

Effectiveness of current policy frameworks in mitigating climate-induced risks relating to human security and conflict – case study on the EU

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Deliverable author(s):	Katriona McGlade and Elizabeth Tedsen
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Abstract

This case study reviews the effectiveness of EU-level policies and measures for addressing the impacts of climate change on water, conflict and human security. It draws attention to gaps in the current policy framework and outlines actors' expectations and demands for a future framework. The EU's internal policy



framework covers many aspects of water management and climate change but has no overt focus on human security or conflict. The EUs external policy framework supports neighbouring and developing countries' broader development agendas which - depending on the country's needs and wishes - may or may not take the issues of water, climate change, human security or conflict into account. Furthermore, even if human security is considered implicitly by the EUs policy framework, it was perceived to be unlikely that a specific policy agenda addressing human security alone or as connected to water and climate change can be expected to develop in the near future.

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Abbreviations

- ACP Africa Caribbean Pacific
- **COM European Commission**
- CAP European Union Common Agricultural Policy
- CIS Common Implementation Strategy of the Water Framework Directive
- DG CLIMA Directorate General for Climate Action
- DG DEVCO Directorate General for Development Cooperation Europe Aid
- DG ENV Directorate General for Environment

DG EXPO – Directorate-General for External Policies of the Union (European Parliament Secretariat)

- DG HOME Directorate General for Home Affairs
- DG RELEX Directorate General for External Relations
- EEA European Environment Agency
- EEAS European External Action Service
- EIB European Investment Bank
- ENP European Neighbourhood Policy
- **ENVSEC Environment and Security Initiative**
- EP European Parliament
- EU European Union
- EUWI European Union Water Initiative
- GA UN General Assembly
- GCCA Global Climate Change Alliance
- GHG Greenhouse Gas



- IPCC Intergovernmental Panel on Climate Change
- IWRM Integrated Water Resource Management
- MDGs Millennium Development Goals
- MENA Middle East and North Africa
- MEP Member of the European Parliament
- MMES Mediterranean, Middle East and Sahel
- MFF Multiannual Financial Framework
- MS Member States
- NGO Non-governmental Organisation
- RBMP River Basin Management Plan
- SLR Sea-level rise
- SWM Strategy for Water in the Mediterranean
- UfM Union for the Mediterranean
- UN United Nations
- UNDP United Nations Development Programme
- UNEP United Nations Environment Programme
- UNFCCC United Nations Framework Convention on Climate Change
- WFD European Union Water Framework Directive
- WWF World Wildlife Fund
- WISE Water Information System for Europe



1. Introduction

This case study provides a review and assessment of the effectiveness of the current European Union (EU) level policy framework¹ for addressing the impacts of climate change on water, conflict and human security² and perspectives on the future. The case study is based on the conceptual and methodological framework set out in the main report³ and has been compiled through desk-based research and interviews with civil servants at EU and national level.⁴ The study begins with a brief introduction to the implications of climate change for water, conflict and human security in the Mediterranean, Middle East and Sahel (MMES) region and interviewee awareness of these issues. This is followed by an overview of current EU policies and programmes tackling these issues and how they approach interlinkages.⁵ Using a policy cycle approach, the study then looks at factors, as perceived by interviewees, which impact the effectiveness the current policy framework for addressing these issues. It goes on to provide an overview of interviewee perceptions regarding the future of the EU policy framework. Based on the findings of the case study research and interviewee opinions, the study ends with insights on the relationship between climate change, hydro-conflict and human security and the future of the EU policy framework in this area.

2. Background

Whilst the EU is not considered to be as immediately affected by climate change as Sub-Saharan Africa, it is widely accepted that the Mediterranean will be one of the hardest hit by impacts on its water resources. According to the Intergovernmental Panel on Climate Change (IPCC) 4th Assessment, less frequent rainfall will exacerbate drought and decreases in groundwater recharge by more than 70% along the southern rim of the

¹ We use the term 'policy framework' to cover not only 'policies' (under which we include laws, strategic programs or long-term and consistent approaches on how to deal with certain issues) but also if/how policies are adopted as well if/how they are coordinated or integrated.

