Climate Change: From Challenge to Key Threat?  
The Example of the European Security Strategy

Norman Laws PhD
Leuphana University Lüneburg, Germany

Corresponding Author email: Laws@leuphana.de

ABSTRACT: For a wide range of reasons it is becoming more and more evident that Climate Change takes part in destabilising societies and creating a threat to the security of states all over the globe. One example where the development of acknowledging this can be reviewed is the history of the European Security Strategy (ESS). Understanding that Climate Change serves as a facilitator for instability of states, participating in creating reasons for migration and radicalisation, may eventually lead – from the side of professionals from the field of security policy – to pressure towards a more progressive climate protection policy framework and an adjustment in other policy fields, thus creating unusual coalitions. Also for this the ESS may create a first example.

Key words: Climate Change; Security; Security Strategy; Security Policy; European Union

INTRODUCTION

Climate Change has been a prominent topic on the international agenda for decades now. It is dealt with intensively during international conferences or in scientific publications; debates taking place in the civil society or the media. This reflects the perceived and anticipated effects of Climate Change. It is becoming more and more evident to a wide range of people: Climate Change can have severe effects on the living conditions of societies all over the planet. These effects can be direct – for example when living standards are worsening due to more severe weather conditions, air pollution, or decreasing water quality. But these effects can also be indirect. Here, people do not necessarily attribute developments and changes of their situation to Climate Change. For example, residents of states suffering from terrorism or migration-related issues may not realize that Climate Change may be a factor fostering them.

According to the International Panel on Climate Change, Climate Change effects include increasing temperatures, rising sea levels, deforestation, desertification, extreme weather events, and their negative impacts on health, water and food supply (IPCC 2007). These effects have been regarded as threats in different ways, e.g. in economic terms (HM Treasury 2006, the Stern-Review is dealing with costs and benefits of Climate Change) or in terms of human costs. Linking Climate Change to the field of security is a relatively new concept, developed by Lonergan & Kavanagh (1991), and dealt with e.g. by Vogler (2009), Maas & Tänzler (2009), Laws (2011). An important question here is: are (were) countries or regional organizations such as the European Union able to acknowledge the intensifying effects of Climate Change – because they are hardly the only or even the main reason for social or economic developments, they can rather be characterized as threat multipliers – in their security strategies? And, following from that, the question arises whether the acknowledgment of Climate Change as a threat multiplier is leading – or going to lead – to additional pressures to adjust actions in other policy fields, such as foreign policy, development aid, ecological and economic matters or social affairs. Can it lead to unusual coalitions where more progressive stands on climate protection policies are advocated by military professionals or defence politicians?

In order to answer these questions, this paper examines: challenges and threats included in the European Security Strategy from 2003 and the Report on its implementation from 2008 (section 2.), as well as the role that Climate Change effects carry out in these documents compared to other analysed issues (section 3); examples of developments around the globe fostered by Climate Change that could affect or are already affecting security of the European Union (section 4); and advantages of the integration of Climate Change that arise from the insights gained in this examination for the security strategy of the EU (section 5).

Before proceeding like this, a short definition of security shall be provided in order to create a theoretical context.
The term of security, and especially the way this term is understood in the two documents analyzed here, must be defined before we may proceed to examine the possible effects of Climate Change on security of the European Union.

In the most general terms, security may be defined as a condition of being protected from or not exposed to danger. This formulation, obviously, concerns both security of individuals (protection of livelihood) and state security, associated with such concepts as stability, peace, sovereignty of states, protection of their citizens against despotism, crime, violence, or prosperity, wealth, and economic security (Laws 2011, pp. 8-9).

In relation to Climate Change, the basic threats to individual security may include, for example, being unable to maintain one's supply of food, water, or protection from weather events. These threats may then move from individual to social or public domain when they affect entire communities and the state's capabilities of dealing with them or when they take part in radicalization processes of individuals. They enter the international domain in the case of disputes or conflicts caused by Climate Change effects, for example over water supply (cf. section 4.3) or energy supply (section 2.4). Seen from this perspective, Climate Change threatens international peace – when mutual dependencies, treaties, relations between states are compromised by an individual state's will to survive – and, as a result, undermines democracy and justice, as (true) democracies show no tendency for aggression (Krell 2004) and tend not to conduct wars against each other (Rittberger 1987).

Of course, the causal relationship between Climate Change and failing states or international conflicts is never so linear and straightforward. For this reason it is important to regard every conflict or crisis situation individually in search for underlying factors, conditions and causes, some of which could be linked more or less directly to Climate Change effects. This is something that the European Union's security measures and policies still fall short of doing.

