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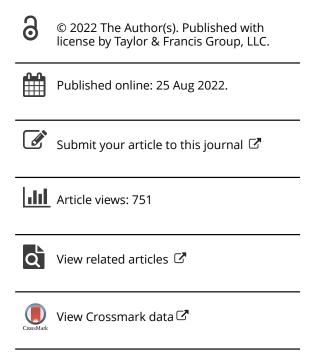
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Plantationocene: A Vegetal Geography

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A Plantationocene is a threshold for understanding planetary change. Rather than attributing environmental transformations to the universal agency of humankind, a Plantationocene grounds the alteration of landscape in histories of colonialism and race, and takes the plantation to be a pivotal engine for producing novel but fraught natures. This article develops a vegetal geography of a Plantationocene, engaging relations between plants and people as well as the role plants play as mediators of habitability in a landscape. It argues that such geographies influence and are underscored by the exploitation of labor, violent enclosures of land, and the quest to profit from both human and other-than-human life. Vegetal geographies are tracked in three conceptual registers: the vegetal agency of plants put into circulation by plantations, vegetal economies centered on labor power and the work plants do, as well as the vegetal politics of landscape change proceeding though an ecology of relations and the asymmetric exercise of power. This reading of a Plantationocene and its vegetal geographies brings scholarship on planetary transformations into closer dialogue with colonial history and postcolonial political economy. The argument is grounded in an ethnography of the Adivasi community, elephants, and tea plantations in Assam, northeast India. Key Words: Anthropocene, labor, Plantationocene, political economy, tea plantation.

There is a rush to plant tea in Sundarpur. Paddy fields are being filled with earth, homestead gardens are repurposed, forest land reclaimed, not to mention a series of land grabs that have taken place through violent means. Assam, a state in northeast India where Sundarpur is situated, has been in the middle of a small tea grower revolution: the cultivation of tea by the peasantry at smaller scales than that of the colonial estate plantations. The rapid rise of small tea estates has been preceded by rampant deforestation in the wider landscape surrounding Sundarpur in the early 1990s, and was soon followed by the virulent spread of Mikania, a nonnative plant. This transformation of the landscape has significantly affected people's lives, particularly that of the Adivasi community who form a majority of plantations' workforce. The alteration of Sundarpur's vegetal geography has also affected other-than-human life. Frictions between people and elephants have escalated, as the animals have taken to foraging intensively on rice paddy given their depleted habitat. This article traces the political and ecological resonance of these processes and events, situating landscape change through the concept of a Plantationocene.

A Plantationocene is a threshold for understanding epochal transformations. It fosters analyses of planetary change in ways that go beyond the tired divisions of nature and society, foregrounding fraught colonial histories and the troubled presents that emerge in their wake. Rather than the blanket notion of "human agency" in altering the earth and its biota, exemplary of interdisciplinary fascinations with the Anthropocene, a Plantationocene centers the role played by extractive and enclosed monocrop plantations (Haraway 2015), their sanctioning of forced labor, and sustenance of a racialized elite (Wolford 2021), when engaging questions of environmental change. The alterations taking place in Sundarpur prompt a particular kind of critical inquiry, one simultaneously attentive to the agency of the living and material world as well as the power dynamics that bring about change. More specifically, and first, they call for examining the violent exploitation of labor power as well as other-than-human work in the quest to produce cheap nature (Patel and Moore 2018), exemplified here in the rush to plant tea. In contrast to much political ecology and agrarian studies, this expanded notion of work enables interrogating how both human life and nature are cheapened by the plantation and its wider milieu

(McKittrick 2011). Second, land grabs and the encroachment of forest areas produce highly uneven spatialities. "Plantations notoriously are enterprises of the 'enclave' type" (Gohain 1982, 58) that arrest development in their wider landscape (Guha 1977; Li 2018). A critical look at the spatial dynamics of a Plantationocene means interrogating who the beneficiaries of landscape transformations are, just as it demands paying attention to the senses of place such transformations erase (McKittrick 2011). Third, the proliferation of nonnative plants—often the product of plantations setting not just people but flora in motion—call for specifying landscape transformations in an ecological vein. A Plantationocene needs to be seen as a "diasporic" condition, involving the circulation of both plants and people and where life is subjected to the exercise of power in terms of its movement and flows (McKittrick 2013, 4). Fourth, a Plantationocene, as viewed from the Sundarpur landscape, involves the violent creation of simplified ecologies. This landscape needs to be read as a site where bodies are differentially disciplined across time and space, with the purpose of coordinating their relations with the time of the market (Tsing 2017). Such a reading is crucial as Plantationocene economies are economies of scale. They are driven by racial and colonial logics (Aikens et al. 2015; Davis et al. 2019; Murphy and Schroering 2020), where the quality of life becomes subordinate to life's quantity (Besky 2020).

A critical exposition of the alterations of the Sundarpur landscape means attending to some of the lacunae in the literature on the Anthropocene, whether to do with racial and colonial underpinnings of the Anthropocene's inflection points (see Yusoff 2018; Gandy 2022) or the occlusion of capitalist dynamics in transforming earth (see Moore 2017). Evoking a Plantationocene is to couch some of the "signature challenges" of the Anthropocene, including those of invasive species, food security, biodiversity conservation, and the plant-human relations they entail (Head et al. 2014, 864; Skrydstrup 2021), in broader histories of colonialism, and in the persistence of colonial legacies in a postcolonial present. By the beginning of the twentieth century, plantations had brought about a dramatic upheaval of Assam's landscape. One fifth of the province's geographical area was converted to tea, aided by British capital, lucrative land grants meted out by the colonial administration, and the toil of more than 3 million people from the Adivasi community recruited from central and eastern India to work under despicable conditions of indenture (Guha 1977; Behal 2012; A. Saikia 2014). More than 4,000 square miles of forest were enclosed and brought under the control of the colonial forest department. This enclosure of the commons also stemmed from plantation logics: the creation of uniform stands of commercially valuable timber and the destruction of trees deemed to have no market value (A. Saikia 2011).

