

## Using OR to tackle health and climate challenges in the Global South

The 2030 Agenda for Sustainable Development presents an ambitious call to action for ending poverty, improving health and well-being, and addressing the climate emergency. These global challenges are especially acute in the Global South, where systemic vulnerabilities and resource constraints demand innovative, context-sensitive solutions. Operational Research, and optimisation in particular, can play a critical role in shaping data-driven, locally grounded interventions that build resilience and promote sustainable development.

In this talk, I will present some research projects that apply OR to real-world development challenges in South-east Asia and Sub-Saharan Africa. Specific examples include designing adaptive flood mitigation strategies for rapidly urbanising cities in Vietnam (the GCRF-OSIRIS project), building OR research capacity for sustainable development in Southeast Asia (CREST-OR project) and optimising health delivery in refugee camps in Ethiopia (a collaboration with Doctors with Africa CUAMM).

Rather than focusing solely on technical results, I will reflect on what these projects have taught us about the importance of people-centred, interdisciplinary approaches. The aim of the talk is to highlight how Operational Research, when embedded in real-world collaborations, can make a tangible difference to the lives of vulnerable communities and contribute to a more resilient and sustainable future.

**Presenter:** SCAPARRA, Maria Paola (Kent Business School, University of Kent)

**Session Classification:** The EURO Plenary