

# Climate Change and Australian National Security

Written by Max Munday

This PDF is auto-generated for reference only. As such, it may contain some conversion errors and/or missing information. For all formal use please refer to the official version on the website, as linked below.

## Climate Change and Australian National Security

<https://www.e-ir.info/2015/08/23/climate-change-and-australian-national-security/>

MAX MUNDAY, AUG 23 2015

In 2003, the Pentagon Office of Net Assessments commissioned Peter Schwartz and Doug Randall to write a report considering the implications of abrupt climate change to the national security of the United States.[1] This report suggested theoretical climate change models, based on historical paleoclimatic evidence, in which resource scarcity led inevitably to violent conflict between states. Despite having been written principally to inform the strategic debate on US national security, the report can be applied to environmental security discussion within the context of other states. In this way, the report can be analysed to contribute to an understanding of how climate change can impact Australia's national security. This essay will argue that Schwartz and Randall's report raises important questions for defence and foreign policy makers of Australia regarding the potential scope of the threat of climate change, and its capability to respond. However, the essay will also show that the report is fundamentally flawed. Specific assumptions and an oversimplification of arguments damage the report's findings and ultimately lead it to reactive solutions that address symptom rather than cause. Furthermore, it understates the agency of political and societal structures that may be able to affect change and avoid the outcomes that report has used as its basis of analysis. Finally, this essay will argue that there are more effective methods of ensuring Australia's national security in the face of the threats presented by climate change.

Schwartz and Randall use *An Abrupt Climate Change Scenario and Its Implications for United States National Security* to present a low-probability, but high-impact, climate change scenario to inform US policy makers, so they are better able to plan and respond to the potential threats of climate change. Their report comes with several caveats, namely that their intent is to "dramatize" the impacts of climate change in order to contribute to strategic debate, rather than make concrete predictions of future events or actions.[2] Schwartz and Randall suggest that incremental global warming could rapidly alter the thermohaline circulation of the world's oceans, leading to significantly harsher weather patterns that would drastically reduce the Earth's carrying capacity.[3] The resulting food, water and energy shortages then lead to state competition over resources that ultimately lead to "constant battles for diminishing resources".[4] They categorise states as developing either an aggressive or defensive security posture, depending on their ability for self-sufficiency. In this way, Australia, and the US, are expected to "build defensive fortresses around their countries", strengthen border controls and increase military capability.[5] They describe a desperate world of instability and violence in the face of an abrupt climate event, in which "the most combative societies are the ones that survive".[6] Due to lack of paleoclimatic data there are uncertainties around the impacts of climate change on Australia, however, the report cautions against drawing benign conclusions.[7]

Scientific evidence suggests that Australia and the Pacific region is particularly vulnerable to climate change shocks, and is not immune to the type of abrupt changes cited in the report. Demian Hommel and Alexander Murphy point to the effect of dramatic weather events on previous civilisations, arguing "it would be naive to assume we are immune" to abrupt climate change.[8] James Lee shows that as climate change outlooks become more pessimistic, the likelihood of an abrupt change increases.[9] Similarly, Chad Briggs observes that recent scientific investigation into paleo-climatological records increasingly suggests that climate change is more likely to be abrupt than gradual.[10] The Intergovernmental Panel on Climate Change (IPCC) assesses that the Australasian region faces significant health, livelihood and economic risks arising from potential climate change impacts, including the flooding of coastal infrastructure and settlements.[11] The Asian Development Bank observes that the Asia-Pacific is the most disaster prone region in the world, which Peter Christoff and Robyn Eckersley point out, has a strong correlation with "areas at greatest risk of being impacted by climate change".[12] An abrupt climate event, therefore, could lead mass

# Climate Change and Australian National Security

Written by Max Munday

migration in Australia's region, and require the deployment of the Australian Defence Force (ADF) for humanitarian reasons. Thus, the Schwartz and Randall report raises a plausible scenario that has a direct effect on Australian national security infrastructure.

