek broader agenda](http://www.bbc.co.uk/news/world-20385312), Nick Childs, BBC News (18 November 2012)
* [The securitization of climate change in world politics: how close have we come and would full securitization enhance the efﬁcacy of global climate change policy?](http://onlinelibrary.wiley.com/doi/10.1111/reel.12008/full), Shirley V. Scott, Review of European Community & International Environmental Law, vol. 21, no. 3 (19 November 2012)

**CLIMATE CHANGE AND SECURITY:**[**Climate and social stress: implications for security analysis**](http://sites.nationalacademies.org/xpedio/groups/dbassesite/documents/webpage/dbasse_073254.pdf)**, Report Brief, National Research Council (November 2012) [PDF, 277KB]**

Climate change can be expected to increase the frequency and intensity of potentially disruptive environmental events. It is prudent to expect to be surprised by ways in which these events may cascade. Climate events will produce consequences that exceed the capacity of global systems to manage. It makes sense for the intelligence community to apply a scenario approach to potentially disruptive events that are expectable but not truly predictable.

* [Climate and social stress: implications for security analysis](http://www.nap.edu/catalog.php?record_id=14682), John D. Steinbruner, Paul C. Stern, and Jo L. Husbands, (eds.), National Research Council (November 2012)
* [Turn down the heat: why a 4°c warmer world must be avoided](http://climatechange.worldbank.org/sites/default/files/Turn_Down_the_heat_Why_a_4_degree_centrigrade_warmer_world_must_be_avoided.pdf), World Bank (November 2012)
* [Amid budget scrutiny, CIA shutters climate center](http://eenews.net/public/Greenwire/2012/11/19/1), Annie Snider, Greenwire (19 November 2012)

CLIMATE CHANGE AND SECURITY: [Climate linked to conflict in East Africa, study finds](http://www.latimes.com/news/science/sciencenow/la-sci-sn-climate-change-linked-to-conflict-in-east-africa-20121022%2C0%2C1078149.story?track=rss), Jon Bardin, Los Angeles Times (22 October 2012)

A study relating climate to conflict in East Africa finds that increased rainfall dampens conflict while unusually hot periods can cause a flare-up, reinforcing the theory that climate change will cause increased scarcity. A dataset using location-specific tracking of individual events across Africa showed an increase in rain reduced the likelihood of conflict, and that especially hot temperatures meant about a 30% higher likelihood of a conflict.

* [Climate variability and conflict risk in East Africa, 1990–2009](http://www.pnas.org/content/early/2012/10/17/1205130109.full.pdf%2Bhtml), John O’Loughlin, et al., Proceedings of the National Academy of Science (22 October 2012) [PDF, 662KB]
* [Vietnam: country study. A guide to the cold calculus of a hot planet](http://daraint.org/wp-content/uploads/2012/09/CVM2ndEd-CountryStudy-Vietnam.pdf). Climate Vulnerability Monitor 2nd Edition, DARA and the Climate Vulnerable Forum (2012) [482.5KB]
* [Too late for two degrees? Low carbon economy index 2012](http://www.pwc.com/en_GX/gx/low-carbon-economy-index/assets/pwc-low-carbon-economy-index-2012.pdf), PWC (November 2012) [PDF, 22.2KB]

**CLIMATE CHANGE AND SECURITY:**[**Integrating tipping points into climate impact assessments**](http://link.springer.com/article/10.1007/s10584-012-0572-8/fulltext.html)**, Timothy M. Lenton and Juan-Carlos Ciscar, Climatic Change (29 August 2012)**

There is currently a huge gulf between natural scientists’ understanding of climate tipping points and economists’ representations of climate catastrophes in models. In particular, there are multiple potential tipping points and they are not all low probability events. For nine different tipping events, the range of expected physical climate impacts is summarised and suggestions are made for how they may translate into socio-economic impacts.

* [Anticipating critical transitions](http://www.sciencemag.org/content/338/6105/344.abstract), Marten Scheffer et al, Science, Vol. 338 no. 6105 (19 October 2012)
* [Early Warning Signals Toolbox](http://www.early-warning-signals.org/home/), Synergy Program for Analyzing Resilience and Critical transitionS
* [Climate change, tipping elements and security](http://link.springer.com/chapter/10.1007/978-94-007-2430-3_4?LI=true), Kjeld Rasmussen and Thomas Birk, National Security and Human Health Implications of Climate Change, NATO Science for Peace and Security Series C: Environmental Security 2012

**CLIMATE CHANGE AND SECURITY:**[**Climate change and energy security as military issues**](http://www.kas.de/wf/doc/7729-1442-5-30.pdf)**, Jeffrey Mazo, Security and responsibility in a multipolar world, IX Conference of Forte de Copacabana, International security – a European-South American dialogue (2012)**

Rather than acting as a ‘threat multiplier’, climate change may be characterised as shifting ‘the tipping point at which conflict occurs’. The mix of missions for armed forces will change within the time horizon of force planning and acquisition programmes. Disagreements stem less from differences in method than from assumptions with regard to uncertainties. Policymakers have to weigh these assessments against the costs of taking preventive action.

* [Livelihood security – climate change, migration and conflict in the Sahel](http://postconflict.unep.ch/publications/UNEP_Sahel_EN.pdf), United Nations Environment Program (2012) [PDF, 15.6MB]
* [Global water security – Intelligence Community Assessment](http://www.dni.gov/files/documents/Newsroom/Press%20Releases/ICA_Global%20Water%20Security.pdf), National Intelligence Council, Office of the Director of National Intelligence, ICA 2012-08 (2 February 2012) [751.5KB]
* [Climate change and international security: the Arctic as a bellwether](http://www.c2es.org/publications/climate-change-international-arctic-security), Rob Huebert, et al., Center for Climate and Energy Solutions (May 2012)

**CLIMATE CHANGE AND SECURITY:**[**Report warns of global food insecurity as climate change destroys fisheries**](http://www.guardian.co.uk/environment/2012/sep/24/food-climate-change-fisheries)**, Suzanne Goldenberg, The Guardian (24 September 2012)**

The Persian Gulf, Libya, and Pakistan are at high risk of food insecurity in coming decades because climate change and ocean acidification are destroying fisheries. Some of the countries at highest risk were in oil-rich – and politically volatile – regions. “The Persian Gulf is actually expected to be one of the hardest-hit regions. In terms of fish catch they are supposed to lose over 50% of their fisheries.” America is expected to lose about 12% of its catch potential by mid-century.

* [Ocean-based food security threatened in a high CO2 world: a ranking of nations’ vulnerability to climate change and ocean acidification](http://oceana.org/sites/default/files/reports/Ocean-Based_Food_Security_Threatened_in_a_High_CO2_World.pdf), Matthew Huelsenbeck, Oceana (September 2012) [PDF, 1.06MB]
* [Climate trends and global crop production since 1980](http://iis-db.stanford.edu/pubs/23214/policy_brief_trends11.pdf), David Lobell, Wolfram Schlenker, Justin Costa-Roberts, Policy Brief, Stanford University Program on Food Security and the Environment (May 2011) [PDF, 309.9KB]
* [East Timor may take climate refugees](http://www.radioaustralia.net.au/international/radio/program/pacific-beat/east-timor-may-take-climate-refugees/1017620), Geraldine Coutts, Radio Australia, ABC (19 September 2012)

**CLIMATE CHANGE AND SECURITY:**[**The planetary water drama: dual task of feeding humanity and curbing climate change**](http://www.agu.org/pubs/crossref/2012/2012GL051688.shtml)**, J. Rockstrom et al., Geophysical Research Letters, Vol. 39, (2012) (subscription required)**

Consumptive water use involved in the dual task would both transgress the planetary boundary range for global consumptive freshwater use and exacerbate already severe river depletion, causing societal problems related to water shortage and water allocation. Strategies to rely on sequestration of CO2 as a mitigation strategy must recognize the high freshwater costs involved, implying that the key mitigation strategy must be to reduce emissions.

