



Climate change and EU security

When and how they intersect

by Gerald Stang

The potential security challenges linked with climate change can make for great headlines. While sensationalist claims about water wars, states collapsing in chaos or the forced migration of hundreds of millions cannot be completely discounted for the long term, intelligent mitigation and adaptation efforts can help avoid the worst of these – and manage the rest.

Planning these efforts, however, requires that the likelihood and time frame of climate change impacts are well understood (as much as they can be); that security challenges associated with these impacts are placed in their proper context; and that resilience mechanisms, including security and defence systems, are appropriately organised to withstand potential shocks. And while much analysis is necessarily focused on potential climate-related threats abroad – climactic stressors that can change the calculus of potential conflicts in far-off lands – climate change will also impact security and defence considerations closer to home.

A US pivot

While Washington is often seen as slow to respond to the challenge of climate change, the surprise

announcement of a joint climate accord between China and the US signifies agreement between the world's two largest carbon emitters (and major geostrategic competitors) on the need to share the burden of emission mitigation. It has shown that, despite discord in Congress, the American executive branch takes climate change very seriously and retains the capacity to take significant action.

The American security establishment has also been quick to incorporate the potential risks of climate change into its strategic planning. The recent release of the latest version of the Climate Change Adaptation Roadmap by the US Department of Defense highlights the potential impacts of climate change on the department's infrastructure, logistics support, training and operations. A few months before, a group of retired US officers produced a paper for the CNA Corporation, a US Navy-affiliated research organisation, taking a broader view by looking at the threat of climate change to the political, military, social, infrastructure, and information systems that constitute American 'national power'.

Climate change has clearly become relevant for the strategic thinking of the US intelligence and defence communities, moving beyond its status as a mere environmental issue.



The updated Adaptation Roadmap focuses on how climate change will impact military capabilities. Other strategic documents (including the 2014 National Intelligence Strategy and 2014 Quadrennial Defense Review) describe climate change as a ‘threat multiplier’ which will affect strategic calculations about security and conflict in various corners of the world. This view of climate change is widely spread, having been expressed by both the UN secretary general in a 2009 report and by the EU high representative for foreign affairs and security policy in a 2008 paper on climate change and international security.

The Global Security Defense Index on Climate Change lists 110 countries which have identified climate change as a security threat, including most regional leaders but with notable exceptions such as Brazil, India and Egypt. This apparent threat perception has seen climate change added to lists of complex, non-traditional and transnational threats (often including energy security, arms proliferation, terrorism, the continued rise of non-state actors and cyber attacks) in the national security policies of many states, though detailed analysis of the expected impacts, and how to respond to them, are rarer.

Although most European states acknowledge the potential threats posed by climate change, its impacts have yet to be deeply integrated into their strategic planning (though the UK is expected to do so over the next year). The EU has increasingly mainstreamed climate change issues in its work across multiple sectors, with at least 20% of its near-trillion euro 2014-2020 budget expected to be spent on climate change-related action. But Europeans have not engaged with climate change as a security issue as comprehensively as the US has, potentially due to the international exposure of the US with its globe-spanning range of responsibilities and military facilities.

Cutting emissions, but not enough

While climate security issues have been raised in international fora in recent years, including at the UN Security Council, international climate discussions have been primarily, and rightly, focused

on emission mitigation. When world leaders met in September for the UN Climate Summit, China reiterated its goals of reducing the carbon intensity of its economy, already achievable on a business-as-usual trajectory, while other countries announced forest protection efforts (Norway), automobile emission standards (Canada) or green energy goals (India). The EU, a world leader in mitigation efforts but still hesitant to take drastic action until others also do, shared the centrepiece of its 2030 framework policy for climate and energy, a plan to cut emissions by 40% by 2030 compared to 1990 levels.