The major strength of the report, as it pertains to Australia, is the highlighting of the issue of climate change as a significant threat to the national security debate. This report is a defence document, drafted primarily for defence policy makers. As Briggs points out, it is the role of the defence establishment to consider worst case scenarios as it is their responsibility to prepare for these eventualities.[13] Neil Adger shows that climate change is indeed "one of the most significant threats to global security of the incoming century", so planning consideration must be undertaken.[14] Jeffery Mazo argues that, being one of the few institutions that can effectively respond to humanitarian crises, the military will face increased deployments as climate change impacts are felt.[15] The Australian Government has shown its willingness to continually deploy the ADF on humanitarian missions both domestically and abroad.[16] Ben Habib suggests that the requirement for increased domestic humanitarian response due to climate change could reduce the capacity of the ADF to respond to external threats.[17] Similarly, Christoff and Eckersley argue that climate change will challenge the ADF in its primary defence role due to "the expected rising cost of transport fuels and the increasing risk of damage to critical infrastructure and other assets, including coastal and inland bases from rising seas, storm surges and forest fires".[18] In this way, the report highlights significant future threat scenarios posed by climate change that could directly affect the operational capability of the ADF. Despite this, the 2014 *Defence Issues Paper*, the precursor to the 2015 Defence white paper, make no mention of climate change in any capacity.[19] Despite its usefulness in presenting scenarios in terms of military humanitarian deployments, its suggestion of escalating violent conflict is fundamentally flawed.

The report's central thesis, of escalating violent conflict in the face of resource scarcity, is flawed and detrimental to its validity. Idean Salehyan shows convincingly that any correlation between climate change and conflict is weak and unproven.[20] Adger, too, argues that the "evidence that such scarcity leads to conflict is highly contested".[21] In fact, significant scholarship on conflict studies suggests that factors such as, "poverty and inequities between groups, the availability of weapons, ethnic tensions, external indebtedness, institutional resilience, state legitimacy and its capacity and willingness to intervene" are much more likely to lead to conflict than environmental issues.[22] Jon Barnett argues that it is abundance, rather than scarcity, that drives violent conflict, reasoning that, if scarcity is a result of climate change, and scarcity is not a determinant of conflict, then climate change will not fundamentally lead to war. [23] Allan Shearer criticises the oversimplification of several arguments in Schwartz and Randall's report, particularly their analysis of Steven LeBlanc's suggestion that scarcity leads to war.[24] Shearer contends that LeBlanc's argument is more complex, and suggests that state decision making is based on a variety of competing issues, rather than a simply causal link from scarcity to conflict.[25] Shearer also argues that by omitting the cause of climate change, Schwartz and Randall fail to consider important political and security implications.[26] In this way, the report fails to consider specific political realities that could affect Australia moving into a future with an abrupt climate change event. Could a sense of public responsibility over lopsided climate change emissions drive more helpful policies toward our Pacific neighbours? A recent study has concluded that the Australian public considers health and the environment a more significant aspect of their security than the traditional realms of defence and economics.[27] This shows a shifting in perception toward a more 'human security' conception of national security, whereby, the health and wellbeing of individuals is paramount to traditional notions of state security. This may lead to Australia (or the US) becoming a 'post-modern' state in the future, with a foundation in openness, law and mutual security, operating beyond traditional state borders.[28] Such a state, either Australia, the US or major global power, would change the security implications in a world severely affected by climate change. Any such state model has not been considered in Schwartz and Randall's report, instead they are relegated to the narrow and inadequate models of aggressor or defender.

The call for a significant role for the military, beyond humanitarian response, in Schwartz and Randall's report to respond to the effects climate change is misguided and counterproductive. Salehyan argues that military action is an inappropriate response to resource scarcity as it does nothing to address underlying causes of climate change, and stems from failures in political processes rather than the level of resources.[29] Similarly, Barnett points to military activity being one of the biggest contributors of greenhouse gas emissions on the planet, and questions their usefulness in solving global warming.[30] Habib postulates that the dangers of the securitisation of climate change,

# Climate Change and Australian National Security

Written by Max Munday

which Schwartz and Randall's report advocates, "will push states toward costly and inappropriate measures that may actually harm their adaptive responses to climate change".[31] Military action would result in negative feedback loops, whereby the costs and resource expenditures of such action would further limit a state's ability to respond to the effects of climate change. For Australia, the use of the ADF to prepare for, or undertake, violent armed conflict as a result of climate is counterproductive. The money used for such actions can be spent much more effectively on methods of climate change mitigation, to not only reduce the effects of climate change, but to reduce the potential for instability.

