

Securitisation of climate change and natural hazards in the UK

Ksenia Chmutina, Lee Boshier and Andrew Dainty

School of Civil and Building Engineering, Loughborough University, Loughborough, LE11 3TU, UK

Abstract: A number of severe weather events (1998 Easter floods; 2007 Summer floods; 2013 Heatwave; 2014 Winter storms and floods) have influenced the shift in the UK policy that covers natural hazards encouraging not only improvements in emergency management, but also in prevention and preparedness (i.e. climate change adaptation). It is notable that such hazards are increasingly securitized within the policy discourse, and are therefore enmeshed with broader agendas traditionally associated with human-induced threats. The aim of this paper is to discuss this securitisation of natural hazards and climate change, and explore the role in the UK security policy landscape. Whilst occasionally discussed together, their securitisation is complex and takes different paths: natural hazards are seen as a security threat, whereas climate change is perceived to be a risk multiplier. Although both challenges will remain salient in the near future, climate change will get less attention as its impacts are not immediate/ obvious. The impacts of natural hazards on the other hand often become a priority (reactively).

1. Introduction

In the recent decades climate change has moved to the top of political agendas in many countries, with political discourse advocating the identifications of ways to adapt to and mitigate present and anticipated effects of climate change (Mercer, 2010). There are a large number of legally binding and voluntary international and national frameworks and regulations that address challenges posed by climate change, since climate change has been labelled as perhaps the greatest global crisis, which humanity has ever faced and which will result in a global long-term disaster (King, 2004). These frameworks have evolved rapidly and in many cases their focus has shifted from reducing anthropogenic greenhouse gas emission to a need to adapt. The UK security discourse mainly focuses on climate change adaptation; however the main subject of the majority of the climate change-related policies is mitigation, excluding these policies from the security context (Bowen and Rydge, 2011).

A number of severe weather events (1998 Easter floods; 2007 Summer floods; 2013 Heatwave; 2014 Winter storms and floods) have influenced such shifts in the UK, encouraging not only some improvements in emergency management, but also in prevention and preparedness (i.e. climate change adaptation). The UK National Security Strategy (the Strategy) states that "*The physical effects of climate change are likely to become increasingly significant as a 'risk multiplier', exacerbating existing tensions around the world*" (HMG, 2010, p.17), thus making a role of climate change in the security discourse prominent. The UK government recognises that security and prosperity are closely entwined, and it is for this reason that the security implications of not just climate change, but environmental change more broadly, need to be taken seriously. For example, the greatest threat identified from recent UK flooding was the risk that the economic damage caused will slow down the UK's economic recovery which, in turn, will undermine confidence in the UK government and create societal tensions (Pitt, 2008).

Closely related to the climate change agenda is the risk from natural hazards (Cabinet Office, 2013): it is one of the Tier One National Risks, with flooding being a reoccurring hazard (HMG, 2010). A number of policies are aimed at preventing and/ or mitigating the effect of flooding. The climate change agenda in the UK also covers natural resources (including energy security), biodiversity, food supply, and land use planning. With environmental security being a key Governmental concern, a number of policies are aimed at improving sustainability and environmental performance of businesses, industry as well as the Government itself: these policies mainly focus on climate change mitigation through energy consumption reduction.

Seeing as a risk multiplier and tied together in a discourse around natural hazards, climate change has therefore been securitised. The aim of this paper is to discuss the securitisation of natural hazards and climate change, and to explore the role these security challenges play in the UK security agenda.

2. Climate change and natural hazards as a security issue in the UK policy

In the UK, climate change and natural hazards are both seen as security issues and are occasionally discussed together in policy documents (Table 1). Natural hazards such as flooding are the highest priority risk (Tier 1 risk), due to the high impact and disruption such events can cause. Whilst the Strategy only focuses on floods, the National Risk Register also lists storms and gales, drought, low temperatures and heavy snow, heatwaves, and severe wildfires (all described as climate-induced risks), and severe effusive (gas-rich) volcanic eruptions abroad (Cabinet Office, 2013).

