

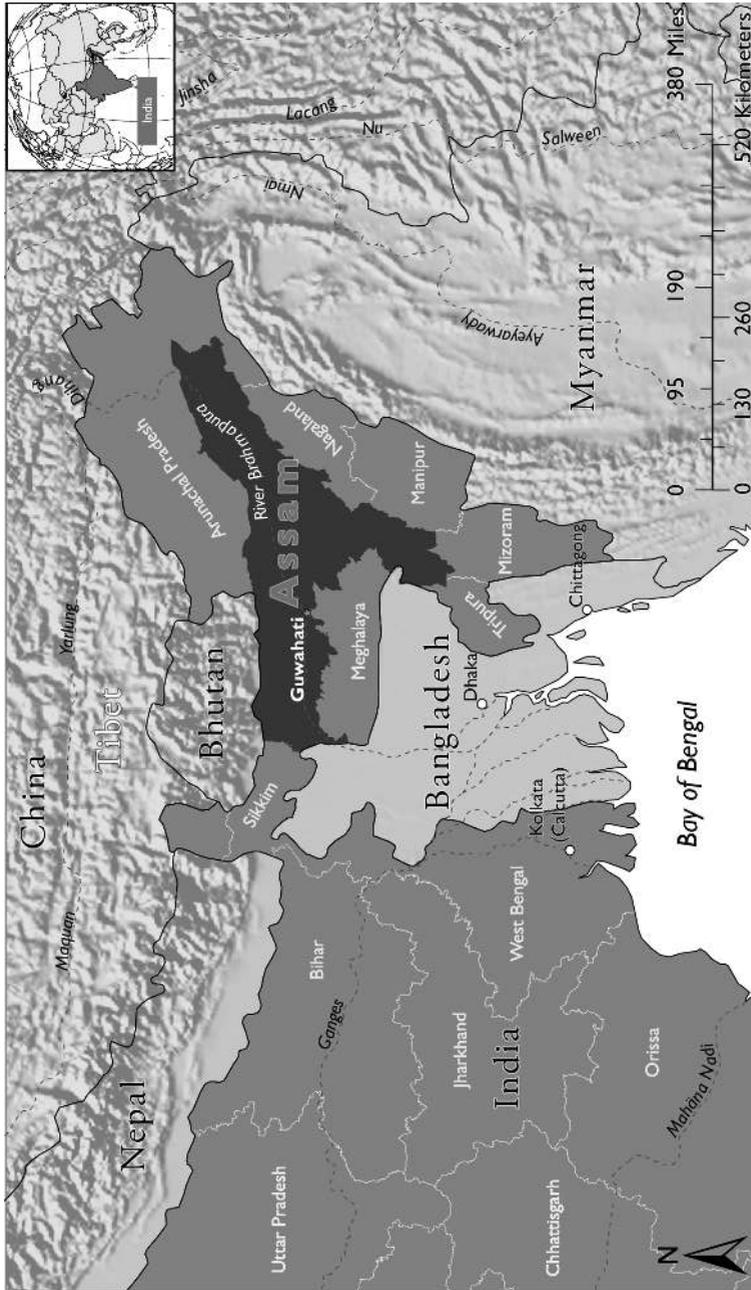
Introduction

This book is about *Camellia sinensis var. assamica*, a tea plant grown in Assam in northeastern India. Celebrated worldwide for its body and flavor, it accounts for almost half of all Indian tea exports.¹ This study is also about the people and place that made it happen. A drive through the heart of the Assam tea country – a few hours east of Guwahati, the state capital – showcase these visually striking plantations. It is a picture of veritable calm. With lush green estates, neatly trimmed lawns, tea pickers in colorful attire, the occasional whirr of mechanical irrigators, and bracing winds of the surrounding hills, they are picture-postcard in natural beauty.