* [When it rains, it pours: global warming and the increase in extreme precipitation from 1948 to 2011](http://www.environmentamerica.org/sites/environment/files/reports/When%20It%20Rains%2C%20It%20Pours%20vUS.pdf), Travis Madsen, and Nathan Willcox, Environment America Research & Policy Center (Summer 2012)
* [Crops in India wilt in a weak monsoon season](http://www.nytimes.com/2012/09/04/business/global/drought-in-india-devastates-crops-and-farmers.html?_r=1), Vikas Bajaj, New York Times (4 September 2012
* [Climate change and the South Asian summer monsoon](http://www.nature.com/nclimate/journal/v2/n8/full/nclimate1495.html), Andrew G. Turner and H. Annamalai, Nature Climate Change, vol. 2, pp. 587–595 (2012) (subscription required)

**CLIMATE CHANGE AND SECURITY:**[**Chaotic climate change and security**](http://onlinelibrary.wiley.com/doi/10.1111/j.1749-5687.2012.00157.x/abstract)**, Maximilian Mayer, International Political Sociology 6 (8 June 2012)**

The framing of climate change has turned into a highly nonlinear danger that threatens national security. Practices and materials have become entangled across professional and disciplinary contexts. The growing association of chaotic climate change encompasses climatologists, who challenge the mainstream ontology of climate; economists, who started to revisit their economic models; and strategic communities, which began to pick up nonlinear climate changes foregrounding national security.

* [Climate change and the Syrian uprising](http://thebulletin.org/web-edition/features/climate-change-and-the-syrian-uprising), Shahrzad Mohtadi, Bulletin of the Atomic Scientists (16 August 2012)
* [Issues of climate change, health and national security in expanding cities worldwide](http://www.springerlink.com/content/g7k60525263n0017/), J. C. R. Hunt, S. E. Belcher and Y. V. Timoshkina, in H. J. S. Fernando, Z. Klaić and J.L. McCulley (eds.) National Security and Human Health Implications of Climate Change, NATO Science for Peace and Security Series C: Environmental Security (2012)
* [Theories and models of climate-security interaction: framework and application to a climate hot spot in North Africa](http://www.springerlink.com/content/h88702n823u27445/), Jürgen Scheffran, P. Michael Link and Janpeter Schilling, in Scheffran, J. e t al (eds.), Climate change, human security and violent conflict, Hexagon Series on Human and Environmental Security and Peace, Volume 8, Part 2  (2012)

**CLIMATE CHANGE AND SECURITY:**[**Global warming’s terrifying new math**](http://www.rollingstone.com/politics/news/global-warmings-terrifying-new-math-20120719)**, Bill McKibben, Rolling Stone (19 July 2012)**

For the past year, an easy and powerful bit of arithmetical analysis first published by financial analysts in the U.K. has been making the rounds. And it allows us to understand our precarious – our almost-but-not-quite-finally hopeless – position with three simple numbers. They provide intellectual clarity about the greatest challenge humans have ever faced. We know how much we can burn, and we know who’s planning to burn more.

* [Unburnable carbon – are the world’s financial markets carrying a carbon bubble?](http://www.carbontracker.org/wp-content/uploads/downloads/2011/07/Unburnable-Carbon-Full-rev2.pdf) Carbon Tracker Initiative (March 2012) [PDF, 1.7MB]
* [Scientists to state department: climate change must be considered in new Keystone XL tar sands pipeline review](http://switchboard.nrdc.org/blogs/eshope/scientists_to_state_department.html), Elizabeth Schope’s Blog, Switchboard, Natural Resources Defense Council (20 July 2012)
* [Interview – Thomas Homer-Dixon: exploring the climate “mindscape”,](http://www.homerdixon.com/wp-content/uploads/2012/05/Exploring-the-Climate-Mindscape.pdf)Bulletin of the Atomic Scientists Vol. 68, No. 3, pp. 1–9 (May/June 2012) [202.6KB]

**CLIMATE CHANGE AND SECURITY:**[**US official: Higher ocean acidity is climate change’s ‘evil twin,’ major threat to coral reefs**](http://www.washingtonpost.com/world/us-science-official-higher-ocean-acidity-major-threat-to-coral-reefs-worldwide/2012/07/09/gJQAfzYMXW_story.html)**, Associated Press, Washington Post (9 July 2011)**

The rise in the acid levels of the world’s oceans has emerged as one of the biggest threats to coral reefs, acting as the “osteoporosis of the sea” and threatening everything from food security to tourism to livelihoods, National Oceanic and Atmospheric Administration chief Jane Lubchenco said. The speed by which the oceans’ acid levels have risen caught scientists off-guard, with the problem now considered to be climate change’s “equally evil twin”. “We’re just beginning to uncover ways in which the changing chemistry of oceans affects behaviours.”

