Valuing and Designing Payment Systems for Ecosystem Services

A short course held in conjunction with EAERE 2016

June 21-22, 2016, Swiss Federal Institute of Technology in Zurich (ETH), Switzerland

APPLICATION DEADLINE: FEBRUARY 1, 2016

Course description

Payment systems for ecosystem services (PES) have expanded rapidly in the decade since the publication of the Millennium Ecosystem Assessment. Most PES systems pertain to regulating services, and they aim to create incentives to conserve ecosystems that are presumed to supply such services. Examples include watershed payment programs that are intended to improve water quality or reduce floods and droughts by conserving forests in upland regions. Despite the increasing popularity of PES systems, the value of the services that these systems actually supply in practice remains poorly understood, and the design of the systems faces a number of economic challenges that can impede their effectiveness.

This two-day course will cover both of these issues: the valuation of regulating ecosystem services, and the design of PES systems to supply those services. The first day will provide an introduction to econometric approaches for valuing regulating services of ecosystems. It will emphasize services from forests and the application of panel-data models. It will also review the theory of production, cost, and profit functions, which underlies the empirical valuation of regulating services.

The second day will review the principal economic design problems confronting PES systems (e.g., spatial variation in ecological potential and supply prices, asymmetric information) and the main design options for addressing them (e.g., conservation auctions, spatial targeting of payments). It will cover methods for measuring the effectiveness and efficiency of PES, and it will circle back to valuation by considering the use of choice modelling to help design PES systems.

The course will involve a mix of lectures and interactive exercises. The valuation sessions will include hands-on econometric exercises that use the statistical package Stata. The sessions on PES design will include group discussions and presentations.

Venue and target audience

The course will be held at the Swiss Federal Institute of Technology in Zurich (ETH), immediately before the 2016 Annual Conference of the European Association of

Environmental and Resource Economists (http://www.eaere2016.org). Its target audience is researchers, policy analysts, and policy makers from developing countries who have received their PhD within the past 5-10 years. Researchers who work on policy-relevant issues, and policy analysts and policy makers with research backgrounds who wish to learn advanced theory and methods related to economic aspects of ecosystem services, are especially welcome to apply. If space allows, then advanced PhD students and researchers holding MSc degrees will also be considered.

Instructors

The primary instructors in the course are:

*Prof Nick Hanley (*University of St Andrews, Scotland, UK)

Prof. Jeffrey R. Vincent (Duke University, North Carolina, USA)

Prof. Vincent will lead the sessions on valuation, while Prof. Hanley will lead the sessions on PES design.

Cost and scholarships

There is no fee for the course. The Beijer Institute will provide lunch on both days of the course and dinner on the first day for all participants. In addition, the Institute is offering a limited number of scholarships, which will cover roundtrip airfare, lodging during the course and the Conference, and a reduced registration fee for the Conference. Participants will be responsible for any remaining costs. Scholarships will be allocated preferentially to researchers from the regional environmental economics networks CEEPA, EEPSEA, LACEEP, SANDEE, and EfD, who have a paper accepted for presentation at the Conference. Participants are also encouraged to apply for the EAERE travel grants http://www.eaere2016.ethz.ch/registration/grants.html .

Application

The application deadline is February 1, 2016. An application consists of a single document that contains the following information:

1. Brief statement (up to 200 words) of your research interests and your topic of work and why you would like to take the course
2. Title of paper submitted to EAERE 2016
3. Description of prior involvement (if any) with CEEPA, EEPSEA, LACEEP, SANDEE, or EfD
4. List of any statistical software (for example, Stata, R) that you have used, including a short statement of your level of experience
5. Statement of whether you are requesting a travel scholarship
6. Current CV

Applications should be e-mailed to:

Christina Leijonhufvud (course administrator)
The Beijer Institute of Ecological Economics
chris@beijer.kva.se

The number of participants will be limited to 25. All applicants who are accepted into the course will be required to register for EARE 2016 by April 29, 2016.

Partners

The course is organized by the Beijer Institute of Ecological Economics (Royal Swedish Academy of Sciences, Stockholm, Sweden; www.beijer.kva.se). It is funded by the United Nations Environment Programme (UNEP), the Swedish International Development Cooperation Agency (SIDA), and the Beijer Institute. The course is organized with the support of the European Association of Environmental and Resource Economists (EAERE).