This mixed bag of announcements is a reflection of how politicised and complex climate issues are for every nation. In the remaining months before the 2015 Conference of Parties (COP 21) climate summit in Paris, negotiators will struggle to reconcile a vast range of national negotiating positions

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in order to push the globe towards the deep decarbonisation pathways which are necessary to avoid the worst long-term climate impacts.

Unfortunately, no matter how quickly mitigation efforts proceed, significant climate change impacts will be unavoidable. These

impacts can generally be split into two categories: slow onset (changing rainfall patterns, rising sea levels) vs. rapid onset (extreme weather, flash floods). The worst slow onset impacts are expected to hit some of the world’s most vulnerable areas hardest. In several parts of both northern and southern Africa, agriculture-dependent populations with limited economic and infrastructure capacities will likely face major temperature rises and significant changes in rainfall later this century. The driest areas in the Middle East may become drier still, while changing monsoon patterns may wreak havoc on agricultural production in impoverished and densely populated parts of South Asia, particularly if poor water management practices continue.

The most recent predictions from the Intergovernmental Panel on Climate Change (IPCC) indicate that the global mean sea level will continue to rise at an increasing pace and, by 2081-2100, could range from 0.26 to 0.82m above the mean for 1986-2005. Low-lying coastal regions will thus increasingly be threatened with

flooding, erosion and loss of wetlands. The expected slow pace of sea level rise over the coming decades should allow for the development of resilience mechanisms in Europe, but adaptation will be a greater challenge for poorer states with significant areas of low-lying territory, notably in South Asia, the Caribbean and the western Pacific Ocean.

For all countries, however, even slow increases in sea level could be problematic if combined with an increase in rapid impact weather events such as cyclones, storm surges, and flash floods. With a third of its population living within 50km of the coast, and as much as a trillion dollars in assets located within half a kilometre of the sea, Europe has plenty of reason to keep an eye on sea levels and storm surges.

But it is early days yet. The IPCC predicts that for another two or three decades, increases in climate extremes may be difficult to differentiate from the normal year-to-year variations, but in the decades that follow, storms and disasters will become increasingly likely to challenge Europe's disaster protection and response systems. In terms of slow onset impacts, the IPCC predicts comparatively modest impacts for Europe over the coming century, including gradually increasing precipitation in northern Europe but decreasing precipitation in the south, with attendant impacts in agricultural production in the two regions.

With its urban population and limited reliance on agriculture for jobs and growth, Europe is better placed to adapt to slow onset events than other parts of the world. But climate change is still expected to impact European security by focusing attention on rapid onset climate impacts, changing the nature of international threats, and influencing Europe's capacity to respond accordingly.

Domestic impacts on security

While Europe generally has calmer weather systems than the hurricane-plagued Caribbean or the typhoon-haunted north Pacific, planning for weather-related disasters will become increasingly important. The EU's 2013 Adaptation Strategy is focused on 'climate-proofing' EU action, ensuring that Europe's infrastructure is made more resilient, promoting the use of disaster insurance, providing funding for cross-border water and flood management, and expanding protection of areas with high drought, desertification or fire risks. Europe has already made disaster management an important part of its adaptation efforts,

with the EU Emergency Response Coordination Centre (ERCC) monitoring emergencies around the world and coordinating responses both within and outside the EU.

With the likelihood and severity of climate-related disasters expected to increase over the coming decades, the role of European militaries in disaster prevention and response may also grow. The military can provide important search and rescue capacity, logistical support, manpower and material resources. Within individual countries, troops have often responded to disasters – and the Lisbon Treaty has solidarity and mutual assistance clauses to allow joint defence action to face attacks or natural catastrophes – though no formal operational mechanisms have yet been put in place to facilitate cross-border military cooperation using these clauses.

While grateful publics will always laud soldiers who lend a hand in disaster response at home, increased use of militaries for disaster response may potentially divert resources from other priorities. Climate change may also reduce the fighting capability of military forces by putting security logistics, infrastructure, and transportation systems at risk (notably in coastal areas), and by changing the environmental conditions in which they train and operate.

