
CLICO Working Papers

Climate Adaption, Water and Security at the International Level: Overview of European Union and United Nations Initiatives

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Abstract

This Working Paper provides an overview of initiatives to address climate change adaptation, water, and climate-related security at the level of the European Union (EU) and the United Nations (UN). Many international level policies and programmes already exist to address these issues within individual sectors. There is an increasing interest, however, in formulating policies that tackle the interlinkages between these themes, although these are still emerging.

1. Introduction

Policy-making at the international level holds particular relevance for managing issues of a transboundary nature such as climate change, shared waters or interstate conflicts. International policies and programmes have the capacity to reach globally and across political boundaries, as well as to influence developments occurring at the national and sub-national levels. This Working Paper examines initiatives of the European Union (EU) and United Nations (UN) relating to the CLICO themes of climate, water, human security, and conflict, providing a broad overview and selection of the primary programmes and policies in these areas. Both the EU and UN are highly active in each of these sectors individually, however this paper focuses on linkages between the thematic areas. Its purpose, as part of CLICO, is to identify policies that the research results of CLICO could help to improve.

This Working Paper is summary and descriptive in nature. It is not intended to provide a comprehensive account, as certainly many additional initiatives address these issues to a lesser degree. Neither does this paper attempt to evaluate policy performance, perform a framework analysis or consider which institutional bodies might cover policies within their mandates – questions beyond the scope of this paper. The paper focuses on established and relatively concrete policies or plans of action, and where information on operations is made available.¹

Policies described for the EU and UN level are categorized by principle thematic area in groupings of climate adaptation, water, development, climate-related security, human security, and climate and water-related disaster reduction, although given the overlapping nature of the issues, initiatives may logically fall under more than one category. The paper first presents an overview of EU policies, then turns to the UN level and finally presents a concluding discussion. It is complemented by tables showcasing selected policies and their relevance to the issues.

¹ The Oxford Dictionary's definition of "policy" is "a course or principle of action adopted or proposed by an organization or individual." Oxford Dictionaries. <http://oxforddictionaries.com/definition/policy?q=policy>. Accessed 23 February 2012.

2. The European Union

The EU has a strong history of environmental leadership and a well-developed policy framework for addressing both climate and water. Climate adaptation policy, however, is less institutionalized than mitigation, and in general, the integration of water and human security considerations, with each other and with climate change, is still evolving.

2.1 Climate Adaptation

The overall framework for present EU environmental policy-making is the Sixth Community Environment Action Programme (6EAP). It was adopted by a joint Decision of the European Parliament and the Council,² creating a framework for EU action on the environment for July 2002 through July 2012. The 6EAP focuses on four key thematic priority areas, including climate change. Climate change objectives in the 6EAP specify that in addition to mitigation, the Community “should prepare for measures aimed at adaptation to the consequences of climate change,” such as reviewing relevant Community policies, encouraging regional climate modelling and assessment, preparing for regional adaptation measures and raising awareness among citizens and businesses.³ Although climate change actions under the 6EAP have emphasized mitigation,⁴ the 6EAP has influenced EU-level adaption policy and witnessed the release of two highly influential papers on adaption.⁵

Climate change, like environmental protection generally, has been a high priority agenda item for the EU, receiving strong public opinion support⁶ and serving as an important driver of European integration.⁷ The EU has been a driving force in international negotiations leading up to the United Nations Framework Convention on Climate Change (UNFCCC) in 1992 and the Kyoto Protocol (KP) in 1997. Internally, climate policy has been robust as well, although mitigation has historically received greater focus. For example, the first European Climate Change Programme resulted in the launch of the EU’s Emissions Trading System in 2005,⁸ the world’s first and largest international greenhouse gas (GHG) emissions trading scheme. In 2007, the EU adopted a set of integrated climate and energy policies – the “20-20-20” targets – committing to achieve by 2020 a unilateral reduction in GHG emissions of at least 20 percent from 1990 levels, a 20 percent increase in renewable energy share in the EU’s energy supply and also a 20 percent savings in energy consumption.

The **2007 European Commission Green Paper** on climate change adaptation outlined EU adaptation actions and raised questions for stakeholders regarding EU priorities and ideas. The Green Paper focused on four pillars for priority actions: (1) early action, integrating adaptation into legislation, policies and funding programmes; (2) integrating adaptation into external relations,

² Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme.

³ Decision No 1600/2002/EC, art. 5(3).

⁴ Ecologic Institute, et al. (2011) Final Report for the Assessment of the 6th Environment Action Programme. Berlin, Germany.

⁵ Ecologic Institute (2011): p. 52.

⁶ Oberthür, S. and Kelly, C. R. (2008): EU Leadership in International Climate Policy: Achievements and Challenges. *The International Spectator*, 43(3), 35-50; Ecologic (2011) p. 51.

⁷ Oberthür (2008).

⁸ Directive 2003/87/EC.

particularly in developing countries; (3) research and exchange of information; and (4) involving stakeholders in preparation of strategies and actions. The Green Paper cited and was influenced by the influential **Stern Review on the Economics of Climate Change**, which considered the economic costs of climate change and recommended early action adaptation measures.⁹

Following and building upon the Green Paper, in 2009, the Commission released its **White Paper on climate change adaptation**.¹⁰ The White Paper laid out a European framework for action across various sectors and levels of governance and identified further research needs, measures and sector-specific features, particularly in three complementary sectoral papers on agriculture,¹¹ health¹² and water, coasts and marine issues.¹³ The framework adopted a phased approach whereby a comprehensive strategy is to be prepared during the first phase, between 2009 and 2012, and implementation is to begin in the second phase, starting in 2013. Similar to the Green Paper, the White Paper identifies four pillars for its first phase: (1) building knowledge regarding the impacts and consequences of climate change for the EU; (2) integrating adaptation into key EU policy areas; (3) employing a combination of policy instruments, such as market-based instruments, guidelines and public-private partnerships; and (4) stepping up international cooperation.

During the first phase and following the second pillar, adaptation is to be widely mainstreamed into EU policies. The White Paper pinpoints as targets for integrating adaptation policy, *inter alia*, the Health Strategy, Animal Health Strategy, Common Agricultural Policy (CAP), Water Framework Directive (WFD), Floods Directive, Communication on Water Scarcity and Droughts, Natura 2000, the Marine Strategy Framework Directive, Integrated Coastal Zone Management, Common Fisheries Policy, Strategic Energy Review process, Trans-European Network for Transport Programme, Trans-European Energy Networks, Environmental Impact Assessment and Strategic Environmental Assessment Directives and EU Water Initiative. Beyond mainstreaming, one of the other central outcomes of the White Paper will be an Adaptation Clearinghouse for Europe for collecting and disseminating adaptation information, to be launched in spring 2012. In 2010, the European Commission created a Directorate-General for Climate Action (DG CLIMA) to coordinate EU climate action. DG CLIMA is currently working on the development of the comprehensive EU adaptation strategy called for in the White Paper, to be released in 2013.¹⁴

Sectoral EU policies began taking adaptation needs into account both prior to and following the White Paper. For example, the CAP's 2008 "Health Check" emphasized both climate mitigation and adaptation in agricultural policy and specific measures such as water saving technologies and flood

⁹ Stern, N. (2007): The Economics of Climate Change: The Stern Review. Cambridge University Press. Cambridge, England.

¹⁰ European Commission White Paper on adapting to climate change in Europe – towards a European framework for action [COM(2009) 147 final] 1 April 2009.

¹¹ Commission staff working document accompanying the White paper - Adapting to climate change: Towards a European framework for action - Adapting to climate change: the challenge for European agriculture and rural areas {COM(2009) 147 final}.

¹² Commission staff working document accompanying the White paper - Adapting to climate change: Towards a European framework for action - Adapting to climate change: Human, Animal and Plant Health Impacts of Climate Change {COM(2009) 147 final}.

¹³ Commission staff working document accompanying the White paper - Adapting to climate change: Towards a European framework for action - Adapting to climate change: Climate Change and Water, Coasts and Marine Issues {COM(2009) 147 final}.

¹⁴ European Commission. "What is the EU Doing?" - Climate Action.
http://ec.europa.eu/clima/sites/change/what_is_eu_doing/index_en. Accessed 24 February 2012.

prevention and management.¹⁵ Plans to reform the CAP give special regard to food security, the environment and climate change.¹⁶ Soon after release of the White Paper, in December 2009, a guidance document on adaptation to climate change in water management was released (discussed below in section 2.2).¹⁷ In 2010, in response to the White Paper, a Green Paper on Forest protection and information was adopted.¹⁸ Additional mainstreaming measures are currently underway as part of the White Paper's first phase.