Plantations and forest enclosure widened the gap between commercial and subsistence sectors in Assam and they significantly constrained the scope for the state's agrarian and urban economy to expand (Gohain 1982). Right until the close of the twentieth century, Assam remained "a colonial hinterland" (T. Misra 1980, 1357; U. Misra 2013). Plantations reaped enormous profits but barely made any investments for local development or for the uplift of the Adivasi plantation workforce. Indian big bourgeoisie wrested monopoly control of most of Assam's resource-based sectors and the stance of the central Indian government remained extractivist (U. Misra 2013). The continual renewal, if not aggravation, of a colonial pattern of underdevelopment generated an atmosphere of deep resentment. Mass agitations against the Indian state, viewed as a neocolonial entity by large sections of Assam's populace, began in the 1970s. Led primarily by upper caste and upper class sections of Assamese society, the agitations turned into full-blown secessionist militancy a decade later (Gohain 1996). Much of the transformations of Sundarpur's landscape, whether to do with the expansion of tea, deforestation, and the virulent spread of nonnative plants, or frictions between elephants and people, are fallouts of the agitations' violent aftermath.

These developments might be seen as a fairly classic story of a neglected region turned into an extractive frontier for timber and tea, but such a framing misses out on wider dynamics at stake. Planetary transformations are in no way uniform and are marked out by the persistent underdevelopment of particular places and regions. Such places are significant to understanding our planetary condition and for introducing specific ecological dynamics to what otherwise can become generalized accounts of change (cf. Moore 2015). Furthermore, the effects of plantations are not limited to their enclaves: They have devastating ecological consequences that

extend to, and even colonize, a plantation's outside (Barbora and Phukan 2022). An account of land-scape transformations must therefore do two things at once. Rather than parochializing a region, it needs to reflect on what such regions tell us about the causes and consequences of planetary transformations (Kikon 2019). It also needs to go beyond overly social and political straightjackets to foreground how diverse, other-than-human agencies are at work in the fabrication of altered worlds.

To this end, locating environmental transformations in colonial plantation history, and tracking their postcolonial legacies, this article develops a vegetal geography of a Plantationocene. Analytically and conceptually, the article furthers the nascent subfield of plant geographies (Head and Atchison 2009; Lawrence 2022), notably concepts of vegetal agency (Fleming 2017), vegetal economies (Ernwein, Ginn, and Palmer 2021), and vegetal politics (Head et al. 2014), by drawing them into conversation with scholarship on planetary change as understood through a Plantationocene (Haraway 2015; Davis et al. 2019; Wolford 2021; Gandy 2022). Inspired by neo-vitalist accounts of nonhuman agency (Bennett 2010), geographers have foregrounded the ways in which plants act and how they have bearings on the social and spatial organization of human activity (Fleming 2017). This article reads vegetal agency in its material and historical context, notably that of the plantation, that generates the very grounds within which agency is expressed. In a similar vein, vegetal economies or the ways in which "plantiness" and economic practices intersect (Ernwein 2020; Ernwein, Ginn, and Palmer 2021) become an opening to interrogate the production of a Plantationocene's cheap natures and simplified ecologies. It does so in lively and innovative ways beyond routine agrarian studies, but without flattening deeply asymmetric, powerladen relations through which "the economic" takes grip (Davis et al. 2019). The article pays close attention to the political ramifications of plants' affordances (Nally and Kearns 2020) or what they furnish for different subjects, both human and other-thanhuman. The latter includes the role the vegetal plays as mediator of animals' geographies and animals' encounters with people.

The reference to *a* Plantationocene rather than *the* Plantationocene might seem paradoxical, as the appeal of the concept is its planetary scope. Planetary change is neither uniform nor universal, however.

Rather, transformations of the planet always have "particular, differential manifestations" (Hecht 2018, 112). To refer to a Plantationocene is to put the latter in place, as a means of holding planet and a place on the planet in the same analytical plane. Place and landscape are points of departure for specifying multiple ecologies and forms of violence that constitute a Plantationocene. To insist on a rather than the Plantationocene is also to draw attention to the fact that there might be other pathways of departure: The current endeavor is one among other possibilities. This specification of plantation and planet, plant, and plot emerges from ethnographic work with an Adivasi community in Sundarpur, where grounded experiences are triangulated with archival research on the landscape's colonial and postcolonial history. The endeavor here is what I call a "more-than-human ethnography" where, unlike multispecies ethnography (Kirksey and Helmreich 2010), the emphasis is not on species worlds (see Ingold 2013), but on spaces of enmeshment, motion, and relation forged by a retinue of beings. A more-than-human ethnography is transversal, in that the focus is not on dyadic human plant and human-animal relations, but on polyvalent connections between the living and material world. I learned about plants from people—particularly Mikania, rice, and tea, as these had bearings on their everyday lives. At the same time, elephants, too, were "guides" into this vegetal geography. By observing how elephants encountered plants, what they consumed and shunned, other vistas into the landscape opened. Here the affordances, and agency, of plants exceed what they mean for a human subject. At the same time, these other-than-human relations come back to mark people's activities, particularly in the form of frictions between people and elephants.

The following sections of the article draw on a more-than-human ethnography to specify vegetal geographies of Assam's Plantationocene. It first attends to questions of vegetal agency, tracked through the political ecology of *Mikania*, a nonnative plant put into circulation by plantations. This work is in conversation with scholarship on invasive species in the South Asian context, attending to the biographies of "weeds" (Robbins 2004) and the conditions that lead to their proliferation (Münster 2020). The article then turns to vegetal economies. Focusing on postcolonial transformation of the land-scape into tea, it interrogates how plant time (Elton 2021) and plantation time intersect, while paying

attention to the violent histories of a Plantationocene that has enabled tea estates to expand. The third section presents a more expansive vegetal politics. It examines how plants mediate relations between people and elephants, and how elephants are enrolled into the dynamics of converting land to tea. In conclusion, the article develops an alternative reading of planetary transformations that brings vegetal geographies into closer dialogue with colonial history and postcolonial political economy.

Vegetal Agency

"Mekanic Lota grows in sunny places and in forest clearings," says Budhu, a farmer from the Adivasi community, pointing to sheets of Mikania micrantha that drapes the undergrowth of the Lower Doigurung Reserve Forest bordering Sundarpur (Figure 1). "It clamps down on everything. All other vegetation is completely suppressed with no chance of coming up," he tells me, as we stare at the verdant climber that has virtually taken over what remains the forest. "It was not that excessive before, but since the mid-1990s, as trees were felled, the forest has been literally covered by Mekanic. If felling of trees reduced firewood, the spread of Mekanic means we do not even get that. What's more, even the paths for entering the forest have been blocked," says Budhu. "You have to hack your way through all this vegetation to get anywhere and this makes the entire exercise of finding firewood completely futile." Budhu adds, "Mekanic has also made walking through the forest risky, as you cannot see if there are elephants. Their fodder too has been diminished as Mekanic barely lets any other plants grow."



Figure 1. *Mikania* cloaking the Lower Doigurung Reserve Forest. Photo by author.

