

Overview of NERC Science & Innovation in India

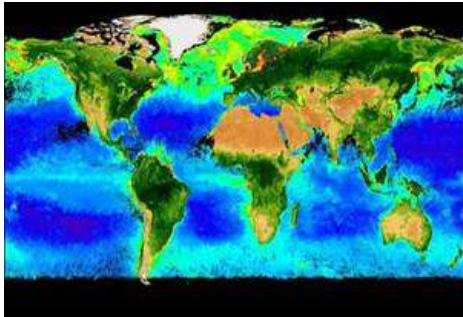
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Our goals

Fund excellent, peer-reviewed environmental science that helps us:



- understand and predict how our planet works
- manage our environment responsibly
- Meet society's needs :
 - Benefiting from natural resources
 - Resilience to environmental hazards
 - Managing environmental change

We support



- 3,000 scientists and 1,000 PhD students
- 1,000 research projects and 60 UK or international programmes
- 55 universities and 20 research institutes
- UK national capability: 4 ships, 7 aircraft, 6 polar stations, 6 data centres, 32 community facilities



Partnership with MoES

- MoU with Ministry of Earth Sciences
- Enables scientific and technical collaboration in natural environmental research including meteorology, climate variability and change, oceanography, hydrology, natural hazards and biodiversity
- Currently have 4 joint programmes:
 - Changing Water Cycle
 - Sustaining Water Resources
 - Drivers of Variability in the South Asian Monsoon
 - Atmospheric Pollution & Human Health in an Indian Megacity

Changing Water Cycle

- 5 projects co-funded by MoES and NERC
- Projects looking at different aspects of water cycle in India, including regional precipitation patterns, evapotranspiration, soil moisture, hydrological storage
- Finale event to present the outcomes of the projects planned for May in New Delhi
- Policymakers and local communities engaged in the projects to ensure outcomes relevant

Sustaining Water Resources for Food, Energy & Ecosystem Services



- Supported by Newton-Bhabha Fund, led by NERC and MoES
- Will use a whole systems approach to develop a framework for integrated basin-wide models of water resources
- Proposals being peer-reviewed
- Projects will start in April
- Expect to fund 3 case studies, one in each of the Himalayas, Indo-Gangetic Plain and Peninsular India

Future Plans



Varanasi Drilling Project, - led by IIT Kharagpur with support from BGS

- Keen to continue water cycle research in India
- Will be scoping with MoES over the coming months
- Likely to include:
 - further developing the whole systems approach
 - addressing key gaps in our understanding of the Indian water cycle

Future Plans

- Setting up a Virtual Joint Centre on Water Security to facilitate researcher links, coordinate MoES-NERC research programmes and support the uptake of research outcomes by users
- Also exploring opportunities for joint training and capacity building activities



Future Plans

- Will be exploring opportunities to translate outcomes of work elsewhere, e.g. on the Thames, to India
- NERC has mechanisms to facilitate translation of research such as Innovation Projects Open Call, policy placements and internships
- Next step is to determine what approaches are most appropriate for India

we'd welcome your views and ideas!