**The European Security Strategy – new challenges**

The European Security Strategy of 2003 – A Secure Europe in a Better World – was result of the development of both institutional framework and concrete workable policies of the Common Foreign and Security Policy (CFSP) pillar of the European Union. The document proved to be based on a rather traditional understanding of security, paying special attention to influencing states and fostering stable governments rather than to approaching the underlying conditions of the situation at hand potentially threatening human security (Laws 2011, p. 77). Still, the Strategy pointed out to some new challenges, such as asymmetrical warfare and the danger of terrorism, and highlighted in very general terms the importance of just societies as a precondition for stable states, which can be seen as an attempt at broadening the concept of security and looking for oblique and indirect connections between security and other policy fields.

The European Security Strategy was based on the assertion that 'no single country is able to tackle today's complex problems on its own' (European Council 2003, p. 1). This statement, together with the title of the document itself ('better world'), drew attention to two important aspects of the security strategy for Europe: first, the European Union is a better provider of security than Europe's national states each on its own; second, security of the European Union is interlocked with, and depends on, security of the entire region, continent, and the world (here the European Union demonstrated at first sight an understanding of the complex interlinkages in a huge variety of policy and problem fields). Thus, the commitment to sharing 'in the responsibility for global security and in building a better world' (European Council 2003, p. 1) is not unselfish: due to globalization processes, incl. increased mobility, it is simply not enough to make one's own home safe as long as there are threats outside the door.

The ESS of 2003 lists the following key security threats: terrorism, proliferation of weapons of mass destruction, regional conflicts (with a strong focus on the Middle East), state failure and organized crime. The document does not name Climate Change, but it does mention 'global warming' as one of the factors aggravating 'competition for natural resources', which is given as a challenge to security next to poverty, disease – particularly AIDS – and energy dependence as a special concern for Europe.

Five years after the publication of the ESS, the European Council issued the Report on the Implementation of the European Security Strategy (RIESS). Because the report with the title Providing Security in a Changing World was not meant to replace the ESS 2003, the latter's basic statements remained valid (Laws 2011, p. 78); there were, however, some structural changes concerning their significance and scale. In the key-threat list, proliferation of weapons of mass destruction 'moved' up from the second to the first position, terrorism and organized crime were reinterpreted jointly in the second position, and Climate Change was introduced to the list in position number four, after energy security (European Council 2008, pp. 4-6).

This development was informed by different working papers prepared at various levels of the European Union's administration, such as:

- The European Union and the Arctic Region, which presents melting of ice caps in the Arctic as a new opportunity in opening trade routes and access to natural resources, but also as a possible threat:
‘Environmental changes are altering the geostrategic dynamics of the Arctic with potential consequences for international stability and European security interests’ (European Commission 2008a, p. 2; see also section 4.2.);

Climate Change and International Security, which covers a wide range of Climate Change-related security aspects, incl. conflict over resources, risk to coastal cities and critical infrastructures, loss of territory due to erosion, tensions concerning access to and control of energy supply, Climate Change-induced migration (High Representative 2008) and introduces the understanding of Climate Change as a threat multiplier: it ‘exacerbates existing trends, tensions and instability. The core challenge is that Climate Change threatens to overburden states and regions which are already fragile and conflict prone’ (High Representative 2008, p. 2, see sections 4.1. and 4.3.).

In the following sections, the challenges and threats dealt with in ESS and RIESS – illegal migration, failed states, radicalization and terrorism and energy security – will be analyzed in order to establish how they are connected with, and affected by, Climate Change effects. This shall shed more light on the role these effects play in the new strategic perspective of the security-related policies of the European Union, and reveal more about their significance expected in the future.

Illegal migration

Migration never takes place in a vacuum; there’s a variety of possible reasons and triggers that contribute to the decision to migrate. Illegal migration is often associated with such factors as regional conflicts, failed states (see section 2.2) or deteriorating living conditions. More often than not it is impossible to disseminate these factors and analyze the issue of immigration on its own. For this reason, it is worth examining the problem from two different angles: taking into account Climate Change effects as possible causes of migration, and considering migration issues as influencing European Union’s policy regarding Climate Change.

