

The School of Doctorate of the University of Venice IUAV and the Department of Design and Planning in Complex Environment is pleased to invite you to the fifth seminar of the series

“Water, energy, land and food security. The challenge of large-scale land acquisitions”

that will be run until the end of January 2015

The seminars are organized in collaboration with the **Venice International University (VIU)**, and the endorsement of the **National Institute of Agricultural Economics (INEA)**, the **Venice Expo2015 Committee** and the **ENEL Foundation**, and will be held on

Wednesday 14th January 2015 at 2 p.m.

at IUAV University of Venice, Room Tafuri, Palazzo Badoer, San Polo 2468 Venezia

The seminar will **address the issues related to land and water resources: balancing the needs for food and energy** with contributions from

Prof Mario Giampietro (Universitat Autònoma de Barcelona)

“The Food-Energy-Water Nexus: A Multi-scale Bioeconomic Perspective”

Emma Li Johansson (Lund University)

“Virtual water exports from land acquisitions in Africa”

A detailed programme of the seminar is enclosed.

Contacts:

Prof Margherita Emma Turvani, margheri@iuav.it

Dr Marta Antonelli, martaantonelli84@gmail.com

Speaker: Mario Giampietro

Title: The Food-Energy-Water Nexus: A Multi-scale Bioeconomic Perspective

Abstract

The nexus between energy, food, water, and land use has recently been put on the front burner of the sustainability discussion. The analysis of this nexus requires us to address the epistemological implications of complexity: How to integrate quantitative assessments referring to different dimensions and scales of analysis? The Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM), an innovative method of accounting, can be used to this purpose. Applications of this approach are presented, including scenarios of change for biofuel production from sugarcane in Mauritius and for the productive matrix in Ecuador.

Biography

Mario Giampietro is ICREA Research Professor at the Institute of Environmental Science and Technology (ICTA) of the Universitat Autònoma de Barcelona (UAB). He is an expert in energy analysis and integrated assessment of sustainability issues, and the 'father' of the innovative scientific approach, Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism (MuSIASEM). He has more than 150 scientific publications and is author of several books.

Speaker: Emma Li Johansson

Title: Virtual water exports from land acquisitions in Africa

Abstract

Since the early 2000s there has been a boom in long-term and large-scale land acquisitions globally. This study focuses on Africa since it's the most targeted region. The areas that are currently in production are converted to water demand by using modeled results from LPJmL, and then visualized as virtual exports of water to the regions where the investing companies originate. The water consumption is then related to the water availability of the targeted area, to highlight areas where an increased water use is more and less suitable.

Biography

Emma Li Johansson is a PhD student in Physical Geography and Ecosystem Analysis at Lund University. Her research is a multi-scale analysis of large-scale land acquisitions in Africa, and its socio-environmental effects, with a focus is particularly on water, and how a change in water use impacts on a global-to-local scale.