



## Editorial

The aim of EUROCLIMA is to help improve the knowledge of Latin American decision-makers and scientists regarding the impact of climate change in the region, and so facilitate integration of the issue within sustainable development strategies. The focal points of the programme in the 18 beneficiary countries play a fundamental role in guaranteeing synergies and promoting the application of results in decision-making. EuropeAid is responsible for the administration of EUROCLIMA, implemented by ECLAC (socio-economic aspects), JRC (biophysical issues) and Technical Assistance.

This Newsletter is the second which the programme has issued for those with an interest in problems of Climate Change in Latin America, in this case with particular emphasis on Water Resources. The relationship between water and climate change must be approached from a holistic perspective not only regarding the effects of one on the other, but also in terms of the political response to integrated water resources management within a context of fairness and sustainable development.

Information on the current state of the management of water resources in Latin America and other regions of the world is presented, along with projects by regional organisations and international cooperation that integrate water management planning policies with regard to issues such as food security, river basin management and others. With the aim of assisting in the dissemination of information about projects and organisations, a section has been included featuring resources and documents related to the issue of water and climate change, for virtual consultation. We trust that the information offered in this newsletter will prove useful and will inspire you to continue exploring the issues associated with climate change.

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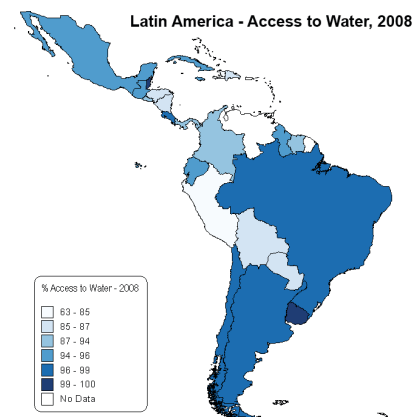
## Water Resources in Latin America

The region of Latin America represents one of the most significant sources of renewable water in the world, accounting for some 30% of the global total. The spatial distribution of water resources, however, varies considerably across the continent. This may be illustrated, for example, by the fact that the basins of the Gulf of Mexico, the South Atlantic and the River Plate cover some 25% of Latin America's territory and are home to more than 40% of the population, but contain just 10% of water resources (World Water Council - 2000). Another equally significant aspect to be taken into consideration is the fact that this region has the second-highest number of cross-border basins in the world: 69 out of a total of 279 (25%). The overall figures for the sector reveal that practically 20% of Latin America's population (115 million people) live and depend on water simultaneously managed by different countries in the region.

Given that water is the most valuable and essential resource for global social and human development (influencing such vital sectors as health, food security, hydropower, industry and agriculture, the sustainability of terrestrial and aquatic ecosystems, and of hydrobiological resources), it is easy to see why the considerable disparity in regional distribution, the need for cross-border management and the variability brought about by Climate Change mean that for Latin America water is one of the key strategic and political elements for stability and sound governance in the region.

In response to these and other needs, the European Union Water Initiative (EUWI) was proposed by the European Union at the World Summit on Sustainable Development in Johannesburg in 2002. It was born out of the need for balanced development of the water sector and for stronger governance in the member states of the European Union. Its key aim is to contribute to the achievement of the Millennium Development Goals (MDG). The role of the EUWI is thus to serve as an instrument for political dialogue supported by the Member States and the European Commission, with its operational structure promoting integrated and multidisciplinary water resource management.

The European Commission, through its Directorate General for Development and Cooperation - EuropeAid (DG DEVCO) and its Directorate General Joint Research Centre (JRC), in close partnership with the governments of Latin American



countries, is to this end implementing the RALCEA (Latin American Network of Knowledge Centres in the Water Sector) and EUROCLIMA-Water programmes with national and regional institutions.

The common aim of the two programmes is to strengthen bi-regional collaboration and promote the development of capabilities and scientific and technical cooperation at research institutions in the water sector (EUROCLIMA-Water) so as to improve the efficiency of support for national and regional decision-makers (RALCEA). As a result, within the context of these programmes three priority thematic areas of study have been identified: The mapping of actors involved in Integrated Water Resources Management (IWRM), the Regional Water Balance, and Water Quality and Sanitation.

As a supplementary contribution, the European Commission also provides participants with an open access Internet tool (AquaKnow) which allows for the straightforward sharing of research results through publications and lessons learnt from experience, in order to facilitate dialogue among experts in the sector.

