



**CWEH Report 2018-
2019**

**Report of the Centre for
World Environmental
History University of
Sussex**

Vinita Damodaran



CWEH Report 2018-2019

The Centre for World Environmental History (CWEH) was launched in May 2002 under the aegis of the School of African and Asian Studies at the University of Sussex. It was funded for an initial three-year period by the Research and Development Fund of the University. CWEH has now raised funds from the Leverhulme Trust, the AHRC, the British Academy, The Canadian Social Science Research Council and the Norwegian Research Council, for independent projects.

The creation of CWEH initiative was a response to specialist courses and research conducted by Sussex faculty for over nine years in tropical and 'Southern' environmental history at, what was then, AFRAS and elsewhere in the University and within the Institute of Development Studies. Sussex University has a long research tradition focussed on environment and development problems in the tropics as well as a close relationship with the Institute of Development Studies (IDS), located on the Sussex campus, which is Britain's leading organisation carrying out research on social and economic processes and problems. Sussex University also has a solid tradition in radical history and the history of material culture and peasant society in the Global South, exemplified in the work of Professor Ranajit Guha and the Subaltern Studies School. Currently the Centre is located across History and Geography.

The Centre has a Director, Research Director, Faculty Associates, Visiting Research Fellows and Associates and Doctoral Associates. It has a close collaborative relationship involving frequent staff exchanges with the Jawaharlal Nehru University in New Delhi, India and the CNRS French Institute in the Union Territory of Pondicherry, India. The Centre is currently collaborating with Kew Gardens, The Botanical Survey of India, and JNU on a project on Joseph Hooker and India and with the British Library and the U.K. Met office on a project on historical records and climate change. It is also collaborating on other projects including *Human Environment Interactions in the Indian Ocean World, 1500-1900* with the University of McGill, Canada, with IDS on uncertainty and livelihoods in India funded by the Norwegian Research council and with JNU on *Adivasi* colonial and post-colonial worlds. It has recently launched a new partnership grant with McGill, entitled *Appraising risk, past and present: interrogating historical data to enhance understanding of environmental crises in the Indian Ocean World, 2019-25* and with IDS on *Tapestry (Transformation as Praxis; exploring social just and multi-disciplinary pathways to sustainability in marginal environments)* with Kyoto University and funded by the Belmont Forum, 2019-2021.

www.sussex.ac.uk/cweh

CWEH Director

Prof Vinita Damodaran (HAHP)

Honorary Research Director- Richard Grove

CWEH Advisory Board

Dr Antonia Moon Curator India Office records, British Library

Professor Deepak Kumar, Professor Emeritus and Historian of Science, JNU

Professor Mark Elvin, Professor Emeritus, ANU

Professor Rob Allan, Met office U.K.

Prof Alan Lester (Global Studies)

Dr Mick Frogley (Global Studies)

Dr Rohan Dsouza (Kyoto University)

Artist in Residence and convenor of the Academia and Activist Network: Zuky Serper

The centre runs five networks:

1. Botanical and meteorological history of the Indian Ocean 1600-1900
2. Mines, water and energy network
3. Academia and Activism network
4. Historical climatology
5. Climate change and the humanities

All the networks have been active particularly the Botanical and Meteorological History of the Indian Ocean and the Academia and Activist networks. We organised a day long workshop on Artists and Environmental Justice as part of this network entitled; Artists, Environmental Justice, Now on 1st May, 2019



Please see academia activist newsletter edited by Zuky Serper.

<https://www.sussex.ac.uk/webteam/gateway/file.php?name=cwehnewsletter-27012020.pdf&site=253>

CWEH's interdisciplinary perspective on complex issues is exemplified by its doctoral associates. It provides an intellectual home for both Sussex graduates and visiting graduates who are integral to contributing to CWEH's ever expanding areas of research. The multidisciplinary nature of CWEH research faculty means that doctoral students have access to a range of expertise as well as to contribute to it. They also form an active social community, organising workshops and networks. Visiting doctoral associates are also welcomed. The centre's PhD Students currently include;