Mikania and the history of its spread exemplifies the vegetal geographies of a Plantationocene, geographies that are crafted through the circulation of a host of flora that plantations set in motion to aid production of cheap commodities. A perennial creeper that originates in Central and South America, Mikania was, in all probability, grown as a cover crop for tea. One Assamese name for Mikania is Jāpāni Lota, literally meaning "Japanese climber," as a popular story is that the plant was introduced to camouflage airfields during World War II when a Japanese invasion of Assam, then annexed to British India, was imminent (Dutta 1977). Archival research, however, indicates that the plant was naturalized in the forests of Assam during the first decade of the twentieth century, and possibly even before 1897 (Brühl 1908). Mikania was in circulation in South Asian plantations. It was imported to control Imperata grass in Ceylon as costs to remove Imperata manually had become prohibitive. The introduced vegetative agent soon spiraled out of control, however, spreading "enormously," literally "covering" the island's "scrub jungle and trees" (Bamber 1909, 145). By the 1930s, Mikania was also becoming a familiar sight in the plains of Assam, growing on "shrubs, trees, bushes and marshy areas" (Biswas 1934, 425), although its distribution was localized. The imperial Botanical Survey of India remarked that in the long run, Mikania would become "a serious source of loss to the agriculturist in the first instance and to the Government in the long run" (Bal 1935, 5), although no removal measures seem to have been put in place.

Now one of South Asia's nonnative plants of considerable conservation and agricultural concern, the rapid proliferation of Mikania happened after a major geological event: the Assam earthquake of 1950. Registering a magnitude of 8.6 on the Richter scale, the earthquake caused an upheaval of the region's topography. It resulted in landslides, deposited enormous amounts of debris on the Brahmaputra riverbed, and created hollows in the landscape. Periodic flooding of the Assam Valley was a lasting consequence. Subsequent "inundation of vast areas of forests by flood" generated a conducive environment for Mikania. It "helped the climber to flourish and spread menacingly" (Choudhury 1972, 179). By 1958, the plant, according to tea planters and forest officials, was expanding "in an alarming fashion," clambering up tall trees and "virtually smothering the forests" (Shaw 1967, 95).

The proliferation of Mikania, one could argue, is reflective of vegetal geographies endemic to plantations, endemic in that they emerge from within a plantation mode of production. The latter not only involves monoculture and the cultivation of a dearth of biological difference, but also the introduction of a suite of other vegetative bodies that bolster economic productivity. From nitrogen fixers and cover crops for enriching and protecting soil, to shade trees that modulate ambient atmospheres and runners for hedges that seal colonial enclaves from their surrounding landscape, plantations continually use life to foster further accumulation from life. Such forms of accumulation can, however, be rambunctious, as the history of Mikania's spread indicates. Mikania lay dormant, as a relatively localized and naturalized climber, before changes in the earth's strata created conditions for it to proliferate, an expression of vegetal agency that slips the leash of a plantation's manicured order and that comes back to bite, disrupting processes of accumulation from within.¹

By the early 1970s, Mikania had increased so extensively that the forests of eastern Assam began to take on "an impression of old ruins" (Choudhury 1972, 178). The writings of A. K. Choudhury, a forest officer who attempted to control Mikania, provide a vivid account of the plant's vegetal agency, one operating over a number of durations and scales. Mikania propagated primarily by runners rather than through seeds, forming "a thick mat" wherever there was sunlight. It was particularly an issue in commercial forestry plantations and in tea, multiplying "so rapidly ... that even an area freed from it" would be covered again "within a fortnight." Although the climber did not have thorns or tendrils, it was able to cloak vegetation by producing "subsidiary offshoots to twine round objects of any kind," moving "from one bush to another in search of light" (Choudhury 1972, 179). Plantation logics, in fact, enabled Mikania to proliferate further. "In the plantations which have been raised by clearfelling high forests," Choudhury (1972) wrote, "this climber tends to be ruthless" (179). The aggravated flood condition also meant that Mikania seeds dispersed along drains and rivulets. Tea plantations were soon affected, and the climber was "virtually putting some of them out of production" (Tea Research Association 1970, 1).

Choudhury's evocation of "ruin" is prescient. Following Stoler (2013), one can read *Mikania*'s vegetal agency as a kind of ruination, an uneven

temporal sedimentation of the violent histories of a Plantationocene. Ruins are not leftovers or relics. Rather, they are "what people are *left with*" (Stoler 2013, 9): a degraded landscape where livelihoods are obstructed and the commons desecrated. *Mikania* is a vegetal body that forms part of empire's afterlives. Its effects begin to emerge long after the end of colonial rule, surfacing in plantations and forests, permeating pathways and plots. To ruin, as Stoler (2013) wrote, is "a virulent verb" (9). Through vegetal agency, colonial legacies not only persist, they multiply along the time of plant growth amplified and accelerated by episodic events.

There is a specific political ecology to the Doigurung forest being cloaked by Mikania, one that stems from a violent backlash to the persistent underdevelopment that marks Assam's Plantationocene. Here, as Choudhury's observations and Budhu's account reveal, vegetal agency and deforestation are closely tied. In the 1990s, Golaghat, the district where Sundarpur lies, lost 40 percent of its forest cover when compared to a 1991 baseline (Sarma et al. 2008). Much of the latter happened after secessionist militancy took hold in the state in the 1980s. Arguing that Assam remained a colonial hinterland, ravaged by the extractivist outlook of the Indian state, plantation companies and the big bourgeoisie, the United Liberation Front of Asom (ULFA), took up a militant struggle for liberating Assam from India (S. Baruah 1999; U. Misra 2013). The outfit's widespread support and moral sanction came from sections of Assamese society, many of whom encountered the Indian state as an instrument of repression and exploitation (Gohain 1996).

The organization, however, took a violent, chauvinist turn. The targeting of politicians, gunning down of non-Assamese businessmen who failed to meet the outfit's demands and, later, the discovery of mass graves in ULFA's camps soon eroded the organization's popular base (Gohain 1996; U. Misra 2013). In the late 1980s, as ULFA began targeting Assam's influential tea plantation industry, the central Indian government responded to the grave situation that had emerged in the state. In 1990, security forces were brought in to quell insurgency and "Operation Bajrang"—one of the largest peacetime operations by the Indian military—was launched (U. Misra 2013). A successor operation, labeled "Operation Rhino," led to a busting of several militant camps, the killing of scores of cadres, and the

arrests of hundreds. Successes of the Indian army were, to a large extent, neutralized by the excesses it committed on the civilian population, some of which included extralegal and extraconstitutional counterinsurgency measures (Gohain 2007; U. Misra 2013).