There is another side to the Assam tea story. It takes us back to British parleys in this northeastern frontier during the First Opium War to find an alternative base for this prized crop. It involves the military fiscalism of the expanding East India Company. The fortuitous find of this second Eden in the “wilds” of Assam sealed the shrub’s fate. Vast swathes of her agrarian landscape – hitherto under direct or indirect possession of local peasant-cultivators, monastic orders, royal households, or autochthon hill “tribes” – were brought under the control of European tea speculators.² With Assam’s formal annexation into the British Empire in 1826, other tea men, sanitarians, botanists, Company surgeons, and colonial administrators crowded into this newly acquired territory. The labor demands of this monoculture experiment were staggering, and form a crucial component of this other narrative. Except for some Kachari and Mising “tribals,” initial attempts to lure or coerce local working hands into these plantations failed. With no dearth of cultivable land, peasants and Assamese agriculturists were unwilling to trade the freedom of homestead cultivation for the restrictive work environment on

¹ Vide www.teaboard.gov.in/pdf/bulletin/Estimated_production_for_Apr_2017.pdf (accessed June 2, 2017).

² See Indrani Chatterjee, *Forgotten Friends: Monks, Marriages, and Memoirs of Northeast India* (New Delhi: Oxford University Press, 2013), especially chapter 5.



Map 0.1 Assam and surrounding regions

these estates. Faced with an uncooperative local labor market, and intense colonial competition, Assam turned to indentured recruitment after 1865. Millions of men, women, and children were brought in from central and south-central India to these emergent plantations. Migrants of economic necessity, or often of recruiter guile, they faced inhospitable terrain, unhygienic conditions on these plantations, managerial oversight, and harsh working conditions in this unknown land. Unthinkable labor mortality during the colonial period and beyond followed.³ This side of the story is also about continued planter brutality, and managerial violence that lent enduring notoriety to the Assam plantation system. Periodic flare-ups in the form of worker protests, riots, desertions, and walkouts were not uncommon. Meanwhile, the socio-economic opportunities created by this tea enterprise drew in middle-ranking estate functionaries, small-time creditors, and share-croppers from Bengal and elsewhere that, in turn, definitively changed Assam ethnic demography. Tea, of course, has always been an export product and added very little to the region's economic coffers during the colonial period, and thereafter. This history of ethnic immigration, and extractive commodity capitalism snowballed into regional disquiet in the decades following India's independence – first with a student-led movement for greater local autonomy, and then into a full-blown armed insurgency against “neglect” by the postcolonial Indian State.⁴

This is the social history of the Assam plantations that has been repeatedly told. Indentured tea labor, of course, is part of another global narrative: the intra-colonial and transoceanic relocation of contract work in the aftermath of abolition. Aiding the rising production demand of plantation cash crops, this human traffic ranged across the imperial meridian – from India to Mauritius, Fiji, British Guiana, Surinam, French Guiana, Martinique, Guadeloupe, Réunion, and Malaya among others. Within the subcontinent, this era of indentured overseas emigration saw stiff competition from the coffee, tea, indigo and jute growing regions of eastern and southern India, the coal mines of Bihar and the textile manufacturing industries of the Bombay Presidency. There has been much scholarly focus on the nature and form of these labor migrations, their socio-demographic and economic push-factors, demand and

³ Despite their shortcomings, consider two recent journalistic findings on the Assam plantations that sum up the contemporary legacy of their colonial history: one by *The New York Times* titled “Hopes, and Homes, Crumbling on Indian Tea Plantations,” (February 13, 2014) and the other by the BBC, “The Bitter Story behind the UK’s National Drink” (September 8, 2015).

⁴ Indeed, this capital-intensive enterprise was almost wholly an “alien” import; besides land, all other factors of production were brought in from other parts of India or metropolitan Britain; the scholarship on these issues is discussed below.

