

SANDEE- Summer School in Environmental and Natural Resource Economics, 9 - 26 May, 2015, AIT CC, Thailand

(Application Submission Deadline is February 26, 2016)

Course Description

The three-week SANDEE Summer School 2016 on Environmental and Natural Resource Economics will cover issues in natural resource management, environmental economics, sustainable development, and climate change. The natural resource management module focuses on renewable resources, such as fisheries, forestry, and non-renewable resources. Environmental economics module covers issues such as externalities and market failures, non market valuation of environmental goods and environmental damage assessment, energy and climate change, sustainability and green accounting, common property resources and institutions. Participants will be exposed to theoretical issues and economic tools for analyzing environmental and resource problems in developing countries.

Modules

The course is divided into six different modules.

Module One is a review of optimization (static and dynamic) and mathematical tools (differential and integral calculus) that are frequently used in resource and environmental economics.

Module Two is on natural resource economics (non-renewable, fisheries and forestry).

Module Three will cover special topics in environmental economics, such as, welfare measurement and inclusive national accounts, externalities, property rights and institutions, common property resources, and fertility behavior and gender.

Module four will cover panel data econometrics, causal inferences in energy and environmental economics, and the economics of climate change.

Module Five will focus on non-market valuation techniques for valuing environmental goods and services.

Module Six will cover empirical environmental economics with hand-on training on statistical software STATA that will be used for doing different assignments, for doing empirical paper presentation and research.

Each module consists of lecture sessions, generally followed by policy discussions/assignments or presentations by the participants. During the workshop, participants are expected to develop a research concept note and present at the end of the course. Last two days of the summer school are exclusively devoted to research concept notes presentation by the participants. In addition, researchers will review and present various empirical papers intermittently throughout the workshop. From these sessions, participants will learn how to do empirical research on their own.

Organization

Mani Nepal (Senior Environmental Economist at SANDEE) is the course director and Anuradha Kafle (Research and Communication officer at SANDEE) is the course co-ordinator. Core teaching faculty for the course includes Prof. Maximilian Auffhammer (UC Berkeley), Prof. Partha Dasgupta (U of Cambridge), Prof. Enamul Haque (East-West University), Dr. Mani Nepal (SANDEE), Prof. E. Somanathan (SANDEE & ISI), and Prof. Jeff R. Vincent (Duke University). There will be several additional resource persons including Dr. Bishnu Prasad Sharma (Associate Prof., Tribhuvan University), Dr. Shobhakar Dhakal (Associate professor, AIT), Dr. Orapan Nabangchang (Senior Economist at EEPSEA), and guest speaker from RCC AP, AIT. The aim of bringing guest



lectures is to provide wider exposure to the participants in contemporary research tools and issues in the related fields.

Core Faculty

Prof. <u>Maximilian Auffhammer</u> is the George Pardee Jr. Professor of International Sustainable Development and Associate Dean in the Division of Social Sciences at UC Berkeley. He received his Ph.D. in economics from UC San Diego. His research focuses on environmental and resource economics, energy economics and applied econometrics. He is a lead author for the Intergovernmental Panel on Climate Change (IPCC). Prof. Auffhammer serves as Co-Editor of the Journal of the Association of Environmental and Resource Economists and he is the recipient of the 2007 Cozzarelli Prize awarded by the National Academies of Sciences, and the 2007 Sarlo Distinguished Mentoring Award.

Sir <u>Partha Dasgupta</u> is the Frank Ramsey Professor Emeritus in Economics at Cambridge University. He has also taught at the London School of Economics and Stanford University. Among many important appointments he has the honor of being the first economist to be elected as a fellow of the Royal Society. In 2007, he received the John Kenneth Galbraith Award from the American Agricultural Economics Association, and Tylor Prize for environmental achievement in 2016 among others. Prof. Dasgupta is a co-founder of SANDEE, and also an exchair of SANDEE's Management and Advisory Committee.

<u>Enamul Haque</u> is Professor at East-West University, a private university in Dhaka, Bangladesh. He has a Master's degree in Economics as well as in Agricultural Economics. He completed his doctoral degree from the University of Guelph, Ontario, Canada in Natural Resource Economics. Professor Haque has been a SANDEE research advisor for many years.

Mani Nepal is Senior Environmental Economist at SANDEE. He manages SANDEE's research activities and coordinates trainings, and provides technical supports to the SANDEE researchers. He has a MS degree in Policy Economics from the University of Illinois at Urbana-Champaign and doctoral degree from the University of New Mexico in Environmental/Development Economics and Applied Econometrics. Earlier, he worked as a visiting faculty at the University of New Mexico, Kathmandu, University, and Tribhuvan University, and held senior economist position at the Department of Finance and Administration, Santa Fe, New Mexico, USA.

E. Somanathan is Executive Program Director, SANDEE and Professor of Economics, Indian Statistical Institute, Delhi. He is the editor of the journal Environment and Development Economics, published by Cambridge University Press and was a coordinating lead author of the Intergovernmental Panel on Climate Change's Fifth Assessment Report. He received his PhD in economics from Harvard. His research lies at the intersection of environmental and development economics, both theoretical and empirical. Prof. Somanathan was SADNEE advisor before undertaking SANDEE leadership.

Jeffery R. Vincent is Clarence F. Korstian Professor of Forest Economics and Management at Nicholas School of the Environment and Earth Sciences, Duke University. Prof. Vincent's research experience is related to economics of natural resource management and policy in developing countries, with an emphasis on forests, agriculture, and water in Asia. Prior to joining Duke, he held positions at University of California (San Diego), Harvard, and Michigan State University. He received the Cozzarelli Prize for the best article in applied biological, agricultural, and environmental sciences published in PNAS (2006) and the McKinsey Award for the most significant article published in the Harvard Business Review (2003). He has degrees from Yale University (Ph.D), Michigan State University (M.S), and Harvard University (A.B.).