The history of EU’s common stance on migration traces back to 1990 Dublin Convention, ratified seven years later by Belgium, Denmark, France, Germany, Greece, Holland, Italy, Luxembourg, Portugal, Spain and the UK. The member states tried for the first time to find a common approach towards asylum seekers, the so-called ‘safe third countries’ and responsibilities of the Union’s bordering states (Kjeagaard 1994). The next step was the 1997 Amsterdam Treaty with the Schengen Agreement. This brought about new challenges, as the states at the edges of the Community that were made responsible for handling asylum seekers were mostly countries with the least capable institutional and technical frameworks; this became even more problematic with the extension of the European Union in 2004. Remarkably enough, the whole field was included in the Treaty within the area of Freedom, Security and Justice, i.e. at the intersection between foreign and security policy and justice and domestic affairs (second and third pillar).

In 1999, the Tampere Summit resulted in a common approach towards asylum seekers, immigration policy, stronger cross-border cooperation with third countries of origin and transit, human trafficking and prevention of immigration in the South of the Union (European Commission 2002). Two years later, the events of 9/11 brought the secularization of immigration to special focus, giving rise to the 2005 Treaty of Prüm that introduced new measures of fighting cross-border crime and illegal immigration, ultimately leading to the establishment of the European Agency for the Management of Operational Cooperation at the External Border of the Member States of the EU (FRONTEX).

FRONTEX functions to assist the member states in training national border guards, conduct risk analyses, follow the development of research and technical measures of control and surveillance, to coordinate cooperation between member states with regard to border control, and ultimately to protect the Union’s borders from illegal violations and maintain legal standards of emigration.

FRONTEX instruments include, for example

EUROSUR – European Surveillance Border System, aimed at preventing illegal immigration and reducing mortality rates by increasing the maritime control to enable intercepting migrants at an early stage;
CRATE - Centralized Record of Available Technical Equipment;
RABIT – Rapid Border Intervention Teams with airplanes, helicopters and boats.

FRONTEX activities, such as the HERA operations aimed at intercepting migrants off the shores of Spain or cooperation with third countries such as Senegal, Morocco or Mauritania, indicate that the EU is focused on migration control as far away from its own borders as possible. The European Union seems to be attributing the issue of migration especially to security matters (for which it is criticized by human rights organizations and African politicians, for example).

In its deliberations regarding migration, the EU security pillar is not concerned, for instance, with economic imbalances; nor does it mention Climate Change as a possible cause or contributing element. This is a perspective reserved for the future considerations: ‘the EU should also formulate a policy in response to recent developments such as the increasing impact of climate change on migratory movements’ (European Commission 2008a, p. 2).
Commission 2008b). This means that the present integration of Climate Change effects in migration policies of the European Union is insufficient and an increase in this regard should be expected in the future.

**Failed states**

The label of a failed state may be applied when 'state institutions and law and order have totally or partially collapsed under the pressure and amidst the confusion of erupting violence' (Thürer 1999). In geographic terms, a failed-state status relates to internal and endogenous problems; in political terms, it concerns the collapse of law and order; and in functional sense it means inability to implement decisions (ibid).

The Failed States Index of the Foreign Policy and the Fund for Peace, based on twelve factors, incl. demographic pressures, refugees and internally displaced persons, human rights, economic decline, delegitimization of the state or external intervention, names such countries as Somalia, Chad, Sudan, Zimbabwe, the Democratic Republic of Congo, Afghanistan and Iraq (these states ranked first in 2010). The European Union approaches the problem of failed states through missions organized within the CFSP/ESDP framework; so far, it has taken part in intervention missions with its own operations in most of the countries mentioned above (excl. Zimbabwe). These missions are based on the assumption that failed states may contribute to armed conflicts, which makes it important for the EU to participate in the effort of stabilizing them. But they are also subject to criticism as a case of underdeveloped integration of military and civilian goals and operational interlocking. While on an operational level the European Union has ca. 40,000 diplomats and 10,000 police staff ready, it still fails to provide sufficient personnel for the integration of civilian and military/security needs on missions abroad. For example, in August 2009, only 205 out of 1228 civilian workers provided by Germany were actually deployed abroad; by UK – 54 out of 769; by Sweden – 139 out of 484; or by Italy – 237 out of 1208 (Gowan & Korski 2009, p. 47). The EU's policy in this regard is also criticized for the focus on 'managing strained defence budgets (rather) than on fixing failed state', lack of integration of military and civilian goals, objectives and considerations into the ESDP practice because of bureaucratic tensions between the Council Secretariat, the Commission and the PSC, and weak links between various bodies involved in organizing missions (ibid: pp. 41, 58, 60).

