## AFRICAN HISTORY AND THE ANTHROPOCENE

Economic Development and Environmental History in the Anthropocene: Perspectives on Asia and Africa.

Edited by Gareth Austin.

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At a time when academics widely acknowledge the value of interdisciplinary engagement, but when disciplinary boundaries all too often suffocate such exchanges, this volume makes a truly inspiring and welcome contribution. In Economic Development and Environmental History in the Anthropocene, a group of highly respected scholars, including economic and environmental historians, archaeologically-informed geographers, and economists, call for further integration of research and teaching agendas to study the unstable interactions between human activity and our physical environment. The volume presents new research and critical investigations on one of the most pressing concerns of our age: the transition from the Holocene to the Anthropocene, in which human economic and reproductive activity have become major drivers of geological change. The overarching question, 'how did we get here?', is addressed by focussing on four world regions (i.e. East Asia, Southeast Asia, South Asia, and sub-Saharan Africa) where industrialisation and (sustained) economic growth advanced at a later time than in the 'West', but where processes of economic development are not necessarily less consequential. Indeed, the Anthropocene is characterized by fundamental transformations in the 'traditional' energybasis that human beings use for production, consumption, and exchange, and this transition occurs virtually everywhere.

The fourteen chapters that constitute the volume all succeed in combining breadth with depth. Gareth Austin's editorial Introduction to the volume is extremely perceptive and beautifully written, a must-read for anyone interested in the concept of the Anthropocene. The volume proceeds with two chapters discussing the late Holocene and some of the processes that were important in setting the transition in motion. Those include anthropogenic environmental changes resulting from European colonialism (Amélia Polónia and Jorge Pacheco) and the diffusion of intensive agriculture in sub-Saharan Africa, which Mats Widgren superbly surveys, drawing on his latest research results. A next set of chapters focuses on the resource demands from population and industry during the modern age of imperialism, including the rise of a 'new energy economy' in South India (Prasannan Parthasarathi); the carrying capacity of Indian soils in the context of agricultural expansion and soil degradation (Tirthankar Roy); the transition of forests in Southeast Asia (the late Peter Boomgaard); the development of rubber production in Southeast Asia (Corey Ross); and the transition from land-extensive agricultural production in sub-Saharan Africa towards conditions of land scarcity and labour abundance, which has created incentives to adopt new exotic cultigens from Asia and the Americas (Gareth Austin). One of the most original chapters is offered by Emily Lynn Osborn, who discusses the making and use of containers in the context of the global shift from biomass to fossil fuels.

Four more chapters evaluate the supposed labour-intensive and resource-saving path of economic development in Asia from a variety of perspectives. Kaoru Sugihara uses the conceptual distinction between livelihood security (individual access to resources) and resource security (collective level) to tease out the relations between local resource use, trade, and (changes in) the international division of labour. The introduction of energy-saving policies in Japan's iron and steel industry reveals the role of cooperation among political, commercial, and professional elites (Satoru Kobori). Se Young Jang zooms in on the case of nuclear power adoption in South Korea, and shows how this process may be understood in light of this country's unique military-strategic considerations. Kenneth Pomeranz's chapter asks to what extent environmental constraints may affect contemporary economic growth in China, drawing analogies to earlier phases of industrial development, while arguing that, at present, water scarcity is a much greater problem for sustaining the Chinese economy than greenhouse gas emissions. Finally, Julia Adeney Thomas draws the key themes of the volume together, noting that history and economics were both founded as disciplines devoted to analyse human freedom. Human emancipation from 'nature' allows us to understand it and think through the consequences of a 'modernist paradigm of progress' which still supposes that natural resources are external to the development of humankind

Good books make interventions in the ways that its readers think. I cannot predict what other academics, politicians, or open-minded consumers of finite resources will find worthy in this volume, but it has a great deal to offer. What will stick with this reader is that the question 'how did we get here?', in relation to the illuminating discussion of 'when did it all start?', makes the book a great source for teaching in economics, geography, and history. As a self-identified economic historian, it also strikes me how much 'my' field still has to learn in order to grasp the relationship between human activity and environmental change. And finally, I consider this book a major stepping stone for the advancement of evolutionary theories on global inequality. For if economic development jeopardizes the very environmental conditions that have allowed us to escape from hunger and premature death in the first place, what does continued wealth accumulation and concentration mean for the fate of the globe's bottom billions?

Perfect books do not exist. The biggest shortcoming of this volume is that it lacks theoretical reflections on human psychology (how do we, as a species, perceive and cope with environmental threats?) and the political economy of resource governance (why is it so difficult, politically, to prioritize long-run sustainability over short-term profit?). Without expertise on the functioning of the human brain and collective perceptions of societal challenges and time, it may be difficult to understand how we got here, and where we are heading. Such lines of inquiry suggest even more reason to follow the excellent example of interdisciplinary scholarship presented in this book.

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