2.2 Water

The White Paper highlighted the need for strategies to improve the EU's management of water resources within the context of climate adaptation. As noted, it was accompanied by a complimentary policy paper and impact assessment on climate change impacts to water, coasts and marine ecosystems. The paper considered measures under the WFD, Floods Directive, Communication on Water Scarcity and Droughts, Marine Strategy Framework Directive and Integrated Coastal Zone Management, while also recommending that adaptation for water be integrated into other sectoral policies, such as agriculture and energy.

The **Water Framework Directive (WFD)**¹⁹ is the EU's key water legislation. The WFD establishes a framework for management of Community waters and requires achievement of "good" water quality by 2015. River basin management plans (RBMPs) are the main tools for implementing the WFD. One particular measure singled out in the White Paper was incorporating adaptation into RBMPs under the WFD, noting that work to develop guidelines and tools was already underway. In December 2009, Water Directors of EU Member States adopted a **guidance document on incorporating climate adaptation to into RBMPs**.²⁰

Prior to the White Paper, in 2006 and 2007, the Commission carried out an assessment of water scarcity and droughts in the EU, followed by a non-legislative document and set of policy options to increase water efficiency and savings.²¹ The **2007 Communication on Water Scarcity and Droughts** identified challenges, best practices and recommendations for water pricing, water allocation, financing, drought risk management, water infrastructure and technologies, behavioural changes and improved knowledge. Based on information from the Member States and its own research, the Commission now prepares annual reports assessing implementation of the policy options.²² The 2010 report confirmed that water scarcity and drought are not limited to Mediterranean countries and that by 2050 most European regions are expected to be under medium to severe water stress – mainly due to unsustainable water use, and exacerbated by the

¹⁵ 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).

¹⁶ Commission Communication - The CAP towards 2020: meeting the food, natural resources and territorial challenges of the future {COM(2010)672 final} 18 November 2010.

¹⁷ Ecologic Institute (2011).

¹⁸ Green Paper on Forest Protection and Information in the EU: Preparing forests for climate change. SEC(2010)163 final. 2010.

¹⁹ Directive 2000/60/EC.

²⁰ Guidance document No. 24: River Basin Management in a Changing Climate, Technical Report - 2009 – 040, Common Implementation Strategy for the Water Framework Directive (2000/60/EC).

²¹ Communication from the Commission - Addressing the challenge of water scarcity and droughts in the European Union {COM(2007) 414 final} 18 July 2007.

²² Water Scarcity & Droughts in the European Union - EU Action on Water Scarcity and Drought. European Commission. http://ec.europa.eu/environment/water/quantity/eu_action.htm#2007_com. Accessed 28 February 2012.

effects of climate change.²³ The report concludes that further action is required by Member States to implement the policy options, such as adopting water efficiency legislation. In June 2010, the European Council adopted conclusions on water scarcity, drought and adaptation to climate change that recognized 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.²⁴

The **Floods Directive**, which applies to both inland and coastal waters, was published in November 2007 and establishes a framework for reducing and managing the risks floods pose to health, the environment, cultural heritage and economic activity. The Directive requires Member States to, in coordination with the WFD, carry out preliminary assessments of at-risk river basins and coastal areas by 2011, draw up flood risk maps by 2013 and establish flood risk management plans by 2015. Under the Floods Directive, Member States are required to consider the impacts of climate change and evaluate how climate change may contribute to flood events.²⁵

The Commission has undertaken a review of EU water policies in the 2012 **Blueprint to Safeguard European Waters**, assessing policies, identifying shortcomings and considering tools for addressing water vulnerability.²⁶ The Blueprint will synthesize policy recommendations based on assessments of RBMPs, implementation of water scarcity and drought measures, identified climate change vulnerabilities and anthropogenic pressures and numerous other studies. Options will focus on land management, internalisation of costs from water use and pollution, water efficiency, identifying barriers to innovation, improving knowledge and considering international policy such as the Millennium Development Goals (MDGs) and outcomes of the Rio+20 Conference. One of the building blocks for Blueprint is the so called **Fitness Check**, a review of EU freshwater policy that seeks to identify excessive burdens, overlaps, gaps, inconsistencies and obsolete measures. The Fitness Check will examine the WFD, Groundwater Directive, Directive on Environmental Quality Standards, Urban Waste Water Directive, Nitrates Directive and Floods Directive. It will also consider quantitative and adaptive water management issues by inspecting the Communication on Water Scarcity and Drought and its annual reports and also the water, coasts and marine issues paper accompanying the White Paper.

Promoting better water management externally is an important part of EU development policy. For example, the **EU Water Initiative (EUWI)**, a 2002 political initiative and joint process of the Commission, aims to assist countries in cooperative development and implementation of water and sanitation policies, in line with the MDGs. The EUWI aims to coordinate development assistance to third countries for water projects and enhance analysis, identification of priorities and delivery on both a country and regional basis. The EUWI also takes into account transboundary water management and practices. While primarily focused on the development aspects of water supply and sanitation, the Initiative's various stakeholder groups and partnerships do consider climate change within this context, and the group's internal bodies have recommended improved mainstreaming of climate change into policies, better communication to decision-makers and increased financing.²⁷ The EUWI prominently notes on its website that "the numbers of those

²³ European Commission. Third Follow up Report to the Communication on water scarcity and droughts in the European Union. COM {COM(2011) 133 final}. 21 March 2011.

²⁴ Council conclusions on water scarcity, drought and adaptation to climate change. 3021st Environment Council meeting Luxembourg, 11 June 2010.

²⁵ Directive 2007/60/EC, para 4.

²⁶ European Commission. A Blueprint to Safeguard Europe's Waters. http://ec.europa.eu/environment/water/blueprint/index_en.htm. Accessed 28 February 2012.

²⁷ EU Water Initiative 2011 Annual Report. (2011): http://euwi.net/files/2011_ANNUAL_REPORTfinal_.pdf.

forced to emigrate by drought and climate change climb every year.”²⁸ The EUWI has Regional Working Groups for Africa, the Mediterranean, Latin America and Eastern Europe Caucasus and Central Asia.

The **Strategy for Water in the Mediterranean (SWM)** was created in 2008 through the Union for the Mediterranean (UfM) (formerly the Barcelona Process or Euro-Mediterranean Partnership) with the objective of creating a political, methodological and financing framework to facilitate the implementation of regional water policy.²⁹ The SWM was financed through funds earmarked for the MED EUWI budget from the MEDA Water Programme of the European Commission, the Commission itself and Greece. Its primary goals are first, conservation of water quality and prevention of further deterioration of water resources, and second, achieving a balance between quantity of water used and quantity of water available, including mitigating and preventing the consequences of droughts and water scarcity. To achieve these goals, the Strategy focuses on four main themes: water governance; water and climate change adaptation; water demand management including non-conventional water resources; and water financing. Within the climate change objective, the Strategy aims to create a cooperative regional approach to climatic changes that promotes measures to enhance adaptive capacity and resilience and strengthen knowledge, such as, *inter alia*, research, education, behavioural changes, vulnerability assessments, scenario building, modelling, monitoring, early-warning systems and market-based instruments.³⁰ However in 2010, largely due to disagreement regarding use of the term “occupied territories” in the final draft policy, the SWM failed to meet approval and has yet to be put into action.

2.3 Development

The EU provides over 50% of development aid worldwide³¹ and through such assistance, promotes its climate change and water supply and sanitation objectives. In 2003, the Commission issued the **Communication on climate change in the context of development cooperation**³² requiring that climate change be incorporated into all aspects of EU development policy. The Communication’s four priorities are: (1) raising the political profile of climate change; (2) providing support for adaptation in developing countries; (3) supporting mitigation and sustainable development paths; and (4) developing administrative capacity in vulnerable countries. Following the Communication, the General Affairs and External Relations Council adopted its accompanying Action Plan and recommendations for concrete measures and also provided for monitoring and evaluation through a biannual report.³³

The 2005 **European Consensus on Development** identified common values, goals, principles and commitments for EU development policy and reconfirmed a commitment to addressing climate change, stating that “[a]daptation to the negative effects of climate change will be central in the

²⁸ EU Water Initiative. <http://euwi.net/about-euwi>. Accessed 27 February 2012.

²⁹ Berglund, M. and Stefes, C. (2011). European policies regarding water policy, climate change and security in the MENA. Ecologic Institute. Berlin, Germany.

