**Report to the JMCE**

**Guest Lecturer**: Dr. Marcella Veronesi, Assistant Professor, Department of Economics, University of Verona, Italy.

**Title of presentation:** Economic Valuation of Ecosystem Services: Empirical Evidence from the UK.

**Venue and Date:** ECON20422 ‘Applied Environmental Economics’ (course instructor: Dr. Dimitrios Reppas); March 22, 2013; 3-5 pm.

On March 22, 2013 Dr. Marcella Veronesi, Assistant Professor in the Economics Department at the University of Verona, was invited as a guest speaker for the undergraduate course ECON20422 ‘Applied Environmental Economics’. Her presentation, entitled ‘Economic Valuation of Ecosystem Services: Empirical Evidence from the UK’ consisted of two parts: the first part, dealt with the U.N. Millennium Ecosystem Assessment (MEA); the second part, with the U.K. National Ecosystem Assessment (NEA).

Dr. Veronesi first defined ecosystem services and then presented the main findings of the MEA along with the conceptual framework behind the economics. Ecosystem Services include provisioning services (e.g., food production), regulating services (e.g., water and climate regulation), cultural services (e.g., recreational benefits), and supporting services (e.g., nutrient cycling). Many of these (e.g., carbon sequestration, and biodiversity) are relevant under a global (as opposed to only a regional) perspective; and therefore, such services constitute global public goods. The MEA estimates that approximately 60% of ecosystem services are being degraded or used unsustainably.

An important aspect of the lecture was for students to understand how preferences for ecosystem services can be elicited in economics. This goal was achieved in the second part of the lecture by analysing the 2011 U.K. National Ecosystem Assessment (NEA). Since 1950, provisioning services in the UK have increased; while other ecosystem services have declined. As many ecosystem services are not traded in markets it is necessary to use non-market valuation techniques to assign a price to changes in ecosystem services. Dr. Veronesi analyzed that the choice of a valuation technique depends on the type of ecosystem service to be valued, as well as the quantity and quality of the data available.

**References**:

Millennium Ecosystem Assessment, 2005. *Ecosystems and Human Well-being: Synthesis. Summary for Decision-Makers*. Island Press, Washington, DC. [www.unep.org/maweb/en/synthesis.aspx](http://www.unep.org/maweb/en/synthesis.aspx)

UK National Ecosystem Assessment, 2011. *The UK National Ecosystem Assessment: Synthesis of the Key Findings*. UNEP-WCMC, Cambridge. Chapter 22: Bateman, et al. «Economic Values from Ecosystems». <http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx>