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978-1-107-02325-3 - Indigo Plantations and Science in Colonial India

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Indigo Plantations and Science in Colonial India

Prakash Kumar documents the history of agricultural indigo, exploring the effects of global processes on a colonial industry in South Asia. Kumar discusses how the knowledge of indigo culture thrived among peasant traditions on the Indian subcontinent in the early modern period. Caribbean planters and French naturalists then developed and codified this knowledge in widely disseminated texts. European planters who began to settle in Bengal with the establishment of British rule in the third quarter of the eighteenth century drew on this network of information. Through the nineteenth century, indigo culture in Bengal became more modern, science based, and expert driven. When a cheaper and purer synthetic indigo was created in 1897, the planters and the colonial state established laboratories to find ways to cheapen the cost of the agricultural dye and improve its purity. This indigo science crossed paths with the colonial state's effort to develop a science for agricultural development and the effort by the Indian intelligentsia to develop a science for the nation. For two decades, natural indigo survived the competition of the industrial substitute. The indigo industry's optimism faded only at the end of the First World War, when the use of German synthetic indigo for textile dyeing and printing became almost universal.

Prakash Kumar is Assistant Professor of South Asian History at Colorado State University.

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PRAKASH KUMAR

Colorado State University



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*Dedicated to the memory of my father,
Akhilshwar Prasad Sinha*

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Preface

This book explores the construction of marginality for agricultural indigo via colonial conditions and global processes. The history of the dye's development on the Indian subcontinent exemplifies colonial power and conditions. The life cycle of indigo on the subcontinent also illustrates participation of colonial India in a global order of uneven structures. The Indian peasantry's labor for the production of indigo was appropriated for a world market. European planters were the agents of this appropriation. This cheap Bengal indigo produced with the labor of Indian peasantry pushed out Spanish and French indigo from the world markets, making dyers across the world beneficiaries of the colonial enterprise in Bengal. The subsequent marginalization of agricultural indigo by synthetic dyes was itself the product of new global rankings among major industrial powers when Germany emerged to be the leading industrial producer of hydrocarbon-derived dyes. The "global" in this study, to deploy the Africanist James Ferguson's use of the phrase, is "globe-hopping, not globe covering." The global emerges at certain points as processes, multiscalar in dimension, are connected in historically contingent ways. It does not efface the other forces characterized as local, colonial, national, metropolitan, and imperial but is integrated with them.

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Acknowledgments

This book developed over more than a decade and has accumulated debts to a wide range of scholars and institutions on multiple continents.

My academic career started in India. Sunil Kumar and Sumit Sarkar at University of Delhi first taught me to appreciate the values and pleasures of historical research during the M.Phil. stage of my training. Deepak Kumar of Jawaharlal Nehru University introduced me to history of science, while Majid Siddiqui and Neeladri Bhattacharya provided key input at important stages in my developing research. In my early years in the teaching profession, I was privileged to be in the company of very committed fellow historians at Ramjas College at the University of Delhi. My senior colleagues, Mukul Manglik, Hari Sen, Sudhakar Singh, and G. B. Upreti, reinforced in me the importance of remaining a historian tuned in to important issues of the times. In Delhi through the years, friends like Shahana Bhattacharya, Pankaj Jha, Dipu Saran, and Ravikant Sharma shared their own insights over cups of tea at the Nehru Memorial Library of Teen Murti Bhavan.

The project on the history of indigo took concrete shape as part of my doctoral research at the Georgia Institute of Technology in Atlanta. In 2000, I first found papers on indigo experiments in colonial India among agricultural files during a summer visit to the Bihar State Archives in Patna. These papers ignited my initial interest in the subject and became the core of a developing project on colonial history of indigo for my Ph.D. thesis. As my principal supervisor John Krige at Georgia Tech helped define this project, and his exceptional support was critical to the launching of this project and its development through to the very end. John was an ideal supervisor and remains a very important influence on

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me. Among other members on the Ph.D. committee, Steve Usselman critically influenced the writing of the dissertation. He served as principal investigator for a dissertation improvement grant from the National Science Foundation that enabled a research trip to the United Kingdom to consult archives. Hanchao Lu on the committee encouraged me to explore the agricultural and social dimensions of the history of laboratory science, a suggestion that I took to heart while developing the book manuscript. Anthony Travis as the external member on the Ph.D. committee prodded me to contextualize indigo history within a broader history of the dye industry and responded to countless queries while I was revising the dissertation. Two independent studies on British imperialism and South Asian historiography with Jonathan Schneer and James Heitzman (now deceased) and a separate course on the comparative history of labor, industry, and technology jointly taught by Mike Allen of Georgia Tech, Matt Payne of Emory University, and Michelle Brattain of Georgia State were helpful to the task of broadly defining my doctoral research. To many faculty at Georgia Tech, I owe an intellectual and personal debt, particularly to Mike Allen, Doug Flamming, Gus Giebelhaus, and Carol Moore. The company and friendship of many fellow graduate students, Ashok, Chris, Devorah, Hannes, Haven, Hyungsub, Jahnavi, Jay, Josh, LeeAnn, Leslie, Patrick, Phil, Raul, Suzanne, Tim, and Vin, made life as a graduate student less stressful. Final chapters of the dissertation were written while I had the sole responsibility to look after my son, Yukt, then a toddler. Many sessions of writing were completed with Yukt in my lap.

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When I joined the History Department at Colorado State University, I decided to expand the chronological width of the manuscript. Suzanne Moon invited me to a stimulating workshop at Harvey Mudd College in

2007 that afforded me an opportunity to discuss the subject of colony and technology with leading specialists in the field. Michael Adas in particular provided concrete feedback on my work at this point. A series of four Professional Development Fund grants and a Faculty Development Fund grant from the College of Liberal Arts and Department of History of Colorado State University offered financial support to visit archives in Britain and India. The National Science Foundation's (NSF's) Scholar's Award (0824468) in 2009 and a supplementary grant in 2011 provided the most critical support for the final phase of research and writing. The NSF funding allowed me to take a leave of absence from teaching during 2009–10, when I completed much of the writing.

At conferences and in personal meetings, and many times by e-mail, many scholars have contributed a lot to the final shape in which this work finds itself. I mention their names as a small token of gratitude and to highlight how collaborative this project has been: Antoinette Burton, Joyce Chaplin, Prachi Deshpande, David Gilmartin, Richard Grove, Sumit Guha, David Ludden, Sudhir Mahadevan, Clapperton Mavhunga, Dilip Menon, Thomas Metcalf, Projit Mukharji, Abena Dove Osseo-Assare, Ishita Pande, Kavita Philip, Gyan Prakash, Mridu Rai, Peter Robb, Willem van Schendel, Alison Shah, Mrinalini Sinha, K. Sivaramakrishnan, and Anand Yang.

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