To deal with this violent milieu, the Assam government, under the leadership of then Chief Minister Hiteswar Saikia, launched a scheme to "rehabilitate" surrendered cadres (Sahni and Routray 2013). Worried that many youth would return to militancy if they failed to find suitable avenues for employment, the government granted surrendered ULFA cadres (widely referred to as SULFA in Assam) a range of formal and informal concessions. Most were allowed to retain their weapons and many were given a free hand to continue what they were doing before: Extortion became rampant, the SULFA ran syndicates controlling businesses or allowing them to function under its "protection," and some even entered the real estate market (Sahni and Routray 2013). The state's agencies also used some of the SULFA to try and "solve" the militancy "problem," deploying them to gun down their former comrades (U. Misra 2013).

The SULFA also muscled into the timber trade, amassing huge fortunes through illegal felling of trees and the smuggling of logs. It was perhaps not a coincidence that Chief Minister Saikia held the additional portfolio of Assam's Minister of Forests at the time. In 1994, a newspaper report stated that SULFA cadres had lit "a pyre of destruction" in the forests of Golaghat. Camps were being set up in protected reserves to fell trees, and logs were floated down rivers with the state's Forest Department either "turning a blind eye" or "becoming complicit" in what had become organized deforestation (R. Gogoi 1994). Estimates suggest that fourteen to fifteen truckloads, carrying 200 cubic feet of timber each, left the forests adjoining Sundarpur every day. Public roads through the forest were sealed off to prevent logging from being detected (Kurmi 1994). Large sections of civil society and polity witness to SULFA-led deforestation remained silent in fear.

The rampant felling of trees, and the informal concessions through which it operates, constitute an extralegal form of accumulation from vegetal life. It is an accumulation by dispossession (Harvey 2003) or, more appropriately, an "accumulation by deforestation." A figure from 1995 suggests that the

SULFA had felled trees worth 2.35 billion rupees, equivalent to a staggering US\$72.46 million at the time ("Govt. move emphasises threat to Assam forests" 1995). Indicative measures suggest that between 1991 and 1993, Assam registered a loss of 190 square kilometers of forests through illegal felling (Forest Survey of India 1993), a figure that went up to 377 square kilometers in the two subsequent years (Forest Survey of India 1995). Such extralegal accumulation not only emerges from violence, including the means to overcome persistent colonial underdevelopment (Gohain 2007), but extralegal accumulation inflicts further violence on a landscape and its denizens, creating the grounds for Mikania to proliferate in even more virulent ways. "Mekanic Lota was present in the Doigurung reserve but not as much as it is now," says Santosh, another Adivasi farmer from Sundarpur, repeating what Budhu and many other farmers observed. Santosh describes how deforestation enabled the climber's vegetal agency to be expressed: "the cutting down of trees exposed almost the entire forest to sunlight. Furthermore, all that was left were shrubs and small trees which Mekanic could easily clamp down on."

Deforestation, coupled with the expression of a virulent vegetal agency, has resulted in greater pressure on the lives of the Adivasi community, particularly for activities that contribute toward simple reproduction: gathering firewood and grazing livestock. When Budhu and I try to walk or, rather, hack our way through the Mikania-clad Doigurung forest, our bodies become weary. The odor of the cut leaves is nauseating and a sticky substance coats our clothes. "There is no way our cattle can graze here," says Budhu as we walk. Although the Lower Doigurung Reserve Forest was officially out of bounds, enclosed by the colonial Forest Department in 1879 (Mann 1879), it still remained grounds where people could informally graze their livestock or collect firewood, as forest surveillance was not rigid. The only trails that Budhu and I are able to follow, after a while, are the dandis, or tracks created by elephants. "They are large and they muscle their way through," Budhu tells me, "but there is very little for them here to eat. As a result, elephants' dependence on our fields has increased."

Holding plant, plantation, and politics in conjunction thus reveals how vegetal agency is expressed under certain historical conditions. In this instance, the usual order of human domination over

plants is inversed. Mikania has significant agency in the Sundarpur landscape, carving out its own vegetal places in excess of plantation order. As Santosh tells me, "Mekanic takes over a place." Yet, its ruinous agency, emerging long after the formal end of empire, amplifies when it intersects with other forces, notably the effects of violent forces that aim to ameliorate the underdevelopment endemic to a Plantationocene. Such agency does not evenly affect all bodies. Rather, ruination is disproportionately brought upon the vulnerable Adivasi community, disrupting their circuits of simple reproduction and sapping the community's strength from within. As Mikania proliferates and becomes hyperabundant, the agency of the Adivasi community diminishes. Their modes of dwelling in a Plantationocene become an act of maintenance rather than one of making.

Vegetal Economies

If Mikania reveals how vegetal agency plays a role the transformation of the earth into a Plantationocene, bringing ruination to a landscape and affecting the lives of a vulnerable community, then a different story unfolds when one shifts attention to the tea plant. At stake here are vegetal economies—the generation of profit from human and plant life through specific sets of economic and ecological practices—which takes on a highly organized and coercive form with the plantation. A major change in Golaghat and the Sundarpur landscape was the explosion of "small tea gardens"—tea grown by landowning peasants in their smallholdings. Such gardens² or estates were typically a few acres each but, in some cases, mirrored larger plantations and their economies of scale.

Although Assamese peasants' involvement in tea cultivation goes back to the colonial period (J. Sharma 2011), the extent of this practice was marginal. Estate plantations that changed from British to Indian ownership after independence began encouraging Assamese farmers to grow tea. In the latter part of the 1970s, a group of well-to-do peasants in Golaghat started cultivating the plant in their homesteads (C. K. Sharma and Barua 2017). The rapid expansion of small tea estates coincided with the political turmoil of the late 1980s. At the time, the Indian tea industry witnessed a significant decline in production. Prices soared and the government curtailed exports to prevent price acceleration

in the domestic market. The age of tea bushes was a major contributing factor to underproduction. In 1987, 44 percent of bushes in Assam's plantations were more than fifty years old (Bhowmik 1999), having crossed the age of optimum economic productivity. The Tea Board of India's efforts to mobilize plantations to substitute older bushes with new plants was largely unsuccessful. As a result, and under India's Eighth Five Year Plan (1992–1997), the Board began encouraging unemployed youth and landed peasants to start small tea estates, an effort aimed at increasing production as well as improving the quality of tea (Bhowmik 1999). Numbers reflect the intensity of this drive. According to one estimate, Assam had twenty-one registered small tea estates in 1987. In 1991, there were 237 small growers in Golaghat alone. This number rose to 837 in 1994 and by 1999, there were 2,148 registered small tea growers in the district, whose estates covered an area of 7,342 hectares (Chakraborty 2006).³

