

**Università Iuav di Venezia**

*Research Unit Territory, Environment, Development and Sustainability  
Research Unit Governing and Governance of Landscape Transformations*

## **International Workshop**

# **RESILIENCE THINKING**

Coordinating Science and Action for the Governance of Socio-Ecological Systems

*10-11 May 2012 - University IUAV of Venice, Italy*

*Palazzo Badoer - Aula Tafuri, San Polo 2468, Venice*



## **Introduction**

In the year 2011 Venice was nominated Resilient City by UNISDR (United Nation International Strategy for Disaster Reduction) for the good progress towards resilience particularly in the protection of the cultural heritage from flood disasters. The flood strategy adopted by the Italian government to protect Venice cultural heritage consists of an integrated system of mobile barriers at the lagoon inlets to temporarily separate the lagoon from the sea during high tides (known as MOSE system) and local defences which consist in raising as much as possible public paved areas in the city up to the level of protection ensured by the barriers. The mobile barriers are expected to be in operation by 2014; local defences will be completed by 2030.

Many of the factors that make coastal zones attractive places for human settlement also make them vulnerable to human activities. Managing such complex systems at the interface between land and sea is particularly challenging for science and public managers. The city of Venice has evolved within an unusually intimate relationship with the sea and its drainage basin, and it is highly vulnerable to human alterations of the surrounding environment; and yet it has shown adaptability and resilience. Some of the specific problems that Venice's citizens currently struggle with are unique to the city. But the broader issues of habitat loss, erosion, subsidence, flooding, pollution, and the impact of physical alterations are extremely relevant global issues affecting human-environment interactions in the coastal zone. Venice offers insight into how the interaction between the needs of humans and that of ecosystems must be balanced in order to support and enhance socio-ecological system's resilience.

The Research Unit Territory, Environment, Development and Sustainability and Research Unit Governing and Governance of Landscape Transformations of the University IUAV of Venice, which have strong vocation to interdisciplinary research, have taken the Resilient City award as an opportunity to reflect on how far scientific and societal understanding of socio-ecological resilience is, and what strategies to managing resilience for sustainable development are emerging and have potential to be implemented in the Italian context. In light of the resilient city award, the organizers of the workshop recognise the importance and urgency to explore and discuss how novel frameworks for understanding, managing and supporting systems' resilience and establishing adaptive governance settings can be fostered and translated in complex socio-ecological systems in Italy, of which the Venice lagoon is a major example.

## **Aim of the workshop**

In reaction to the failure of traditional environmental management approaches grounded on the paradigm "control change in systems" resilience thinking has emerged as a novel way of understanding ecosystems and landscape dynamics, including change and the interactions between human and natural systems. The novelty of resilience thinking lies on a new approach to ecosystems and resource management (the adaptive management approach) in which management actions and policy are designed as experiments not only to steer ecosystems towards desired states but also to learn about their functioning. This requires flexible and adaptable institutional settings (i.e. adaptive governance settings) in which learning, novelty and diversity are emphasized as ways to manage socio-ecological resilience, uncertainty and change. Since resilience thinking is about a paradigm shift in ecosystem and resource management that also

requires institutional adjustments, *does resilience thinking call for novel ways of interaction between science and policy?* Furthermore, as this paradigm shift involves all spheres of societal action (economic, social and environmental management), *how do different disciplines can integrate (or have already integrated) resilience thinking?*

Against this background, the aim of the workshop is to discuss opportunities and challenges of applying resilience thinking across disciplines, and particularly in the dialogue between science and policy. Ultimately this discussion will bring insights on avenues for integrating resilience thinking and adaptive governance settings in the Italian context.

We will bring together a limited number of scholars from different disciplines that are actively working with the concepts of resilience and adaptive governance and will involve them in a comprehensive discussion on these topics together with an audience of researchers, PhDs, practitioners, and policymakers. The workshop will be organized in 4 thematic sessions and 2 round tables so that the speakers will have ample time for presenting their work and to engage in discussion with the audience.

With this initiative we also would like to start linking scholars, young researchers and PhDs interested in resilience, adaptive governance and science-policy interface in Italy with the broad international arena working on these topics.