Sumanas Kalyogi- *Khadi Industry in India*

Saumya Ranjan Nath- *The Kondhs and resistance against mining in Orissa*

Preetix- *Histories of Indian agriculture*

Nandima Angom- *Indigenous women's movement in India's borderland*

Mike Rayner- *History of Indian genetics*

CWEH Blog Posts, 2018-2019

Debjyoti Das, 3 December 2019, 'Swidden Farming' in eastern India: What can an ethnographic study reveal about citizens' interactions with the colonial and post-independent Indian state? A post from South Asia @ LSE - LSE's engagement with South Asia, 15 November 2019

"My Work Is What Will Survive", A blog post from the Natural Sciences Collections Association, 12 November 2019

Stuart Richard Peters, Water Scarcity: How the South is caught up in the eye of the storm, 10 July 2019

Stuart Richard Peters, From Low-Carbon Economy to Zero-Carbon Economy: Why It Can't Come Soon Enough,

13 June 2017, Rose named after Janaki Ammal, A blog post from the John Innes Centre

Stuart Richard Peters / Rohan D'Souza, 13 June 2019, Industry 4.0 and the Environment

5 March 2019, The Transition to a Low-Carbon Economy: It's Not What it All Seems?

Stuart Richard Peters, 20 December 2018, Botanical Drawings made in Nepal for Nathaniel Wallich in 1821 by Vishnupersaud and Gorachand

Henry Noltie, A blog post for Botanic Stories, Royal Botanic Garden, Edinburgh, 20 December 2018, Francis Buchanan's Bengal Survey botanical drawings and specimens reunited after 203 years

Stuart Richard Peters ,8 November 2018, Supergrid Update.

CWEH activists blog posts

Contributes to promote the cause of indigenous peoples around the globe, highlight issues of human rights, justice, social and gender equality, holistic development, provides an up-to-date report on the regions and people we support and shares workshops, conferences, field work and current events.



Saranda villages assert Forest Rights Act in rejection of allocation of coal blocks on their land

Roger Moody, 21 March 2018



ASIC takes action against Rio Tinto and its former CEO and CFO for misleading and deceptive conduct

Roger Moody, 20 March 2018

- Atrocities against women and girls as tool for "devil-worshippers" cleansing
Carol Yong
26 January 2018



“Oui, we buy!”

The French Connection in the “crop-apartheid” affair

Carol Yong, 26 January 2018



Shifting Positions or: Wooing smallholders in advance of upcoming national elections?

Carol Yong

26 January 2018



Dams, resettlement and experiences of indigenous peoples in Malaysia

Carol Yong

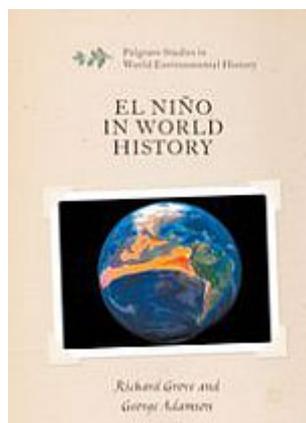
19 January 2018

Recent Funding and Ongoing projects

1. **2018-22** Belmont Forum and Norface. *TAPESTRY, Transformations to Sustainability*, EU 2020
2. **2018-2025** Canadian Social Science Research Council. *Appraising risk, past and present: interrogating historical data to enhance understanding of environmental crises in the Indian Ocean World*. Partnership grant with McGill University, Canada (approximately 500,000 CAN\$).
3. **2019-2022** Gwilliam Letters project, Partnership development grant University of McGill, (198,000 CAN\$)
4. **2017-2019** Sussex Sustainability Research Programme (SSRP) Fund. *Assessing trade-offs and synergies in SDG targets from global commodity chains associated with environmental justice conflict* (approximately £70,000).
5. **2017-2018** Canadian Social Science Research Council. *Human-Environment Interaction in the Indian Ocean World*. Primer grant with McGill University, Canada (approximately 20,000 CAN\$).
6. **2017-2018** Norwegian Social Science Research Council. Grant for a project on climate and uncertainty in India with IDS, Sussex (Approximately £40,000).
7. **2018-19** S.R. Peters visiting Fellowship Fund. (£8000)

News

2019 *El Niño in World History* wins Atmospheric Science Librarians International award



The book *El Niño in World History* by Richard Grove and George Adamson has won an award. The Atmospheric Science Librarians International (ASLI) has selected the book to receive a 2018 ASLI's CHOICE Honorable Mention award for an historical monograph related to atmospheric science. The award was announced and presented at its 22nd Conference on January 10 at 1:00 PM in the Phoenix Convention Center in Arizona. This event was held in conjunction with the 99th Annual Meeting of the American Meteorological Society.