³⁰ Annex 1. of the Declaration of the IV Euro-Mediterranean Ministerial Conference on Water (Barcelona, 13 April 2010). Union for the Mediterranean Strategy for Water in the Mediterranean. Final DRAFT. March 2010.

³¹ The European Consensus on Development. Development and Cooperation – EuropeAid. http://ec.europa.eu/europeaid/what/development-policies/european-consensus/index_en.htm. Accessed 28 February 2012.

³² Commission Communication - Climate Change in the Context of Development. {COM(2003) 85 final} 11 March 2003.

³³ Conclusions of the General Affairs and External Relations Council meeting of 22 November 2004, on climate change in the context of development cooperation. Action Plan 2004-2008 [Not published in the Official Journal].

Community's support to least developed countries and small island development states.”³⁴ The Consensus recognized the importance of water resources in development, referencing the EUWI and its objectives.

EuropeAid's 2009 **Guidelines on the Integration of Environment and Climate Change in Development Cooperation**³⁵ seek to further mainstream environment and climate variability into development aid through identification, formulation, implementation and evaluation of projects and funding. The Guidelines recognize the linkages between environment, climate and aspects of both traditional and human security and note that “[i]ncreasingly, environmental conditions are also linked to security and potential conflict in particular regarding access to and the management of natural resources. Climate change is already considered as a driver in the creation of ‘environmental refugees’ with the related social and political challenges.”

On 13 October 2011, the Commission released the **Agenda for Change**,³⁶ a plan for development cooperation and reform proposals for EU budget support that sets out a strategic approach to poverty reduction and more targeted allocation of funding. While the Agenda does not focus on climate change, it discusses reducing developing countries’ “exposure to global shocks such as climate change” and supporting “capacity development and technology transfer, including in climate adaptation and mitigation strategies,” emphasizing climate change as a component of priority funding and linking it to sustainable development and poverty.

The **Global Climate Change Alliance (GCCA)**, initiated through a 2007 EU Commission Communication,³⁷ seeks to enhance cooperation between Europe and vulnerable developing countries with support for both mitigation and adaptation. The GCCA includes financial agreements, regional dialogue, technical assistance, project development and capacity building activities. It includes among its priorities measures that promote adaptation, disaster risk reduction and poverty reduction together.³⁸

The EU provides additional climate-related development assistance through a number of regional cooperation programmes such as, for example, the **EUroCLIMA regional climate change cooperation programme**³⁹ between Latin America and the EU, and the **ACP-EU Water Facility**,⁴⁰ which helps to promote water management and sanitation goals in Africa, the Caribbean and the Pacific. The **Africa, Climate Change, Environment and Security (ACCES)** initiative promotes dialogue between African partners and the EU regarding the risks of climate change in Africa from a development and security perspective.⁴¹

³⁴ Joint statement by the Council and the representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission on European Union Development Policy: ‘The European Consensus’ (2006/C 46/01).

³⁵ Guidelines on the Integration of Environment and Climate Change in Development Cooperation. EuropeAid. November 2009.

³⁶ Commission Communication - Increasing the impact of EU Development Policy: an Agenda for Change. {COM(2011) 637 final}. 13 October 2011.

³⁷ Commission Communication - Building a Global Climate Change Alliance between the European Union and poor developing countries most vulnerable to climate change. {COM (2007) 540 final} 18 September 2007.

³⁸ Global Climate Change Alliance. http://www.gcca.eu/pages/1_2-Home.html. Accessed 28 February 2012.

³⁹ EUroCLIMA - Climate change regional cooperation programme. Development and Cooperation – EuropeAid. http://ec.europa.eu/europeaid/where/latin-america/regional-cooperation/euroclima/index_en.htm. Accessed 28 February 2012.

⁴⁰ ACP-EU Water Facility. Development and Cooperation – EuropeAid. http://ec.europa.eu/europeaid/where/acp/regional-cooperation/water/index_en.htm. Accessed 28 February 2012.

⁴¹ Africa and Europe in Partnership. <http://www.africa-eu-partnership.org/>. Accessed 28 February 2012.

2.4 Climate-related Security

The White Paper noted the potential security implications from failure to adapt to climate change and how tools such as early warning systems, conflict prevention mechanisms and security sector reform measures should be implemented to reduce risks, although the paper offered no specific policy options.

Security and climate change first began to intersect in EU policy in 2001 with the **Commission Communication on Conflict Prevention**,⁴² which, in the context of a broad EU role in international cooperation, looked at natural resources and environmental degradation as cross-cutting issues. Specifically, the Communication noted that the “challenging problem of climate change” could have a destabilizing effect by decreasing potential arable land, reducing income opportunities and forcing migration.

In 2003, the **European Security Strategy (ESS)** stated that global warming was likely to intensify competition for natural resources.⁴³ The Strategy did not otherwise consider climate change. It broadly addressed both national and human security threats, fostering neighbourhood security and building international order through multilateralism.⁴⁴ A **2008 ESS implementation report** reiterated climate-related security concerns – exacerbating conflict, particularly in situations of poverty and population growth, with humanitarian, health, political and security consequences, including greater migration – and noted that while conflict prevention and crisis management had been improved, the EU still needed to enhance analysis, early warning capabilities and international cooperation.⁴⁵

In June 2007, the European Council invited a joint paper between the High Representative for the Common Foreign and Security Policy, Javier Solana and the European Commissioner for External Relations, Benita Ferrero-Waldner, on the international security challenges of climate change.⁴⁶ In response, they published what is commonly known as the **Solana paper** in 2008.⁴⁷ The Solana paper concluded that climate change is a “threat multiplier.” It outlined the main risks posed by climate change and provided overarching recommendations for (1) enhancing capacities at the EU level to improve early warning systems, analysis and response to climate-induced security implications; (2) promoting EU multilateral leadership on global climate security and a post-2012 international agreement on climate change; and (3) enhancing cooperation with other countries. The Solana Paper warned that “[c]limate change impacts will fuel the politics of resentment between those most responsible for climate change and those most affected by it.” It pointed out that the EU is well-positioned to play a leadership role in conflict prevention and crisis management. The European Council welcomed the Solana paper and requested a framework for implementation.⁴⁸ In December 2008, Solana summarized these efforts in a brief strategy, **Climate**

⁴² Commission Communication on Conflict Prevention {2001 COM (2001) 211 final} 11 April 2001.

⁴³ Berglund, M. and Stefes, C. (2011). European policies regarding water policy, climate change and security in the MENA. Ecologic Institute. Berlin, Germany.

⁴⁴ A Secure Europe in a Better World. European Security Strategy. 12 December 2003.

⁴⁵ Council of the European Union. Report on the Implementation of the European Security Strategy - Providing Security in a Changing World. S407/08. http://www.eu-un.europa.eu/documents/en/081211_EU%20Security%20Strategy.pdf.

⁴⁶ European Council. Presidency Conclusions, Doc. 11177/1/07 REV 1, Para. 41. 21-22. June 2007.

⁴⁷ Paper from the High Representative and the European Commission to the European Council. Climate Change and International Security. S113/08 14 March 2008.

⁴⁸ European Council. Presidency conclusions, Doc. 7652/08, para 26. 13-14. March 2008.

Change and Security: Recommendations of the High Representative, with recommendations for detailed analysis of security implications at the regional level, integration of analyses into early warning mechanisms and increased dialogue.⁴⁹ The paper also presented threat scenarios in Africa, the Middle East and North Africa and Central Asia and steps for the EU in these regions such as enhanced dialogue and improved management of water resources.

The **European Neighbourhood Policy (ENP)** aspires to promote positive relations with EU neighbouring countries⁵⁰ and to promote prosperity, stability and security through bilateral action plans. Action plans cover reform objectives for political measures, security, trade and more over a period of three to five years. In 2010, the Commission released a **Communication on Taking stock of the European Neighbourhood Policy** that reviewed the ENP and asserted that it should be used to support partner countries in mainstreaming climate change into policies and for deepening dialogue and cooperation on the issue.⁵¹ A 2011 review, **A New Response to a Changing Neighbourhood**, called for enhancing sector cooperation for the environment in the ENP and for improving resilience to climate impacts.⁵²

In 2011, a **Joint Reflection Paper of the European External Action Service (EEAS) and Commission** was produced, discussing climate change's role as a global environmental and development challenge and as a "threat multiplier."⁵³ The Paper asserted a need to step up climate diplomacy and international action, elaborating on three strands of action for EU climate diplomacy, with the third focusing specifically on climate and international security. It recommended building on existing work, strengthening international dialogue, increasing early warning reviews of vulnerable areas, providing climate diplomacy training and engagement, improving aid effectiveness, raising the security implications of climate change in political dialogues and improving understanding of the interlinkages between climate, development, environmental degradation, natural resources, migration and conflict. Shortly thereafter, the Council adopted similar language in its **Conclusions on EU Climate Diplomacy** which recognized the need for immediate action by the EU in order to "reduce systematic risks resulting from climate change before they trigger crises."⁵⁴

2.5 Human Security

In 2003, a study group on Europe's security capabilities was convened at the request of EU Secretary-General Javier Solana. The group, led by Mary Kaldor, proposed **A Human Security Doctrine for Europe**,⁵⁵ arguing that a human security response force, comprised of troops and civilians, new legal framework, and human rights based approach are needed for the ESS;⁵⁶ a lack

⁴⁹ Climate Change and Security: Recommendations of the High Representative on follow-up to the High Representative and Commission report on Climate Change and International Security (S412/08), 18 December 2008.