### **Attendance to the workshop**

Admittance to the workshop is free of charge. Because we have a limited number of places, participants need to sign up by sending an e-mail to [resilience@iuav.it](mailto:resilience@iuav.it) indicating their name, affiliation and intention to attend the full workshop or only one day (in the latter case, indicate the date). Deadline for subscription is **April 25<sup>th</sup>**.

We have organized the sessions so as to have ample time for discussion. There is the possibility for a limited number of participants to have 5-10 minutes planned intervention during the sessions and the round tables. The participants who would like to take this opportunity need to indicate the session and the topic of their intervention in the subscription e-mail.

### **Organizers and Contacts**

The International Workshop “Governance of Socio-Ecological Systems: Coordinating Science and Action in Resilience Thinking” is organized by the University IUAV of Venice - Research Unit Territory, Environment, Development and Sustainability and Research Unit Governing and Governance of Landscape Transformations, and by the PhD Program in “Regional Planning and Public Policy” - University IUAV of Venice ([www.iuav.it/Facolta/facolt--di/](http://www.iuav.it/Facolta/facolt--di/)).

Organizers are: dr. Elena Gissi, dr. Stefania Munaretto, dr. Francesco Musco, prof. Matelda Reho, dr. Giuseppina Siciliano, prof. Margherita Emma Turvani, prof. Luciano Vettoreto.

For information and questions please contact: [resilience@iuav.it](mailto:resilience@iuav.it)

## Workshop Programme

### May 10<sup>th</sup>

12:00-13:30 Registration and light lunch

13:30-13:45 Introduction, prof. Margherita E. Turvani, University IUAV of Venice  
Venice Resilient City 2011, Ing. Pierpaolo Campostrini, CORILA

13:45-15:15 **Session 1 – Resilience thinking and adaptive governance: novel approaches to natural resource management**

*Chair:* Dr. Stefania Munaretto, University IUAV of Venice

*Speakers*

Dr. Thomas Hahn, Stockholm Resilience Centre, Sweden

Dr. Dave Huitema, Institute for Environmental Studies, VU University  
Amsterdam, Netherlands

15:15-15:30 Coffee break

15:30-17:00 **Session 2 – Resilience thinking across disciplines**

*Chair:* Dr. Giuseppina Siciliano, University IUAV of Venice

*Speakers*

Prof. Andrew Stirling, SPRU - Science and Technology Policy Research, Sussex  
University, UK

Dr. Esther Turnhout, Wageningen University, Netherlands

19:30 Social dinner

### May 11<sup>th</sup>

9:00-10:30 **Session 3 – Novel forms of dialogue between science and policy in resilience thinking**

*Chair:* Dr. Francesco Musco, University IUAV of Venice

*Speakers*

Prof. Wenche Dramstad, Norwegian Forest and Landscape Institute, Norway

Dr. François Bousquet, Agricultural Research for Development (CIRAD),  
Montpellier, France

10:30-10:45 Coffee Break

10:45-12:15 **Session 4 – Ecosystem services and landscape governance**  
*Chair:* Dr. Elena Gissi, University IUAV of Venice

*Speakers*

Dr. Benjamin Burkhard, Kiel University, Germany

Prof. Paul Opdam, Wageningen University, The Netherlands

12:15- 13:15 **Session 5 – Novel forms of dialogue across disciplines and between science and policy fostered by resilience thinking: discussion and open debate**

*Chair:* Prof. Margherita Turvani, University IUAV of Venice

*Contributors:* Dr. François Bousquet, Dr. Benjamin Burkhard,  
Prof. Wenche Dramstad, Dr. Dave Huitema, Prof. Paul Opdam

13:15-14:30 Lunch break

14:30-16:30 **Session 6 - Landscape integration in policy making and practices facing resilience. Italian issues and cases: roundtable with Italian policy-makers and experts (in Italian)**

*Chair:* Prof. Matelda Reho, University IUAV of Venice

*Contributors:*

Dr. Angela Barbanente, Councillor of Puglia Region for Spatial Planning

Dr. Maria Sargentini, Officer of Toscana Region, Department of Civil Protection

Dr. Riccardo De Gobbi, Officer of Veneto Region, Department of Agriculture

Prof. Davide Pettenella, University of Padova

Prof. Riccardo Santolini, University of Urbino