2018-2019 Sussex collaboration with British Library and Met Office continues as part of the MOU signed to understand environmental change in the Indian Ocean continues with Rob Allan of the Met office and Dr Moon of the BL working closely with CWEH with regard to publications and grants. CWEH is funding a meeting in Mauritius on climate records scheduled for 2020

2018-2019 The Kolkata School project to bring school children to the Kolkata botanic garden is continued by the Botanical Survey of India for one year and continues to be very popular with school students, teachers and BSI scientists. The programme will be developed further for 2020 to cover Sundarbans with a grant from IDS

2018-2019 Following recent meetings convened by Centre for Environmental History, attended by Dr Paramjit Singh, Director of the Botanical Survey of India, who was also welcomed by the Asia Scotland Trust at a reception in the Botanic Cottage in the Royal Botanic Garden Edinburgh in May 2017 there is a major funding initiative to conserve Roxburgh House and herbarium in Kolkata. This initiative is now been carried forward by BSI's new director Mao in conjunction with the Roxburgh International hub

Social Event

2019 August CWEH Summer Garden Party was a very successful event with 70 attendees



Recent select publications

<https://www.palgrave.com/gp/series/14570>

Palgrave Studies in World Environmental History

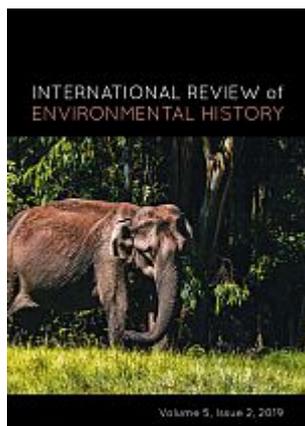
co-edited by Damodaran, V. (Ed), D'Souza, R. (Ed), Sivasundaram, S. (Ed), Beattie, J. J. (Ed)

(now has eight titles)

Biofuels' unbalanced equations: Misleading statistics, networked knowledge and measured parameters: Part 2. Networks, consensus and power

International Review of Environmental History: Volume 5, Issue 2, 2019

The independence of claims that biofuels can mitigate climate change is assessed using environmental history. The development of professional and institutional networks that produced both energy demand models and soil, land and terrain databases and models is traced, and the acquisition of significant unacknowledged social power is examined. Data literacy's critical perspective identified sources of embedded distortions, unacknowledged bias and inherent weaknesses. Claims of the robustness, accuracy, objectivity and originality of globalised analyses in general, and global biofuels projections in particular, are challenged. The effectiveness of policy based upon these results is discussed.



Synchronous droughts and floods in the Southern Chinese Loess Plateau since 1646 CE in phase with decadal solar activities

Xuefeng Yu, Yi Wang, Shiyong Yu and Zhihai Kang (2019). *Global and Planetary Change*. ISSN 0921-8181

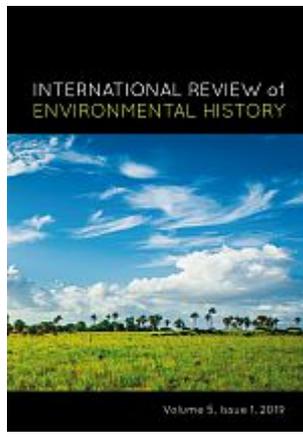
A 1000-year-long documentary record of the lower Yellow River ice-jam floods and its climatic implications

Yi Wang, Shi-Yong Yu and Wen-jia Li (2019). In: INQUA Congress 2019, 25-31 July 2019, Dublin.

The Yellow River floodplain is a low-lying landmass, which is remarkably susceptible to excessive precipitation and prone to floods. Therefore, it has a strong association with calamity and has traditionally been regarded as "China's sorrow." Also, given its immense ecological, societal, and economic importance, the Yellow River floodplain contributes significantly to human welfare, which has colloquially known as the birthplace of Chinese civilization. Therefore, a deeper understanding of flooding frequency in this area is especially important for the assessment of socio-economic risks associated with future climate changes. The late 20th century contained a number of catastrophic floods in the lower Yellow River, which has exerted devastating impacts on the human livelihood. However, the long-term context of apparently anomalous flooding events witnessed in recent decades has received very limited attention.