² As interviewees were working at a policy-making rather than implementation level, the assessment of effectiveness is based on interviewees perceptions of the adequateness of the policy design rather than their effectiveness on the ground.

³ Gerstetter, C., McGlade, K., Vidaurre, R., and Tedsen, E, *Current Policy Frameworks for Addressing Climate-Induced Risks to Human Security and Conflict- An Assessment of Their Effectiveness and Future Perspectives*, CLICO, 2012. 4 A full list of interviewees can be found in Annex V. Interviews were carried out with thirteen civil servants across different EU institutions to provide a range of opinions on policies and processes relevant to the abovementioned themes. Two further civil servants from Spain were interviewed (see Annex IV) to provide a point of view from an EU Member State in the region of focus for this report (Mediterranean, Middle East and Sahel (MMES)). Efforts were made to gather a range of interviewee opinions; nevertheless, these perspectives are only indicative as the full range of EU institutions was not included in this study due to available resources. Interviews were carried out with civil servants, rather than political representatives, who for the most part worked on the technical aspects of EU policy on climate change, water and development rather than the EUs broader agenda for security or conflict prevention. 5 We examine policies both within and beyond the EU. We use the term 'internal' to refer to EU policies aimed at EU Member States; 'regional' to refer to the European Neighbourhood Region (See Annex II); and 'external' to refer to EU policies aimed at third-countries beyond the EU and its neighbourhood.



Mediterranean Sea.⁶ Threats from desertification have been projected in Mediterraneantype ecosystems due to expansion of adjacent semi-arid and arid systems.⁷ Land use, habitat fragmentation and intense human pressures will further limit natural adaptation responses.⁸ The impacts of climate change on water resources are also widely acknowledged by policy makers, as highlighted in the increasing number of measures to tackle these issues. In terms of water policy, in the past, the EU has placed a strong focus on improving water quality as well as on flood management. However, the IPCCs 4th Assessment and conferences of the parties to the United Nations Framework Convention on Climate Change (UNFCCC) have led to a broadening of awareness that policies must also begin to seriously address climate change impacts on drought and sea-level rise (SLR), also outside of the EU.

So far, conflict over water resources within the EU is fairly limited, particularly in the case of inter-state conflict where settlements are easier to reach than as is the case for other states which lack the EUs tradition of cooperative conflict management.⁹ Conflict in the EU over water resources is usually limited to intra-state conflict, as demonstrated in Spain where there was large public opposition to planned inter-basin water transfers to water scarce regions.¹⁰ In addition, the EU - as well as its Member States (MS) - aims to protect and provide security to its citizens in various dimensions.¹¹ Nevertheless, the EU assumes that there is a reciprocal relationship between the security of the northern Mediterranean – which hosts a wealthy, developed and stable Europe, and that of the southern Mediterranean – which is home to the more fragmented North Africa and Middle East.¹² The EU must consider the implications of the dynamics of neighbouring regions not only due to the potential implications for the security and protection of its own citizens,¹³ but also because the stated objectives of its external action include the

⁶ Kundzewicz, Z.W., L.J. Mata, N.W. Arnell, P. Döll, P. Kabat, B. Jiménez, K.A. Miller, T. Oki, Z. Sen and I.A. Shiklomanov, "Freshwater Resources and Their Management, Climate Change 2007: Impacts, Adaptation and Vulnerability," in *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 2007), 976: 173–210.

⁷ *Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge, UK: Cambridge University Press, 2007). M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson (eds) Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007 Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 8 Ibid.

⁹ Haftendorn, H., "Water and International Conflict," *Third World Quarterly* 21, no. 1 (2000): 51–68. 10 Elena Lopez-Gunn, "Agua Para Todos: A New Regionalist Hydraulic Paradigm in Spain" 2, no. 3 (June 12, 2012): 370–394.