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supply patterns, and impact on resettlement and (de) peasantization in the home and host countries.⁵ That this traffic in “voluntary” and “free” labor movement in the Old World never really emerged out of slavery’s shadow in the New is well established. As a British Consul in Paramaribo expressed in 1884, “the Surinam planters . . . found in the meek Hindu a ready substitution for the negro slave he had lost.”⁶ Whether or not such migration stemmed from volition or coercion, historians on both sides of the debate have drawn our attention to the structural forms of exploitation, conditions of work and travel, the cycles of debt-bondage, and subsistence wages that underpinned these sites of European agrobusiness. It is hard to miss Hugh Tinker’s foundational influence in these explorations of labor life in an era of indentured contract.⁷

As far as the Assam plantations are concerned, three broad approaches dominate in the existing scholarship: its working-class history, regional political fallout, and ethno-social impacts. For the first, labor historians have long remarked on an overbearing work regime, miserable conditions to and on these gardens, brutal planters, and systemic managerial license.⁸ Indeed, a recent work reiterates that the political economic hallmark of the Assam system was a combination of coercive power

⁵ The literature on indentured migration, or on plantation systems overall, is vast; see the helpful, though dated, bibliography compiled by Edgar T. Thompson, *The Plantation: A Bibliography*, Social Science Monographs IV (Washington, DC: Pan American Union, 1957); also see P. C. Emmer, ed., *Colonialism and Migration; Indentured Labour Before and After Slavery* (The Netherlands: Martinus Nijhoff, 1986).

⁶ Emmer, *Colonialism and Migration*, p. 187.

⁷ Hugh Tinker, *A New System of Slavery: The Export of Indian Labor Overseas, 1830–1920* (London: Institute of Race Relations, 1974). Also see Philip Corrigan, “Feudal Relics or Capitalist Monuments? Notes on the Sociology of Unfree Labor,” *Sociology* 11(3) (1977): 435–463; Robert Miles, *Capitalism and Unfree Labor: Anomaly or Necessity?* (London: Tavistock Publications, 1987).

⁸ These include Rajani Kanta Das, *Plantation Labor in India* (Calcutta: Prabasi Press, 1931); Ranajit Das Gupta, *Labor and Working Class in Eastern India: Studies in Colonial History* (Calcutta and New Delhi: K. P. Bagchi & Company, 1994); Sharit Bhowmik, *Class Formation in the Plantation System* (New Delhi: People’s Publishing House, 1981); Sanat Bose, *Capital and Labor in the Indian Tea Industry* (Bombay: All India Trade Union Congress, 1954); Muhammad Abu B. Siddique, *Evolution of Land Grants and Labor Policy of Government: The Growth of the Tea Industry in Assam 1834–1940* (New Delhi: South Asian Publishers, 1990); J. C. Jha, *Aspects of Indentured Inland Emigration to North-East India 1859–1918* (New Delhi: Indus Publishing Company, 1996); Rana P. Behal and Prabhu P. Mohapatra, “Tea and Money Versus Human Life: The Rise and Fall of the Indenture System in the Assam Tea Plantations 1840–1908,” *Journal of Peasant Studies* 19(3) (1992): 142–172; Rana Partap Behal, “Forms of Labor Protests in the Assam Valley Tea Plantations, 1900–1947,” *Occasional Papers on History and Society* (New Delhi: Nehru Memorial Museum and Library, 1997); Behal, “Power Structure, Discipline and Labor in Assam Tea Plantations Under Colonial Rule,” *International Review of Social History* 51 Special Supplement (2006): 143–172; Samita Sen, “Commercial Recruiting and Informal Intermediation: Debate over the Sardari System in Assam Tea Plantations, 1860–1900,” *Modern Asian Studies* 44.1 (2010): 3–28; see also,