To better understand the nature, evolution, and driving mechanisms of river floods, it is widely recognised that the instrumental time series should be placed within a longer time framework. Here we present a 1000-year-long documentary record of ice-jam floods of the lower Yellow River by compiling flooding events in terms of levee breaches and overflows during the early spring months as documented in official dynamic histories. A time series with a yearly resolution was formed by using a binary expression with "1" denoting the presence and "0" the absence of flooding event for a year. The flood frequency is computed by convolution with a 31-year-wide window. Our results reveal an increasing frequency of ice-jam floods since AD 1855 when an avulsion occurred, and the river shifted northward to its current channel. As the occurrence

of the ice-jam floods is essentially induced by a deepened temperature gradient between the inland and maritime region in the lower Yellow River area during the early spring months (January-March), we ascribe the increasing frequency of ice-jam floods to the prolonged negative phase of ENSO (i.e., La Nina). Our finding implies the global teleconnection of terrestrial hydrological systems to the ENSO cycles.



Biofuels' unbalanced equations: Misleading statistics, networked knowledge and measured parameters

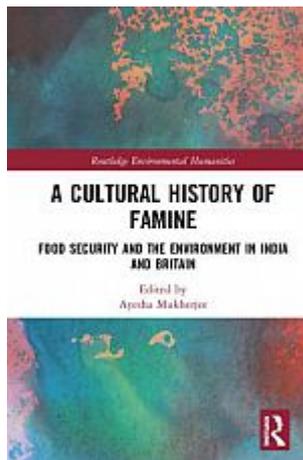
Kate B. Showers

In *International Review of Environmental History*: Volume 5, Issue 1, 2019

Biofuels were central to the European Union's early twenty-first-century responses to Kyoto-mandated carbon emissions reduction. This paper, the first part of three, traces the evolution of eight globalised soil, land and terrain databases and models underpinning global biofuels research. Central to the discussion are examination of the meaning and power of numbers; the significance of homogenising and harmonising data; and the decline of data quality inherent in derivation. The relevance of globalised model-based analysis for practical policy formulation and local implementation are discussed.

A Cultural History of Famine; Food Security and the Environment in India and Britain, 1st Edition; ed. Ayesha Mukherjee

Routledge, January 2019



A Cultural History of Famine. The term "food security" does not immediately signal research done in humanities disciplines. It refers to a complex, contested issue, whose currency and significance are hardly debatable given present concerns about environmental change, resource management, and sustainability.

The subject is thus largely studied within science and social science disciplines in current or very recent historical contexts. This book brings together perspectives on food security and related environmental concerns from experts in the disciplines of literary studies, history, science, and social sciences. It allows readers to compare past and contemporary attitudes towards the issues in India and Britain – the economic, social, and environmental histories of these two nations have been closely connected ever since British travellers began to visit India in the latter half of the sixteenth century. The chapters in this book discuss themes such as climate, harvest failure, trade, technological improvements, transport networks, charity measures, and popular protest, which affected food security in both countries from the seventeenth century onwards. The authors cover a range of disciplinary and interdisciplinary approaches, and their chapters allow readers to understand and compare different methodologies as well as different contexts of time and place relevant to the topic.

This book will be of great interest to students and researchers of economic and social history, environmental history, literary studies, and South Asian studies.

Also in 2019

H.J. Noltie (2019). A history of Indian collections at the Royal Botanic Garden Edinburgh in 22 objects, in R. Jeffery (ed.) *India in Edinburgh: 1750s to the Present*, pp 96–113. New Delhi

H.J. Noltie (2019). Moochies, Gudigars and other Chitrakars: their contribution to 19th-century Indian botanical art and science. *Marg* 70: 34–43.

H.J. Noltie & M.F. Watson (2019). The Buchanan-Hamilton collection of botanical drawings at the Linnean Society of London. *Marg* 70: 81–84.