¹¹ The Fundamental Charter of Rights of the European Union accords a number of protective rights to its citizens. These include, but are not restricted to the right: to life; to security of person; to social security and services; to healthcare; and to environmental protection. EU, "Fundamental Charter of Rights of the European Union Accords a Number of Protective Rights to Its Citizens.," *Official Journal of the European Union* C 83/389 (2010), http://eurlex.europa.eu/en/treaties/index.htm.

¹² Abdelwahad Biad, "Estabilidad y Conflictos En El Mediterráneo," *Afers Internacionals*, no. 37, Revista CIDOB (1997): 53–63. Stein, S., "The European Union and the Arab Spring, One Year of the Arab Spring: Global and Regional Implications," ed. Mark A. Heller, Yoel Guzansky (Institute for National Security Studies, Tel Aviv University, 2012), http://www.cidob.org/es/publicaciones/revistas/revista_cidob_d_afers_internacionals/%28offset%29/42. 13 Art.3, European Union, *Consolidated Version of the Treaty on European Union*, 2010.



preservation of peace, prevention of conflicts and the strengthening of international security.¹⁴

3. Awareness

General public awareness of the issue of climate change is high within the EU¹⁵, with around 20% perceiving it as the most important current threat (see Annex III). During the interviews conducted for this case study, it was noted that EU citizens may not necessarily perceive the difference between mitigation and adaptation and although they may be aware of certain specific human security threats e.g. floods, members of the public do not generally make the conceptual link between these impacts and climate change.¹⁶ The potential inter-linkages between climate change, conflict and human security have also been part of discussions in the public domain, for example in relation to the civil conflict in Sudan¹⁷

At the EU political and administrative level, impacts of climate change, including those on water, are also widely recognised: the EU has created policies for climate change mitigation and management of water resources (see Chapter 4) and the EU and its MS are vocal in their calls for action at international climate change and water fora such as the UNFCCC and the World Water Forum. In this way, awareness among interviewees¹⁸ of both the physical impacts of climate change on water and of EU policy initiatives aimed at tackling these issues was, on the whole, very high. There has also been EU level recognition that climate change impacts on water resources may have broader implications for conflict¹⁹ and human security²⁰ and some EU MS have been actively engaged in high level political debates on these issues.²¹

18 All interviewee were civil servants and thus had a high level of general policy awareness.

¹⁴ Art.21 (2c), Ibid. 'The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to...preserve peace, prevent conflicts and strengthen international security, in accordance with the purposes and principles of the United Nations Charter, with the principles of the Helsinki Final Act and with the aims of the Charter of Paris, including those relating to external borders'

¹⁵ Personal communication, EU official working on water issues

¹⁶ Ibid.

¹⁷ In the media, the civil conflict in Sudan has often been dubbed as an example of the first 'climate war'

¹⁹ European Commission, Communication from the Commission to the Council and the European Parliament Water Management in Developing Countries Policy and Priorities for EU Development Cooperation {SEC(2002)288}, 2002, http://eur-

 $lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexplus!prod!DocNumber&lg=en&type_doc=COMfinal&an_doc=2002&nu_doc=132.$

²⁰ Paper from the High Representative and the European Commission to the European Council, *S113/08, Climate Change and International Security*, March 14, 2008 and the European External Action Service and European Commission, *Towards a Renewed and Strengthened EU Climate Diplomacy. Joint Reflection Paper.*, 09 2011, http://eeas.europa.eu/environment/docs/2011_joint_paper_euclimate_diplomacy_en.pdf as well as the Council of the European Union, "Council Conclusions on EU Climate Diplomacy", 2011 were all highlighted by different interviewees as key documents addressing the connection between human security, climate change and the environment. 21 EU states have sought to increase visibility of these issues at international level. Two examples are the Greek chairmanship of the Human Security Network in 2008, which focused on raising political and public awareness on the



Whilst most interviewees had a broad understanding of the concept of human security, there was no unanimity as to its meaning or as to how it was being tackled by the EU. Interpretations of human security varied from connecting it to vulnerability and environment, to placing it alongside traditional security. Mostly, interviewees connected the concept of human security to the EUs external rather than internal affairs.

