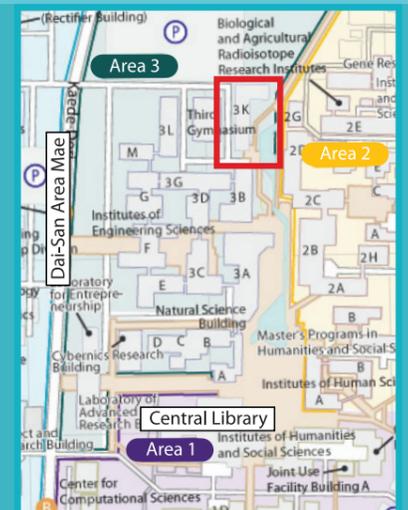




Individual Consumption and Climate Change: Comparison between Developed and Developing Countries

Lecturer: **Dr. Pragya Gupta**

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3:00 PM - 4:30 PM

Venue: 3K Building, Room 311 (Central Area)

Abstract: The impact of household consumption on climate change has been recognized globally and is one of the sustainable development goals. However, household consumption behavior differs considerably between developed and developing countries, and so does their carbon footprints. The objective of this study is to compare the effect of per capita household consumption on CO₂ emissions between developed and developing countries.

First, this study examines the significance of per capita household expenditure as a driver of total CO₂ emissions using the STIRPAT (Stochastic Impacts by Regression on Population, Affluence and Technology) model and finds it to be statistically significant in both developed and developing countries. Second, monthly per capita emissions from household consumption of goods and services, aggregated into 12 consumption categories for 2004 and 2009, were compared between two leading emitters of the world, India and the USA. The results suggest that the total CO₂ emissions were higher in the USA across all consumption categories; however, India had a higher share of emissions from food, and the USA from non-food consumption categories. Also, the percentage increase in emissions from 2004 to 2009 was higher in India. Finally, existing policies to alter the demand for polluting goods and services in India are explored.

Profile: Dr. Pragya Gupta is currently working as a lecturer at Chuo University. She teaches a course on Introduction to Statistics for Management in the Department of Global Management. She is also working as a Research Associate at Japan International Cooperation Agency Research Institute (JICA-RI) for the project "Study on Remittances and Household Finances in the Philippines and Tajikistan." Before coming to Japan, she completed her PhD in the field of consumer behavior and climate change from Indian Institute Engineering Science and Technology, Shibpur India.