Schwartz and Randall's report concludes with several recommendations that offer no solution to the cause of climate change, but rather attempt to manage its symptoms. These recommendations are not the most effective measures by which Australia could mitigate the effects of climate change, while also reducing the likelihood of instability and conflict. We have seen that factors that destabilise states are more likely to lead to conflict than environmental conditions alone. In this way, by addressing these factors, Australia can limit the potential for instability in its immediate region. Salehyan argues that the best methods to manage conflicts arising from climate change stresses is to help develop the infrastructure of at-risk developing states, through "improved irrigation systems, better seeds and fertilizers, and strategies for managing urban growth".[32] Mazo agrees, arguing that the best system of reducing climate induced conflict is to manage the adaptation methods of at-risk neighbours.[33] Christoff and Eckersley suggest that Australia's best chance of reducing the likelihood of conflict in our immediate region is to set and maintain "a strong national mitigation target that is consistent with scientific recommendations, complemented by additional climate finance and development assistance for decarbonisation and adaptation in the region, and pursuit of an international and regional co-operation".[34] The costs of military action are better diverted to these type of mitigation measures, as they more effectively reduce the likelihood of armed conflict. For example, the World Bank consider that US\$75-\$100 billion a year for the next 40 years is needed to allow developing countries to avoid the effects of climate change.[35] In contrast, the wars in the Iraq and Afghanistan have reportedly cost the US between US\$4-6 trillion.[36] In this way, Schwartz and Randall's report fails to recommend the necessary actions to most effectively reduce the likelihood of conflict for Australia. More effective recommendations would include: a decarbonisation of Australia's economy, a regional assistance plan, designed to help developing states adapt to and mitigate climate change effects, and calls for ADF to prepare for a larger humanitarian assistance role in the region.[37]

The strength of Schwartz and Randall's report lies in its attempt to highlight the significance of the threat of such a climate change scenario. For Australia, this should affirm serious discussions of how to best mitigate these threats and adapt to climate change. Its weaknesses lie in a flawed thesis of resource scarcity leading to conflict. In this way, it threatens to focus defence efforts and resources toward an ineffective and counterproductive set of actions. It fails to address the underlying issues of climate change, and fails to consider social and political pressures that could change the security landscape moving into the future. Its recommendations, therefore, are counterproductive and ill-advised in the face of a more nuanced and considered analysis.

## References

- Adger, N, 'Climate Change, Human Well-Being and Insecurity', *New Political Economy*, 15:2 (2010), pp. 275-292.
- Barnett, J, 'Security and Climate Change', *Global Environmental Change*, 13:1 (2003), pp. 7-17.
- Bilmes, L, 'The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets', *HKS Faculty Research Working Paper Series RWP13-006*, 2013.
- Briggs, C, 'Climate Security, Risk Assessment and Military Planning', *International Affairs*, 88: 5 (2012), pp. 1049-1064.
- Christoff, P and Eckersley, R, 'No Island is an Island: Security in a Four Degree World', in P Christoff (ed.) *Four Degrees of Global Warming: Australia in a Hot World*, (Oxon: Routledge, 2014) pp. 190-204.

# Climate Change and Australian National Security

Written by Max Munday

Department of Defence, *Defence Issues Paper*, Commonwealth of Australia, 2014.

Greet, N, 'ADF Experience on Humanitarian Operations: A New Idea?', *Security Challenges*, 4:2 (2008), pp. 45-61.

Habib, B, 'Climate Change and Security: A Coherent Framework for Analysis', Australian Political Studies Association Conference: Politics of the Global Crisis, 2009, pp. 1-19.

Hommel, D and Murphy, A, 'Rethinking Geopolitics in an Era of Climate Change', *GeoJournal*, 78:3 (2013), pp. 507-524.

Lee, J, *Climate Change and Armed Conflict: Hot and Cold Wars*, (Oxon: Routledge, 2009).

Mazo, J, 'Chapter Five: Climate Change and Security', *Adelphi Series*, 49:409 (2009), pp. 119-136.

Pachauri, R and Meyer, L (eds.), *Climate Change 2014: Synthesis Report: Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, (Geneva: Intergovernmental Panel on Climate Change, 2014).