Despite these differing definitions, a number of interviewees did agree that climate change and environmental factors can present risks for human security and conflict. One interviewee highlighted two particular constellations to be considered in regards to these interlinkages: firstly, the potential that water or lack of water has for causing human security issues, highlighted, for example, in the case of the Middle East; secondly, the potential that underlying problems could flare up and cause conflict over water.²² The potential for climate- or conflict-induced migration was also mentioned by a few interviewees. However, as expressed by one interviewee, the causal relationship between climate change and migration is difficult to demonstrate, as water scarcity or other climatic factors are only some of a number of reasons why people choose to migrate.²³ Although migration is recognised as both a strategy for adapting to climate change or indeed as a response to threats to human security or conflict, ensuring populations have stable, viable environments to live, in their own countries wherever possible, was said to be the EUs preferred option.²⁴

4. Overview of policy framework

The following chapter aims to provide a broad overview of EU level policies which address climate change, water and human security.²⁵ It distinguishes between 'internal' policies (made by the EU for its MS); 'regional' policies (EU level interaction at the Mediterranean and European Neighbourhood level)²⁶; and international cooperation with third countries and the UN.

The EU is well known for its leadership in environmental protection and policy-making. It further has a strong policy framework in the water sector – at least as far as water quality is concerned - and has been bold in its initiatives to address climate change mitigation. Measures to address adaptation to climate change are receiving increasing attention. However in contrast to mitigation, this is a policy area which is still very much in the process of development and which due to its cross-cutting nature is addressed in

human security implications of climate change, and the German chairmanship of the Security Council in 2011 which focused on the threats that climate change poses for security.

²² Personal communication, Andrew Murphy, DG Environment

²³ Personal communication, Maria-Cruz Cristobal Muñoz, European External Action Service

²⁴ Personal communication, European Union official working on environment and climate issues

²⁵ For a full discussion of the relevant EU policy framework, please see Elizabeth Tedsen, *CLICO Working Paper: Climate Adaptation, Water and Security at the International Level: Overview of European Union and United Nations Initiatives*, 2012, http://clico.org/working-papers. 26 For an everyiew of the European Neighbourhood region cae Apper II.

²⁶ For an overview of the European Neighbourhood region see Annex II



different ways by different Directorates General (DGs) of the European Commission.²⁷ Furthermore, although the impacts of climate change on oceans and hydrological resources are increasingly understood, methods and approaches for MS and citizens to adapt to changing climatic conditions and sea-level rise are only beginning to be systematised. The EU has no overarching strategy or policy that addresses climate change, water and the potential implications for human security or conflict. However, as this section shows, there are a number of initiatives which take aspects of this nexus into account.

4.1 Internal policies

The EU has a long history of policy-making in the area of water management and protection. This contributes to overall high levels of water security. As noted above, conflict over water within the EU is limited and its water management policies promote inter-regional and cross-border cooperation in water management (including droughts and floods) and risk assessment, including the establishment of trans-boundary risk maps and flood mitigation strategies.²⁸

The Water Framework Directive (WFD) (2000) forms the primary legal framework for the management of EU waters.²⁹ The WFD is primarily focused on water quality rather than quantity and the EU policy framework does remain underdeveloped in the management of water quantity.³⁰ Nevertheless, good water quality does make a key contribution to human security by ensuring water security and health for human populations. The key tools created pursuant to the WFD are River Basin Management Plans (RBMPs) which decentralise the management of water resources to the river basin level and which require cooperation between riparian states. The implementation of the WFD takes place through a framework for cooperation and coordination on water management known as the Common Implementation Strategy (CIS). As part of this Implementation Strategy, a number of working groups and expert groups have been set up, which include an expert group on Climate Change and Water and another on Water Scarcity and Droughts. Measures to tackle floods are of crucial importance for protecting citizens and ensuring human security. To this end, the WFD is complemented by the Floods Directive (2007) which provides a framework for reducing and managing flood risk, through hazard mapping and the preparation of flood risk management plans by

²⁷ See Annex I for a glossary of the main EU institutions and policy-making instruments of relevance to this study. 28 EIB, *Financing Water and Climate Change Adaptation*, March 31, 2012.