structure, unregulated immigration, and extra-legal planter authority all rolled into one.⁹ Secondly, as the region's primary socio-economic driver, these plantations have been noted for their importance in forming Assamese political consciousness.¹⁰ Lastly, they have been examined for their role in creating ethnic and sub-national claims to "homeland" and "otherness" in the region.¹¹ The enduring and influential epithet of a "Planter's Raj" in the second approach argued that the planters' hold over civic, socio-economic, and political power in the province throughout the long nineteenth century stymied – but simultaneously created – the conditions for the eventual rise of a regional bourgeoisie who, with support from the Indian National Congress, reclaimed the political mantle in Assam in the decades preceding independence.¹² The material imperatives of "improvement" and "progress" of this imperial tea regime in the third assessment – partially put to use by the educated Assamese middle-class "elites," by those taking advantage of its opportunities from Bengal, by itinerant graziers and herdsmen from Nepal, and by the relocated indentured émigrés from "outside" – are credited with creating the historical and social conditions of "exclusionary" and sectarian Assamese solidarities, ethnic divisions, and supra-national "homeland" demands in postcolonial northeastern India.¹³

Agronomy, Ecology, and Plantation "Science"

But were the Assam plantations self-serving economic or social structures alone? By 1905, its total production area had swelled to more than

Bodhisatwa Kar, *Framing Assam: Plantation Capital, Metropolitan Knowledge and a Regime of Identities, 1790s–1930s*, unpublished PhD dissertation (New Delhi: Jawaharlal Nehru University, 2007); and Nitin Varma, "Coolie Acts and the Acting Coolies: Coolie, Planter and State in the Late Nineteenth and Early Twentieth Century Colonial Tea Plantations of Assam," *Social Scientist* 33(5/6) (2005): 49–72. Also see Dwarkanath Ganguly, *Slavery in British Dominion*, ed. Siris Kumar Kunda (Calcutta: Jijnasa Publications, 1972); Sir J. H. S. Cotton, *Indian and Home Memories* (London: T. Fisher Unwin, 1911); Mrs. Emma Williams, "Letter Regarding Abuses on the Tea Plantations of Assam," IOR/L/PJ/6/749, March 24, 1906, British Library London; Report from Aborigines Protection Society on "Treatment of Tea Labourers in Assam," IOR/L/PJ/6/193, January 17, 1887; Revered C. Dowding, "Letters and Pamphlets on the Illegal Arrest of Run-Away Tea-Garden Coolies in Assam," IOR/L/PJ/6/832, October 22, 1907, and the numerous House of Commons Parliamentary papers on the topic.

⁹ See Rana Partap Behal, *One Hundred Years of Servitude: Political Economy of Tea Plantations in Colonial Assam* (New Delhi: Tulika Books, 2014).

¹⁰ See Amalendu Guha, *Planter Raj to Swaraj: Freedom Struggle and Electoral Politics in Assam, 1826–1947* (New Delhi: ICHR, 1977, rpt. 2006).

¹¹ See Jayeeta Sharma, *Empire's Garden: Assam and the Making of India* (Durham, NC and London: Duke University Press, 2011).

¹² See Guha, *Planter Raj to Swaraj*, especially chapters 2, 3 and 4.

¹³ See Sharma, *Empire's Garden*, especially part II.

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338,000 acres.¹⁴ More than 16 legislative Acts controlled one facet of its operation or another. By this same year, the labor of more than 2 million men, women, and children¹⁵ had gone into producing this commodity. Labor mortality rate stood at a staggering 53.2 per thousand working adults.¹⁶ Two imperial Labor Enquiry Commissions had visited these gardens by the second decades of the twentieth century, and had submitted their findings. Colonial administrators and nationalist leaders (including M. K. Gandhi) had spent their energies discussing various aspects of these pioneer estates. “Rival” resource stakeholders, namely the Indian Forest department had rubbed shoulders – often uncomfortably, but also out of necessity – with zealous guardians of this tea enterprise. A vigorous traffic in scientific opinion, field experiments, and personnel moved between Assam, Calcutta, Java, Ceylon (now Sri Lanka), London, and beyond. All this while, more than eight species of plant bugs and pests parasitically fed on the tea micro-climate and ravaged crop yields, flavor, and profits.

How are these histories connected, if at all? What agronomic, legal, and economic logics bring together these disparate features of the industry? What does tea’s built environment have to do with labor protests, and conditions of worker impoverishment and morbidity? What role did nonhuman agents play in this monoculture economy? How did scientific discourse, agrarian ideology, and plantation practice come together?