⁵⁰ 16 partner countries are covered under the ENP: Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, the Republic of Moldova, Morocco, the occupied Palestinian territory, Syria, Tunisia and Ukraine.

⁵¹ Commission Communication - Taking stock of the European Neighbourhood Policy. { COM(2010) 207}. 12 May 2010.

⁵² Joint Communication by the High Representative of The Union For Foreign Affairs And Security Policy and the European Commission - A New Response to a Changing Neighbourhood: A review of European Neighbourhood Policy. 25 May 2011.

⁵³ Joint Reflection Paper of the European External Action Service and European Commission -Towards a renewed and strengthened EU climate diplomacy. 9 July 2011.

⁵⁴ Council Conclusions on EU Climate Diplomacy. 3106th Foreign Affairs Council Meeting, 18 July 2011.

⁵⁵ Kaldor, M, et al (2004): A Human Security Doctrine for Europe - The Barcelona Report of the Study Group on Europe's Security Capabilities. 15 September 2004.

⁵⁶ A Human Security Doctrine for Europe.
<http://www2.lse.ac.uk/internationalDevelopment/research/CSHS/humanSecurity/doctrineForEurope.aspx>

of food and water are mentioned as sources of insecurity, but climate change is not mentioned. The group issued a follow-up report in 2008, **A European Way of Security**,⁵⁷ further spelling out principles for a human security approach in the EU, with no references to climate, water, or environment. The **2008 ESS implementation report** explicitly referred to human security as an EU strategic goal and discussed human security concerns.⁵⁸ While human security concerns are addressed through many internal and externally focused EU policies, there is currently no comprehensive policy on human security as such.

2.6 Disaster Reduction

In February 2009, the Commission released a Communication on **Disaster Risk Reduction in Developing Countries**, proposing that greater attention be given to climate-related disasters and impacts.⁵⁹ The Communication put forth an EU strategy intended to complement existing initiatives on climate change and emphasizing disaster risk reduction (DRR) as an “essential part of successful adaptation to climate change” that had not been sufficiently integrated into DRR. It stated that the EU will, *inter alia*, “[s]upport the integration of DRR into developing countries’ development policies and planning, including relevant sectoral policies, climate change adaptation strategies and crosscutting issues” and “ensure[ing] that appropriate linkages are made with natural resources and environmental programmes,” including the GCCA and the Solana Paper. The Implementation Plan for the Strategy,⁶⁰ covering 2011 to 2014, focuses on more fully integrating climate change into development aid and targeted actions for disaster prevention, mitigation and preparedness.

A subsequent European Parliament **resolution on a Community approach on the prevention of natural and man-made disasters** in September 2010 further expanded on DRR and, *inter alia*, identified increasing problems from climate migration and refugees; called on the Commission for a proposed directive on water scarcity, drought and adaptation similar to the Floods Directive; suggested that the interlinkages between drought, forest fire, desertification and climate adaptation be considered in the context of drought risk prevention and management policy; proposed cross-border DRR cooperation; and pointed out climate impacts to food security.⁶¹

⁵⁷ Kaldor, M. et al (2007): *A European Way of Security - The Madrid Report of the Human Security Study Group comprising a Proposal and Background Report*. November 2007.

⁵⁸ Martin, M. and Owen, T (2010): “The Second Generation of Human Security: Lessons from the UN and EU Experience.” *International Affairs* 86, no. 1: 211–224, p. 216.

⁵⁹ Commission Communication - EU Strategy for Supporting Disaster Risk Reduction in Developing Countries. {COM(2009) 84 final} 23 February 2009.

⁶⁰ Commission Staff Working Document - Implementation Plan of the EU Strategy for supporting disaster risk reduction in developing countries 2011-2014. { SEC(2011) 215 final} 16 February 2011.

⁶¹ European Parliament resolution on the Commission communication: A Community approach on the prevention of natural and man-made disasters (2009/2151(INI)). 21 September 2010.

3. United Nations

The UN is an international forum with membership from the majority of the world's nations. Its various bodies and mechanisms take up a wide range of global concerns that both directly and indirectly, and separately or in conjunction, address the issues of climate change, water resources management, food security, health, disaster risk reduction and conflict.

3.1 Climate adaptation

Since the Rio Summit in 1992, the UN has devoted significant resources and finances towards addressing climate change. The pinnacle of these efforts, the **United Nations Framework Convention on Climate Change (UNFCCC)**⁶² and its **Kyoto Protocol (KP)**,⁶³ have traditionally focused on mitigation; however, attention towards adaptation has progressively grown. UNFCCC commits Parties to preparing for and facilitating climate change adaptation and helping meet countries' adaptation needs with technology transfer.⁶⁴

UNFCCC's **Bali Action Plan**, adopted at the 13th Conference of the Parties (COP 13) in December 2007, identified adaptation as a key component of climate response. At the COP 16 in Cancun in December 2010, Parties established the **Adaptation Framework**.⁶⁵ Parties affirmed that adaptation must be addressed at the same level of priority as mitigation and that adaptation action should reduce vulnerability and build resilience in developing countries. The Adaptation Framework focuses on sharing technology and information, formulating and implementing national plans, finance, capacity building, stakeholder engagement and establishing global, regional and national institutions, including an Adaptation Committee. At the COP 17 in Durban in November and December 2011, Parties advanced the Adaptation Framework by agreeing on procedures and composition of the Adaptation Committee, activities under the work programme on loss and damage and guidelines for **National Adaptation Programmes of Action (NAPAs)**.

NAPAs are policy documents through which LDCs assess and communicate vulnerabilities and adaptation needs and identify priorities. NAPAs are formulated with the support of the **LDC Fund (LDCF)** under the Global Environment Facility (GEF).

The **Nairobi work programme on impacts, vulnerability and adaptation to climate change (NWP)** under the UNFCCC's Subsidiary Body for Scientific and Technological Advice aims to assist Parties, particularly developing countries, LDCs and small island states, in improving climate impact assessment and decision-making through a structured framework for knowledge-sharing and collaboration.⁶⁶ The NWP framework is implemented by UNFCCC parties, intergovernmental and non-governmental organizations, the private sector, communities and other stakeholders. It covers methods and tools, data and observations, climate modelling, scenarios, socioeconomic

⁶² United Nations Framework Convention on Climate Change. 1771 UNTS 107; S. Treaty Doc No. 102-38; U.N. Doc. A/AC.237/18 (Part II)/Add.1; 31 ILM 849 (1992).

⁶³ Kyoto Protocol. UN Doc FCCC/CP/1997/7/Add.1, Dec. 10, 1997; 37 ILM 22 (1998).

⁶⁴ UNFCCC art.4,1, 4.4, 4.8 and 4.9.

⁶⁵ Cancun Adaptation Framework. United Nations Framework Convention on Climate Change. http://unfccc.int/adaptation/cancun_adaptation_framework/adaptation_committee/items/6053.php. Accessed 28 February 2012.

⁶⁶ Nairobi work programme on impacts, vulnerability and adaptation to climate change. United Nations Framework Convention on Climate Change. http://unfccc.int/adaptation/nairobi_work_programme/items/3633.php. Accessed 28 February 2012.

information, adaptation planning and practices, research, technologies and economic diversification, and is linked to other UNFCCC activities such as NAPAs.

The UN has devised multiple **funding schemes for financing climate change adaptation initiatives in developing countries**. The Global Environment Facility (GEF) Trust Fund is the UNFCCC's financial mechanism. In addition to providing guidance to the GEF on funding activities, UNFCCC Parties have established three special funds: the Special Climate Change Fund and LDCF, both under UNFCCC; and the Adaptation Fund, under the KP.