²⁹ Directive 2000/60/EC of the European Parliament and of The Council, *Establishing a Framework for Community Action in the Field of Water Policy*, 2000, http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=0J:L:2000:327:0001:0072:EN:PDF.

³⁰ A contributing factor to this is that the quantitative management of water resources is one of the few areas of environmental decision-making requiring unanimous agreement amongst Member States rather than a majority vote.



2015.³¹ The European Environment Agency (EEA) is also supporting the first preliminary flood risk mapping to contribute to the European Water Information System for Europe (WISE).³² Challenges associated with reduced water availability (and therefore water and human security) are also addressed by the 2007 European Commission Communication on Water Scarcity and Droughts³³ and are regularly assessed through annual Follow-up Reports.³⁴

The Commission's Communication on Droughts and Water Scarcity and its Follow-up Reports also recognise the growing stress on water resources and the role that climate change plays in increasing this stress. In June 2010, the European Council adopted its own conclusions on water scarcity, drought and adaptation to climate change.³⁵ These conclusions recognised the serious and growing problems within Europe stemming from both natural and anthropogenic causes, stressed the importance of water management and planning, urged Member States to take action and invited the Commission to consider new measures where appropriate.

A substantial tranche of 20% of the EUs budget for 2014-2020 (the Multiannual Financial Framework) has been earmarked for climate change (both mitigation and adaptation); the first time that funds have been targeted in this way. All internal action on climate change is coordinated by DG CLIMA where activity on climate change adaptation is currently focused on the development of an adaptation strategy to be implemented beginning in 2013, as proposed by the Commission's 2009 White Paper on climate change adaptation.³⁶ The final details of this adaptation strategy are yet to be finalised, however, the framework is currently much 'softer' than that of mitigation as it does not include legally binding targets. The EUs focus is to mainstream climate change adaptation into different sectors and existing policy processes. Three sectoral papers accompanying the White Paper highlight the particular challenges for agriculture,³⁷

³¹ Directive 2007/60/EC of the European Parliament and the Council on the Assessment and Management of Flood Risks, 2007.

³² The Water Information System for Europe (WISE) is a gateway to information on European water issues. It comprises a wide range of data and information collected by EU institutions to serve several stakeholders. http://water.europa.eu/

³³ European Commission, *Addressing the Challenge of Water Scarcity and Droughts in the European Union*, Communication from the Commission to the European Parliament and the Council-, July 18, 2007, http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52007DC0414:EN:NOT.

³⁴ See the three Follow-up Reports at: http://ec.europa.eu/environment/water/quantity/eu_action.htm#2007_com. Accessed 28 February 2012

³⁵ Council of the European Union, "Council Conclusions on Water Scarcity, Drought and Adaptation to Climate Change," in *3021st Environment Council Meeting* (Luxembourg, 2010).

³⁶ European Commission, *White Paper: Adapting to Climate Change: Towards a European Framework for Action* (Brussels: European Commission, 2009), http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0147:FIN:EN:PDF.

³⁷ European Commission, "Commission staff working document accompanying the White paper - Adapting to climate change^[2]: Towards a European framework for action Climate Change and Water, Coasts and Marine Issues {COM(2009) 147 final} {SEC(2009) 387} {SEC(2009) 388}".



health³⁸, water, coasts and marine issues³⁹. A new web portal CLIMATE-ADAPT was launched in 2012 to provide information on adaptation and to collect examples of policies and best-practice on adaptation across the EU.⁴⁰

Action to adapt to climate induced impacts on water can be seen in several key policies. The Floods Directive states that preliminary flood risk assessments should include the potential adverse consequences of future floods for human health, the environment and economic activity and consider long-term developments including impacts of climate change. Flood management plans should be periodically reviewed and updated according to the likely impacts of climate change.⁴¹ Similarly, the Common Implementation Strategy of the WFD forsees numerous ways in which climate change should be taken into account.⁴² Beyond water policy, sectoral policies which impact water resources such as the EUs Common Agricultural Policy (CAP) are now also placing emphasis on specific measures such as water saving technologies and flood prevention and management⁴³ and future plans to reform the CAP place an emphasis on food security, the environment and climate change.⁴⁴

The Commission is currently undertaking a review of all water policy which aims to assess its capacity to address current and future challenges, which will include vulnerability and the ability to adapt to climate change. This review will feed into a proposal for a 'Blueprint for Safeguarding European Waters' to be proposed at the end of 2012 and will specifically address issues related to the implementation of the WFD and any shortcomings in terms of coordination with other sectors such as agriculture and concerns such as water quantity issues.⁴⁵ The EEA is also working on indicator and

45 The Blueprint is being produced on the basis of four main assessments: the assessment of the River Basin Management Plans delivered by the Member States under the Water Framework Directive; the review of the EU action on Water Scarcity and Drought; the assessment of the vulnerability of water resources to climate change and other

³⁸ European Commission, "Commission Staff Working Document Accompanying the White Paper - Adapting to Climate Change^[]: Towards a European Framework for Action Climate Change and Water, Coasts and Marine Issues {COM(2009) 147 Final} {SEC(2009) 387} {SEC(2009) 388}", n.d., http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=SEC:2009:0386:FIN:EN:PDF.

³⁹ Ibid.

⁴⁰ CLIMATE-ADAPT was not yet published at the time of interview. It is now online at: http://climate-adapt.eea.europa.eu/

⁴¹ Directive 2007/60/EC of the European Parliament and the Council on the Assessment and Management of Flood Risks, 60.

⁴² European Communities, "Common Implementation Strategy for the Water Framework Directive (2000/60/EC) Guidance No 24 - River Basin Management in a Changing Climate.", 2009,

http://circa.europa.eu/Public/irc/env/wfd/library?l=/framework_directive/guidance_documents/management_final pdf/_EN_1.0_&a=d.

⁴³ Council of the European Union, *Council Regulation (EC) No* 74/2009 of 19 January 2009 Amending Regulation (EC) No 1698/2005 on Support for Rural Development by the European Agricultural Fund for Rural Development (EAFRD), January 19, 2009, http://eur-

lex.europa.eu/Notice.do?val=487851:cs&lang=en&list=500157:cs,487851:cs,&pos=2&page=1&nbl=2&pgs=10&hwords=.

⁴⁴ European Commission, *The CAP Towards 2020: Meeting the Food, Natural Resources and Territorial Challenges of the Future,* Communication from the Commission to the Council and the European Parliament, The Council, The European and Social Committee and the Committee of the Regions (Brussels, November 18, 2010).



scenario development to show current and future impacts of climate change including those on water and health.

The White Paper on adaptation to climate change also points out that "failure to adapt could have security implications".⁴⁶ With this aim in mind, the EU is working to strengthen its analysis and early warning systems and integrating climate change into existing tools such as conflict prevention mechanisms and security sector reform.⁴⁷ The White Paper further remarks that the effects of climate change on migratory flows should also be considered in the broader EU reflection on security, development and migration policies.

4.2 Regional policies

As with its internal policies, the EUs regional policies do not directly tackle the connection between climate change, human security and conflict. Nevertheless, the EU contributes to numerous regional governance and development initiatives which tackle aspects of this nexus. The European Neighbourhood Policy (ENP) is one of the EUs key mechanisms for regional cooperation, carried out mainly through bilateral cooperation and informed by mutual commitment to common values.⁴⁸ The ENP has no overarching thematic focus on water management, human security or conflict prevention as agreements are drafted on a country to country basis. However, amongst other actions, the ENP does support partner countries to mainstream climate change into existing policies⁴⁹ as well as enhancing sectoral cooperation on environmental protection and improving resilience to climate impacts.⁵⁰