This book answers many of these unexplored and seemingly unrelated questions. In what follows, it provides an agro-ecological history of tea production in colonial eastern India over a hundred-year period and beyond. In contrast to existing debates, I argue that a syncretic look at the legal, environmental, and agronomic aspects of tea production help us better understand *why* human and natural reordering in the region had overlapping, and invisible agendas. By using tea’s self-avowed mandate of agrarian reform and modernization as its overall base, this book demonstrates that the enterprise was essentially a “knowledge economy,” a congeries of ideological, scientific, and legal interests that did not always converge, or control opinion and outcome. That this disorderly house – the sum and part of what I heuristically and analytically call “disarray” – ultimately manifested itself in harsh working conditions, tea pests, disease

¹⁴ The figures are for 1901, cited in Amalendu Guha, *Planter Raj to Swaraj*, p. 28. See also his “A Big Push without a Take-Off: A Case Study of Assam 1871–1901,” *Indian Economic and Social History Review*, 5 (September 1968): 202–204.

¹⁵ The figures are for 1905, see *The Report on Labor Immigration for the Province of Assam for the Year 1906* (Shillong: Assam Secretariat Press, 1906).

¹⁶ The figures are for 1900; see Guha, *Planter Raj to Swaraj*, 2nd ed., p. 30.

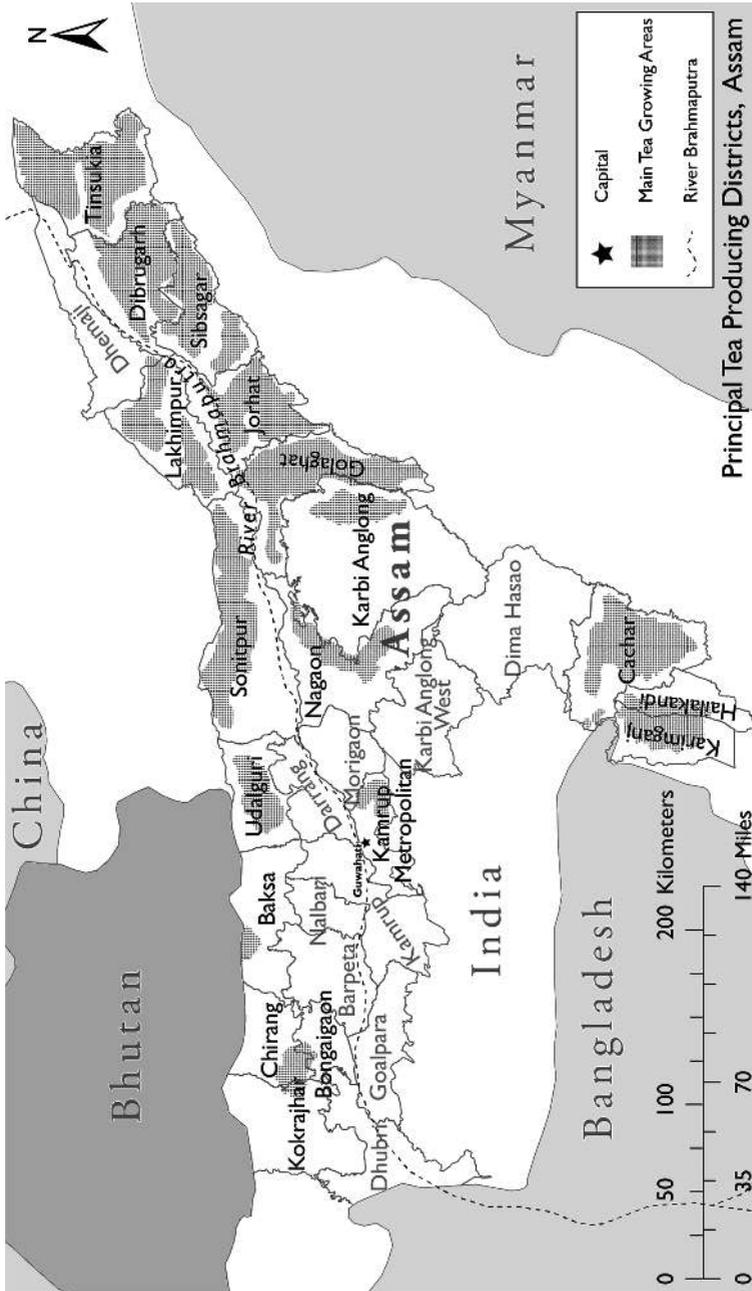
environments, labor mortality, wage manipulation, felled forests, and lawlessness is crucial to this book's overarching departure from existing narratives. The plant and the plantation are thus brought together to rethink this classic opposition between labor and capital.¹⁷