It is worth mentioning some of the EU's missions abroad here. The European Union has run two missions in Somalia under the ESDP framework – one aiming at providing military training to 2000 locals (EUTM) and the other at protecting vessels of the World Food Programme and other ships from pirates (EUNAVFOR). The importance of security and humanitarian goals of those missions is reflected by the amount of money spent on them: in total, over 130 million euro has been spent on the former goal and only 12 million euro on the latter. What is more, it may be claimed that EUNAVFOR focuses mainly on providing security to international (i.e., not Somali) vessels, so it is hardly of any help to Somalia itself; in turn, EUTM provides short-term solutions without taking the root causes of the situation into consideration.

In Chad, the aim of the EUFOR Chad/Central African Republic mission conducted by 3700 military from 23 countries was to protect civilians and UN personnel from Chadic and Sudanese militia. Chad and Sudan fought a proxy war in which they supported insurgencies on each other's territories. The situation in Sudan, where genocide-like actions against black non-Arab people have been carried out by the Arabic Janjaweed since 2004, adds fuel to the fire (Laws 2011, p. 95). This state of affairs may have been fostered by Climate Change-induced conditions, making it the 'first Climate Change War' (Biello 2009). The Janjaweed, as nomads, depend on water for their survival; the decline in rainfall over the last 30 years, combined with the significant increase in population, has taken at least a part in radicalization of the on-going conflicts.

The Democratic Republic of Congo has hosted five ESDP missions since 2003, aimed mostly at protecting civilians, strengthening the security sector or training police forces. The legacy of the Rwanda war of 1994 is most often mentioned as the underlying cause of the situation in Northeast DRC, but it has also been fuelled by fight for power over natural resources, incl. diamonds, gold, copper, cobalt and zinc. In addition, ‘the Rwandan apocalypse was rooted in a complex web of explosive population growth, severe land shortages, land degradation and rapidly falling food production’ (Pearce 2008). Not only Rwanda, but also DRC have been affected by Climate Change outcomes – the falling food production and land degradation mentioned above have originated from declining precipitation. For the entire Congo basin, a decline in precipitation of 2-10% between 1951 and 1993 was noted, and for DRC – a temperature increase of 0.6-1.6°C between 1960 and 1990 (Samba et al. 2007, p. 85).

This short overview of the European Union missions in so-called failed or (institutionally) weak states indicates that they mostly focus on dealing with internal developments and security concerns rather than with underlying structures contributing to the crisis. This reactive approach may stem from the design of CSDP and the lack of integration between various goals and objectives, which has already been mentioned before.

**Radicalization and terrorism**

Failed or weak states contribute to the global challenges of illegal migration (by causing dissatisfaction with unacceptable economic and living conditions) and internationalization of terrorist groups (by being unable
to contain them within their borders). The European Union addresses the problem of extreme radicalization and terrorism with its Counter-Terrorism Strategy of 2005 and the EU Action Plan on Terrorism. Both work within a four-pillar framework consisting of Prevention, Protection, Pursuing and Responding and making use of such instruments as Europol and Eurojust. The target of protection is closely connected to border security and the tools of SIS and FRONTEX. This approach is thus above all concerned with securing borders and involving reactive policy measures rather than with addressing underlying conditions through governance and education (Laws 2011, p. 99).

Energy security

Energy security is a case in point for the connection between Climate Change and ESDP/CFSP. The term includes reliable and adequate supply of energy at reasonable prices, security of energy infrastructure, diversification of supply, investment possibilities, security of supply, security of revenue, access to new reserves, as well as the risk of terrorism, abuse of energy as leverage and accidents and nature catastrophes (World Economic Forum 2006, p. 8). The European Union addresses all of these points in the EU Energy Security and Solidarity Action Plan of 2008.

The situation of the European Union is characterized by its high dependence on energy imports. Almost 54% of the consumed energy is imported. Most of the oil consumed in Europe is imported from Russia, Middle East and North Africa. The gas consumed in EU comes from Russia, Libya and Algeria.

These figures indicate high reliance on Russia, in this context, security of energy supply may be achieved either by closer cooperation with Russia (as advocated at least partly by Germany) or by looking for other solutions which bypass Russia – e.g. direct pipeline connections with Azerbaijan, Iraq, Turkmenistan or Uzbekistan, which lies within the interests of the Baltic States and Poland and may seem, due to the use of energy as a lever in conflicts with states like Ukraine or Latvia, as a more desirable solution (Laws 2012). The numbers also point to high reliance on the North African countries. Keeping in mind how unstable the region is, it comes as no surprise that it has such a prominent place in the European Security Strategy and foreign policy activities of many European countries. It could also explain in part why these missions hardly ever focus on providing far-reaching solutions to underlying structural problems of North African societies and show the European involvement in any but altruistic light.

