

Divecha Centre for Climate ChangeIndian Institute of Science BANGALORE - 560012 Phone: 91-80 22933425/2075

DCCC Seminar

Title: "Perspective matters: An interpretational lens to understand climate performance indices"

Speaker: Dr. Chirag Dhara

Assistant Professor, Department of Environmental Studies Krea University, Andhra Pradesh

Date: 24th March 2025 (Monday)

Time: 11:00 AM to 12:00 Noon

Venue: DCCC Auditorium, 2nd Floor, D314.

Coffee/Tea: 10.30 to 11.00 AM

Speaker Bio:

Dr Chirag Dhara is a quantum physicist turned climate scientist holding two doctorates: one in Earth System Science (2017) from the Max Planck Institute for Biogeochemistry and University of Hamburg, Germany and the other in Photonics (2013) from the Institute of Photonic Sciences and Universitat Polytechnical de Catalunya, Barcelona, Spain.

Prior to joining Krea University, he spent two years as a Research Associate at the Indian Institute of Tropical Meteorology (IITM). He co-authored India's first comprehensive climate change assessment report released by IITM in June, 2020 (as an official report of the Ministry of Earth Science, India). He is also a contributing author to the IPCC AR6 report (2021). His other major area of work is sustainability. Specifically, the development-sustainability conundrum, the role of technology towards sustainability and the energy transition. Main Research Discipline: Climate science, sustainability science, Specific Research Area: The effect of anthropogenic aerosols on global and regional precipitation; sustainability of development. In 2018-2019, he freelanced for Firstpost, a digital news portal, writing on climate change science and impacts.

Abstract:-

Climate performance indices play a crucial role in evaluating countries' efforts and advancing global environmental governance. This study critically examines disparities among prominent climate performance indices, including the Environmental Performance Index (EPI), Climate Change Performance Index (CCPI), and Climate Action Tracker (CAT). We reveal significant divergences in country rankings, particularly between 'developed' and 'least developed' nations, underscoring how subjective methodological choices impact indices' results and how they should be interpreted. We develop an analytic tool, called EPI-equity, to demonstrate how integrating equity principles can substantially alter performance assessments. We propose a novel conceptual framework to classify indices based on the perspectives they embody, highlighting how these can shape the interpretation of performance. Our results suggest that the outcomes of climate performance indices are more likely to concur when they represent similar perspectives.

We propose that explicitly articulating the perspective embodied by performance indices can enhance transparency, guide developers in aligning methodological choices with intended interpretations, and equip users with a clearer understanding of the results. Our analysis highlights the importance of employing multiple indices that encompass a range of perspectives for a comprehensive evaluation of countries' climate performance. Our adaptable framework provides a structured approach to guide the selection of indices ensuring that they span a broad spectrum of viewpoints. This method mitigates the likelihood of conflicts arising from fragmented worldviews on complex socio-environmental issues.

All are welcome!