H.J. Noltie. (2019) A Scottish Daughter of Flora: Lady Charlotte Murray and her Herbarium Portabile of 1781–4. *Archives of Natural History* 46: 298–317

Nandikar, M.D., Shinde, R.A. & Noltie, H.J. (2019). Taxonomy and typification of *Kalanchoe olivacea* and *K. bhidei* (Crassulaceae). *Rheedea* 29: 197 – 208. *Rheedea*

Miehe, G., Schleuss, P.-M., Seeber, E. Noltie, H.J. [+ 31 other authors] (2019). The *Kobresia pygmaea* ecosystem of the Tibetan highlands – Origin, functioning and degradation of the world's largest pastoral alpine ecosystem: *Kobresia* pastures of Tibet *Science of the Total Environment*. 648: 754–771.

R. D'Souza. 'Scarcity, Environmentalism and the Politics of Pre-Emption: reconsidering the environmental histories of South Asia in the epoch of the Anthropocene', *Geoforum*, 101, 2019, pp.242-49.

R. D'Souza. 'Should Clean Energy be Politics as Usual? Reflections on India's Energy Transition Quest', *Georgetown Journal of Asian Affairs*, Vol.4, No.2, winter 2019, pp. 38-44.

Recent seminars and workshops organised, 2019

Rebuilding 'Riskscapes': post-flood Kerala 2018

Thursday 10 October from 17:30 until 19:00

Ravi Raman (State Planning Board, Kerala, India)

Disruption by Dams

Wednesday 2 October from 15:00 until 18:00

Felix Padel and Subrat Kumar (Film Maker)

Women, Militarisation and Trade in North–East India's Borderland Area

Thursday 27 June from 14:00 until 17:00

CWEH Activists and Academia Forum events

Nandima Angom and David Lillian Thangsing (School of Global Studies)

How to Steal a Forest - Investigating Extractivism in India

Saturday 8 June from 14:00 until 17:00

Chitragada Choudhury with Felix Padel and Vinita Damodaran

Artists Environmental Justice Now

Wednesday 1 May from 10:00 until 18:00

Attenborough Centre for the Creative Arts, University of Sussex

CWEH Activists and Academia Forum events

Mining Affected Communities from Odisha to Zambia

Friday 1 March from 14:00 until 17:00

Samarendra Das and Suravee Nayak

Politicised Pollution, Land Grab, Mine Workers in Disputes

Beyond the Indian Ocean: Inter-Asian Environments from the Hindu Kush to the Himalayas - Future Research Agendas

Wednesday 17 October from 13:00 until 14:30

Shah Mahmoud Hanifi; Magnus Marsden; Vinita Damodaran

1st March to May 2019- CCA, Brighton University and CWEH

Reading group 'Whose Anthropocene' facilitated by Zuky Serper**Talks and Activities of CWEH members**

Vinita Damodaran gave the following talks

October 3, Key note address, Climate signals, Famine and livelihoods from 17th to 19th century India, Institute of Contemporary History, Lisbon

June 2019, Forests, heritage and history, Manchester

May, 2019, Art, Activism and Environmental history, Sussex

March, 2019, Adivasis and the Anthropocene, History seminar, Durham

March 2019, Environmental history for the Anthropocene, Brighton

January, 2019 A scientific Life, Janaki Ammal and the scientific patriarchy in Britain and India, Centre for South Asian Studies, Cambridge

M. Frogley gave the following talks:

June 2019. Wilson, G.P., Frogley, M.R. & Tzedakis, P.C. (2019). Persistent millennial-scale climate oscillations in Southern Europe during the Penultimate Glacial (MIS 6). INQUA Congress, Dublin, Ireland.

January 2019. Frogley, M.R., Chepstow-Lusty, A.J., Boessenkool, K.P., Leng, M.J., Vonhof, H.B., Cundy, A.B. & Gil, E.F. (2019). Mid- to Late Holocene lacustrine response to millennial-scale climate forcing in the southern tropical Andes of Peru. Quaternary Research Association Annual Discussion Meeting, Chester, UK.

January 2019. Wilson, G.P., Frogley, M.R. & Tzedakis, P.C. Persistent millennial-scale climate oscillations in Southern Europe during the Penultimate Glacial. Quaternary Research Association Annual Discussion Meeting, Chester, UK.

May 2018. Thiele, G., Chepstow-Lusty, A.J., Frogley, M.R., de Haan, S., Juarez, H., Kroschel, J. & Heider, B.. A second climate-smart agricultural revolution in the Andes for the 21st century. 10th World Potato Congress / XXVIII Congreso de la Asociación Latinoamericana de la Papa, Cuzco, Peru. Winner, best presentation, climate change session.