The EU has several regional initiatives which are of relevance for cooperative, transboundary water management and protection in the Mediterranean. The EU Water Initiative (EUWI) and Horizon 2020 both contribute to human security in terms of their focus on health and water quality. EUWI has a development focus with the aim of improving water supply and sanitation in line with the Millennium Development Goals

man made pressures and; the Fitness Check which will address the whole EU water policy in the framework of the Commission Better Regulation approach. A Blueprint to Safeguard Europe's Waters. European Commission. http://ec.europa.eu/environment/water/blueprint/index_en.htm. Accessed on 2 May 2012.

⁴⁶ European Commission, *White Paper: Adapting to Climate Change: Towards a European Framework for Action.* 47 Ibid.

⁴⁸ The recent ENP review, sets out a policy of 'bilateral differentiation' ('more for more') increasing the incentives (economic integration, mobility of people and financial assistance) for countries who share the EUs values on human rights, democracy and rule of law and are willing to embark on political reforms. In the EU's Southern Neighbourhood, the EU has offered to engage in partnership dialogues on migration, mobility and security with Egypt, Morocco and Tunisia. European Commission, *A New Response to a Changing Neighbourhood: A Review of European Neighbourhood Policy*, Joint Communication to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions (Brussels, May 25, 2011).

⁴⁹ European Commission, "Communication from the Commission to the European Parliament and the Council of 12 May 2010 - Taking Stock of the European Neighbourhood Policy [COM(2010) 207 Final - Not Published in the Official Journal].", n.d., http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:0207:FIN:EN:PDF. 50 High Representative and European Commission, "A New Response To A Changing Neighbourhood A Review Of European Neighbourhood Policy: Joint Communication by the High Representative of The Union For Foreign Affairs And Security Policy and the European Commission. 25 May 2011.", n.d.,

http://ec.europa.eu/world/enp/pdf/com_11_303_en.pdf.



(MDGs) and the Horizon 2020 initiative contributes to tackling pollution in the Mediterranean by implementing the commitments undertaken in the framework of the Barcelona Convention.⁵¹ The Union for the Mediterranean (UfM) aims for cooperative action in the sustainable management of water resources and the protection of their quality. The Strategy for Water in the Mediterranean (SWM) is being developed and worked upon with support from EUWI and the UfM. The SWM was designed to provide a common political, methodological, and financing framework for cooperation over water between southern and northern Mediterranean states and to facilitate the implementation of regional policies in the water field.⁵²

In addition to cooperation over water, the SWM addresses the impacts that climate change may have for human health, food and water security. The Strategy furthermore includes 'adapting to climate change and enhancing drought and flood management' is one of the SWMs four priority themes. In this way, if successful, the SWM could provide a number of benefits for adaptation to water related impacts of climate change, ensuring human security and reduction of conflict potential in the region. Nevertheless, to date the SWM has not been adopted due to political differences over the wording of the document.⁵³

The EUWI website clearly notes that "the numbers of those forced to emigrate by drought and climate change climb every year"⁵⁴ and the relevance of climate induced impacts for migration, and consequently elements of human security has entered into EU level discussions and policy documents. The 2009 Stockholm Programme to address future challenges in the area of freedom, security and justice requested an exploration of the effects of climate change on international migration and potential effects on immigration to the EU.⁵⁵ Following renewed attention brought by the Arab spring in 2011⁵⁶, the EU proposed an overarching framework for EU External Migration Policy, known as the Global Approach to Migration and Mobility (GAMM). The GAMM is to be embedded in the EUs overall foreign and development policy and aligned with the EUs internal policy priorities. The GAMM considers that addressing environmentally induced migration, including by means of adaptation to the adverse effects of climate change, is

⁵¹ Horizon 2020 website: http://www.h2020.net/

⁵² As a response to the water problems in the region the significant water problems (water scarcity, droughts) in the region and the implications they have on livelihoods, it was decided at the 2008 Euro-Mediterranean Ministerial Conference on Water (22 December 2008, Dead Sea, Jordan) to elaborate a new long term Strategy for Water in the Mediterranean. For details, see Bergland, M., *European Policies Regarding Water Policy, Climate Change and Security in the MENA.*, 2011.