This newsletter dedicated to "Water and Climate Change" will address a number of the actions being implemented by the European Commission in order to underpin the capabilities of regional and local actors in water management and sustainable development.

Dr. César Carmona-Moreno

European Commission's Joint Research Centre - JRC



### RECENT EVENTS

16 to 18 November 2011

#### Bonn2011 Nexus Conference: Water, Energy and Food Security

<http://www.water-energy-food.org/en/conference.html>

During the conference some 500 participants analyzed the synergies, compensations and links between water, energy and food security, in order to draw up recommendations for political decision-makers based on the consultation of stakeholders, so as to position water-energy-food security as a key dimension at Rio+20, and to launch initiatives dealing with these three issues in a coherent, integrated and sustainable manner.

14 to 15 November 2011

#### Raising awareness and enhancing the adaptive capacity of water resources planning and management to climate change impacts.

<http://bit.ly/B2ForoAgua>

In preparation for the Sixth World Water Forum (Marseille, March 2012), UNESCO and the French Water Academy organised this seminar in Paris, with the aim of identifying challenges and opportunities in the management of river basins and the definition of tools and methodologies for adaptation. The results will be presented at the Forum itself, as well as during other key climate negotiation events.

13 to 19 November 2011

#### Seventh Inter-American Dialogue on Water Management

<http://d7.iwrn.org>

The Seventh Inter-American Dialogue (D7) on Water Management was staged in Medellin, Colombia, and organised by the Office of the President of the Republic of Colombia, the Ministry of the Environment and Sustainable Development, CORANTIOQUIA and RIRH (the Inter-American Water Resources Network). The event was attended by more than 1,200 participants drawn from governments and civil society in the Americas, representing indigenous peoples, African descendants, young people, women, the private sector, members of police forces, national and international experts, scientists, academics and others. The work performed at D7 made progress towards the agreement on a continental position for the Sixth World Water Forum, to take place in Marseille in March 2012.

### "Mapping of Actors" in the water sector in Latin America

RALCEA (the Latin American Network of Centres of Excellence in the Water Sector) is a bridge between institutional actors (Focal Points as liaisons and as representatives of governments) and Centres of Excellence for the development of processes to strengthen capabilities and knowledge for sustainable, equitable and efficient management of water resources.

In order to establish such actions, RALCEA views its work on the "Mapping of Actors" as a key area, which serves to reveal the specific needs and interests of the different actors and the development of capabilities for institutional strengthening. Joint efforts by the Centres of Excellence and Focal Points will generate improved governance and more effective management of water resources. The contents of capability development include and accompany the management and

implementation of programmes and projects, which must take into consideration both the design of actions aligned with short-term needs and those dealing with future scenarios.

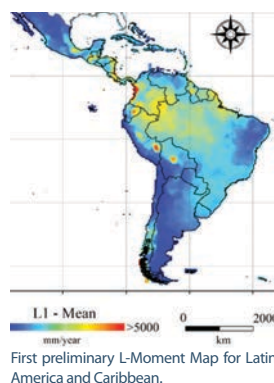
The mapping of actors will be dynamic and multi-dimensional, performed in real time with the actors and those offering capacity development moving forward in a cycle of knowledge generation and transfer, accompanying specific actors to offer them capacity development tailored to each specific time and context.



For further information:

<http://www.aquaknow.net/mapeo-de-actores/>

### Analysis of the variability and frequency of components of the Water Balance in Latin America



Within the context of the EUROCLIMA and RALCEA programmes of the European Union and Latin America, a platform has been established for the exchange of knowledge and the generation of synergies among specialists belonging to a range of Latin American institutions dealing with hydrology and water resources.

With the support of the European Commission's Joint Research Centre (JRC), the group is analyzing the variability and frequency of the components of the Water Balance at the regional level (precipitation, temperature and evapotranspiration), using the Regional Frequency Analysis based on L-moments, that permit the characterization of variability in

space and time. This methodology is viewed as the most appropriate when dealing with short data records and networks of limited density where the variables present significant asymmetry, as in the case of precipitation. The procedure was agreed upon by the specialists attending a workshop held in Ispra, Italy (<http://bit.ly/B2MemoriaTaller>), in July 2011.