Such deliberations point to the link between the fields of security, politics and business; they all have to work for the success of energy security. Taking into account that oil and gas are non-renewable resources whose production and transit pose certain risks to the environment (like oil spills), sooner or later their price – in economic, political and environmental terms – may prove to be too high. Europe will thus need to turn towards alternative energy sources, which means basically renewable energies, even if nuclear energy is also discussed as part of the solution by different European countries.

The fact that some European Union member states like France depend to a high degree on nuclear energy while others do not have any nuclear power plants for the ‘production’ of electricity (e.g. Greece) means that the origin and production of energy within the European Union is highly diversified. This makes it difficult to work out a truly common energy security strategy. While the EU member states do share a common problem perception, reflected in the Action Plan mentioned above, their energy interests still lie within the separate responsibilities of national states.

In the light of these conclusions, a stronger focus on renewable energies such as water, wind and solar energy, and improving energy efficiency can be seen as a way of minimizing dependence on third countries and increasing energy security of the European Union in practically all its aspects. At this point an interconnection of European security policies and Climate Change becomes visible: while achieving greater independence in terms of energy supply, sustainability could be fostered through reducing greenhouse effects. On the other hand, projects like Desertec, where North Africa and the Middle East as regions of the production of renewable (solar) energy are planned to be connected to Europe as a consumer region, highlight also the continued need of a close cooperation with regions that cannot be portrayed as constantly stable.


After we have looked at the first ESS and the report on its implementation in a more general way, we may turn our attention to the question of how the issue of Climate Change is dealt with in these documents. As mentioned above, the key threats to security listed in ESS include terrorism, proliferation of weapons of mass destruction, regional conflicts, state failure, and organized crime (European Council 2003, pp. 3-5); Climate Change is thus not mentioned here. The document, however, does refer to Climate Change in considerable length and in a prominent place – right before discussing the key threats – as one of the ‘global challenges’:

‘Security is a precondition of development. Conflict not only destroys infrastructure, including social infrastructure; it also encourages criminality, deters investment and makes normal economic activity impossible. A number of countries and regions are caught in a cycle of conflict, insecurity and poverty.'
Competition for natural resources - notably water - which will be aggravated by global warming over the next decades, is likely to create further turbulence and migratory movements in various regions.

Energy dependence is a special concern for Europe. Europe is the world’s largest importer of oil and gas. Imports account for about 50% of energy consumption today. This will rise to 70% in 2030. Most energy imports come from the Gulf, Russia and North Africa' (European Council 2003, pp. 2-3).

The underlined fragment leads to the conclusion that global warming is seen as a source, cause of threats rather than a threat itself. The European Security Strategy seems to be concerned not with Climate Change as a problem in itself, as a threat to this planet and its environment, but with the effects Climate Change may and will have on its human population, reflecting an anthropocentric position to the issue.

It may be mentioned here that ‘energy dependence’ mentioned in the fragment quoted above is a Climate Change-related issue as well; thus, even if the document does not refer to Climate Change directly (the term does not appear in it at all), it still indicates its significance to the field of security.

The Report on the Implementation of the European Security Strategy created five years later suggests an increase in significance of Climate Change-related security issues. The term ‘Climate Change’ itself appears here five times. In this case, the list of key threats to security includes proliferation of weapons of mass destruction, terrorism and organized crime, energy security and climate change (European Council 2008, pp. 3-6). This way Climate Change is no longer a challenge but a (key) threat, which is a significant change of status. Notably, the Report also takes up the ‘threat multiplier’ concept, which is the way Climate Change will be regarded in this paper.

In 2003, the ESS already identified the security implications of climate change. Five years on, this has taken on a new urgency. In March 2008, the High Representative and Commission presented a report to the European Council which described climate change as a ‘threat multiplier’. Natural disasters, environmental degradation and competition for resources exacerbate conflict, especially in situations of poverty and population growth, with humanitarian, health, political and security consequences, including greater migration. Climate change can also lead to disputes over trade routes, maritime zones and resources previously inaccessible.’ (European Council 2008: 5-6).

While this fragment repeats the two Climate Change effects listed by the European Security Strategy in 2003 (competition for resources and migration), it also regards them in greater detail and adds another one – namely, disputes over trade routes, maritime zones and previously inaccessible resources.