The GEF **Strategic Priority on Adaptation Fund (SPA)** was a pilot project mandated by UNFCCC in order for the GEF to demonstrate how adaptation funding programmes can successfully translated into action.⁶⁷ All funds were distributed by 2009 and the fund is now closed. Following the success of the SPA, the LDCF and SCCF were established directly under UNFCCC.⁶⁸ The GEF **LDCF** assists LDCs in developing and implementing NAPAs. The UN/GEF **Special Climate Change Fund (SCCF)** began approving project funding in 2006, focusing on management, education, policy and capacity building initiatives.

The KP's **Adaptation Fund** finances adaptation projects and programmes in developing countries, although small island states may be prioritised to avoid overlap with the LDCF.⁶⁹ The Adaptation Fund began disbursing funds to projects in 2010 and is financed primarily with 2% of the Certified Emission Reduction (CERs) issued for projects of the Clean Development Mechanism (CDM).

The UNFCCC's **Green Climate Fund (GCF)** is being created as a mechanism to transfer money from the developed to the developing world, to assist developing countries with both adaptation and mitigation. The GCF has the goal of raising \$100 billion a year by 2020.

Similar to the EU's forthcoming Adaptation Clearinghouse, the **Adaptation Learning Mechanism (ALM)** was launched by the UN Development Programme (UNDP), in partnership with UNFCCC, the United Nations Environment Programme (UNEP), the World Bank, the UN Food and Agriculture Organization (FAO) and others, to share adaptation information and knowledge with stakeholders.⁷⁰ The ALM focuses on best practices, capacity building and integration of climate risks and adaptation into development policies.

While focused on sustainable development, and not climate change, the **"zero draft" for the upcoming Rio+20 Conference**, discusses priorities for food security and water independently, and for climate change, where it encourages "international initiatives and partnerships to address the interrelationship among water, energy, food and climate change."⁷¹

3.2 Water

The **United Nations Economic Commission for Europe's (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes** addresses

⁶⁷ McGlynn, E. and Viduarre, R. (2011): UN Funding Schemes Relevant to Climate Adaptation. Analysis of UN level policies relevant to Climate Change, Water and Security. Ecologic Institute. Berlin, Germany.

⁶⁸ United Nations Development Programme (2011): Adapting to Climate Change: UNDP-GEF Initiatives Financed by the Least Developed Countries Fund, Special Climate Change Fund and Strategic Priority on Adaptation. New York, United States. p. 4.

⁶⁹ Adaptation Fund. <http://www.adaptation-fund.org/about>. Accessed 28 February 2012.

⁷⁰ Adaptation Learning Mechanism. <http://www.adaptationlearning.net/about>. Accessed 28 February 2012.

⁷¹ Bureau of the United Nations Conference on Sustainable Development (2012): The Future We Want. p.14.

transboundary water uses, pollution and cooperative management.⁷² In 2009, the Convention developed **Guidance on Water and Adaptation to Climate Change**.⁷³ The Guidance is intended provide direction on the implementation of the Convention's and Protocol on Water and Health's⁷⁴ provisions in the context of climate change. It devotes special attention to transboundary issues and health aspects. The Guidance was in part motivated by the EU's 2009 White Paper and guidance document for RBMPs and climate change. In 2010, the Convention began a programme of pilot projects on climate change adaptation in transboundary basis, seeking to support countries, especially those in economic transition, with development of adaptation strategies, best practices and assistance in implementation of the Convention, WFD and Guidelines.⁷⁵

The **GEF's Focal Area on International Waters (GEF – IW)** has existed since GEF's founding in 1991. Its main objective is to fund initiatives that will improve collaborative management of and reduce stress on transboundary water systems, with the aim of preventing conflicts, supporting sustainable resource use, reducing cross-border tensions stemming from water issues and improving allocation. The Focal Area's objectives for GEF's 2010-2014 phase of funding explicitly address climate variability and change. One goal is to "catalyze multi-state cooperation to balance conflicting water uses in transboundary surface and groundwater basins while considering climatic variability and change."⁷⁶ Two more of the four objectives for the 2010-2014 period are to support capacity building, education and research for joint management of transboundary waters cooperation and to support for rebuilding marine fisheries and reducing coastal and marine pollution in the context of climatic variability.

UN-Water seeks to strengthen coordination and coherence among UN entities dealing with freshwater and sanitation. The UN-Water Task Force on Water and Climate Change was established to offer an opportunity to better link climate change and water within the UN system and in January 2010, the Task Force was transformed into the **Water and Climate Change Thematic Priority Area (WCC-TPA)**.⁷⁷ The core objective of the WCC-TPA is to strengthen UN system coordination on the water-climate nexus and improve assessment of impacts. Also, some programmes under the UN-Water Decade Programme on Capacity Development (UNW-DPC) address climate change impacts and disaster risk reduction, human security and conflict resolution.⁷⁸

3.3 Development

The focal point of the UN's development objectives are the **Millennium Development Goals (MDGs)**, adopted in 2000. The MDGs are comprised of eight broad objectives to be achieved by 2015, with 21 targets and accompanying indicators for poverty reduction and international

⁷² United Nations Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes. 1936 UNTS 269; 31 ILM 1312 (1992).

⁷³ Guidance on Water and Adaptation to Climate Change. Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes. ECE/MP.WAT/30. 2009.

⁷⁴ United Nations Economic Commission for Europe Protocol on Water and Health. UN Doc. MP.WAT/AC.1/1999/1.

⁷⁵ Transboundary pilot projects on climate change adaptation. Convention on the Protection and Use of Transboundary Watercourses and International Lakes.
<http://www1.unece.org/ehlm/platform/display/ClimateChange/Welcomed;jsessionid=F750A8538407C443E00A31DD04FAFB06>. Accessed 28 February 2012.

⁷⁶ GEF International Waters Strategy. http://www.thegef.org/gef/IW_GEF5_strategy. Accessed 28 February 2012.

⁷⁷ UN-Water Activities – Thematic Priority Area on Water and Climate Change. <http://www.unwater.org/TFclimate.html>. Accessed 28 February 2012.

⁷⁸ UNW-DPC Activity Database. <http://www.unwater.unu.edu/activities>. Accessed 28 February 2012.

development. While all of the MDGs are relevant to human security, of greatest import in the CLICO context are the goals of eradicating poverty and hunger, promoting safe drinking water supplies and sanitation and reversing loss of environmental resources. The MDGs guide numerous other programmes and initiatives both within and outside of UN system. Progress towards achieving the MDGs is generally slow, however.

UNDP takes climate change into account while promoting its development goals by developing resilience and supporting the integration of climate change risks into national planning and poverty reduction efforts.⁷⁹ **UNDP's adaptation programme** supports 75 countries through guidance, support and funding measures. **UNDP's Adaptation Policy Framework**, a comprehensive guidebook developed by UNDP on behalf of the GEF, provides information, resources and methodology for adaptation strategies to ensure human development in the face of climate change. UNDP also offers a **toolkit for practitioners on Designing Climate Change Adaptation Initiatives**, which includes water and food security as variables to weigh.⁸⁰

UNDP and UNEP's joint Poverty-Environment Initiative (PEI) was created in 2005 to help countries integrate the nexus between poverty and the environment into national and sub-national development plans and policies with technical assistance, funding and capacity building.⁸¹ The PEI has supported increasing demand from countries for assistance in mainstreaming adaptation into national development planning within the poverty-environment context, such as with NAPAs.⁸²

UNDP and UNEP's joint **Climate Change Adaptation and Development Initiative (CCDARE)** provide technical and financial support to Sub-Saharan Africa and small island developing states for flexible and targeted actions that integrate climate change adaptation into national development frameworks, focusing on country activities, regional training courses and national and regional workshops.⁸³

The FAO's programme on climate change targets food security through both regional and national projects and **FAO-Adapt**, an organization-wide framework programme that guides FAO's adaptation activities.⁸⁴ FAO's Interdepartmental Working Group on Climate Change, established in 1988, and its subgroup on adaptation help facilitate implementation, along with technical units at FAO headquarters.⁸⁵

The **World Food Programme (WFP)** builds community livelihood practices, supports development of national social protection programmes and safety net mechanisms for immediate food needs, helps prepare for emergencies through DRR and development of national risk

⁷⁹ Environment and Energy – Adaptation to Climate Change. United Nations Development Fund. <http://www.undp.org/climatechange/adapt/>. Accessed 28 February 2012.