One of the outcomes is the characterization of the variability in terms of the frequency of occurrence of extreme events, which would in turn serve as the basis for establishing the risk of disasters caused by extreme hydro-climatic events. This approach furthermore complements and enriches the efforts made with the International Hydrological Programme (IHP: <http://www.unesco.org.uy/phi/aqualac>), for the development of National Water Balances in Latin America, which will provide data for decision-makers in response to the effects of variability and climate change. It is similarly expected to strengthen networks for cooperation within the region and with the European Union for research into the water sector.

For more information:

<http://www.aquaknow.net/balance-hidrologico-regional/>





### RECENT EVENTS

3 to 5 October 2011

#### Water in the Green Economy in Practice: towards Rio+20

[http://www.un.org/spanish/waterforlifedecade/green\\_economy\\_2011/index.shtml](http://www.un.org/spanish/waterforlifedecade/green_economy_2011/index.shtml)

As part of the preparations for Rio+20, the conference identified 4 areas requiring significant changes in terms of water use for a transition towards a green economy: industry, agriculture, urban centres and river basins. In order to facilitate this shift, economic, financial, green employment, biodiversity investment, technology and water management tools were proposed. The regional session on Latin America and the Caribbean was organised and coordinated by the ECLAC Division of National Resources and Infrastructure, with case studies presented on 9 countries in the region, dealing with water, climate change and developments towards a green economy.

30 September to 01 October 2011

#### Definition of Priorities for Economic Research into the Relationship between Climate Change and Water in Latin America and the Caribbean

<http://bit.ly/B2DefPrioridades>

Panama City staged this consultation of 24 experts in socio-economic and biophysical sciences from 12 countries, in order to define priorities for research into the relationship between climate change and water in Latin America and the Caribbean, emphasising impacts and measures for adaptation, with a view to their application in public policy.

The event was held within the context of the "Strengthening of environmental economic research capacity for the analysis of links between water and climate change" (an initiative of the LACEEP, EFD-CA, CATIE and the Universidad de los Andes, supported by Canada's IDRC). The key presentations can be downloaded from the website.

22 to 23 September 2011

#### Central American workshop: Regional Development and its Relationship with Water and Climate Change

<http://bit.ly/B2tallerGWP>

This workshop was held in San Salvador, organised by GWP Central America, in coordination with the Central American Commission for Environment and Development (CCAD), the International Union for Conservation of Nature (IUCN) and the Central American Bank for

### Water Quality and Sanitation. Challenges and Plan of Action

Although access to water in Latin America is generalized, distribution is highly variable and problems with water quality and sanitation have seriously increased over the last 30 years. This is the result of the region's important industrial and agricultural development, which has not gone hand-in-hand with pertinent water quality and sanitation policies.

In order to address this issue, RALCEA, the Latin American Network of Knowledge Centres in the Water Sector, within the "Quality and Sanitation" line of action and in accordance with the assignment taken up at the Regional International Seminar held in Ispra in July, is designing an ambitious working plan to define the initiatives which this network will tackle, with the fundamental aim of helping to underpin public policy and capabilities with regard to specific water quality issues in Latin America.

This initial phase involves a call on all the Knowledge Centres and Focal Points (government representatives) to present proposals for the projects and issues to be prioritised and selected. The network will be responsible for setting up the working teams who are to implement each of the initiatives.

Fulfilment of this undertaking and the future development of initiatives addressing water quality and sanitation within the RALCEA Programme, managed by Directorate General



for Development and Cooperation (DG DEVCO) and coordinated by the Joint Research Centre (JRC) of the European Commission, represents a wonderful opportunity for greater proximity and cooperation among the knowledge centres and focal points dealing with these issues. According to the background data presented by each of the countries involved so far, the issues faced would seem to reveal many similarities and points in common, suggesting that the initiatives to be implemented will have a significant impact and regional influence.

For more information:

<http://www.aquaknow.net/agua-y-saneamiento/>

### RALCEA successfully completes selection of knowledge centres to make up the network



Latin America is home to a large number of institutions with a high level of technical and scientific knowledge and considerable experience in the water sector. In order to strengthen ties and exchanges among these institutions, and between them and different political levels, the RALCEA (Latin American Network of Knowledge Centres in the Water Sector) project issued a call to Research and

Education Centres to present declarations of interest in collaboration ([http://ec.europa.eu/europeaid/where/latin-america/regional-cooperation/ralcea/index\\_en.htm](http://ec.europa.eu/europeaid/where/latin-america/regional-cooperation/ralcea/index_en.htm)).