* [From science to policy: using science to inform coral reef conservation and management](http://www.noaanews.noaa.gov/stories2012/speech_20120709_coralreefsymposium.html), Keynote Address, International Coral Reef Symposium 2012, Cairns, Australia, Jane Lubchenco (9 July 2012)
* [2012: State of the climate in 2011](http://www.ncdc.noaa.gov/bams-state-of-the-climate/2011.php), J. Blunden and D. S. Arndt (eds.), Bulletin of the American Meteorological Society, Volume 93, Issue 7 (July 2012), (Supplement) S1-S264.
* [Explaining extreme events of 2011 from a climate perspective](http://journals.ametsoc.org/doi/pdf/10.1175/BAMS-D-12-00021.1), Thomas C. Peterson, Peter A. Stott and Stephanie Herring (eds.), Bulletin of the American Meteorological Society, Volume 93, Issue 7 (July 2012). pp 1041–1067 [3.6MB]

**CLIMATE CHANGE AND SECURITY:**[**Data Systems & Solutions pays $8.8 million to settle FCPA violations**](http://blogs.wsj.com/corruption-currents/2012/06/18/data-systems-solutions-pays-8-8-million-to-settle-fcpa-violations/)**, Samuel Rubenfeld, Wall Street Journal (18 June 2012)**

US company, Data Systems & Solutions (DS&S), agreed to a pay $8.8 million in fines to resolve charges of bribing officials at a Lithuanian nuclear power plant to obtain orders. DS&S executives paid substantial bribes in return for influence in awarding contracts to a range of officials at the Ignalina Nuclear Power Plant.

* [Another nuke scandal: theft and bribery](http://blogs.wsj.com/korearealtime/2012/04/27/another-nuke-scandal-theft-and-bribery/), Jaeyeon Woo, Wall Street Journal (27 April 2012)
* [Taiwan govt seeks to impeach current, former power officials](http://www.asianewsnet.net/home/news.php?id=31790), Camaron Kao, China Post (13 June 2012)
* [Global corruption report: Climate change](http://www.transparency.org/whatwedo/pub/global_corruption_report_climate_change), Transparency International (2011)

**CLIMATE CHANGE AND SECURITY:**[**Indonesia’s forests of corruption**](http://www.smh.com.au/environment/indonesias-forests-of-corruption-20120610-203sk.html)**, Michael Bachelard, Sydney Morning Herald (10 June 2012)**

“The forestry sector,” said Chandra Hamzah, the deputy chairman of Indonesia’s Corruption Eradication Commission, in 2010, “is a source of unlimited corruption.” On climate change, Indonesia is being pulled in two directions. Politically it appears serious about the task of reducing its emissions, 60 to 80 per cent of which are due to deforestation. But economically, the drivers of deforestation have not changed. There is big foreign cash to be earned as a coal and timber producer and the world’s largest exporter of palm oil.

* [A very real and practical contribution? Lessons from the Kalimantan Forests and Climate Partnership](http://devpolicy.anu.edu.au/pdf/papers/DP_16_-_A_very_real_and_practical_contribution.pdf), Erik Olbrei and Stephen Howes, Development Policy Centre, Australian National University (March 2012)
* [Indonesia’s REDD reality](http://www.thejakartapost.com/news/2012/06/03/indonesia-s-redd-reality.html), Adisti Sukma Sawitri, Jakarta Post (3 May 2012)
* [Analysing REDD+ : Challenges and choices](http://www.cifor.org/publications/pdf_files/Books/BAngelsen1201.pdf), Center for International Forestry Research (CIFOR) (June 2012)

**CLIMATE CHANGE AND SECURITY:**[**Climate change and violent conflict**](http://www.sciencemag.org/content/336/6083/869.short)**, Jürgen Scheffran, Michael Brzoska, Jasmin Kominek, P. Michael Link, and Janpeter Schilling, Science, Vol. 336 no. 6083 pp. 869-871 (18 May 2012)**

The climate system is related in a complex way to societal stability and conflicts. Numerous interdisciplinary questions still need to be investigated to understand the feedback loops involved. Models of the various linkages can build on a rich set of tools from complexity science, multi-agent systems, social-network analysis, and conflict assessment to extend previous data and experiences into future scenarios.