⁸⁰ United Nations Development Fund Bureau for Development Policy (2010): Designing Climate Change Adaptation Initiatives - UNDP Toolkit for Practitioners.

⁸¹ UNDP – UNEP Poverty Environment Initiative. <http://www.unpei.depiweb.org/who-we-are/pe-initiative.html>. Accessed 28 February 2012.

⁸² UNDP-UNEP Poverty-Environment Initiative (2010): Mainstreaming Adaptation to Climate Change into Development Planning: A Guidance Note for Practitioners.

⁸³ CC DARE: Climate Change Adaptation and Development Initiative. <http://www.ccdare.org/CCDAREStructure/tabid/6775/Default.aspx>. Accessed 28 February 2012.

⁸⁴ Climate Change. Food and Agriculture Organization of the United Nations. <http://www.fao.org/climatechange/fao-adapt/en/->. Accessed 28 February 2012.

⁸⁵ FAO's Work in Climate Change. <http://www.fao.org/climatechange/49359/enZ>. Accessed 28 February 2012.

management frameworks and assists governments in emergency responses to climate-related hunger crises and disasters.

The World Health Organization (WHO) was requested by UNFCCC Parties at the 61st World Health Assembly in 2008 to develop and implement a **WHO work plan to support member states in protecting human health from climate change**.⁸⁶ This work plan, approved in 2009, supports health systems, particularly in developing countries and small island states, by enhancing capacity for assessing and monitoring health vulnerability, risks and impacts due to climate change. In 2010, WHO and UNDP launched the first global project on public health adaptation to climate change, part of a series of pilot projects aiming to “increase adaptive capacity of national health system institutions, including field practitioners, to respond to climate-sensitive health risks.”⁸⁷

The International Fund for Agricultural Development (IFAD) builds resilience to climate change for the poor by working with developing countries, rural peoples’ organizations, NGOs, the private sector and other UN agencies and multilateral financial institutions to design programmes and projects for agriculture. **IFAD’s climate change strategy from 2010** focuses on impacts at the country level, targeted at smallholder farmers and seeking to enhance dialogue.

3.4 Climate-related Security

In April 2007, the security implications of climate change were discussed for the first time at the UN **Security Council**. The United Kingdom initiated the one-day debate which drew support from some governments, but others, particularly developing countries, disputed the Council’s mandate to address climate change, maintaining that the issue should be properly handled under the UNFCCC and KP.⁸⁸

In 2009, the UN General Assembly adopted a draft resolution on **Climate change and its possible security implications (A/63/281)**. The resolution encouraged other UN bodies to “strengthen their efforts to combat climate change and to avoid intensifying potential security risks” by addressing the threats of climate change within their respective mandates. It further requested that the UN Secretary General submit a report on the security implications of climate change. The **Secretary General’s report** identified climate change as a “threat multiplier,” and identified five ways in which climate change may impact security: (1) increasing vulnerability from impacts to food security and human health and exposure to extreme events; (2) undermining stability by slowing or reversing development; (3) increasing likelihood of domestic conflict due to migration and resource depletion, with international ramifications; (4) implications for sovereignty, rights and security from disappearing territory and potential statelessness; and (5) through international conflict stemming from impacts to shared international resources.⁸⁹

The **UN Security Council** again addressed climate change in July 2011, this time led by Germany as Council president.⁹⁰ The initiative was supported by Western powers and small island states, while

⁸⁶ Climate Change and Human Health. http://www.who.int/globalchange/health_policy/. Accessed 28 February 2012.

⁸⁷ Climate Change Adaptation to Protect Human Health. <http://www.who.int/globalchange/projects/adaptation/en/index.html>. Accessed 28 February 2012.

⁸⁸ Security Council, 5663rd Meeting (2007): Security Council Holds First-Ever Debate On Impact Of Climate Change: On Peace, Security, Hearing. Department of Public Information, News and Media Division, New York, United States. Available online at: <http://www.un.org/News/Press/docs/2007/sc9000.doc.htm>.

⁸⁹ Report of the Secretary-General (2009). Follow-up to the outcome of the Millennium Summit Climate change and its possible security implications. (A/64/350 11). September 2009.

⁹⁰ MacFarquhar, N. (2011): *UN Deadlock on Addressing Climate Shift*. New York Times. 20 July 2011. Available at: <http://www.nytimes.com/2011/07/21/world/21nations.html> U.N. Deadlock on Addressing Climate Shift.

most developing countries repeated their rejection of the topic's place on the Security Council agenda. The prospect of UN peacekeeping troops for climate change peacekeeping was raised in the debate.⁹¹

The **Environment and Security Initiative (ENVSEC)** is a partnership between the Organisation for Security and Co-operation in Europe (OSCE), UNDP, UNEP, the North Atlantic Treaty Association (NATO), the Regional Environmental Centre for Central and Eastern Europe (REC) and UNECE. ENVSEC's objective is to reduce the likelihood that environmental changes will increase threats to human security.⁹² Its specific goals are to identify environment and conflict hotspots, raise awareness, build capacities and support action for security-relevant environmental problems. The joint initiative developed out of a shared understanding between the founding partners (OSCE, UNDP and UNEP) that environmental degradation and natural resource scarcity could potentially lead to conflict and exacerbate human insecurity and that increased conflict itself can then lead to greater resource scarcity. The concept was to combine participants' diverse areas of expertise to achieve an integrated approach to the nexus between environmental problems and human security. ENVSEC projects cover risk information and analysis, cooperation and dialogue enhancement, information exchange in transboundary regions, modelling, vulnerability assessments, creation of networks between stakeholders, coordination of adaptation actions, risk monitoring, analysis of conflicts and the environmental implications of security issues and policies, raising awareness and strengthening institutions and participatory mechanisms.

The United Nations Educational, Scientific and Cultural Organization's (UNESCO) International Hydrological Programme (IHP) is an intergovernmental programme devoted to water research, water resources management and education. The **IHP's Potential Conflict to Cooperation Potential (PCCP) programme** facilitates research, capacity-building and multi-level and interdisciplinary dialogues to help achieve peace and cooperation in development and management of transboundary waters.⁹³ The PCCP covers research and capacity building activities that promote joint management and cooperation between stakeholders.

The United Nations **Interagency Framework Team for Preventive Action** is an internal UN support mechanism that assists country-level operations with development of conflict prevention strategies and is supported by a variety of UN departments and programmes, including UNDP, UNEP, the UN Department of Political Affairs, HABITAT and also the EU. The Team has produced a series of Guidance Notes and tools and training manuals, including one training manual that considers environmental scarcity, conflict and climate-related water scarcity.⁹⁴

The **Peacebuilding Commission (PBC)** is an intergovernmental advisory board created in 2006 to strengthen the work of the United Nations in peacebuilding and assist states in the transition from the immediate post-conflict phase to a longer-term reconstruction and development. The PBC's work focuses on peacebuilding priorities that include environmental management and adaptation to climate change, however, inclusion of environmental considerations in the PBCs work is still in its infancy.⁹⁵

⁹¹ Goldenberg, S. (2011): *UN security council to consider climate change peacekeeping*. The Guardian. 20 July 2011. Available at: <http://www.guardian.co.uk/environment/2011/jul/20/un-climate-change-peacekeeping>.

⁹² Timeus, K. (2011): *The Environment and Security Initiative (ENVSEC). Analysis of UN level policies relevant to Climate Change, Water and Security*. Ecologic Institute. Berlin, Germany.

⁹³ About PCCP. <http://webworld.unesco.org/water/wwap/pccp/>.

⁹⁴ The United Nations Interagency Framework Team for Preventive Action (2010) *Environmental Scarcity and Conflict – Guidance Note for Practitioners*.

⁹⁵ McGlade, K. (2011): *United Nations Peacebuilding. Analysis of UN level policies relevant to Climate Change, Water and Security*. Ecologic Institute. Berlin, Germany.

UNEP's Disasters and Conflicts sub-programme provides post-crisis environmental assessments and recovery, environmental cooperation for peace building and disaster risk reduction.⁹⁶ The programme works to understand and reduce the impacts of environmental degradation from disasters and conflicts on health, livelihoods and security and emphasizes the role of resource management in reducing the risk of conflict. The Disasters and Conflicts sub-programme is delivered through several key actors and partners, including the Joint UNEP/OCHA Environment Unit, ENVSEC and the APELL (Awareness and Preparedness from Emergencies on a Local Level) Programme.