The success of the call for interest was demonstrated by the total number of 56 proposals, representing numerous Latin American institutions (including consortia) belonging to 12 of the 18 countries which make up the RALCEA project. 16 institutions have been selected, 13 of them Latin American institutions/consortia, while the remaining three are international bodies whose collaboration and active involvement in the activities will not be funded by the project.

The list of centres can be consulted on the Aquaknow platform (<http://www.aquaknow.net>).



### RECENT EVENTS

Economic Integration (BCIE). The aim was the identification of specific measures for adaptation to climate change, in particular in the water resource sector, and to promote their inclusion within development plans at the national level. A review was conducted of the general framework of water management and water security, water governance, the water economy, the economic impacts of climate change and the Regional Climate Change Strategy. Representatives of the Ministries of the Environment, Agriculture, Planning and Finance of El Salvador, Nicaragua, Honduras, Guatemala, Costa Rica and Panama, along with civil society organizations, addressed the role of water and climate change in their countries' development plans.

#### 21 to 27 August 2011 World Water Week

<http://bit.ly/B2SemanaAgua>

The World Water Week staged in Sweden ended with the "Stockholm Statement to the 2012 United Nations Conference on Sustainable Development in Rio de Janeiro (Rio+20 Summit)". The Statement calls on leaders at all levels of government who will be involved in the Rio+20 Summit (4-6 June 2012) to commit to achieving "universal provisioning of safe drinking water, adequate sanitation and modern energy services by the year 2030", and to adopt intervening targets to increase efficiency in the management of water, energy and food. The targets to be achieved by the year 2020 include:

- 20% increase in total food supply-chain efficiency
- 20% increase in water efficiency in agriculture
- 20% increase in water use efficiency in energy production
- 20% increase in the quantity of water reused
- 20% decrease in water pollution

The "Stockholm Statement", has been signed by numerous international bodies connected with Water and the Environment, including UN-Water, the WWF and IWMI, and can be downloaded here:

<http://www.worldwaterweek.org/2011-Stockholm-Statement>

### Websites related to Water and Climate Change

The EUROCLIMA Newsletter provides a series of information resources accessible via the Web connected to water management and climate change, intended as a contribution to wider awareness, knowledge, debate and the generation of proposals. The emphasis is on key sites with relevant information regarding this issue for Latin American.

#### Aquaknow: virtual space for collaboration and information of the water sector



<http://www.aquaknow.net/>

AquaKnow is an open access Internet tool produced by the European Commission. It allows for the sharing of research results through publications and lessons learnt from experience, with a view to facilitating dialogue among experts in the sector. There are discussion and information exchange activities involving various working groups and networks of specialists (the community) within the context of the EUROCLIMA-Water Programme. Information on the issue of Water in Latin America is constantly updated.

#### Latin American Network of Knowledge Centres in the Water Sector (RALCEA)



[http://ec.europa.eu/europeaid/where/latin-america/regional-cooperation/ralcea/index\\_es.htm](http://ec.europa.eu/europeaid/where/latin-america/regional-cooperation/ralcea/index_es.htm)

The aim of RALCEA is to promote public policy based on scientific and technical knowledge within the context of the water sector. The project seeks to establish cooperation among institutional actors and centres of excellence by strengthening capabilities and implementing initiatives in Latin America.

#### Water Center for Arid and Semi-Arid Zones in Latin America and the Caribbean (CAZALAC)



<http://www.cazalac.org>

CAZALAC is an organisation for the coordination/structuring of scientific and technological actions with a focus on the sustainable management of water resources in arid, semi-arid and sub-humid zones of Latin America and the Caribbean. Its website features information about the seminars, workshops and projects which it undertakes in the region with the aim of bringing about better use and management of water resources.

#### Water Center for the Humid Tropics of Latin America and the Caribbean (CATHALAC)



<http://www.cathalac.org/>

CATHALAC is engaged in applied research and development initiatives, education and transfer of technology involving water resources and the environment. It includes information about four thematic areas: Integrated Basin Management, Climate Change, Environmental Analysis and Modelling and Risk Management.

#### International Research Center on "El Niño" (CIIFEN)



<http://www.ciifen-int.org/>

CIIFEN provides climate information for development sectors in Latin America, supporting the strengthening of institutions connected with Climate Risk Management, in order to improve understanding and provide better early warning of the ENSO phenomenon and climate variability on a regional scale. It has in place a Western and Southern South America Climate Prospects Forum, involving the meteorological agencies of Argentina, Venezuela, Colombia, Ecuador, Peru, Bolivia and Chile.