Salehyan, I, 'From Climate Change to Conflict? No Consensus Yet', *Journal of Peace Research*, 45:3 (2008), pp. 315-326.

Schwartz, P & Randall, D, *An Abrupt Climate Change Scenario and Its Implications for United States National Security*, Pentagon Office of Net Assessments, 2003.

Shearer, A, 'Whether the Weather: Comments on 'An Abrupt Climate Change Scenario and its Implications for United States National Security'', *Futures*, 37:6 (2005), pp. 445-463.

## Footnotes

[1] P Schwartz & D Randall, *An Abrupt Climate Change Scenario and Its Implications for United States National Security*, Pentagon Office of Net Assessments, 2003.

[2] Ibid, p. 7.

[3] Ibid, p. 1.

[4] Ibid, p. 16.

[5] Ibid, p. 18.

[6] Ibid, p. 16.

[7] Ibid, p. 13.

[8] D Hommel and A Murphy, 'Rethinking Geopolitics in an Era of Climate Change', *GeoJournal*, 78:3 (2013), p. 512.

[9] J Lee, *Climate Change and Armed Conflict: Hot and Cold Wars*, (Oxon: Routledge, 2009), p. 151.

[10] C Briggs, 'Climate Security, Risk Assessment and Military Planning', *International Affairs*, 88: 5 (2012), p. 1051.

[11] R Pachauri and L Meyer (eds.), *Climate Change 2014: Synthesis Report: Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, (Geneva: Intergovernmental Panel on Climate Change, 2014), p. 14.

# Climate Change and Australian National Security

Written by Max Munday

- [12] P Christoff and R Eckersley, 'No Island is an Island: Security in a Four Degree World', in P Christoff (ed.) *Four Degrees of Global Warming: Australia in a Hot World*, (Oxon: Routledge, 2014), p. 191.
- [13] C Briggs, pp. 1049-1064.
- [14] N Adger, 'Climate Change, Human Well-Being and Insecurity', *New Political Economy*, 15:2 (2010), p. 276.
- [15] J Mazo, 'Chapter Five: Climate Change and Security', *Adelphi Series*, 49:409 (2009), pp.127-128.
- [16] N Greet, 'ADF Experience on Humanitarian Operations: A New Idea?', *Security Challenges*, 4:2 (2008), pp. 45-61.
- [17] B Habib, 'Climate Change and Security: A Coherent Framework for Analysis', Australian Political Studies Association Conference: Politics of the Global Crisis, 2009, p. 9.
- [18] P Christoff and R Eckersley, p. 198.
- [19] Department of Defence, *Defence Issues Paper*, Commonwealth of Australia, 2014.
- [20] I Salehyan, 'From Climate Change to Conflict? No Consensus Yet', *Journal of Peace Research*, 45:3 (2008), p. 316.
- [21] N Adger, p. 279.
- [22] J Barnett, 'Security and Climate Change', *Global Environmental Change*, 13:1 (2003), p. 10.
- [23] *Ibid*, p. 11.
- [24] A Shearer, 'Whether the Weather: Comments on 'An Abrupt Climate Change Scenario and its Implications for United States National Security'', *Futures*, 37:6 (2005), p. 455.
- [25] *Ibid*, p. 455.
- [26] *Ibid*, pp. 451-452.
- [27] P Christoff and R Eckersley, p. 200.
- [28] A Shearer, p. 457.
- [29] I Salehyan, p. 317.
- [30] J Barnett, p. 13.
- [31] B Habib, p. 3.
- [32] I Salehyan, p. 323.
- [33] J Mazo, pp. 132-133.
- [34] P Christoff and R Eckersley, p. 196.
- [35] D Hommel and A Murphy, p. 515.

# Climate Change and Australian National Security

Written by Max Munday

[36] L Bilmes, 'The Financial Legacy of Iraq and Afghanistan: How Wartime Spending Decisions Will Constrain Future National Security Budgets', *HKS Faculty Research Working Paper Series RWP13-006*, 2013.

[37] P Christoff and R Eckersley, p. 201.

*Written by: Max Munday  
Written at: La Trobe University  
Written for: Dr. Ben Habib  
Date written: June 2015*