Sussex collaboration with British Library and Met Office to understand environmental change in the Indian Ocean

A grant made to the Centre for World Environmental History (CWEH) by the Global Transformations Research Theme helped facilitate initial networking meetings which have culminated in the recent signing of a Memorandum of Understanding (MOU) between The University of Sussex, The British Library and The UK Met Office. The 3 have agreed to share historical weather and climate data to enhance understanding of environmental change in the Indian Ocean area during the colonial period. It is a hugely important period as European empires, the British, French, Dutch and Portuguese, brought about an unprecedented transformation of the landscapes and environments on the periphery of the Indian Ocean. The resulting ecological reshaping was closely documented and can be found in various types of colonial and indigenous documents but the issue is finding where relevant historical sources are held.

The data sharing supports the project 'Collaborative Research on the Meteorological History of the Indian Ocean, 1600-1900' which is led by CWEH and funded by the Arts and Humanities Research Council (AHRC). CWEH is responsible for identifying relevant historical records , strengthening academic and non-academic networks, providing online hosting for descriptive accounts of the collection and ultimately providing a roadmap for digitising the sources for improved accessibility.

Leading the work at the University of Sussex Dr Vinita Damodaran commented:

"This research will help to plug the gaps in our knowledge of human induced climate change by uncovering historical records that help us understand the changes taking place in the last 400 years. It is exciting to see that for the first time historical records are being used to complement instrumental climate data. The instrumental data only dates back as far as the late nineteenth century so the results of our work will be of great value to environmental and climate scientists and researchers in the humanities and social sciences".

The project received backing from the Global Transformations Research Theme, said Alan Lester, "because Vinita's existing contacts with external partners, and the interdisciplinary nature of environmental reconstruction using historical records, both lent themselves to the kind of cross-university and external collaboration that the Research Themes at their best have sponsored". The CWEH has already played a key advisory role in helping holding institutions such as Kew Gardens, the Natural History Museum and the British Library to establish interconnections between their various collections and those of institutions in South Asia such as the National Library in Calcutta and the Calcutta Botanic Garden. The colonial records include numerous papers and archives compiled by both private individuals and by colonial bureaucracies, naturalists, travellers, missionaries and scientific services. For example, the British Library holds a large collection of transcribed songs from across India that lament the environmental changes caused by the introduction of new crops by the British from the late 19th century. Physical sources include the specimens of plants, animals and geological materials that remain in herbaria and museum collections.

A pilot project on the transcription of the Indian letters of Joseph Hooker, 1848-51 Himalayan explorer and director of Kew Gardens has already been completed by a team of researchers from CWEH in collaboration with Kew. This is a critical resource for the environmental and climate history of India.