SANDEE- Summer School in Environmental and Natural Resource Economics

05 -19 May 2019, AIT CC, Thailand

Course Description
The 15 days SANDEE Summer School 2019 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, and common property resources and institutions. Participants will be exposed to theoretical issues and economic tools such as experimental economics for analyzing environmental and resource problems in developing countries.

Modules
The Summer School course is divided into seven different modules.

1. **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.

2. **Module Two** is on experimental economics which will cover the use of experimental economics in understanding environmental issues, formal and informal regulatory measures and compliances, and unconventional markets (emission trading and market for conservation, for example).

3. **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.

4. **Module Four** will cover natural resource economics (non-renewable, fisheries and forestry). This module introduce open access as well as public good nature of the natural resources where collective action is needed for sustainable management.

5. **Module Five** will focus on nonmarket valuation techniques for valuing environmental goods and services.

   The next three modules are exclusively design to give practical knowledge in doing research in environmental and resource economics, where learning-by-doing approach is applied.

6. **Module Six** will cover empirical environmental economics including hands-on training on statistical methods.

7. **Module Seven** is related to understanding applied research in environmental economics in participants-led environment.

8. **Module Eight** is exclusively design to give the participants enough time to reflect on what research they intend to do and how? Peers and expert provide feedback on the research ideas and methods. Participants are required to develop a research concept notes and present at the end of
the course. Final two days are devoted for this activity.

Each module consists of lecture sessions, generally followed by policy discussions/assignments or presentations by the participants. The Summer School participants will review and present various empirical papers intermittently throughout the workshop and make presentation. From these sessions, participants will learn how to do empirical research in environmental and resource economics on their own.

**Organization**

Mani Nepal (Program Coordinator SANDEE) is the course director and Neesha Pradhan (Program Associate SANDEE) is the course administrator. AIT CC will provide administrative support during the Summer School.

**Core Faculty**

The Summer School Core faculty include the following prominent scholars in environmental and resource economics:

**Faculty Profile**

**Randall Bluffstone** is Professor of Economics and Director of the Institute for Economics and the Environment at Portland State University. His research and teaching interests focus on environmental and resource economics, including climate change, energy, pollution control and deforestation in low-income countries. Professor Bluffstone is associate editor of the journal Forest Economics, a research associate of the Environment for Development (EfD) Initiative and co-coordinates the EfD Forest Collaborative. In 2017-2018 Bluffstone was a Fulbright Senior Scholar in Nepal. Prior to coming to Portland State, he taught at the University of Redlands and until September 1999 was deputy director of the International Environment Program at the Harvard Institute for International Development (HIID) at Harvard University. While at Harvard, Bluffstone directed HIID’s environmental policy program in Central Asia and from 1994 to 1997 served as senior environmental policy advisor to the Government of Lithuania. Randall Bluffstone received his Ph.D. in economics from Boston University and from 1983 to 1985 was a Peace Corps volunteer in Nepal.

Sir **Partha Dasgupta** 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, Sir Partha has the honor of being the first economist to be elected as a fellow of the Royal Society. Prof. Dasgupta is a co-founder of SANDEE. He is a member of Pontifical Academy of Social Sciences, and foreign member of US National Academy of Sciences, the American Academy of Arts and Sciences, American Philosophical Society, Royal Swedish Academy of Sciences. He is an honorary fellow of London School of Economics, and Trinity College (Cambridge). He has received Volvo Environment Prize (2002), John Kenneth Galbraith Prize (2006), Zayed International Environment Prize (2011), Blue Planet Prize (2015), and Tyler Prize (2016). Prof. Dasgupta has been awarded honorary doctorate by Harvard
University, Wageningen University, University of Bologna, Tilberg University, Catholic University of Louvain, and University of York.

**Lata Gangadharan** is Professor of Economics and holds the Joe Isaac Chair in Business and Economics at Monash University, Australia. Her research focuses on understanding and designing appropriate institutions for the environment and for development. She is a CoEditor of Experimental Economics and is a Fellow of the Academy of Social Sciences in Australia. Prof. Gangadharan is an experimental economist, and has conducted laboratory and field experiments to examine incentives in environmental markets, attitudes towards peer punishment to solve environmental dilemmas, propensity for corruption in different countries, and impact of gender, norms and social identity. Her research is published in journals such as the American Economic Review, Science, Nature Communications, European Economic Review, Journal of Public Economics, Journal of Environmental Economics and Management, Journal of Economic Behavior and Organization and American Journal of Agricultural Economics.

**Enamul Haque** is Professor at East-West University, a private university in Dhaka, Bangladesh, and Executive Director, Asian Center for Development. 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 faculty advisor for many years.

**Mani Nepal** is SANDEE Program Coordinator and Lead Economist at ICIMOD. He manages SANDEE’s research activities, coordinates trainings, and mentors SANDEE researchers. He served as an adjunct professor at Agriculture and Forestry University, associate professor at Tribhuvan University, assistant professor at the University of New Mexico, visiting professor at Kathmandu University, and held senior economist position at the Department of Finance and Administration, Santa Fe, New Mexico, USA. 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.

**Joyashree Roy** is the inaugural Bangabandhu Chair Professor at AIT, Thailand. She has been with Department of Economics, Jadavpur University and also been awarded national fellow of the Indian Council of Social Sciences Research (ICSSR). She was Ford Foundation Post-Doctoral Fellow at LBNL, University of California, Berkeley, USA. She is the Founding advisor of the Global Change Programme and Ryoichi Sasakawa Young Leaders Fellowship Fund (SYLFF) Project at Jadavpur University. She was in IPCC-2007 Nobel Peace Prize winning panel and is continuing as Coordinating Lead Author of WGIII, of IPCC. She has been a chapter author of Global Energy Assessment. She is in the winning team of Prince Sultan Bin Aziz award for water. She has published more than 100 peer reviewed journal articles in issues related to environmental and energy economics.