Following the American lead, climate change adaptation strategies for European militaries are likely to become increasingly common in the next few years as national security establishments are called upon to develop appropriate capabilities, priorities, and responses.

External security challenges

But it is the possibility of climate-related security challenges abroad which can cause security analysts to react, or overreact. In recent years, conflicts from Syria to Darfur have been highlighted as models of what the future may hold, as droughts and mass migration increase the likelihood of instability and violence. Climate change impacts can be seen as additional stressors which may contribute to conflict risks in a number of ways.

First, increased frequency of droughts or floods could disrupt agricultural livelihoods, rural incomes and local systems of ensuring food security, thereby triggering conflicts over water and land. Second, increases in the severity and frequency of extreme weather events could lead to

social and state instability. Third, various climate impacts could trigger potentially destabilising mass migration, as migrants flee across borders or to cities that lack the infrastructure or job opportunities to accommodate them.

Finally, if potential climate change impacts are perceived as requiring responses from security institutions, the ‘securitisation’ of responses to climate change may occur, providing a pretext for militarisation, inhibiting cooperative efforts to adapt to climate change. This could be especially worrying in areas where maritime borders are unclear and coastlines are changing due to rising seas.

Prevention and response

The likelihood of these risks turning into major security problems will depend on the severity of the impacts, the vulnerability of those impacted, and the response when they occur. Reducing the severity of future climate impacts can only be done through improved emission mitigation to slow the pace of global warming, an immense challenge on a global scale.

Reducing vulnerability to climate change impacts will require local improvements in physical, social and political resilience of populations and states. Richer societies with well-developed infrastructure, low reliance on agriculture for livelihoods, good storm warning and disaster response mechanisms and capable, responsive governments are better equipped to handle climate change. But many societies lack some (or all) of these capacities. A preventative approach, involving all of the development and diplomatic tools at hand, will be important to help build resilience in vulnerable areas and reduce the likelihood of future conflicts arising.

For Europe’s security community, decisions over whether and how to respond to future conflict and disaster situations abroad are less likely to be influenced by whether climate change was a factor than by the same political and humanitarian factors that shape such decisions today. A Europe that is better prepared to respond to the threat of weather-related disasters at home may find itself involved in responding to a larger number of disasters abroad, and in dealing with the associated humanitarian and security consequences. Even without climate change, continuing population growth and changing patterns of human settlement may lead to an increased need to respond.

European security planning may thus increasingly include the possibility of responding to disasters abroad, though political norms for (and public acceptance of) the use of military capabilities for such interventions are in flux. Continued reduction in the capacity and interest of European militaries to project force to distant lands would reduce the likelihood that they would play a disaster response role in the same theatres – particularly if increasing efforts are made to outsource response capacity by training and equipping local actors through both development and military cooperation programmes. Recent trends toward broadening national security definitions and of using ‘whole-of-government’ processes for international engagement may also change how security institutions engage with the climate adaptation work already underway, generally led by the development community.

Looking ahead

In the end, addressing the potential security implications of climate change will require action to manage the expected risks, while keeping a sense of perspective about time frames and impacts.

Climate impacts are real, growing, and could eventually become catastrophic on a global scale. High impact weather events, in particular, may directly affect the capacities of European security establishments, but for the next 20 or so years, Europe will likely only be experiencing the early stages of climate change. Slow onset climatic changes will eventually change European climates and systems of managing natural resources, but pending any sudden climatic shifts (a real possibility), the continent will be able to manage its adaptation to climate change without major domestic security worries for at least the next few decades.

Internationally, however, too many countries lack resilience, have weak or brittle ruling regimes and are experiencing unsustainable population growth. It has often been stated that preventing conflicts before they start is better than attempting to respond to them once they turn into a crisis. The gradually increasing effects of climate change in the coming century may provide plenty of opportunity to put this idea into practice.

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