Underproduction draws attention to the "vegetal work" carried out by plants (Ernwein 2020; Palmer 2021). Such work entails the processes of growth or the photosynthetic, metabolic, and reproductive processes of plants that, from the standpoint of capital, convert nutrients and sunlight into carbohydrates and ultimately proteins in ways that anthropogenic machines cannot yet replicate. What distinguishes vegetal work from a plant's ways of being is that in the former, corporeal and metabolic aspects of a body are brought into the ambit of economic activity. Here, metabolic and reproductive processes become intrinsic to the process of valorization, enabled by particular economic and ecological arrangements, whereas benefits to plants' own proliferation are either lacking or incidental. Plantations are vegetal economies of colonialism and capitalism par excellence. In contrast to political economic analytics derived from a factory-based model of commodity production, where commodities are deemed to be made, the quintessential cheap commodity of a Plantationocene is grown (cf. Ingold and Hallam 2014). Plantations set up conditions for plants to take on particular forms and dispositions and, in conjunction with a sanction of forced labor, reorient the time of vegetal life into the time of production.

Vegetal work, however, is not a physiocratic allusion to living biology being the source of all wealth. Rather, as a concept, vegetal work is a material abstraction, where abstract, temporal imperatives of

accumulation are operationalized at the level of the vegetative body (cf. Cooper and Waldby 2014). At the same time, vegetal work becomes part of the dead labor embodied in a plantation's commodities produced through the violent, racial exploitation of human labor. A failure to account for the conjoint nature of vegetal work and human labor, and plantations were notorious in their deployment of forced labor, leads one down the wrong path, to the ahistorical and "colour-blind" idea that plantations are just the slavery of plants (Haraway et al. 2016, 556). The small tea garden sector in Assam has grown partly because of a readily available reserve army of "faltu" labor, predominantly members of the Adivasi community, living outside estate plantations like those in Sundarpur.

For instance, Bogai, a farmer from Sundarpur, cultivated paddy in his small plot of land, but also worked part time in a neighboring small tea estate, planting saplings, digging drains, and carrying out the all-important activity of weeding. His wife Dipa performed the demanding labor of plucking in the same estate, but was paid a lower wage. "I have to wake up at four o'clock in the morning, clean the house and cook, see the children off to school and then go to the bagaan to start work," Dipa tells me, "and in the evening, after work, it is the same routine all over again." Women like Dipa shoulder most of the unpaid domestic care work that replenishes the plantation's workforce, bearing the heaviest burdens of systemic inequality. Studies indicate that a maximum of six hours of sleep is routine for thirteen hours of physical work for women in tea plantations. In 2017, Assam's plantations recorded 363 maternal deaths per 100,000 live births, a figure more than double the Indian national average (Oxfam 2019).

Plucking tea is a highly skilled but gendered activity, almost exclusively performed by women, whether in the larger estate plantations or in small tea gardens. Here, vegetal dimensions of the tea plant and specific requirements of the crop translate into technologies of governing labor. Historically, this entailed the violent "planting" of the Adivasi community in Assam, brought from central and eastern India, often through deceit and fraud, and made to work under appalling conditions of indenture (Behal 2012). People were immobilized in "coolie lines" resembling barracks, cut off from the rest of the populace, and coerced into working, unable to withdraw their labor until the contract period ended (Guha 1977; Behal 2012).

Plantations required labor of a particular type: It had to be cheap, plentiful, and easily disciplined (Rodney 1981). As Behal (2012) argues, the particularities of the tea plant influence the organization and disciplining of plantation labor. The manner in which tea sprouts leaves, called "a flush" in industry parlance, introduces "a very strong element of continuity" to the production process (Behal 2012, 62). A week or two after the first flush is plucked, a second one appears in the form of shoots growing from the axils of the tea bush, followed by a third, and so on. Plucking has to be continuous, commencing from the first flush in April or May, through to subsequent flushes until December. Pauses result in sprouts becoming mature, spoiling the quality of tea, besides upsetting the plucking level and subsequent flushes. Vegetal growth, and therefore the work done by plants, thus creates a demand for the continuous year-round supply of labor and influences work-time discipline on plantations.

The tea plant becomes an active participant in the patterning of labor time (cf. Brice 2014) and, in vegetal economies, plant time and plantation time meld. Making a plant continuously flush also means that the metabolic energies of the tea plant are invested in the production of leaves rather than in fruits and seeds. In a plantation, vegetal time thus becomes synonymous with the time of production, fueled by the quest to reap profits from the work done by plants at the level of the vegetal body. "They hardly seed," a farmer once told me, "and even when they do after six or seven years, the seeds do not germinate or grow well." Plucking patterns are not transhistorical, however. They have undergone modifications over time, dictated by demands for quality and competitiveness in a global market.

Plantation logics proceed through a vegetal politics of the plant body: the correction and optimization of the plant such that it grows to maximize yield rather than for its own regeneration. In its wild-growing state, the tea plant becomes a small tree. In plantations, though, the plant is maintained as a low bush, at a height of two to two-and-a-half feet through pruning in the winter months (Figure 2), so that it is within reach of a woman's hand while plucking (Behal 2012). Here, the plant becomes "anthropo-ontogenetic" (Ingold and Hallam 2014, 5), taking on or mirroring the form of the gendered, laboring human body as processes and conditions of its growth are manipulated and controlled.



Figure 2. Pruned tea bushes in a small tea estate. Photo by author.

A failure to prune in the winter months can result in a loss in the next year's yield. Vegetal being is therefore prevented from following its own course: The plant's metabolic energy is channelized to yield fresh leaves.

Small tea estates in Sundarpur and the Golaghat landscape are a scaling down of the plantation model, a shrinking rather than an expansion of a project (Tsing 2015), without changing internal relationships of human and vegetal work. Much of their growth has happened because of the routine violence that characterizes plantation zones (Li 2018), including the destruction of forms of life, the appropriation of resources and land, and a foreclosing of particular futures. In Assam's Plantationocene, the patchy, accretive expansion of small tea estates has been fostered by the violence that followed secessionist militancy, particularly deforestation and subsequent land grabs. "Earlier the company plantations did not allow people to cultivate tea," says Santosh, as he explains why there has been a sudden surge in small tea estates, "Only when the ULFA was created did tea cultivation become possible for people."

