International Workshop

The Ecological Implications of Climate Change on the Venice Lagoon

Palazzo Zorzi, Venice. 26-27 May 2011
Background

The UNESCO Venice Office started in 2010 a process of reflection and consultation to assist the Venetian authorities in developing, through a multi-stakeholders participatory approach, a shared vision for the protection of Venice and its Lagoon, inscribed on the UNESCO World Heritage List in 1987. This process was launched to better promote the natural and cultural assets of a heritage site facing major global economic, social and cultural changes.

Four preparatory thematic workshops have been foreseen, with a view to the organization of an international conference in 2011 on “The future of Venice and its Lagoon in the context of Global Change”. A first workshop, organized in 2010 by the UNESCO Venice Office in cooperation with the National Research Council - Institute of Marine Sciences (CNR-ISMAR), dealt with “From Global to Regional: Local Sea Level Rise Scenarios - Focus on the Mediterranean Sea and the Adriatic Sea” and identified multiple plausible sea level rise scenarios by 2100 for the northern Adriatic Sea which will be taken into consideration as a starting point for this second Workshop in a series of four. The next workshop, later in 2011, will be dedicated to socio-economic development and culture and development issues.

These seminars are organized to discuss and evaluate the situation of Venice and its lagoon and to develop a “shared vision” for its future. Such a vision is intended to help and guide sound decision-making, help the sustainable management of the Venice World Heritage Site, and eventually become also a source of inspiration for other sites and cities, in particular World Heritage sites in the South-East European and Mediterranean regions.

Acting as a neutral broker able to mobilize different fields of expertise, in the interconnected fields of expertise, the UNESCO Venice Office intends to contribute to a long-term effort leading to the establishment of a more permanent coordination, planning and monitoring platform for the management of Venice and its Lagoon.

Aim and structure of the Workshop

The aim of the workshop is to outline possible effects of the Hydro-Climatic Change (HCC) on the Lagoon of Venice ecology, specifically the combination of both Climate Change and Sea Level Rise for the end of the Century. A two-day workshop is organized with the arrival of participants foreseen on Wednesday 25 May 2011. The first day, Thursday 26th, will be devoted to presentations and discussions. The second day, Friday 27th, will be dedicated to the final discussion and wrap-up. The workshop will end on 27 May with lunch.

Presentations (about 20 minutes each) will be grouped into 4 blocks, each one followed by a discussion (about 30-45 minutes each).

Participants in the workshops are internationally recognized scientists with experience in coastal lagoon ecology. Half of the scientific panel is composed of Italian scientists working on the Lagoon of Venice; they will illustrate the ecological state of the lagoon, the climate change and sea level rise scenarios to be used as a background for the discussion. The other half of the panel is composed by international experts who have long studied lagoons’ ecology in different hydro-climatic conditions; they are asked to bring their knowledge, experience and visions into the discussions that will follow the presentations of Italian colleagues.

Contributions in the form of short presentations are welcomed and should be communicated to the organizers in advance for logistic arrangements.

A schematic plot of change scenarios will be sent to you next days to facilitate the discussion, and the outcome of these discussions will be summarized in a summary report.
Invited participants

International panel

Pérez-Ruzafa Angel E University of Murcia
De Wit Rutger F University of Montpellier
Pierre Lasserre F University of Pierre and Marie Curie – Paris VI
Reizopoulou Sofia GR HCMR
Rilov Gil IL National Institute of Oceanography
Chicharo Luis P University of Algarve
Gamito Sofia P University of Algarve
Aloui-Bejaoui Nejla TN INAT
Tunberg Bjorn USA Smithsonian Marine Station Fort Pierce
Valiela Ivan * USA Marine Biological Lab. Woods Hole

* Prof. Valiela will act as an external advisor and editor for reports or publications resulting from the workshop.

Experts will be asked to present short papers during their presentations (20 minutes) and to hold interactive discussions, with questions and answers. Each session will have one moderator to introduce the debate, summarize the position papers and facilitate the discussions of the session. A report and consolidated position paper will be prepared at the end of the workshop. Each participant is therefore asked to send in advance a one-page abstract of his intervention to facilitate discussions among participants and the preparation of the summary report.
Working language
The workshop language will be English.