Like its peers elsewhere, the Assam plantations were also fueled by an elaborate environmental imagination and blueprint.¹⁸ If the commodity was at the center of these plans, these imaginations also took shape in the midst of racial and social hierarchies, ecological improvisations, unintended consequences, agrarian practices, and complex rearrangements of labor and landscape. This book highlights those overlaps. Indeed, by some measure, tea was a demanding cash crop. As with similar tropical products – tobacco, for instance – crop success and capital investment were not directly proportional. Its ecological context was as important, if not more so, in the making and unmaking of production goals and plantation practice. If tea's natural setting has been underplayed and ignored in present accounts, this book shows that the physical environment played a variety of roles in this commodity history. Instrumentally, of course, climate, soil, moisture, rainfall, and overall weather patterns were inextricably linked to company fortunes. But beyond this, nature was an ideological battleground where matters of "wilderness" (anthropogenic or botanical), imperial power, agrarian "improvement," horticultural authority, and even fiscal imposts were fought and tested. If this human–nature link connects this work to a staple of environmental history, it is not the debate between pristineness and degradation that primarily concerns us here.¹⁹ Indeed, as I discuss below, the

¹⁷ On this perspective, see James L. A. Webb, Jr., *Tropical Pioneers: Human Agency and Ecological Change in the Highlands of Sri Lanka, 1800–1900* (New Delhi: Oxford University Press, 2002); James S. Duncan, *In the Shadows of the Tropics: Climate, Race and Biopower in Nineteenth Century Ceylon* (London: Ashgate Publishing Co., 2007); Corey Ross, *Ecology and Power in the Age of Empire: Europe and the Transformation of the Tropical World* (Oxford: Oxford University Press, 2017); Ann Laura Stoler, *Capitalism and Confrontation in Sumatra's Plantation Belt, 1870–1979* (New Haven, CT and London: Yale University Press, 1985); and Lynn A. Nelson, *Pharsalia: An Environmental Biography of a Southern Plantation, 1780–1880* (Athens, OH: University of Georgia Press, 2007).

¹⁸ See the interesting collection of articles in Frank Uekötter, ed. *Comparing Apples, Oranges, and Cotton: Environmental Histories of the Global Plantation* (Frankfurt and New York, NY: Campus Verlag, 2014).

¹⁹ See, for instance, Donald Worster, *Nature's Economy: A History of Ecological Ideas* (Cambridge: Cambridge University Press, 1988); Gregg Mitman, *The State of Nature: Ecology, Community, and American Social Thought, 1900–1950* (Chicago, IL: University of Chicago Press, 1992); and William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York, NY: W. W. Norton & Co., 1991); their respective bibliographies provide a good source for this rich historiography. Cronon's distinction between "first" (pre-human) and "second" (post-human intervention) nature in *Nature's Metropolis*, p. 56 is instructive here.



Enlightenment parable of Edenic recovery underwent exceptional extra-market and extra-legal tweaks in British east India.