#### Regional Committee on Hydraulic Resources (CRRH)



<http://www.aguayclima.com/clima/inicio.htm>

The website presents Central American information regarding the water resource situation, by country and at the regional level. It also provides strategic and technical documents about plans and programmes for the management of water resources, climate change, disasters, etc.



#### LA-WETnet

<http://la-wetnet.org/>

This is a regional network which operates as a non-profit organisation to provide high-quality capacity development services at an affordable cost for integrated water management and access to water and sanitation. It is made up of leading institutions with a proven track record in the



### EVENTS 2012

12 to 17 March 2012

#### Sixth World Water Forum

<http://www.worldwaterforum6.org>

Every three years since 1997 the World Water Forum has mobilized knowledge, creativity and innovation with a focus on water, bringing together parties with an interest in local, regional and global water issues. The aim of the 6th Forum is to include water as a priority on political agendas, as there can be no sustainable development without resolving key water resource issues. The Right to Water, recognised as such by the 189 States of the UN a year ago, must be guaranteed and put into practice. This is one of the key issues for the event, which has set 12 priorities and 3 conditions for success. Priorities and goals have also been set for the various continents, as for the Americas. The Forum is open to all those wishing to contribute and participate in resolving global water challenges.

26 to 31 August 2012

#### World Water Week 2012

<http://www.worldwaterweek.org>

The Stockholm International Water Institute has every year since 1991 staged the World Water Week as a forum for exchange, debate and the development of capabilities and alliances, and to monitor the implementation of international water and development processes and programmes. The focus of the World Water Week from 2009 to 2012 has been "Responding to Global Changes", setting out a range of actions and options connected with water, management and development policy. The central issues have been: Accessing Water for the Common Good (2009); The Water Quality Challenge (2010); and Water in an Urbanised World (2011).

For 2012 the World Water Week will take as its central issue "Water and Food Security". The aim is to address the relationship between water and food, along with the challenges and opportunities raised by the global situation. Between 2 and 3 thousand participants are expected to attend, including experts in the field and decision-makers, who will be discussing the fundamental role of water in achieving food security. A space will be set up for the presentation of abstracts and proposals for the event between 1 December 2011 and 15 February 2012. Information on the event can be found here.

#### Global Water Partnership (GWP)

 Global Water Partnership

<http://www.gwp.org/>

The website offers information to assist countries in tying water resource planning to both local and cross-border initiatives and projects. It has a network of 13 regional water associations and 80 national water associations, with more than 2,400 members in 158 countries. The resource includes specific entries for South America (<http://www.gwpsudamerica.org/>) and Central America (<http://www.gwpcentroamerica.org/>).

#### International Hydrological Programme for Latin America and the Caribbean (UNESCO)



<http://www.unesco.org.uy/phi>

This is a UNESCO intergovernmental scientific cooperation programme covering water research, management, education and capacity building in the field of water resources. It highlights the regional and local initiatives undertaken by research centres and institutions, and also offers access to a virtual library, along with other tools.

#### Fresh Water Action Network (FAN)



<http://www.freshwateraction.net/>

Information on how to improve water resource management by strengthening civil society to influence decision-making. It features experiences of work in South America (FANAS: <http://www.freshwateraction.net/node/20>), in Central America (FANCA: <http://www.fanca.co.cr/>) and Mexico (<http://www.fanmexico.net/>), connected with the right to water and sanitation, climate change and improved governance.

#### CGIAR Challenge Program on Water and Food (CPWF)



<http://www.waterandfood.org/>

The aim of the CPWF is to increase the resilience of social and ecological systems through improved water management for food production. Presents activities of research, innovation and discussion about this topic. It provides documents, publications and multimedia materials. CPWF is active in 4 countries of the Andean Community (<http://www.waterandfood.org/page/Andes/type:basin>).

#### Regional Office for Mesoamerica of the UICN (ORMA)



[http://www.iucn.org/es/sobre/union/secretaria/oficinas/mesoamerica/nuestro\\_trabajo/unidad\\_de\\_gestion\\_del\\_agua/](http://www.iucn.org/es/sobre/union/secretaria/oficinas/mesoamerica/nuestro_trabajo/unidad_de_gestion_del_agua/)

The UICN Water Management unit in Central America aims to foster knowledge, improve practices and promote the governance of fresh and salt water ecosystems, taking into consideration the needs of populations and their livelihoods, along with risk management associated with climate change.