Table 1 Natural hazards and climate change related government publications

Year	Natural hazards	Climate change
2000		Climate Change Programme
2004	Civil Contingencies Act	
2005	Making space for water	
2008	Planning Act	Climate Change Act
2009	The Flood Risk Regulations	
2010	Flood and Water Management Act	
	Strategic framework on improving the resilience of critical infrastructure to disruptions from natural hazards	
2011	Natural Hazards and Infrastructure: Keeping the country running	
2012		The UK climate change risk assessment
2013	National Risk Register of Civil Emergencies	Adapting to Climate Change
	Improving UK's ability to absorb, respond to and recover from emergencies	
	Reducing the threats of flooding and coastal change	
	The national adaptation programme: making the country resilient to a changing climate	
2014	The national flood emergency framework for England	

Climate change is often described to be a factor that will increase the intensity of the natural hazards in the future, a 'risk multiplier': "*Building resilience will therefore need to consider the impacts of climate change over the lifetime of the infrastructure and make allowances for the magnitude of future hazards in investment decisions to secure the necessary adaptation over time*" (Cabinet Office, 2013, p.28). A number of political leaders and academics have stated that climate change is now becoming an issue of national security (Helm, 2014, Harris, 2012); however the Strategy does not describe climate change as a risk. The UK Climate Change Risk Assessment report explains this by stating that climate change is assessed differently because the risk assessment focuses on the long term risks (up to the year 2100) that can aid long-term and short-term decisions on adaptation policy, whereas the National Risk Assessment focuses on most significant specific threats and hazards over a five year period, i.e. those that could threaten national security interests, and drives contingency planning for responding to and recovering from these threats and hazards (HMG, 2012).

The UK Climate Change Programme was put in place in 1994 with the aim to return carbon emissions to 1990 levels by 2000, and further reduce the emissions to 80% of 1990 levels by 2010. It became apparent in 2006 that the 2010 target would not be met, and as a consequence of the 2008 Climate Change Act, which changed the targets to 80% reduction by 2050, was introduced. However, the adaptation was given more attention too: this led to the creation of the Climate Change Risk Assessment (to be carried out every five years starting in 2012) and, as a result The National Adaptation Programme was established. The main focus of the National Adaptation Programme is on flooding; however a number of other challenges that are also noticed in the National Risk assessment are listed: hotter summers present significant health risks; increasing pressure on the UK's water resources; and increases in drought and some pest and diseases could reduce timber yields and quality (HMG, 2013).

Another aspect of climate change considered as a security issue is the prospect of conflict stimulated by changes in social systems driven by actual or perceived climate impacts; this however is not widely discussed in the UK security policy (Barnett and Adger, 2007). The Climate Change Risk Assessment states that it "*has mainly examined the risks of a changing climate in the UK – not to the UK from abroad*" (HMG, 2012, p.9). The 2011 Building Stability Overseas Strategy does not give much attention to the mechanisms for dealing with the suggested security threat of climate change either (DFID, 2011). The Foresight report 'International Dimensions of Climate Change' however explicitly discusses the implications of global climate change for the UK security; these include (Foresight, 2011):

- an increase in failed states and ungovernable spaces acting as a source of growing insurgent and terrorist activity;
- an increase in calls for international interventions in regions where tensions have been exacerbated;
- more calls for international humanitarian assistance and contingency arrangements are made;
- as a result of more severe and widespread impacts from climate change impacts overseas, UK domestic protests increase, for example due to unrest spread through diaspora communities;

- the expansion of civil nuclear power as nations attempt to decarbonise their energy generation leads to greater risk of nuclear proliferation;
- future defence planning fails to incorporate the full impacts of climate change;
- tensions in the Arctic region present potential trade and conflict risks to the UK.

3. Discussion and conclusions

As demonstrated in the description of the policies in the previous section, there is evidence to suggest that climate change has been 'securitised', in a sense that there has been a (re)framing of climate change from an environmental/developmental to a security perspective. However, a subsequent change in practice, programming and funding has not yet occurred. The inclusion of climate change and natural hazards into the National Security Strategy is a recent development. For example, the MOD Strategic Defence Review of 1998 mentions neither climate change nor natural hazards. The 2008 National Security Strategy and its 2010 update, however, outline a range of climate security-related 'threats' (i.e. the security implications of climate change) (Harris, 2012).