Place of the meeting
UNESCO Venice Office
Regional Bureau for Science and Culture in Europe

Palazzo Zorzi
Castello 4930 30122 Venice, Italy
Tel : + 39 041 260 15 11
Fax : + 30 041 528 99 95
Web : www.unesco.org/venice

Contacts
- Mr. Philippe Pypaert
Programme Specialist, UNESCO Venice Office - Science Unit
Tel + 39 041 260 15 12, Fax : + 39 041 528 99 95
Email : p.pypaert@unesco.org
- Ms. Cristina Faccia
Programme Assistant, UNESCO Venice Office - Science Unit,
Tel + 39 041 260 15 20, Fax : + 39 041 528 99 95
Email : c.faccia@unesco.org
- Dr Davide Tagliapietra
Researcher, CNR-ISMAR, Venice
Email : davide.tagliapietra@ve.ismar.cnr.it

Logistical arrangements
The UNESCO Venice Office will arrange for travel tickets and make hotel reservations for participants.
To get to the hotel from the airport, take the public boat of Alilaguna (http://www.alilaguna.com/) and get off either at Fondamenta Nuove (Blu line) or San Zaccheria (Blu or Red line).
Lunches and dinners will be offered to the participants.
Agenda of the meeting

- **Wednesday 25 May 2011**
  Arrival of participants and dinner at 20:30 at Il Giardinetto Restaurant

- **Thursday 26 May 2011**

  09:00 Registration of participants

  09:30 – 10:00 Opening & Welcome

  10:00 – 11:00 Session 1 . Present state of the Lagoon of Venice (LoVe) and scenarios for Climate Change (CC) and Sea Level Rise (SLR)

  Presentation 1: Sea Level Rise scenarios resulting from the last UNESCO Workshop (Trincardi)

  Presentation 2: Hydrological changes in coastal lagoons as a consequence of Climate Change. Hydrology of the LoVe and Mo.S.E. closing frequencies (Ferrarin)

  Presentation 3: The present state of some major components of the ecosystem (Bocci)

  11:00 – 11:30 Session 1 Discussion

  11:30 – 11:45 Coffee break

  11:45 – 12:45 Session 2 . Effects of CC & SLR on chemical properties, nutrient cycle, primary producers and organic matter degradation

  Presentation 4: The main patterns of change in the LoVe and its Watershed (Tagliapietra).

  Presentation 5: Primary production, decomposition, biogeochemistry and vulnerability to anoxia in Adriatic coastal lagoons with different primary producers (Viaroli).

  Presentation 6: Downscaling experiment for the Venice lagoon. Effects of changes in temperature and precipitation on nutrient inputs, planktonic productivity and habitat suitability for shellfish growth (Solidoro)

  12:45-13:15 Session 2 Discussion

  13:15 – 14:30 Lunch
14:30 – 15:30  Session 3 . Effects of HCC on consumers and food webs

Presentation 7:  Relationships between organic matter content, benthic community structure and diversity in coastal lagoons (Magni).

Presentation 8:  State and changes of nekton. The LoVe food web (Pranovi).

Presentation 9:  Bioinvasion patterns, present and future scenarios for alien species (Mistri).

15:30-16.00  Session 3 Discussion

15:15 – 16:15  Session 4 . The warmer sister of Venice; suggestions from southern lagoons.

Presentation 9:  Effect of temperature on weight growth of the cultured mussel Mytilus galloprovincialis, Bizerte Lagoon (Tunisia) (Bejaoui).

Presentation 10:  Biodiversity changes in the lagoons of Amvrakikos Gulf (Greece) (Reizopoulou)

16:15 – 16:45 Session 4 Discussion

16:45 – 17:00  Coffee break

17:00 –17:30  Conclusion of the day

•  Friday 27 May 2011

09:30 – 11:00  Final Thoughts/Questions

11:00 – 11:15  Coffee break

11:15 – 12:45  Discussion and wrap-up.

12:45 – 13:00  End of the workshop

13:00 – 14:30  Lunch

Departure of participants