In this study, nature is rather used as an ecosystem context to understand its expedient use and abuse in human and landscape transformations.²⁰ For instance, the agroecology that sustained tea plant growth also gave rise to blights and pests. Embankment works that irrigated these plantations, and paddy cultivation that fed sustenance-wage workers produced malaria and black-fever that, in turn, led to rampant labor ill-health and death. Aspects of tea cultivation that demanded field rigor, namely hoeing and plucking were utilized to prop up an illegal task-based labor wage system that favored bodily capacity over guaranteed monthly pay. Forests that provided necessary shade to tea saplings and provided wood for tea-boxes also sustained virulent malarial parasites that killed vast number of workers. Nature had many functions in this capital-intensive economy; it was the lynchpin between crop and capital. Frank Uekötter's argument is poignant in this context: that in its hegemonic ability and desire to condition nature as well as society, "plantation systems are akin to totalitarian states – matters of life and death for entire economies and regions."²¹

This work is therefore not about a specific commodity or a specific place. It is a plantation history first and foremost, and seeks to situate Assam within its broader Asia-Pacific and Atlantic contexts. But it does not call for this comparison through the primacy of any one approach – cultural, biological, or Marxist.²² If labor is still at

²⁰ On this perspective, I draw inspiration from John Soluri's, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States* (Austin, TX: University of Texas Press, 2005); Sven Beckert, *Empire of Cotton: A Global History* (New York, NY: Vintage, 2014); Sidney W. Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York, NY and London: Viking, 1985); Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley, CA and London: University of California Press, 2002); J. R. McNeill, *Mosquito Empires: Ecology and War in the Greater Caribbean, 1620–1914* (Cambridge: Cambridge University Press, 2010); Paul S. Sutter, "Nature's Agents or Agents of Empire? Entomological Workers and Environmental Change during the construction of the Panama Canal," *Isis*, Vol. 98, No. 4 (December 2007), 724–754; Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York, NY: Hill and Wang, 2005); T. H. Breen, *Tobacco Culture: The Mentality of the Great Tidewater Planters on the Eve of Revolution* (Princeton, NJ: Princeton University Press, 1985); Richard S. Dunn, *Sugar and Slaves: The Rise of the Planter Class in the English West Indies, 1624–1713* (Chapel Hill, NC: University of North Carolina Press, 1972); Ian Tyrrell, *True Garden of the Gods: Californian–Australian Environmental Reform, 1860–1930* (Berkeley, CA: University of California Press, 1999), Uekötter, ed., *Comparing Apples, Oranges, and Cotton*, and Corey Ross, *Ecology and Power in the Age of Empire*.

²¹ See Uekötter, ed., *Comparing Apples, Oranges, and Cotton*, p. 18.

²² Consider, for instance, that in comparing the plantation economies of Assam and British West Indies, Prabhu P. Mohapatra focuses exclusively on the penal provisions of



Figure 0.1 An Assam plantation © Schlesinger Library, Radcliffe Institute, Harvard University

the center of this book, an agroecological perspective de-centers attachment to categories such as proletariat and peasant, feudal and capitalist in understanding confrontation, or the relationship between crop and cultivator in extractive production. Entomological science, fertilizers, soil management, pathogen environments, and botanical manipulation contribute to, and are components of, planter violence and legal control of land and labor. As John Soluri suggests in his study of Honduran banana production, “attempts to draw well-defined borders between natural spaces and cultural spaces run the peril of ignoring all-important interactions between fields, forests, and waterways; and between cultivated, wild, and hybrid organisms.”²³

indentured contract and their mechanisms of enforcement; surely, the legal extraction of labor-power, and the resistance it evoked have other material and historical drivers in these two cases; see Prabhu P. Mohapatra, “Assam and West Indies, 1860–1920: Immobilizing Plantation Labor,” in Douglas Hay and Paul Craven, *Masters, Servants, and Magistrates in Britain and the Empire, 1562–1955* (Chapel Hill, NC and London: The University of North Carolina Press, 2004), pp. 455–480.

²³ Soluri, *Banana Cultures: Agriculture, Consumption, and Environmental Change in Honduras and the United States*, p. 5.