It must be emphasized that further on, the document actually labels Climate Change as one of the ‘key priorities’ and contains a very concrete declaration of taking action: ‘the EU (...) must use all its levers to achieve an ambitious outcome at Copenhagen in 2009’ (European Council 2008, p. 12) – which, as we already know, unfortunately failed (cf. Harvey, Crooks & Ward 2009, Martin 2009).

Even such a preliminary discourse-analytic comparison of the two documents suggests an increase of significance of Climate Change effects to the security of Europe on the one hand, and an increase of awareness of the various ways in which these effects are linked to other global and European issues on the other hand.

**Global Climate Change effects as threats to the security of Europe – examples**

Climate Change is a global problem to which cultural, economic, political borders, zones or treaties bear no relevance. But it so happens that those who have already suffered from its effects are mostly communities in the so-called third or developing world with little or very little economic and political power. If the named effects had not been attributed to Climate Change for a long time, it would be possible to argue that one of the reasons why Climate Change has been regarded with so little attention and respect by political leaders of the first-world countries is that it has always been about regions far away and someone else. Climate Change effects introduced above, incl. deforestation, desertification, water shortage, and others, are often to be felt in Europe in a qualitatively different way as, for example, in such areas as Bangladesh, China or Africa which are discussed below. This results especially from the institutional capacity to deal with environmental problems and to soften their effects. The IPCC makes the following predictions for the European continent:

‘Climate change is expected to magnify regional differences in Europe’s natural resources and assets (…).

- Mountainous areas will face glacier retreat, reduced snow cover and winter tourism, and extensive species losses (...).

- In southern Europe, climate change is projected to worsen conditions (high temperatures and drought) in a region already vulnerable to climate variability, and to reduce water availability, hydropower potential, summer tourism and, in general, crop productivity.

Climate change is also projected to increase the health risks due to heat waves and the frequency of wildfires’ (IPCC 2007, p. 50).

But the security threats brought about by Climate Change mentioned in the European Security Strategy – e.g. migration or acceleration of religious extremism – is affecting Europe as well. And this effect...
seems to be more and more severe. With the internationalization and globalization of threats to security – just to mention developments that have become especially prominent after 9/11: terrorism and the connected networks can operate internationally, actions in one part of the world can affect security interests far away – the internationalization of political planning in security and defence policies have moved upwards the scale of importance. If Europe was (indirectly) influenced by the attacks on the World Trade Center that took place across the Atlantic, it will be much more affected by Climate Change effects taking place across the Mediterranean, the Ural, and in other places of the world.

Among the examples of such effects are: rising sea levels in Asia, effects of global warming in the Arctic (example of the Northwest Passage) or water shortages in China and Africa.

**Rising sea levels**

The IPCC predicts an accelerated rise ‘in sea level of up to 0.6 m or more by 2100; a further rise in sea surface temperatures by up to 3°C; an intensification of tropical and extra-tropical cyclones; larger extreme waves and storm surges’ (IPCC 2007). The scenario offered by the Report for the region of Asia focuses on water- (particularly seawater-) related problems:

‘By the 2050s, freshwater availability in Central, South and South-East Asia, particularly in large river basins, is projected to decrease.

Coastal areas, especially heavily populated megadelta regions in South, East and South-East Asia, will be at greatest risk due to increased flooding from the sea and, in some megadeltas, flooding from the rivers.

Climate change is projected to compound the pressures on natural resources and the environment associated with rapid urbanisation, industrialisation and economic development.

Endemic morbidity and mortality due to diarrhoeal disease primarily associated with floods and droughts are expected to rise in East, South and South-East Asia due to projected changes in the hydrological cycle.’ (IPCC 2007, p. 50).

An obvious consequence of violent cyclones leaving millions of people homeless, rising sea levels leading to constantly flooded or disappearing land masses, and the spreading of waterborne diseases such as diarrhoea, hepatitis A and E and typhoid fever would be the relocation of vast parts of the population. In Bangladesh, for example, such a massive movement may have serious global security implications. One reason could be the fragile relationship between Bangladesh, India and Pakistan originating from their history of gaining independence from British rule or each other. With its huge Muslim population, Bangladesh is very likely to become a new hot spot of action for groups such as Al-Qaeda (Riedel 2007). If its population continues to grow as it does, by 2020 it will exceed the population of Russia significantly, while facing the loss of almost 11% of the territory due to Climate Change effects (Laws 2011, p. 24). And keeping in mind that ‘the combination of deteriorating socioeconomic conditions, radical Islamic political groups, and dire environmental insecurity brought on by climate change could prove a volatile mix with severe regional and potentially global consequences’ (Podesta & Ogden 2007, p. 118), the case of Bangladesh must be regarded with due gravity. The regional consequences are already visible in the political tensions between Bangladesh and India. But if – or when – the latter fails ‘to cope with a surge of displaced people from Bangladesh’ (Podesta & Ogden 2007, p. 117), the problem will spread to other regions of the world.