Climate change has become an item in the security agenda, under which a number of other issues are discussed, in particular natural hazards, and food and energy supply; it will thus remain salient in the political discourse. However the attention may seize – and it is happening currently – depending on political attitudes to climate change of the leading party, as its impacts are not immediate/obvious. The impacts of natural hazards on the other hand often become a priority reactively. This has to change if the overall resilience of the UK to natural hazards is to be increased. There is a need for implementing more pro-active policies based on a holistic multi-stakeholder and multi-hazards approach, regardless of whether the hazard is climate induced or not. Whilst addressing climate change is indeed important; it is also dangerous because focusing only on climate change may lead to ignoring the deeper roots of resource destruction (Kelman and Gaillard, 2010).

Since climate change has been securitised and closely tied with natural hazards, there should be more encouragement for the incorporation of climate change adaptation and disaster risk reduction. Currently, whilst included in security agenda, these two areas are perceived as separate, thus neglecting and underestimating their commonalities and goals, or being unable to overcome political constraints. Such lack of synergy should not be ignored as by attending to similar issues in different ways, there is a risk of not successfully reducing vulnerabilities in the long run. This leads to multiple negative consequences, including duplicating efforts that lead to organisational inefficiencies and ineffective use of resources; counter-productive efforts, in particular by reinventing older approaches for CCA already used in DRR; and a lack of consideration of frequency and magnitude of climate-related hazards in DRR. The frequencies and costs of disasters are increasing annually, and climate change presents an additional challenge due to its future uncertainty, therefore the traditional engineering approach where a reasonable margin of safety should suffice is no longer effective.

Climate change has become a part of the political agenda nationally and internationally, and therefore could act as a mechanism to attract attention of policy makers to DRR. This however has to be done carefully in order not to shift the agenda to climate-induced hazards only, but instead it is critical to make DRR part of the sustainability agenda. Whilst it is important to build a structure that

is energy efficient and was constructed using materials that have minimal impacts on the environment, it is equally important to make sure that it is not in a risk-prone area and is not going to be destroyed by a next storm and therefore decrease physical security of a country's infrastructure and assets.

Acknowledgement: This research has been carried out as a part of the FP7 project 'The Evolving concepts of security' (Grant agreement number: 605142).

References:

Barnett, J. and Adger, W.N., 2007. Climate change, human security and violent conflict. *Political geography*, 26 (6), 639-55.

Bowen, A. and Rydge, J., 2011. *Climate Change Policy in the UK*. Policy paper. Available at: http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2014/03/PP_climate-change-policy-uk.pdf (accessed 28 Oct. 15).

Cabinet Office, 2013. *Improving the UK's ability to absorb, respond to and recover from emergencies*. Stationery Office, UK.

DFID, 2011. *Building stability overseas strategy*. Stationary Office, UK.

Foresight, 2011. *International Dimensions of Climate Change*. Final Project Report. The Government Office for Science, London.

Harris, K., 2012. *Climate change in UK security policy: implications for development assistance?* ODI Working paper 342. Available at: <http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7554.pdf> (accessed 28 Oct. 15)

Helm, T., 2014. *Ed Miliband: 'Britain is sleepwalking to a climate crisis'*, The Guardian, 15 Feb. 2014.

HM Government, 2010. *A strong Britain in an age of uncertainty: The national security strategy*. Stationery Office, UK.

HM Government, 2012. *UK Climate Change Risk Assessment: Government Report*. Stationery Office, UK.

HM Government, 2013. *The National Adaptation Programme Making the country resilient to a changing climate*. Stationery Office, UK

Kelman, I. and Gaillard, J.C., 2010. Embedding climate change: Adaptation within disaster risk reduction. *Community, environment and disaster risk management*, 4, 23-46.

King, D., 2004. Climate change science: Adapt, mitigate or ignore? *Science*, 303, 176-77.

Mercer, J., 2010. Disaster risk reduction of climate change adaptation: are we reinventing the wheel? *Journal of International Development*, 22, 247-64.

Pitt, M. 2008. *The Pitt Review: Learning Lessons from the 2007 floods*. Cabinet Office. UK