#### Water and Climate Change

<http://www.aguaycambioclimatico.info>

It provides information about the initiatives, experiences, policies and projects undertaken in the Andean Region (Bolivia, Ecuador and Peru) in terms of water and climate change, along with access to a virtual library containing 260 key documents which can be downloaded online.

#### Iberoamerican Water Information System (SIAGUA)



<http://www.siagua.org/>

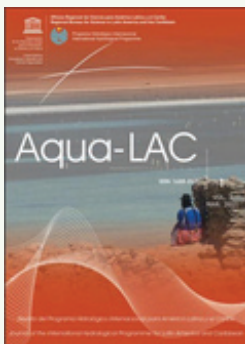
SIAGUA was launched in 2001 to develop a useful and effective tool for the exchange of information, knowledge, technology and experience about water resource management in Latin American countries, via the Internet.





### DOCUMENTS

**Aqua-LAC, the Journal of the International Hydrological Programme for Latin America and the Caribbean**



<http://www.unesco.org/uy/phil/aqualac/>

This is UNESCO's regular IHP publication on Latin America and the Caribbean, adopting a multidisciplinary approach to the water resource situation. The journal includes debates and academic and technical proposals drawn from scientific and socio-economic research, legal aspects and the use of innovative technologies, along with other issues.

### Climate change, water and food security



<ftp://ftp.fao.org/docrep/fao/010/i010i142s/i0142s07.pdf>

This document highlights the varying impact of climate change on different regions of the world and its effects on water access and food production. Not all the effects are negative, but political and technical involvement is required for the management, use and optimization of water, in connection with agricultural capacity and food security. The complete report: Climate change, water and food security

<http://www.fao.org/docrep/014/i2096e/i2096e.pdf>  
(English version)

The following websites with important information resources on Water and Climate Change are mainly focusing on the European Union or containing global information. Nevertheless, they contain relevant information on Integrated Water Resources Management from a Latin America perspective.

### European Water Partnership



<http://www.ewp.eu/>

The European Water Partnership (EWP) presents initiatives and activities for the sustainable management of water in this region of the world, along with events and information resources on processes and strategies developed in Europe working towards an efficient and sustainable water resource culture.

### European Union Water Initiative



<http://www.euwi.net/>

The European Union Water Initiative presented by the European Union at the World Summit on Sustainable Development in Johannesburg in 2002, is the instrument for political dialogue in the water sector, supported by the various services of the European Commission along with the Member States of the EU.

The initiative focuses on development of the water sector and the strengthening of governance through integrated, multidisciplinary management of water resources, with a view to achieving the MDG in the member countries.

### Iagua: Climate Change and its impact on the water cycle



<http://www.iagua.es/2006/10/el-cambio-climatico-y-su-impacto-en-el/>

Information from Spain about water use and quality in connection with climate change. It offers water management resources and courses, and tenders for experts in the field. The featured link presents the fundamental role of research in ensuring the right political approach to changes in the water cycle as a result of climate change. Research which goes hand-in-hand with the generation of knowledge and sound political proposals thus represents the cornerstone in adapting to climate change.

### WaterCore



<http://www.watercore.eu/default.asp>

It features information resources, documents and research connected with water scarcity and drought in Europe. The thematic approach of the project is based on the demand for water management, the handling of periods of drought, the effects of climate change, awareness-raising and public participation. It is financed by the EU's European Regional Development Fund.

### World Water Week



<http://www.worldwaterweek.org/>

It presents a range of topics connected with the global water situation within the development context. World Water Week is part of the Stockholm International Water Institute (SIWI) initiative serving as a platform for the exchange of knowledge and creation of networks across the scientific community, legislators and civil society.

### Capacity Building for Sustainable Water Management (IWRM) – Cap NET



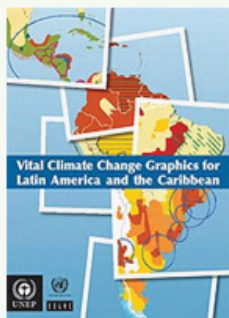
<http://www.cap-net-esp.org/>

CAP-NET is an international IWRM capability-building network. It is made up of institutional members and independent networks committed to the development of capabilities in the water sector at the national, regional and international levels. Its portal features information about its constituent networks, along with a range of IWRM resources such as courses, and training materials covering Latin America, the Caribbean and the rest of the world.