**The Northwest Passage and Arctic**

The case of the Northwest Passage is an example of seemingly positive economic consequences of Climate Change (particularly global warming) and pays witness to the fact that it is relatively easy to oversee long-term and large-scale effects. The Northwest Passage is a sea route that links the Atlantic Ocean and the Pacific Ocean 3121 nautical miles north of the American continent. For the most part of the year it is non-navigable due to the presence of ice sheets and shallow waters; when passable, however, it shortens the way from Europe to Asia by at least 5000 km (compared to the current main route via the Suez Canal) or 4000 km (compared to the less frequently used Panama Canal). Due to global warming resulting in melting of ice, the Northwest Passage is likely to become ice-free in a matter of years. The economic benefits that this would bring to shipping companies are self-evident.

But the opening of this route is also likely to bring about international political tensions and conflicts regarding the right of control of navigation and the right of passage. The first signs of this risk have already been materialized, as a dispute between Canada (which claims the Northwest Passage to constitute its internal waters) and the USA in the second half of the 20th century. As long as the problem was limited to the two countries, it was hardly possible to talk about its international implications. More recently, however, other states such as Russia or Denmark have shown interest in exploring economic opportunities offered by the Northwest Passage. This brings about additional effects to the ecosystems connected to the Northwest Passage, for example when additional pollution from vessels amplifies the results of Climate Change in the region.
The situation results in two types of threats to the security of the European Union. One type concerns the risk of international conflict, e.g. with Russia over the so-called Lomonosov Ridge that allows control over the North Pole (while Russians claim that the Lomonosov Range is an extension of Siberia, Denmark holds the position that it belongs to the Greenland continental shelf, cf. Lee 2009) or with Canada (the dispute between Canada and Denmark over Hans Island located between Greenland and the Canadian Ellesmere Island has even led to initial military movements of both countries on the island, cf. Gründel 2005). The other type concerns the possible effects that the changing environmental conditions in the area, especially of the Arctic may have on global climate (in Europe they could include increased risk of inland flash floods and more frequent coastal flooding and increased erosion, IPCC 2007, p. 50). Once again we see how a situation in a place far, far away affects Europe in an increasingly tangible way.

Water shortages

The case of water shortage in China in particular and Asia in general illustrates the geopolitical importance of access to, and control over, regional water supplies, and its strategic implications that reach beyond the region in question.

More than a quarter of China’s territory is desert; in five years' time, between 1994 and 1999, the Gobi desert expanded by 52,400 sq km, and is now approaching the capital city Beijing at the rate of 2 kilometres every year (Macleod & Macleod 2001). In this situation, water becomes crucial for maintaining stability, security and survival; taking into account that six of the eight longest rivers originating in China have their springs in Tibet (Yangtze, the Yellow River, Mekong, Indus, Brahmaputra and Salween), the hyper-eagerness of the Chinese communist government with regard to preserving the status quo of Tibet gains a new geostrategic dimension (Laws 2011, pp. 40-41). But the government is not interested only in securing the water supply for the needs of its own people. With the control over eight out of ten springs of the longest rivers in Asia, China can use the water supply as a power tool in the region, e.g. against India, Pakistan, Russia or Viet-Nam. ‘Disagreements about water security can serve as an intensifier for existing border disputes in the region, like between China, India, and Pakistan in the Himalayan Region or Kashmir’ (Laws 2011, p. 42). Keeping in mind that these countries are significant military powers, a conflict between them can spread easily to other parts of the world and endanger security of Europe or America.

In Africa, the problem of water shortage is coupled with the more and more pressing issue of overpopulation. The population of Egypt is estimated to grow from 73 million in 2005 to 121 million in 2050; of Sudan, from 37 to 73 million; of Ethiopia, from 79 to 183 million inhabitants. The fact that all three countries depend on the Nile for their water supply makes political or even military frictions between them very likely.

CONCLUSIONS

Does Climate Change create conflicts?