3.5 Human Security

The **United Nations Trust Fund for Human Security (UNTFHS)** was created in 1999 to direct funding towards developmental concerns covering health, education, agriculture and small-scale infrastructure development. The UNTFHS is managed by the **Office for the Coordination of Humanitarian Affairs (OCHA)'s Human Security Unit (HSU)**.⁹⁷ The overall objective of the HSU is to place human security – broadly defined as protecting fundamental freedoms – in the mainstream of UN activities. Activities focus on outreach to stakeholders, project funding and raising awareness of human security. The definition of human security used by the HSU is broad, but does include environmental systems and response to natural disasters, food security and health; however, there is little mention of climate and water specifically.

The **UN General Assembly** held informal thematic debates on human security in 2008 and 2010, and the Secretary-General has issued reports on the concept.⁹⁸ In July 2010, following debate considering Secretary-General Ban Ki-moon's report on human security⁹⁹, the General Assembly adopted by a resolution, taking note of ongoing efforts to define the concept and deciding to continue its consideration of human security.¹⁰⁰

The **International Organization for Migration (IOM)** considers how climate change may serve as a driver for accelerated global migration.¹⁰¹ The IOM works to reduce vulnerability of populations exposed to environmental risk factors, to assist populations migrating due to climate and environmental causes, to facilitate migration as an adaptation strategy where it does occur and to build governmental capacities. IOM offers a platform for dialogue, guidance on policies and practices and research.

3.6 Disaster reduction

⁹⁶ Disasters and Conflicts. United Nations Environment Programme. <http://www.unep.org/disastersandconflicts/>. Accessed 28 February 2012.

⁹⁷ Human Security Unit –United Nations Trust Fund for Human Security. <http://ochaonline.un.org/HumanSecurityUnit/tabid/2212/language/en-US/Default.aspx>. Accessed 29 February 2012.

⁹⁸ Report of the Secretary-General (2012): Follow-up to General Assembly resolution 64/291 on human security. (A/66/763). April 2012; Informal Thematic Debate on Human Security. <http://www.un.org/en/ga/president/65/initiatives/HumanSecurity.html>.

⁹⁹ Report of the Secretary General (2010): Human security. (A/64/701). March 2010.

¹⁰⁰ Resolution adopted by the General Assembly (A/RES/64/291. Follow-up to paragraph 143 on human security of the 2005 World Summit Outcome. Sixty-fourth session. Agenda items 48 and 114. July 2010.

¹⁰¹ International Organization for Migration. Migration, Climate Change and the Environment <http://www.iom.int/jahia/Jahia/activities/by-theme/migration-climate-change-and-environment>. Accessed 28 February 2012.

The UN International Strategy for Disaster Reduction (ISDR) assists governments in reducing vulnerabilities and disaster risks due to climate change.¹⁰² **ISDR's International Human Dimensions Programme on Global Environmental Change (IHDP) Working Group** was created in 2004 to share information between climate change and disaster risk reduction communities. It provides recommendations for actions addressing climate-related disaster risks and tools and methods for climate change adaptation.¹⁰³ The **Partnership on Environment for Disaster Risk Reduction (PEDRR)**, an international network and platform of ISDR, promotes an integrated approach to disaster risk reduction, climate adaptation, ecosystem management and livelihoods with technical and scientific expertise and best practices.¹⁰⁴

The **Hyogo Framework for Action Plan (2005-2015)** was adopted by 168 countries in 2005 at the Second World Conference on Disaster Reduction, following a call for action from the UN General Assembly.¹⁰⁵ The ten-year Framework includes actions to help countries prevent and prepare for climate disasters. Priority measures for reducing underlying risk factors cover climate change, which is addressed in both sector development planning and post-disaster situations.¹⁰⁶

The **World Meteorological Organization (WMO)'s Disaster Risk Reduction (DRR) Programme** performs research on climate interactions and water resources distribution and develops early warning systems for climate hazards, with a particular focus on developing countries.¹⁰⁷ The DRR Programme was established in 2003 to strengthen and integrate disaster risk reduction processes related to meteorological, hydrological and climate hazards into WMO operational and research networks. The Hyogo Framework for Action Plan directs WMO's strategic goals in DRR, including the goal of developing of early warning systems for water and climate-related hazards.

An inter-agency **Working Group on Climate Change and Disaster Risk Reduction** was established in 2004, to share information between communities working on DRR and climate change. The Working Group is co-chaired by UNDP and WMO and receives support from ISDR. The Group has provided recommendations for UNFCCC and information on DRR tools and practices.

UNEP's Division of Early Warning and Assessment (DEWA) primarily focuses on identifying emerging environmental threats and vulnerabilities, including climatic variation.¹⁰⁸ **UNEP's Disaster Risk Reduction sub-programme** has work programmes covering integration of climate factors into disaster risk assessment. For example, the Risk and Vulnerability Assessment Methodology Development Project (RiVAMP) aims to assist government decision-makers in considering climate change impacts in risk evaluation.¹⁰⁹

¹⁰² Climate Change. United Nations International Strategy for Disaster Reduction. <http://www.unisdr.org/eng/risk-reduction/climate-change/climate-change.html>. Accessed 28 February 2012.

¹⁰³ International Human Dimensions Programme on Global Environmental Change. <http://www.ihdp.unu.edu/article/read/about-ihdp>. Accessed 28 February 2012.

¹⁰⁴ PEDRR-Partnership for Environment and Disaster Risk Reduction. <http://www.pedrr.net/>. Accessed 28 February 2012.

¹⁰⁵ Resolution adopted by the General Assembly [on the report of the Second Committee (A/58/484/Add.5)] 58/214. International Strategy for Disaster Reduction. Fifty-eighth session. Agenda item 94 (e). 27 February 2004.

¹⁰⁶ Hyogo Framework for Action (HFA). <http://www.unisdr.org/we/coordinate/hfa>. Accessed 28 February 2012.

¹⁰⁷ WMO Disaster Risk Reduction Programme. http://www.wmo.int/pages/prog/drr/index_en.html. Accessed 28 February 2012.

¹⁰⁸ DEWA: Division of Early Warning and Assessment. United Nations Environment Programme. <http://www.unep.org/dewa/EarlyWarning/tabid/4435/Default.aspx>. Accessed 28 February 2012.

¹⁰⁹ Disasters and Conflicts – RiVamp: Integrating Ecosystem and Climate Change Factors in Disaster Risk Assessments. <http://www.unep.org/disastersandconflicts/Introduction/DisasterRiskReduction/RiVamp/tabid/55004/Default.aspx>. Accessed 28 February 2012.

4. Discussion

The **2009 White Paper on Adaptation** is the preeminent driver for EU adaptation policy. The White Paper is guiding mainstreaming of adaptation measures into sectoral policies and the development of a comprehensive adaptation framework. Although the WFD is the EU's central water policy, it focuses primarily on water *quality* levels rather than quantity, leaving less room to consider climate-related water scarcity. Quantitative aspects are largely linked to the **Water Scarcity and Droughts policy** or the **Floods Directive**. However, in 2009, **Guidance on River Basin Management in a Changing Climate** was adopted, requiring that future RBMPs, under the **WFD**, incorporate climate adaptation into planning, thus moving towards further integration of adaptation as a focal point of EU water policy. The RBMP Guidance will not apply until the second and third RBMPs, but there may be opportunity for earlier assimilation of the climate-water nexus into the EU water framework as the result of ongoing policy reviews under the **Blueprint to Safeguard European Waters** and **Fitness Check**.

These developments are primarily internal, but the climate, water and human security nexus is taken up externally with EU development policy. The EU formally commits to integrating climate change impacts into all of its development policies through the **Communication on climate change in the context of development cooperation** and **Action Plan**, the **European Consensus on Development** and the 2009 **Guidelines on the Integration of Environment and Climate Change in Development Cooperation**. The **GCCA** and numerous regional and country-based policies provide support to developing countries and enhance cooperation for adaptation and water management. The **EUWI** assists developing countries with water and sanitation policies and promotes cooperative approaches, while considering climate impacts.

The connection between climate and security in EU policy commenced with the **Communication on Conflict Prevention** and took considerable steps forward with the 2008 **Solana paper** and **Climate Change and Security: Recommendations of the High Representative**, which stressed climate change's role as a "threat multiplier" and provided recommendations for EU action to reduce risks. More recently, the "threat multiplier" language was restated in the July 2011 **Joint Reflection Paper and Council Conclusions on Climate Diplomacy**, which called for further EU focus on climate and international security. At the discursive level of EU policy-making, the debate on climate change as a security issue is thus gaining momentum.