Although the origins of small estates lay elsewhere,⁵ there are connections between militancy and the expansion of tea. The SULFA in particular had begun investing in the sector, partly aided by Chief Minister Hiteswar Saikia's "Margin Money Scheme" for rehabilitating surrendered militants, which promoted "mini tea gardening" as an opportunity for self-employment (Press Information Bureau 2000). In Saikia's own words, encouraging

surrendered militants to start "pursuing their livelihood through tea" was to create an avenue for their "return to the mainstream" (S. Saikia 1996, 13). Saikia mooted a scheme to refinance small tea growers across Assam and asked estate plantations to provide support so that small growers did not "find any problem in marketing their products" ("Small tea growers to be promoted" 1992, 40).

Certain sections of the SULFA opened plantations near Sundarpur on the back of violent land grabs. "A group of surrendered militants from Golaghat came and set up camp in our house in ... around 1994–1995," says Santosh, "staying for many weeks at a time, looking for land and negotiating with people to start their plantations." Santosh recounts how they took away land at throwaway prices. "My father was reluctant to sell his land, but they would threaten us with their pistols," he tells me, "I was very young and my father was often drunk. They would coax and intimidate him at the same time." Worried, Santosh tried to intervene on a number of occasions. Their family owned significant amounts of land, obtained from erstwhile tea plantation grants as well as by reclaiming forest land in the early 1980s.⁶ The SULFA cadres resorted to physical violence. "They would beat me up," says Santosh, who tried to escape the brutal atmosphere the SULFA had created in their home by dropping out of school and leaving home to seek work elsewhere.

Informal concessions given to the SULFA by the state rendered the atmosphere ripe for violent, extralegal land acquisition. Some of the capital for

starting plantations—certain estates were as large as a thousand bighas with permanently settled labor came from money the cadres had extorted before surrendering. In the 1990s, the ULFA made significant monetary demands on corporate-owned tea plantations, including an approximate US\$700,000 from the Unilever companies (Hazarika 1994). Many cadres had "forgotten" to deposit enormous sums with their linkmen when leaving the outfit (Gohain 1996, 2067). "One of the militants came overground with huge stacks of cash," says Budhu. "The Doigurung forest had been their camp ... and some of us were entrusted with safekeeping the money at gunpoint." The surrendered militant later plowed this extorted plantation capital into business ventures including the acquisition of land to grow tea. Some of this proceeded through coercion, dispossessing the Adivasi community even further.

The overwhelming material fixity of plantations (Li 2018), remaining from one generation to the next with the agency of people to remove or alter its character in a fundamental way severely curtailed, is a crucial factor in the expansion of small estates in Assam. Colonial estate plantations and forestry locked up large tracts of land in the state, severely curtailing the scope of the agrarian sector to expand (Guha 1977; A. Saikia 2011). There is considerable pressure on land and many small tea estates were started by encroaching on forest reserves and government-owned revenue land (Sentinel Digital Desk 2021). There is also a vegetal dimension to the material fixity of plantations. A tea plant continues to yield tea at least until it is fifty years old, and bushes get replaced when productivity declines. The cycle of productivity is of a much longer duration than, say, the three-year turnover of crops like sugarcane, once extensively cultivated in Golaghat. Vegetal time, and therefore vegetal agency, has bearings on land political economy, for the fixity and endurance of the tea plant allows for small growers to stake territorial claims.

The deforestation driven by the SULFA and the encroachment of forest land by small tea growers begin to overlap, revealing how the conversion of a landscape into a Plantationocene operates through a number of intersecting forces and at different scales. Much of the clear felling of forests required to plant tea had already been achieved through informal concessions and extralegal means. Assam's Small Tea Growers' Association consistently pushed for

allocating such forest land for growing tea, arguing that deforested tracts were no longer "beneficial to the Forest Department" (Ghosh 1999). This late twentieth-century expansion of small tea estates in Assam is not of a spectacular scale like that of palm oil in Southeast Asia (Li 2018). Rather, it has been an accretive and patchy transformation of Assam's landscape. Nonetheless, like in other plantation zones, it has proceeded through violent land grabs, extralegal deforestation, and the exploitation of Adivasi labor. The expansion of plantations also involves enrolling other actors.

Vegetal Politics

Budhu points to an excavator digging a deep trench along the edge of a tea estate bordering the Doigurung forest. "It is deep enough to prevent elephants from crossing," he says, as we stare at an excavation that is six to seven feet deep and five feet wide (Figure 3). "The plantation management is digging the trench to prevent elephants from coming into their estate, as the animals sometimes damage bushes and put a halt to plucking," Budhu explains, then drawing my attention to a subtle process of land reclamation. "You can see how close they are getting to the forest," he tells me. "Even a few extra feet makes a huge amount of difference." Budhu then points to gaps in the trench. "These have been left strategically," he claims, narrating how the gaps, placed where people's homesteads intersperse the plantation, will channel elephant movement through settlements. "Over time people will have no option but to move out," says Budhu. "It's a slow process of making people shift so that the plantation can expand."



Figure 3. Trench between a tea estate and the Lower Doigurung Reserve Forest. Photo by author.

Elephants open up other ways of reading vegetal geographies and their attendant politics. As Budhu points out, elephants not only become actors in the expansion of plantations, but get enrolled in the gradual transformation of a landscape into a Plantationocene. Elephants are megaherbivores, consuming up to 2 percent of their four-ton body weight each day (Sukumar 2003). Plants have distinct affordances for elephants; that is, the latter sense the capacities and potentials of plants in their own ways (Gibson 1986; Nally and Kearns 2020), in excess of the sensory proclivities of an anthropocentric subject. Plants influence animals' geographies, particularly in the case of megaherbivores, and they mediate people's relations with elephants. In Sundarpur and in the wider Golaghat landscape, deforestation and the virulent spread of Mikania, as well as the incremental but significant rise of tea estates, have resulted in a gradual depletion of foraging attributes of the landscape for elephants. As a result, the animals' dependence on crops has increased. Altered vegetal geographies have implications for the lifeworlds of animals and, consequently, people's lives. They proceed along and against the grain of human orderings of a plantation zone.

Over the course of the last two decades, Sundarpur's elephants have developed distinct foraging patterns. These entail staying in the Doigurung forest during the daytime and raiding people's fields at night during the paddy cultivation season from June to December. Sundarpur's elephants are fauna of a Plantationocene, adapting to the transformations of earth brought about by plantation logics and responding to challenges posed by a postcolonial condition. Furthermore, as Budhu explains, elephants' altered ecologies and mobilities are channeled to create further dispossession. Encounters and frictions between people and elephants happen along particular tracks and pathways rather than across uniform space. By installing electric fences along the forest boundary, and by leaving gaps in the newly dug trench, plantation management intensifies frictions along specific routes and creates conditions that lead to people shifting from their land.