From the examples of Climate Change affecting different parts of the world it may be concluded that the issue does influence the understanding, provision and maintenance of security. Individual human security is affected when environmental changes threaten the basis of people’s livelihood. People with unsecured living conditions seem to be more likely to migrate or to look for solutions outside the democratic mainstream. Societies and states become vulnerable when facing unrest, instability or challenges to sovereignty due to Climate Change-related difficulties such as limited access to water or other resources. We have seen that Climate Change is capable of giving rise to international conflicts even when it affects places located far away from the territories of states taking part in such conflicts (e.g. the Northwest Passage). But can Climate Change actually lead to openly violent international conflicts?

Due to the high level of interdependencies between societies and states, and highly formalized and institutionalized interaction between governments, armed conflicts are becoming less and less likely. For example, in 2009, out of 112 crises with sporadic violent conflicts identified by the Heidelberg Institute for International Conflict Research, only 6 were interstate conflicts (Heidelberg Institute 2010, p. 2). But it seems feasible that Climate Change can lead to disputes and conflicts on the diplomatic level with effects on foreign policies of states taking part in them, which has already been exemplified with the Copenhagen Conference of 2009 and the dispute between developing and developed countries over greenhouse gas reductions.

Climate Change is thus more likely to cause intrastate conflicts, especially in countries with already existing problems of poverty, vulnerable livelihoods and weak governments. The scope of a possible conflict depends on a variety of factors. For example, in Chad, with its 80% of the labour force employed in agriculture, effects of severe droughts would be much more serious than in an industrialized country.

Climate Change may also lead to the intensification of existing social imbalances within states. In such cases, war and violent conflicts are likely to be chosen as means of achieving or reclaiming social status, especially in countries depending on natural resources.
Climate Change alone hardly ever leads to violent conflicts or security threats. Only in combination with social, economic, political factors and developments does it reveal the holistic view of conflict potential. As a ‘threat multiplier’, Climate Change ‘exacerbates existing economic and social inequities’ (Podesta & Ogden 2007, p. 118), leading to tensions and instabilities that, under specific circumstances, may result in open conflict.

As mentioned before, a detailed and fine-grained examination of the network of factors and conditions contributing to a given situation, one or some of which could be Climate Change-related, is always necessary in order to get a full picture of security challenges of a community, state or region in question.

Advantages of integrating Climate Change into the CFSP/ESDP

The documents and examples of situations discussed in this paper seem to lead to the conclusion that the integration of Climate Change into the framework of CFSP/ESDP is insufficient at best – and that in spite of the close connection of Climate Change with such security-related issues as migration or weak/failing states, which in turn do play an important role in European security measures and policies.

Since its foundation, the European Union has remained primarily an economic body. The development in the direction of defence has been motivated by the wish of the member states to take a more prominent place on the international arena. It has always been a slow and careful process, characterized by its reactive rather than proactive nature and lesser priority. The trade policy of the European Union, for instance, focuses on fostering success of European companies, not taking the environmental costs into account. This means that it is vitally important to regard Climate Change in a more comprehensive, holistic way, also in those policy areas that are not apparently or directly connected with it.

This does not run counter to the European Union’s interest in becoming a global actor in hard and (foremost) soft politics. Stronger integration of Climate Change into CFSP/ESDP would increase its geo-strategic importance through hard power developments and advance its legitimacy as a political actor by integrating new soft power elements and fostering its cultural and ideological attraction.

A full integration of Climate Change into CFSP/ESDP policies could bring various advantages on different levels within the European Union. In case of missions and operations abroad, which are at present not rated overall positively by European societies, it could widen the basis of legitimacy and add an additional rationale for European Union’s involvement in those missions (if one thinks this is an advantage). On the level of institutional cooperation across different fields, a common approach to Climate Change-related issues could contribute to greater consistency and coherence of policies and strategies in those fields, increasing the effectiveness of governance processes. Moreover, the perception of Climate Change as a threat multiplier in the military, defence and security community may lead to additional pressure coming from a sphere normally not expected to come up with far reaching or progressive measures to tackle Climate Change effectively. In cooperation with environmental or developmental areas this could lead to an additional expansion of environmental protection measures. Such developments would additionally have a positive effect on the public perception of environmental protection, which still tends not to be taken seriously enough by the public opinion.

But these positive developments would not be limited to the European Union only. By bringing about closer cooperation between the EU and other regions (e.g. North Africa), they would have the chance to improve not only environmental protection, but also international political stability and security outside Europe (as mentioned above, tight institutional connections between states minimize the risk of international conflict), additionally making the EU the positive role model and increasing its soft power mentioned above.

Including Climate Change into the security field would also have an effect on the definition of the term security – by broadening it to cover the concept of human security more comprehensively, and by increasing its openness and responsiveness to further developments of the concept.

REFERENCES