### DOCUMENTS

#### Vital Climate Change Graphics for Latin America and the Caribbean 2010



<http://www.grida.no/publications/vg/lac2/>

The United Nations Environment Programme (UNEP), the Economic Commission for Latin America and the Caribbean (ECLAC), through its Sustainable Development and Human Settlements Division, and GRID-Arendal, recently launched this publication. The document offers a range of information about the effects of climate change on ecosystem services, human health and the region's vulnerability to extreme events. It sets out a global and regional analysis of greenhouse gases (GHG) and identifies possible options in the region to mitigate the impact of climate change.

#### Ramprasad - Bolivia - Water



[http://www.euroclima.org/publications/otros-documentos/bolivia/ramprasad-water/download\\_en](http://www.euroclima.org/publications/otros-documentos/bolivia/ramprasad-water/download_en)

The study focuses on understanding the role of knowledge in adaptive water management in Bolivia in the context of climate variability and change. Different levels of government are researched and their access to and use of available climate information. The author emphasizes that downscaled climate information is a valuable tool to enable decision makers and communities increase their adaptive capacity by strengthening their ability to prepare and respond to extreme-weather.

#### FAO Water



[http://www.fao.org/nr/water/index\\_es.html](http://www.fao.org/nr/water/index_es.html)

It offers a range of information, studies, multimedia resources and news items about the global water situation, interactive maps, along with the impact of projects connected with water resource management.

#### A Decade for Water, a Decade for Life 2005-2015



<http://www.un.org/spanish/waterforlifedecade/index.shtml>

Towards the primary goal of the Water for Life Decade, Spain has agreed to provide resources to establish an Office to support the International Decade for action. Allocated in Zaragoza, and managed by the United Nations Department of Economic and Social Affairs (UNDESA). The Web site provides information on many water related issues (gender, shared waters, water and cities, etc.) and resources specially developed for the media, children and young people.

#### UN Water



<http://www.unwater.org/>

The United Nations has through its economic and social affairs department and the Institute for Water, Environment and Health arranged the information provided by its various agencies related to water and its impact on the population. UN-Water as inter-institutional mechanism was established formally in 2003, and has at the moment 28 UN agencies as members, and 25 other international organizations as partners.

#### UNESCO World Water Assessment Programme (WWAP)



<http://www.unesco.org/water/wwap/>

The World Water Assessment Programme (WWAP) is UN-Water's flagship initiative. It contains information about practices, research tenders, projects and studies into the situation of fresh water resources around the globe. One key feature is the periodically published World Water Development Report (WWDR).

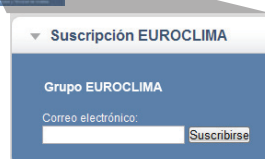
#### The World Bank Water



<http://water.worldbank.org/water/>

Contains data on strategies and policies related to water management, as well as multimedia resources and detailed information on the use and access to water in urban and rural areas. The World Bank has now launched a special site on climate change, including climate scenarios until 2100: <http://data.worldbank.org/news/new-data-and-tools-on-climate-change>. Several new resources of the site will be presented in Durban, on the occasion of COP17.

### To subscribe to the EUROCLIMA e-Newsletter



[www.euroclima.org](http://www.euroclima.org)

Visitors to the EUROCLIMA portal can sign up to receive this regular e-mail newsletter.

The portal also contains information about the programme and its components, the national Focal Points and the agencies responsible for the theme of climate change in each country, along with the Programme workshops, courses and seminars.



### DOCUMENTS

**Water and Paramo: Dialogue between communities and conservation initiatives (Propuestas Andinas no. 5. Year 1. October 2011)**



[http://www.condesan.org/portal/sites/default/files/publicaciones/archivos/propuestas\\_andinas\\_agua\\_paramo\\_web\\_final.pdf](http://www.condesan.org/portal/sites/default/files/publicaciones/archivos/propuestas_andinas_agua_paramo_web_final.pdf)

This publication analyzes the role of rural communities in the management of water resources and the Andean Paramo ecosystem through grassroots assemblies such as the Cabildo and Juntas de Agua. It stresses improved dialogue and understanding between local communities and decision-makers and public authorities with regard to conservation initiatives.

### Water and the Green Economy. Reading Guide



<http://www.un.org/spanish/waterforlifedecade/unpublications.shtml>

Produced by the UN-Water Decade Programme on Advocacy and Communication (UNW-DPAC), this reading guide is intended for all those with an interest in learning more about water and the green economy. The guide provides a series of basic references to assist readers, and a number of the most recent key UN publications in this field.



