

GIAN Course on

# ENVIRONMENTAL ECONOMICS AND SUSTAINABLE DEVELOPMENT: THEORY AND METHODOLOGY FOR VALUATION

November, 19 – November 23, 2018



## Overview

Environmental economics is a comparatively young, but by now well-established, branch of economic study. In successfully applying standard microeconomic analysis to the field of the natural environment and sustainable development, economists have challenged many erroneous, but strongly held preconceptions of policy makers and environmentalists alike. For example, the course will show that the efficient level of environmental pollution is, in general, not zero and that there is no risk of running out of fossil fuel non-renewable resources any time soon. Conversely, however, policy makers fail to understand the fundamental drivers behind renewable resource extinction (particularly species loss), are over-optimistic when it comes to the environmental consequences of economic growth and insufficiently grasp the obstacles toward achieving strong multilateral agreements for solving international and global environmental problems. This course aims to provide students with a comprehensive account of the application of economic analysis to environmental issues. The course covers both methodological topics and recent applications. Using microeconomic principles, we will examine such topics as the sustainability problems, ethics and the environment, climate change, irreversibility and uncertainty, trade and the environment and public policies.

## Objectives

The primary objectives of the course are as follows:

- (i) Exposing participants to the theoretical underpinning of environmental economics and sustainable development
- (ii) Discussing methodological topics and recent applications in the field of climate change and energy
- (iii) Discussing alternative methods of developing models to reduce pollution in developing countries setting
- (iv) Discussing business models that can be profitable while staying committed to environmental sensitivity



**Shunsuke Managi** is the Distinguished Professor of Technology and Policy & Director of Urban Institute at the Kyushu University, Japan. Previously, He has received several research fellowships from organizations such as the Helmholtz Association and Cheney Senior Fellowship and has served as an expert on energy and environmental policy. His areas of interest are Environmental and Natural Resource Economics, urbanization, transportation, energy, climate change, sustainability, and population change. He is a lead author for the Intergovernmental Panel on Climate Change (IPCC), a coordinating lead author for the Intergovernmental Platform on Biodiversity and Ecosystem Services. He is the author of 25 books and 200 academic journal papers. He has served as reviewer for more than 200 referred journal articles. IDEAS/RePEc ranks him among the top 40 young economists in the world and top in Asia (10 years or less), ranked 37 as of August 2012. Top 200 Economists (ranked 43) (15 years or less), rank 7 in Japan, rank 45 in Asia.



**Dr. Pradyot Ranjan Jena** is currently working as Assistant professor at School of Management, National Institute of Technology Karnataka (NITK), Surathkal. He has obtained his Ph.D. in Economics from Indian Institute of Technology (IIT) Kanpur in 2007. Before joining NITK, Surathkal in 2015 he worked at International Maize and Wheat Improvement Center, Nairobi and Institute for Environmental Economics and World Trade (IUEW), Leibniz University of Hannover in Germany. Dr. Jena's core research area of expertise is impact evaluation, food security and climate change. He has travelled across continents and has experience about rural livelihoods in different developing countries. He has published 20 journal papers in international peer reviewed journals e.g. Ecological Economics, Agricultural Economics, Economic Bulletin, World Development, Water Science and Technology: Water Supply, Applied Economic Perspectives and Policy etc. He has completed 3 research projects. His h-index is 7 and i10-index is 3. As part of these projects he has collected primary data in countries such as India, Kenya, Ethiopia and Nicaragua.

## Course details

Day 1 Economic Concepts for Environment, Market failure and public policy,

Day 2 International Externalities, Economic valuation, Global climate change, Economics of climate change, Estimating the impacts of climate change

Day 3 International Trade and Environment, Measurement Issues, Sustainable Development and Politics, Theoretical Models Tutorial 1: PRJ: 1 hr

Day 4 Pollution control: Targets and Instruments Lecture, Emission trading

Day 5 Approaches to Business and Environment, Saving costs, Managing Environmental Risk

## Course Fee

For Students from India	Participation fee	Rs. 1000/-
For Faculty/ Scientists/ Industry from India	Faculty (Internal & External) & Scientists from R&D Labs	Rs. 2000/-
	Persons working in Industry / Consultancy firms	Rs. 5000/-
For Participants from abroad	Students	USD 150
	Faculty/Scientists/Persons from Industry & Consultancy firms	USD 250

(Excluding Lodging & Boarding)

## Who can attend?

Practitioners of Environmental Engineering, Environmental Economics and Sciences NGO professionals working on Sustainable development PhD students, or Faculty from academic and technical institutions

**Last Date for Registration: 15th October 2018**

## About NIT Karnataka

The National Institute of Technology Karnataka (NITK), Surathkal has established itself as one of the top technological institute in India and is recognized as an institute of National importance. The Institute is considered as a premier center engaged in imparting quality technological education and providing support to research and development activities. The Institute has a long tradition of research for several decades in both traditional and modern areas of engineering and science. The NITK campus is a breeding ground for effective interaction among the faculties, research scholars and students leading to germination of innovative ideas. The campus also fosters interaction with industry and other stakeholders.

## School of Management

The School of Management which was established in the year 1989-90 has become a leading management school. The School strives to offer state of the art management teaching and real world business exposures through its internship program. With faculties having expertise in diverse fields of research and strong quantitative background the School offers excellent placement opportunities.

### Course Coordinator

Dr. Pradyot Ranjan Jena

School of Management

National Institute of Technology Karnataka, Surathkal

Mangalore 575025, Karnataka, India

[www.nitk.ac.in](http://www.nitk.ac.in)

Email: [jpradyot@gmail.com](mailto:jpradyot@gmail.com) Mobile: 7899495351

## How to Register

All prospective participants need to do web registration for the course on GIAN portal by making onetime non-refundable payment of Rs. 500/. After the mandatory registration the participants need fill up the attached registration form and send it along with the DD to course coordinator. The payment should be made in the form of Demand Draft, in the favor of DIRECTOR NITK SURATHKAL payable at Surathkal. In case of any queries, you send an email to the course coordinator. Limited accommodation can be provided inside the campus against a nominal charge.

### REGISTRATION FORM

1. Name: \_\_\_\_\_

2. Designation: \_\_\_\_\_

3. Qualification: \_\_\_\_\_

4. Institution: \_\_\_\_\_

5. Address: \_\_\_\_\_

6. Email address: \_\_\_\_\_

7. Phone: \_\_\_\_\_

8. Accommodation Required: YES/NO

9. Details of payment of course Registration fees:

DD No.: \_\_\_\_\_ Date: \_\_\_\_\_ Amount Rs: \_\_\_\_\_

Bank: \_\_\_\_\_

Signature of the Candidate