"This is where my earlier home was," says Budhu, pointing to what looks like a nondescript spot amidst rows of ordered tea bushes. Budhu had been "asked" to sell his land and relocate, a euphemism for what was a violent land grab. Signs of past settlement begin to appear through a closer reading of the



Figure 4. Erstwhile Adivasi homestead now taken over by plantations. Photo by author.

landscape: The Albizzia shade trees that grid and intersperse tea are relatively young, about ten years old, whereas an occasional mango and Aegle that dots the view are much older. Not conventionally used as shade trees for tea, the latter are standing testimonies of what was once the Adivasi community's land and homesteads (Figure 4). "Many people relocated from the edge of the reserve as the elephant problem got aggravated, particularly those who lived in isolated hamlets," Budhu tells me. "They sold their land to the owner of the tea estate. One can hardly expect any other buyers here."

Elephant movement in fact has bearings on where people lived. During the course of my field work, Somra, another farmer who also worked as *faltu* labor in a small tea estate, moved his house closer to those of other villagers. His earlier dwelling was isolated and his family did not feel safe, given Somra was often out guarding his paddy fields from elephants at night. The situation was graver for Kanu, another Sundarpur resident, who lost both his father and brother-in-law to encounters with elephants. Left without men to cultivate the family's land, particularly to undertake the risk-laden activity of guarding crops, Kanu sold two bighas of land to a nearby Assamese plantation owner. He paid off debts that his father had accrued and used the remaining money to dig a trench around his home. "Our house is right beside the track elephants use to enter our village," Kanu tells me, "and this was a safety measure that I had to take." Dwelling alongside elephants has costs that run far deeper than immediate encounters with elephants. They aggravate preexisting poverty and have sociopsychological effects (Jadhav et al. 2015), besides fostering conditions for further dispossession and the conversion of the landscape into tea.

There is a distinct vegetal ecology to tea plantations, especially when viewed from the standpoint of elephants. Tea is not a crop on which elephants forage and, therefore, the plant does not afford nutrition to proboscidean bodies. Besides incidental damage to bushes, plantations are relatively immune from elephant incursions. In the past, significant tracts of Golaghat's forests reclaimed by Assamese peasants remained uncultivated due to a paucity of wage-labor. Such land remained in the form of "home gardens" (A. Saikia 2008) harboring a heterogeneous array of plants that provided forage for elephants. The rapid conversion of these lands into monocrop agriculture generated a landscape whose vegetal ecology was hostile to elephants. The animals' dependence on rice paddy increased, as the plant is analogous to what elephants eat in the wild but with a much higher nutrient content. Although bull elephants are known to opportunistically raid paddy fields (Sukumar 2003), an altered landscape means that female-led herds also do so with regularity in Sundarpur.

Continuous raiding of fields by elephants has further sparked farmers to cultivate tea, given the damage suffered is much less and it does not require the additional labor of guarding crops. Santosh and some others in Sundarpur who still owned land also began growing tea in their plots, a pattern that is becoming increasingly discernible across the village and wider landscape. "It is mainly because of the elephants," says Santosh. "How many trenches can you keep digging?" Santosh had converted some of his erstwhile paddy land to tea, cordoning off the area with a bamboo fence, filling earth to raise the ground and digging drains to ensure soil is not waterlogged. Although there has been an ongoing crisis in the small tea estate sector, particularly due to a fall in prices and, therefore, the rate of profit, it has not stopped the proliferation of tea. "People are planting tea seedlings, selling land, and then again others are planting tea," says Santosh, pointing to the intensity at which change is happening. "Paddy has almost disappeared." In 2013, Golaghat had 11,286 small tea growers registered with the Tea Board of India (Das 2019), having grown almost six times the number at the turn of the millennium. In 2019, this number had increased to a little over 13,000, covering an area of 13,900 hectares (Directorate of Economics and Statistics 2020). This has had significant bearings on elephants' lifeworlds. "Now where

will the elephants feed?" asks Santosh, who shows an acute awareness of this fraught vegetal ecology and its political ramifications.

"Tea will yield benefits in the future, for my children," Santosh tells me. The small plots of tea that he and others in Sundarpur cultivate primarily involve labor from within the family or neighbors who work on the basis of daily wages. Santosh's statement rings of hope amidst immiseration, although the small tea estate "revolution" has primarily benefited wealthier sections of the rural Assamese peasantry (C. K. Sharma and Barua 2017). Irrespective of its scale and size, plantations foster inequality. Small growers like Santosh are green leaf producers who lack capital for making processed tea. To sell their produce, most depend on estate plantations, and more recently "bought leaf factories" owned by richer sections of Assamese society. Prices have to be negotiated constantly. In Sundarpur, small growers sell their leaf to a large SULFA-owned plantation that, like other estates, uses various means to keep the price of green leaf low.

An expanded "more-than-plant" geography of the Sundarpur landscape reveals a vegetal politics that is marked by slow violence, a violence of delayed degradation (Nixon 2011) that proceeds through land grabs, the conversion of land to tea, and the exposure of the Adivasi community's lives and crops to elephants. This dynamic—in which the question of vegetal agency is paramount—sets a vicious cycle in motion. The cultivation of tea increases elephants' dependence on paddy, triggering further conversion of agricultural fields to tea. Here, a vegetal politics mediates human-elephant relations and vice versa. The Adivasi community is at its receiving end, for many lack even the means of growing tea in their plots. People end up selling land, shifting from subsistence farming to wage labor to toil as faltu workers on estate plantations and in the small tea gardens of richer Assamese peasants.

Plantationocene

A close look at the Sundarpur landscape and the politics of its vegetal geography gives credence to a Plantationocene as an alternate concept for specifying environmental change. Deforestation, the virulent spread of *Mikania* and the expansion of tea do not lead to "anthropogenic landscapes" produced through the agency of humankind (cf. Tsing 2021).

