

MEDIA RELEASE

Embargo: Monday, 12 August 2019

Media are welcome to attend

Embargoed media releases will be available [here](#) and the full program is [online](#).

Interviews can be prearranged for Monday, 12 August

WATER SOLUTIONS FROM BEYOND THE WATER SECTOR: WATER-ENERGY-FOOD NEXUS THINKING A MUST

While science and innovation have much to offer for water, energy and food security, these must be backed by institutional policies and political leadership to identify pathways to overcome a plethora of inter-connected challenges.

This is the key message of Dr Aditi Mukherji, Principal Researcher at the International Water Management Institute, in Australia to address the 2019 Crawford Fund annual conference, titled *Weathering the 'Perfect Storm': Addressing the Agriculture, Energy, Water, Climate Change Nexus*. She will make her address in Parliament House, Canberra on 13 August, with other international and Australian specialists discussing strategies needed to provide water, energy and food in a sustainable and equitable way in the face of climate change impacts.

"Water, energy and food outcomes are inextricably interlinked in an unsustainable nexus of mutual interdependence. Changes in one sector affects the other two sectors. This is true the world over. The 'water-energy-food nexus' concept is a powerful analytical tool for problem identification and for seeking solutions. Australia may well learn from some current research around 'nexus solutions' for developing countries," said Dr Mukherji, who is the coordinating lead author of the water chapter of the 6th Assessment Report team of the Intergovernmental Panel on Climate Change.

"Growth in the agriculture sector is often reliant on unsustainable practices in the groundwater and electricity sectors. Likewise, policies and practices in one sector affect outcomes in all three sectors."

"My work shows that there is wide variation in the functioning and outcomes where water-energy-food connect. This variation is caused not only by the physical characteristics of groundwater endowments and rainfall-recharge, but also by variation in both institutional policies and in political exigencies."

"Those of us who work on water issues in South understand that there have been decades of mismanagement of our land, water, energy and ecosystems due to poor policies, whose effects are now being compounded due to climate change," she said.

"Solutions for groundwater overexploitation problems are often found in the regions' energy policies, including in the ever-increasing potential of renewable energy."

"Policies for reducing water distress in agriculture have to focus on all fronts – ensuring that food procurement policies are revised to incentivise low water consuming crops, that agricultural energy policies are tweaked to provide smarter incentives for lower groundwater extraction, and that water policies encourage decentralised solutions like water harvesting and water efficient agriculture," she explained.

In her talk, Dr Mukherji will raise a range of issues and examples in Asia and proposes that for effective solutions for water, energy and food security, proposing a greater focus on their interconnectedness to solve real world water, energy and food issues.