**COP17/CMP7**  
**UNITED NATIONS**  
CLIMATE CHANGE CONFERENCE 2011  
**DURBAN, SOUTH AFRICA**

### Side events of EUROCLIMA to the United Nations Conference on Climate Change

Tuesday December 6  
Durban Exhibition Centre, North plaza  
European Pavilion. Brussels Room

In two side events EUROCLIMA will present its progress in acquiring and distributing knowledge on the impact of climate change in Latin America aimed primarily at decision-makers and scientists, in order to strengthen sustainable development strategies.

10:30 – 12:30.

Presentation of the biophysical component of EUROCLIMA by the implementing agency, the Joint Research Centre of the European Commission (JRC-EC): research on climate change in Latin America in relation to Soils, agriculture, water resources, desertification and drought, bioenergy and biofuels.

13:00 – 15:00

Presentation of the socioeconomical component of EUROCLIMA by the implementing agency, the Economic Commission for Latin America and the Caribbean (ECLAC-UN): research on the impacts of climate change on social equity and poverty in Latin America.



### Socioeconomic Sciences

Socioeconomic knowledge and information on climate change will be improved, by analyzing its impact on social equity and poverty and by providing tools to analyse the costs and benefits of mitigation alternatives, thereby facilitating the transition to low-carbon economies.

Component implemented by:  
United Nations Economic Commission for Latin America and the Caribbean.  
[www.cepal.org](http://www.cepal.org)

### Biophysical Sciences

Studies and tools will be generated, that lay the foundation for an analysis of climate change impact on natural resources emphasizing these areas: Soils, Agriculture, Water resources, Desertification and drought, Bioenergy and biofuels.

Component implemented by:  
European Commission  
Joint Research Centre.  
[www.ec.europa.eu/dgs/jrc](http://www.ec.europa.eu/dgs/jrc)





### DOCUMENTS

#### IWRM as a Tool for Adaptation to Climate Change



<http://www.cap-net.org/node/1628>

The aim of this skills development manual, which also includes a guide for trainers, is to present the general concepts and practical implementation of integrated water resources management as an instrument for adaptation to climate change. The document is produced by the UNDP (CAP-NET), with financial support from the European Union.

#### Plurinational State of Bolivia: pilot country of the Economic study of adaptation to climate change



[http://www.euroclima.org/publicaciones/paises/bolivia\\_es](http://www.euroclima.org/publicaciones/paises/bolivia_es)

The focus of this pilot study on adaptation to climate change is water and agriculture (issues such as water storage for periods of scarcity, access to water for irrigation and other aspects). It emphasises the importance of Watershed Management for adaptation, employing resilience and vulnerability as its key concepts. Traditional/local knowledge is seen as a valuable guide for adaptation strategies, while on occasion requiring adaptation in response to new situations. It further explores governance: the importance of including climate change in national and local planning, and strengthening agencies at different levels for their role in water resource management, despite the problems caused by the lack of up-to-date figures.

#### Governance of shared waters: legal and institutional issues



<http://data.iucn.org/dbtw-wpd/edocs/EPLP-058-rev.pdf>

This publication by the IUCN analyzes the issue of governance of transboundary waters and explores alternatives of cooperation between states on the basis of international law, for a better management of shared basins. It presents a global view, but offers abundant data and specific cases from the Latin American continent, with a view to strengthen the capacity of multiple stakeholders to consider water as a vehicle for integration rather than as a source of conflict.

#### Energy-Water-Climate Planning for Development Without Carbon in Latin America and the Caribbean



<http://www.sei-international.org/publications?pid=1981>

This publication by the Stockholm Environment Institute (SEI) looks at the viability of hydroelectric power as a low-carbon energy source for Latin America and the Caribbean in a changing climate. Hydropower infrastructure will have to be planned within the ranges of uncertainty that climate trends impose, moving away from static planning and design. Plans will likely need to accommodate forecasts for targeted operations based on climate and demands, with flexible infrastructure, also taking into account the possibility of conflicting interests by different user groups. Robust analytical frameworks are needed to help policymakers make informed choices, understanding the tradeoffs. For this reason two advanced water and energy decision support tools are presented: Water Evaluation And Planning (WEAP) and the Long-range Energy Alternatives Planning system (LEAP).

### CONTACT



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United Nations Economic Commission for Latin America and the Caribbean  
[www.cepal.org](http://www.cepal.org)

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