

## **Adaptation policies and measures in the Mediterranean region**

The Mediterranean region has been identified as one of the main climate change "hot spots", i.e. one of the areas more vulnerable to present and future impacts of climate change. The main projected impacts in the Mediterranean region span from a decrease in annual precipitation and annual river flow and increase in forest fires to an increase of frequency of extreme events (heat and precipitation) and an increased risk of biodiversity loss and desertification (EEA, 2012). Water scarcity and more frequent and severe droughts are threats that may undo the efforts to achieve the good ecological status of the Community water bodies, and short-circuit the customary performance of a wide array of sectors driving economic growth, especially in the Euro-Mediterranean countries. The late 2000s financial crisis revealed a high exposure of the EU to economic shocks, including that of extreme weather and climate related hazards, exacerbated by fiscal and 'other macro-economic imbalances'. The European Climate Adaptation Strategy diagnosed that the risk posed to water security will make out the bulk of the expected climate change environmental and economic impacts.

This region is populated by over 500 million people in about 30 countries in Africa, Asia and Europe, and is characterized by geographic, climatic and socioeconomic differentiation. The consequences of the climate change impacts will affect all sectors, and can worsen already critical situations present in the region such as are the water management, agriculture, fishery, biodiversity and health. Furthermore, socioeconomic sectors such as cities, infrastructures, transport, energy and tourism can face new challenges due to climate change. Finally, climate change will worsen constraints and problems that already exist in the region.

Hence effective climate change adaptation policies and measures are needed in several sectors and areas in the Mediterranean region and may represent opportunities to guide the economic development of the region in a more sustainable direction.

At the present several international initiatives have been started in the field of climate change adaptation and sustainable development with a focus on South Europe, Mediterranean and North Africa (the UNEP Ecosystem-based Adaptation Programme, the EU Strategy on Adaptation to Climate Change, the climate-related policy framework, of Union for Mediterranean, the Arab Framework Action Plan on Climate Change 2010-2020, the South East Europe 2020 Strategy) and several adaptation measures have been implemented in different sectors and areas in Mediterranean countries. On the other hand, still some Mediterranean countries lack of effective coordinated adaptation policies (strategies and plans).

This session will present experiences in climate change adaptation at National and Subnational level in the Mediterranean region such as; case studies, national/subnational/sectorial strategies and plans, policies under development and already implemented. The session will also address studies of economic losses caused by water scarcity and droughts in the Euro- Mediterranean countries, along with policy options to induce a greater efficiency of water use, including arrangements to shift water from low to higher value uses.