* [Climate change and violent conflict- supporting online material](http://www.sciencemag.org/content/336/6083/869/suppl/DC1), Science, Vol. 336 no. 6083 (18 May 2012)
* [Climate change, human security and violent conflict – challenges for societal stability](http://www.afes-press-books.de/html/hexagon_08.htm), Jürgen Scheffran, Michael Brzoska, Jasmin Kominek, P. Michael Link, and Janpeter Schilling (eds.) Hexagon Series on Human and Environmental Security and Peace, vol. 8 , Springer (30 April 2012)
* [Pakistan’s climate change challenge](http://afpak.foreignpolicy.com/posts/2012/05/09/pakistans_climate_change_challenge), Michael Kugelman, AfPak Channel, Foreign Policy (9 May 2012)

**CLIMATE CHANGE AND SECURITY:**[**Insights from past millennia into climatic impacts on human health and survival**](http://www.pnas.org/content/109/13/4730.full.pdf%2Bhtml)**,  Anthony J. McMichael, Proceedings of the National Academy of Science [PNAS], vol. 109 no. 13, pp. 4730-4737 (27 March 2012)**

Historical experiences of diverse societies experiencing climatic changes provide insights into population health vulnerability. Warming this century is not only likely to greatly exceed the Holocene’s natural temperature fluctuations but to occur faster. Modern societies, although larger, better resourced, and more interconnected than past societies, are less flexible, more infrastructure-dependent, densely populated, and hence are vulnerable.

* [Civil conflicts are associated with the global climate](http://www.deas.harvard.edu/climate/seminars/pdfs/Hsiang_etal_2011.pdf), Solomon M. Hsiang, Kyle C. Meng and Mark A. Cane, Letter, Nature, Vol. 476, pp. 438-441 (25 August 2011)
* [The causality analysis of climate change and large-scale human crisis](http://www.pnas.org/content/108/42/17296), David D. Zhang, Harry F. Lee, Cong Wang, Baosheng Lie, Qing Peia, Jane Zhang, and Yulun An, Proceedings of the National Academy of Science [PNAS], Vol. 108, no. 42, pp. 17296–17301 (18 October 2011)
* [Pride and prejudice, practices and perceptions: A comparative case study in North Atlantic environmental history](https://dspace.stir.ac.uk/handle/1893/3702), Sharla Chittick, Doctoral dissertation, Research Centre for Environmental History and Policy, University of Stirling (2011)

**[CLIMATE SECURITY: Much ado about conflict? Climate’s links to violence re-examined](http://www.newsecuritybeat.org/2012/03/guest-contributor-nils-petter-gleditsch.html), Nils Petter Gleditsch, New Security Beat (28 March 2012)**

The Journal of Peace Research investigated weaknesses in writing on climate change and conflict, concluding that pessimistic predictions may not be warranted in the short to medium run. As yet there is not much evidence for climate change as an important driver of conflict. Although environmental change may under certain circumstances increase the risk of violent conflict, the existing evidence indicates that this is not generally the case.

* [Special issue: Climate change and conflict](http://jpr.sagepub.com/content/49/1.toc), Nils Petter Gleditsch, Journal of Peace Research, Vol. 49, No. 1 (January 2012)
* [Climate-security as agent provocateur](http://www.trust.org/alertnet/blogs/climate-conversations/climate-security-as-agent-provocateur), Katie Harris, AlertNet (18 February 2012)
* [Climate-Security: A reality, not a narrative](http://climateandsecurity.org/2012/02/19/climate-security-a-reality-not-a-narrative/), Francesco Femia & Caitlin Werrell, Center for Climate and Security (19 February 2012)