

**UABDIVULGA**

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## Environment and peace: European research under the direction of ICTA



The European research project CLICO -Climate Change, Water Conflict and Human Security- devoted to the study of climate change and its social dimensions begins in February with conferences that take place from 25 to 27 February in Bellaterra. During the next three years, researchers from 14 institutes, under the direction of the Institute of Environmental Science and Technology (ICTA) at UAB will be analysing the effects hydroclimatic phenomena -drought, flooding and rise of sea levels- have on the intensification of social tension and conflicts in eleven regions of the Mediterranean, Maghreb, Middle East and Sahel, and will propose specific actions to guarantee the peace and security of the population in each area.

The unprecedented speed at which changes in the climate are taking place all over the planet represents a threat to human security, especially in regions greatly affected by droughts, flooding

or rise of sea levels which can cause or worsen violent conflicts and humanitarian disasters such as hunger or hordes of climate refugees.

The European Union has voiced its concern over the social and political consequences of water conflicts caused by climate change, both those originating in member states -between towns and cities of the same state- and those occurring in nearby countries, such as in the Middle East. The project CLICO was born as a means to find solutions to these problems and is financed by the EU Seventh Framework Programme. The project will be financed with 3.8 million euros and will last three years. It is the only European project dedicated to research in the field of social sciences and humanities coordinated by a university and research institutes in Spain.

The initiative includes the participation of fourteen institutes of Europe, North Africa, the Middle East and Sahel, with some of the best researchers in the world dedicated to the study of water resources, vulnerability of populations, human security and peace.

The CLICO project aims to fill a gap currently existing in the study on cause and effect relations between climate change, hydrology, social conflicts and the security of affected populations, and will carry out an exhaustive statistical analysis -the first of its kind- of the climatic, hydrologic, and socio-economic variables of each region. The research will focus particularly on the impact climate change has on the mode of subsistence of the most vulnerable populations and will provide a critical analysis of the role played by public institutions in protecting these populations.

The results of the project will be synthesised in a final document which will propose solutions on how to improve the security of the populations living in these regions and new ideas on public policies and institutions needed to promote peace and human security under changing hydro-climatic conditions. The project will include three work meetings in Egypt, Palestinian territory and Ethiopia, and the creation of a training centre on climate change and human security for graduate and postgraduate students.

#### **The eleven case studies of the CLICO project**

- **The island of Cyprus.**- Average rainfall has fallen more than 20% in the past four decades. During the summer of 2008 hull water tanks were imported from Greece.
- **The Andalusian-Moroccan biosphere.**- Droughts have brought on fierce competition for water destined to agricultural purposes, cities, tourism and ecosystems on both sides of the Strait of Gibraltar. The waves of immigration from Northern Africa is related to the decline in farming income.
- **Sarno Basin, Italy.**- In the year 1998 the banks of the River Sarno overflowed and caused the worst flooding ever seen in Italy. 155 persons died and damage was estimated in over 500 million euros.
- **Niger.**- In 2005, drought conditions in the Republic of Niger caused a decrease in crops by 224,000 tonnes, which affected approximately 3.5 million people in 3,755 different populations, mainly in the region of Tillabéri.
- **Alexandria, Egypt.**- A 0.5 metres increase in the sea level could flood 30% of the city of Alexandria, causing the displacement of at least 1.5 million people, the loss of 195,000 work places and damages estimated in 30 trillion dollars in land and property.
- **Sudan.**- Droughts, flooding and desertification worsen the conflicts and contribute to making Darfur one of greatest humanitarian crises of our time.

- **Seyhan Basin, Turkey.**- It is calculated that by the year 2070 temperatures of the basin of the River Seyhan could rise more than 3.5°C and rainfalls could decrease 35%. This is a threat to the mode of subsistence of thousands of seasonal agricultural workers who migrate to the region.

- **Jordan Basin, Israel-Palestine-Jordan.**- The year 2008 marked the fifth consecutive year of droughts for the basin of the River Jordan; many in Palestine do not have access to water during the majority of the day.

- **Desert of Sinai, Egypt.**- Rainfall in this region has decreased 20% to 50% in the past 30 years. Droughts and sudden flooding threaten the lives of local Bedouin tribes.

- **Nile Basin, Ethiopia-Egypt-Sudan.**- Flooding of the River Nile in 2006 caused the death of 600 people, left 35,000 without a home and affected a further 118,000 people. Some 3,000 houses were destroyed in Sudan.

- **Ebre Basin, Spain.**- One of the ecosystems most threatened by climate change in Spain. The rise of the sea level causes sea water to enter the basin and flooding threatens the means of living of the population.

### Participating institutes

- ICTA, Universitat Autònoma de Barcelona, Spain (project coordinator) ([www.icta.uab.es](http://www.icta.uab.es) & [www.eco2bcn.es](http://www.eco2bcn.es))

- United Nations University. Institute for Environment and Human Security, Bonn, Germany

- Tyndall Centre for Climate Change Research, University of East Anglia, United Kingdom

- ECOLOGY GmbH Institut für International und Europäische Umweltpolitik, Germany

- Centre for the Study of Civil War (CSCW), International Peace Research Institute, Oslo (PRIO), Norway

- Department of Geography, The Hebrew Universities of Jerusalem, Israel

- Suez Canal University, Egypt

- Swiss Federal Institute of Technology, Zurich, Switzerland

- The Cyprus Institute, Republic of Cyprus

- School of Global Studies, Universities of Sussex, United Kingdom

- Palestinian Hydrology Group For Water And Environmental Resources Development

- Centre de Recerca Ecològica i Aplicacions Forestals (CSIC-UAB), Barcelona, Spain

- Israeli-Palestinian Science Organization, Brussels, Belgium

- Addis Ababa University, Ethiopia

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