⁵³ Israel blocks Mediterranean water strategy. Global Water Intelligence, "Israel Blocks Mediterranean Water Strategy," *Global Water Intelligence*, April 2010, http://www.globalwaterintel.com/archive/11/4/general/israel-blocks-mediterranean-water-strategy.html.

⁵⁴ EU Water Initiative. http://euwi.net/about-euwi. Accessed 27 February 2012.

^{55 &}quot;The Stockholm Programme-An Open and Secure Europe Serving and Protecting the Citizens" (Brussels, 2009), http://ec.europa.eu/anti-

 $[\]label{eq:constraint} trafficking/download.action; jsessionid=wyLKQ3fX968fQWpJC4X12htlLnxfFj57pNLYB19v4kMWvS0yQhn3!-186574361?nodeId=ed45de55-a7f6-4662-8773-efc6c89df8ea&fileName=The+Stockholm_Programme++an+open+and+secure+Europe_en.pdf&fileType=pdf.$

⁵⁶ European Commission, "A Win-Win Immigration Policy" (European Commission, November 21, 2011), http://ec.europa.eu/news/external_relations/111121_en.htm.



part of its approach.⁵⁷ Although human security is not mentioned specifically, the GAMM does take a migrant-centred approach to the design of policies in order that these respond to the aspirations and problems of the people concerned. In addition, migration and mobility are said to be embedded in the broader political, economic, social and security context and the GAMM recognises the need to accompany and protect migrants along their migratory route.

Coordination on climate change with third countries is carried out through three main institutions: DG CLIMA, DG DEVCO and the European External Action Service (EEAS). The EEAS has recently put together a climate change team who will follow the security aspects of climate change so as to provide a more systematised approach that avoids the previous 'ping-ponging' back and forth between the two bodies.⁵⁸ DG CLIMA is working closely with the EEAS as well as with the Directorate General for Humanitarian Aid and Civil Protection (DG Echo) on a disaster risk reduction strategy in response to Member State requests to produce an overview of future climate change risks. The timing of this strategy is being closely coordinated with the Adaptation strategy and will be released at the same time at the beginning of 2013.

Box 1: The European Investment Bank

The European Investment Bank (EIB) is an investment bank which funds activities both within and outside the EU. In 2011, the EIB signed loan agreements worth EUR 61bn, of which EUR 54bn was in the EU.⁵⁹ The EIBs Facility for Euro-Mediterranean Investment and Partnership (FEMIP) specifically supports growth and job creation by improving infrastructure including in the environmental sector in water and sanitation, solid waste disposal and treatment, pollution abatement and irrigation. The EIB is driven by EU policy and as such, the White Paper on climate adaptation has been an important driver for the mainstreaming of climate change adaptation into EIB projects.⁶⁰ Climate vulnerability is a transversal issue which is built into all of the Bank's sector policies. Its approach to adaptation is to eliminate the risk of climate change by considering the potential impacts and ways in which these could be mitigated. The vulnerability of the environment (i.e. the way in which the project can impact the climate vulnerability of the environment) were both considered important aspects to consider in appraisal for funding.⁶¹

60 Personal communication, Mathias Zoellner, European Investment Bank.

⁵⁷ European Commission, "Communication from the Commission to the European Parliament, the Council, the European Eonomic and Social Committee and the Committee of the Regions. The Global Approach to Migration and Mobility {COM(2011)0743 Final}", n.d., http://eur-

lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0743:FIN:EN:PDF.

⁵⁸ Personal communication, European Union official working on environment and climate issues

⁵⁹ European Investment Bank, *Financial Report 2011*, 2011,

http://www.eib.org/infocentre/publications/all/financial-report-2011.htm.

⁶¹ Personal communication, Mathias Zoellner, European Investment Bank.