The **Strategy for Water in the Mediterranean** offers a comprehensive and promising framework for regional cooperation on water, human security and climate, but remains tied up in politically-based disputes.

Altogether, at the EU level, there is a visible progression from a mitigation-centric climate policy to increased focus on adaptation and integration of climate change into other sectoral policies. Climate change impacts are also increasingly seen as an aspect of EU security policy. The connection between climate change and water scarcity has been articulated, but is still being incorporated into measures within the EU. Working externally, there are numerous EU development aid programmes and initiatives that support cooperation and measures to address the climate-water nexus. Human security issues are addressed through numerous internal and external measures, although the concept is not yet integrated into policy.

More relevant actors and initiatives can be found at the UN level, which is unsurprising given the scope of the organization and its mandate. However, many of these policies and programmes appear to be more fragmented or perhaps simply have less visible directives and operations.

Nevertheless, many UN policies lead international efforts and guide national policies on climate and development. The UN has tried to take up climate change as parts of its security agenda, spurred largely by European states, yet lower profile programmes have done an excellent job of taking up the human security and resources nexus.

Adaptation policy is dominated by the **UNFCCC, KP and affiliate programmes and funding mechanisms**. Other UN organizations assist in implementation of UNFCCC and KP measures, such as **NAPAs**, financed by GEF's **LDC Fund**, or **Adaptation Fund** projects. Noticeably, climate change considerations have been mainstreamed into the work of many organisations and programmes within the UN system.

Water, by contrast, is not an issue which is tackled predominantly by one UN instrument or institution. Intersecting water and climate change matters within the UN are coordinated by the **UN Water and Climate Change Thematic Priority Area**. Water, climate, human security and cooperation together are all addressed in the **GEF Focal Area on International Waters** and the **UNECE Convention and Guidance on Water and Adaptation to Climate Change**, both of which promote collaborative management of transboundary waters, while the GEF Focal Area puts greater emphasis on conflict reduction.

UN development policy is guided by the **MDGs**. The MDGs address water resources in the context of human security, although not necessarily climate change. Beyond the MDGs, the UN houses countless programmes covering poverty, health, food security and economic development. A sampling of those of most relevance to the CLICO nexus include UNDP's adaptation programme and Policy Framework, the UNDP-UNEP joint PEI and the WHO work plan on human health and climate change.

The UN Security Council has failed to make progress in adding climate change to its agenda, however in **2009, the UN General Assembly and Secretary-General** did speak to the issue. More successful in the security realm, although addressing environment and resources broadly, **ENVSEC** hones in on the linkages between environment, conflict and human security. UNESCO's **PCCP programme** also works directly with the nexus between water resources and conflict and UNEP's **Disasters and Conflicts sub-programme** considers post-conflict environmental connections, although this has yet to be applied in the context of climate.

The UN's **Human Security Unit** and its **Trust Fund for Human Security** are some of the only programmes specifically addressing "human security" and promoting the concept. However, while environmental considerations do fall within this understanding of human security, there is yet little evidence of explicit focus on climate and water-related vulnerabilities.

The UN system has a number of initiatives addressing DRR implications in the context of climate change, including the **Hyogo Framework for Action Plan (2005-2015)**, **ISDR IHDP Working Group** and the **PEDRR**. The **WMO Disaster Risk Reduction Programme** is largely involved in research examining climate and water risks, but also develops early warning systems as tools, as does **UNEP's Division of Early Warnings and Assessments and Disaster Risk Reduction sub-programme**.

The increasing number of policies and programmes addressing climate, water, human security and conflict at the international level focus is representative of a growing awareness on these matters in the EU and globally. Initiatives that address more than one, or even two, of these areas in a comprehensive fashion are still less common, however there is rising integration of the nexus into sectoral policies. Also, while human security concerns such as food security, health and economic and political stability are regularly taken up, it is less common that the term "human security" is

directly referred to in policies or that multiple aspects of human security are taken into consideration.

At a time when policies are still being shaped, and actors may struggle to integrate different policy considerations within governance systems that are both fragmented at a macro-level and structured more or less hierarchically and along issue areas internally, research such as that conducted by CLICO can provide important lessons on which political solutions work under and offer viable avenues, and which should rather be avoided.

Table 4.1. EU Policies and Thematic Areas

		Climate	Water	Human Security	Conflict/ Cooperation	Status
Climate Adaptation	<i>2007 Green Paper</i>	X	X	X	X	Followed by 2009 White Paper on Adaptation
	<i>2009 White Paper</i>	X	X	X	X	First phase of implementation (2009-2012): mainstreaming, framework, and Clearinghouse
Water	<i>2009 Guidance on River Basin Management in a Changing Climate</i>	X	X		X	To be incorporated in the 2nd and 3rd RBMP cycles
	<i>2007 Communication on Water Scarcity and Droughts</i>	X	X			Annual reports are prepared; Member State action urged by 2010 report and Council of Ministers Conclusions
	<i>Floods Directive</i>	X	X	X		Member States required to consider climate impacts
	<i>EU Water Initiative</i>	X	X	X	X	Assists developing countries with water and sanitation goals, promotes cooperative management
	<i>Strategy for Water in the Mediterranean</i>	X	X	X	X	Approval blocked due to political considerations
Development	<i>2005 European Consensus on Development</i>	X	X	X	X	Reconfirmed commitment to addressing climate change in EU development policy
	<i>2009 Guidelines on Integration of Environment and Climate Change in Development Cooperation</i>	X		X	X	Further mainstreaming of environment and climate into development aid; links between climate and security
	<i>Global Climate Change Alliance</i>	X		X		EU support for developing countries' climate needs, including disaster risk and poverty reduction
Climate-related Security	<i>European Security Strategy</i>	X		X	X	Considers traditional and human security implications of climate change
	<i>2008 Solana paper and Recommendations of the High Representative</i>	X	X	X	X	Outlined climate threats to security and recommendations
	<i>European Neighbourhood Policy</i>	X			X	Bilateral action plans with neighbouring countries; calls for further inclusion of climate adaptation
	<i>2011 Joint Reflection Paper and Council Conclusions on Climate Diplomacy</i>	X		X	X	Declared need for stepped up international action on climate, with focus area on climate security
Disaster Reduction	<i>2009 Communication on Disaster Risk Reduction in Developing Countries</i>	X		X		DRR strategy for developing countries proposing greater integration of climate adaptation
	<i>2010 Resolution on Community approach on prevention of natural and man-made disasters</i>	X	X	X	X	Resolution considering DRR and climate impacts

Table 4.2. UN Policies and Thematic Areas

		Climate	Water	Human Security	Conflict/ Cooperation	Status
Climate Adaptation	<i>UNFCCC: Adaptation Framework, NWP, NAPAs and LDCF</i>	X		X		Frameworks for adaptation action under UNFCCC and country-level adaptation plans and funding
	<i>KP: Adaptation Fund</i>	X		X		Finance for adaptation projects in developing countries
Water	<i>UNECE Convention 2009 Guidance on Water and Adaptation to Climate Change</i>	X	X	X	X	Guidelines for consideration of climate adaptation in transboundary water management
	<i>GEF Focal Area on International Waters</i>	X	X	X	X	Projects promote transboundary water cooperation and reduce tensions
	<i>UN Water Water and Climate Change Thematic Priority Area</i>	X	X			Coordination of UN water and climate activities
Development	<i>Millenium Development Goals</i>		X	X		Principal UN and global development goals and targets for 2015
	<i>UNDP Adaption Program and Policy Framework</i>	X		X		Guidance, support and funding for adaption measures
	<i>Poverty-Environment Initiative</i>	X		X		UNDP-UNEP initiative, mainstreams environment and adaptation into development planning
Climate-related Security	<i>2009 Draft resolution on Climate change and its possible security implications and Secretary-General Report</i>	X		X	X	Identified climate change as a "threat multiplier" and security implications; encouraged UN bodies to consider
	<i>ENVSEC</i>	X	X	X	X	Joint initiative to reduce environment-related threats
	<i>IHP PCCP Programme</i>		X		X	Facilitates cooperative dialogue and management of transboundary waters
	<i>UNEP Disasters and Conflicts sub-programme</i>			X	X	Post-crisis environmental peacebuilding measures.
Human Security	<i>Human Security Unit and UNTFHS</i>	X		X		Promotion of human security framework and projects
Disaster Reduction	<i>ISDR IHDP Working Group and PEDRR</i>	X	X	X		Addresses climate-related disaster risks, tools and methods
	<i>Hyogo Framework for Action Plan</i>	X	X	X		International framework for DRR measures from 2005-2015

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