

WORKSHOP ON

Research methods in environmental and natural resource economics using R

17–21 May 2021 | Zoom meeting
18:00 – 21:30 (Nepal Standard Time, UTC+05:45)

Application deadline: 7 April 2021

Background

The South Asian Network for Development and Environmental Economics (SANDEE) at the International Center for Integrated Mountain Development (ICIMOD), East-West University (EWU), and Goa University (GU) are jointly organizing a virtual workshop on research methods in environmental and resource economics with R from May 17-21, 2021.

Objectives

The main objective of this workshop is to provide hands-on training and familiarize researchers with the practical and theoretical aspects, including techniques for conducting research in environmental and natural resource economics using the statistical tool, R.

Organizers

Mani Nepal (Programme Coordinator, SANDEE, and Lead Economist, ICIMOD), is the course director and **Neesha Pradhan** (Programme Associate, SANDEE-ICIMOD) will be administering the course.

Workshop faculty

Vikram Dayal, the main faculty member for the workshop, is a professor at the Institute of Economic Growth, Delhi. He has been using R in teaching quantitative economics to diverse audiences. Dr. Dayal has authored several books on quantitative economics such as “Quantitative Economics with R: A Data Science Approach,” and “An Introduction to R for Quantitative Economics: Graphing, Simulating and Computing.” He has also published research on various environmental and developmental issues, from outdoor and indoor air pollution in Goa, India to the impacts of *Prosopis juliflora*, an exotic tree, on the habitat of tigers in Ranthambore National Park. He studied economics in India and USA and received his doctoral degree from the Delhi School of Economics, University of Delhi. He will be assisted by **Heena Gaude**, who is an Assistant Professor at Goa Business School, Goa University.

Additional faculty include Prof. **AK Enamul Haque** (East-West University and Asian Center for Development), Prof. **Pranab Mukhopadhyay** (Goa University) and **Mani Nepal** (SANDEE-ICIMOD).



Who can apply?

Interested participants must have the following qualifications:

A master's degree or PhD in economics with a good understanding of basic and applied econometrics and environmental economics

Some experience of applying statistical software, such as Stata

An interest in learning R, along with a reasonable internet connection; participants must have downloaded R and R Studio in their personal computer before attending the workshop

Priority will be given to researchers who have received SANDEE research grants and have data sets to be analyzed or completed a research grant and wish to learn alternative data analysis tools

Priority will also be given to junior to mid-career university faculty and researchers who have submitted a research proposal to SANDEE on issues related to environmental and resource economics and meet other pre-requisites

Researchers from Afghanistan, Bangladesh, Bhutan, China, India, Maldives, Myanmar, Nepal, Pakistan, and Sri Lanka are eligible to apply

Researchers from outside South Asia and the Hindu Kush Himalayan (HKH) region or from the region but living outside South Asia or the HKH region are not eligible

What are you expected to do during the workshop?

This is an intensive teaching workshop (around 15 contact hours) over five days. Participants are expected to bring in data for use during the workshop, read up on the topic of each day's lecture beforehand, and participate in individual/group assignments and discussions. Due to the pandemic, the workshop will be organized online for three hours each day in the evening (18:00 – 21:30 Nepal Standard Time) with a short break in between. Participants are expected to use extra hours each day for completing their assignments.

Topics to be covered

Basic orientation to R

RStudio interface

R scripts

Basic data analysis,

Vectors and data frames

Wrangling and graphing

Matching

Regression analysis

COVID-19 epidemiology models with R, including a live demo and hands-on applications with various real-world data sets

Application process

SANDEE-ICIMOD will cover the workshop costs and fees for the shortlisted participants.

Interested and eligible candidates are requested to submit their application online before the deadline on 7 April 2020. Shortlisted candidates will be informed towards the end of April 2021.

Please fill in the online form with relevant information [here](#) and attach a single PDF file (no more than 4 pages altogether – one-inch margin, 12-point font)

A one-page cover letter indicating how this course will be useful in the applicant's teaching and research activities; prior background in environmental economics courses; and exposure to basic econometrics and statistical software

A two-page research concept note (precursor of a research proposal) on issues related to environmental and resource economics in South Asia and the HKH. The concept note should include a discussion of the research problem and its policy relevance; research gaps; clear research question(s); an analytical framework; research gap and potential contribution of the proposed research; and empirical methods (data requirement, collection, and analysis). In lieu of research concept note, researchers can also submit two-page data analysis that they have done with econometric models, the results, and some interpretation.

A brief CV (no more than one page) indicating age; gender; professional responsibilities/activities (current job and institutional details with address); educational qualifications (highest degree/institution/date); two most important research publications (if any); and current teaching and research responsibilities (if relevant)

If you have any difficulties submitting the online form, please write to Neesha Pradhan at sandee@icimod.org mentioning the issues.

We request you to pass this information along to interested colleagues and peers.

Approximately 30 participants will be invited to the workshop. Only shortlisted candidates will be contacted.

About the organizing institutions

SANDEE-ICIMOD is an initiative of the International Centre for Integrated Mountain Development (ICIMOD) under the Mountain Knowledge and Action Networks (MKAN) Regional Programme. SANDEE is a research capacity-building network that works in South Asia and the Hindu Kush Himalaya, supporting researchers from the region and institutions interested in understanding the inter-connections between economic development, the environment, and the use of natural resources through rigorous research.

East West University (EWU), rated among the top private universities of Bangladesh, is an institution promoting eastern culture and values while meaningfully blending eastern and western thoughts and innovation. EWU strives to maintain high quality in both instruction and research, and render community service through dissemination of information, training and other activities.

Goa University is a young state university established in 1985 and located on the western coast of India. It has been consistently ranked in the top 100 universities in India by NIRF, Q.S., *India Today*, and *The Week*. Goa University offers programmes leading to undergraduate, masters', M.Phil. and Ph.D. degrees in various disciplines.

SANDEE is an initiative of the International Centre for Integrated Mountain Development (ICIMOD). SANDEE supports ICIMOD's programmatic work and strengthens the Centre's economic and policy analysis.

SANDEE is supported by the Government of Sweden. SANDEE is also supported by ICIMOD's core donors: the Governments of Afghanistan, Australia, Austria, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Norway, Pakistan, Sweden, Switzerland, and the United Kingdom.