May 2019 Zuky Serper, 'Introducing Forensic Architecture' University of Brighton

May 2019 Zuky Serper, Artists, Environmental Justice, Now, organiser

May 2019 Zuky Serper and Lorna Ough, Art Exhibition, Attenborough Centre

Media coverage

March, 2018 Media coverage for work on Janaki Ammal March, 2018,
<http://www.thehindu.com/society/the-first-indian-woman-botanist-e-k-janaki-ammal-ought-to-be-more-widely-known-for-her-huge-contributions-to-science-but-she-remains-unknown-within-the-country-and-outside-academic-circles-and-even-our-textbooks-have-failed-to-teach/article23001501.ece>

October, 2018 Guardian letter on the protests against 'menstruating' women entering Sabarimala temple in Kerala, Oct 31st, 2018

<https://www.theguardian.com/world/2018/oct/31/dont-let-indias-upper-caste-men-dictate-tradition>

April 2019, Participant BBC radio 4, 'Beyond belief' <https://www.bbc.co.uk/programmes/m0004f05>

May 2019, RHS Wisley, Blog about my research on Janaki Ammal, <https://natsca.blog/2019/04/26/my-work-is-what-will-survive/>

July, 2019, Interview with me on my work on Ammal with the Smithsonian Magazine

<https://www.smithsonianmag.com/science-nature/pioneering-female-botanist-who-sweetened-nation-and-saved-valley-180972765/>

16th October, 2019 Daily Mail, Gandhi Must be scrapped

<https://www.dailymail.co.uk/news/article-7576099/University-Manchester-students-say-statue-Gandhi-scrapped.html>

27th December, 2019 Guardian letters on recent protests over the constitution

<https://www.theguardian.com/world/2019/dec/27/fighting-back-over-india-constitution>

4th January, 2020 BBC History channel, discussion on 1972 book, *Limits to Growth*

<https://www.bbc.co.uk/programmes/w3csyx5b>

School project

The AHRC project on the Botanical and Meteorological History of the Indian Ocean involved taking 2 schools to visit the Botanic Garden and the Indian Museum in Kolkata, India. The first of these was to the exhibition on "Joseph Hooker and the Botanical Heritage of India" in the BSI gallery of the Indian Museum. The second was to the AJC Bose Botanical Garden at Howrah. This project has continued with great success under the auspices of the BSI for the second year covering over 500 students. It is proposed to extend the project to other parts of India in the next three years with the first stage of the new project being launched in Sundarbans in 2019-20 the *Mangrove School project*.

<http://www.sussex.ac.uk/cweh/research/indianocean/schoolproject>

International Visitors to CWEH: 2018-2019

- Dr Ravi Raman (State Planning Board Kerala)
- Dr Felix Padel (JNU)
- Dr Chitragada Choudhury (Independent Journalist)
- Dr Nirmal Mahato, North Bengal University

- Samarendra Das, Independent Activist

Media coverage for CWEH exhibitions

<https://thewire.in/74911/janaki-ammal-magnolia-kobus/>

<http://www.thehindu.com/sci-tech/science/Kolkata-celebrates-botany-legend-Janaki-Ammal/article16073012.ece>

<https://www.youtube.com/watch?v=7uVKx2gSLt8>

<http://timesofindia.indiatimes.com/city/patna/scholar-rues-leadership-crisis-in-subaltern-polity/articleshow/57831930>.

Media coverage for work on Janaki Ammal March, 2018, <http://www.thehindu.com/society/the-first-indian-woman-botanist-e-k-janaki-ammal-ought-to-be-more-widely-known-for-her-huge-contributions-to-science-but-she-remains-unknown-within-the-country-and-outside-academic-circles-and-even-our-textbooks-have-failed-to-teach/article23001501.ece>

Current Partners

See www.sussex.ac.uk/cweh

Our partners

US
University of Sussex

The image displays a collection of partner logos on a dark teal background. The logos include: Met Office Hadley Centre (black and white), British Library (red and white), JNU (blue and white), Kew Royal Botanic Gardens (green and white), National Archives Of India, Ministry Of Culture, Government Of India (gold and white), and Natural History Museum (gold and white). The text 'Our partners' is in yellow, and the University of Sussex logo is in white.