Rather, they result in the emergence of landscapes permeated by "plantation logics" and their racialcolonial economies (McKittrick 2011). Plantations grew through the exploitation of labor power and that, too, of a particular type. It involved the violent transport and subsequent immobilization of the Adivasi community in Assam, making them work under conditions of indenture that enforced hierarchies and sustained a racialized elite (Behal 2012). Colonial plantation logics did not wither away after Indian independence, but morphed and persisted in a neo-colonial vein, generating, as Assam's leading scholars have argued (Guha 1977; Gohain 1982; T. Misra 1980), persistent underdevelopment in the region. The environmental consequence of this condition is the depletion of habitability for both human and other-than-human life (also see Barbora and Phukan 2022). The violent backlash to colonial underdevelopment, postcolonial through what was almost two decades of agitations and secessionist militancy in Assam, benefited certain rural elites but has aggravated the immiseration of the Adivasi community.

A reading of the landscape's vegetal ecology visà-vis plantation logics enables going beyond conventional political economy and agrarian studies, which often cast aside other-than-human agency in their accounts of environmental change. At the same time, it inserts a much more critical outlook into posthumanist readings of a Plantationocene (Haraway 2015; Haraway et al. 2016; see also Davis et al. 2019), expanding the concept in a number of generative ways. The first has to do with how landscape transformation might be understood. If the conversion of a region into a Plantationocene involves economies of scale and the simultaneous production of cheap nature, an attention to vegetal economies reveals how this proceeds through arrangements exploiting both labor power and otherthan-human work. Plantations are sites where vegetal work and human labor, plant time (Elton 2021) and labor time, and the vegetal politics of the plant body and the anatomo-politics of the human body are brought together in violent ways. Both plant and worker are disciplined with the aim of generating surplus value. The tea bush is regularly pruned so that it mirrors the worker's body and so that it maximizes yield. More than a process of anthropo-ontogenesis (Ingold and Hallam 2014), the vegetal politics of the plant body entails what one could call capital-ontogenesis or the growth of plants that makes it synonymous with the accumulation of capital. Here, the tea plant's metabolic and photosynthetic activities become fully internal to the process of commodity production.

This is not to fetishize capital and to treat it as an organic category. The generation of value in a economy requires the simultaneous "planting" of human labor: rendering people immobile so that they can work year-round and in keeping with the continuity in the production process that tea cultivation demands (Behal 2012; see also Brice 2014). Immobilization maps onto the sessile nature of plants and the latter spurs particular ways of organizing the labor process. Vegetal economies thus bring new directions to specifications of bioeconomies centered on other-than-human (Barua 2019), therefore critically expanding understandings of the economic vis-à-vis Plantationocene. Immobilization is a logic of the plantation. It is also a logic of contemporary carceral capitalism, which proceeds through the dynamic of "accumulation by immobilization" or the violent extraction of value by forcibly rendering people immobile (Achtnich 2021, 16). Although labor is not always "planted" in small tea estates, the Adivasi community in Assam's postcolonial context remains dependent on plantations, performing what is a form of generational labor (Behal 2012). Plantations thus become sites of social reproduction and, therefore, biopolitics. The pressure on land, the enclosure of forests, and the slow violence of a Plantationocene landscape mean they barely have an outside to turn to for recourse.

Plantations are thus ongoing loci of violence and death (McKittrick 2011). The legacies of colonial plantations exert a slow violence on the Sundarpur landscape, whether in the ways in which they have constrained Assam's agrarian sector, limited the development of infrastructure, or created the grounds for virulence to proliferate. The violent backlash to the underdevelopment plantations spur makes matters worse. The postcolonial quest to create small tea estates marks a continuity of plantation logics and aggravates the dispossession that is endemic to a Plantationocene. Like colonial plantations, recent conversions of the landscape into tea have proceeded through state concessions, rampant deforestation, and a hungry quest to grab land. The Assam government's push to encourage small tea growers,

particularly the SULFA, in fact marks a "fundamental continuity between the colonial and postcolonial state" (A. Saikia 2008, 111). Plantation logics permeate the present and they constrain futures (McKittrick 2013). Their durability is marked by the unrelenting ways in which space, people, and diversity are subordinated to plantations.

Plantation logics provide a much more critical entry point into reading some of the biotic circulations seen to characterize ecologies of the Anthropocene (Tsing 2015). The spread of Mikania and its virulent agency not only grounds planetary transformations in specific pathways but shows why we should be exercising caution when referring to feral biologies. The plant was brought to Assam to aid in the production of cheap nature, indexing how a Plantationocene and its simplified ecologies not only involve the use of life to govern life (Lorimer 2020), but also the use of life to accumulate capital from life. Mikania is rambunctious. It exceeds the order of plantations and comes back to disrupt processes of accumulation from within. The expression of vegetal agency is dictated by historical circumstances, rather than solely through a plant's vegetative properties or "thing power" as neo-vitalist notions of agency would suggest (Bennett 2010). Mikania's agency reverses the usual order of plants being subordinate to people and the "vegetal places" (Ernwein, Ginn, and Palmer 2021) it forges are not benign. The climber seals spatial access to forests for people and cattle, stymies simple reproduction and brings about a slow degradation of elephant habitat (see also Münster 2020). This has cascading effects and the "more-than-plant" geographies that emerge as a result lead to further dispossession of Adivasi lives. The ruinous effects of Mikania manifest long after the formal end of colonial rule. In lieu of an apolitical Anthropocene, a Plantationocene foregrounds how colonial legacies do not wither away but operate as a duration, bursting through at particular moments and disrupting settled orders of life.

A Plantationocene is an ongoing and expansive condition. Holding plant and planet, plantation, and plot in the same analytical plane enables grasping some of its scalar complexities. At the same time, working through these scales develops novel insights into a Plantationocene's vegetal geographies. This article has fostered a much-needed conversation between posthumanist perspectives and racial and colonial dimensions of planetary change (Davis

et al. 2019; Nally and Kearns 2020; Gandy 2022) that are sometimes occluded by the former's interdisciplinary fascination with the Anthropocene. Such a conversation also builds an expanded vegetal geography attentive to the role of plants in mediating animal lifeworlds and in influencing the politics of landscape change, holding violent colonial histories and their postcolonial legacies in sharp focus. A Plantationocene opens up new avenues for critical scholarship. This article is a stride in that direction.

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Notes

- 1. Virulence in this sense is endemic to a Plantationocene. For a fascinating discussion of endemics and insect pests in Assam's plantations, see Dey (2018).
- 2. Early colonial planters first used the term *garden* to denote privately owned plantations. It is a translation of the Assamese *bāri*, a category of land for homesteads and gardens over which peasants

- possessed hereditary rights in precolonial Assam (J. Sharma 2011).
- There is considerable variation in data on small tea growers in Assam, as not all growers are registered with the Tea Board of India. These figures are meant to indicate trends rather than pinpoint exact numbers.
- 4. A term coined in the 1930s, *faltu* labor refers to labor from the Adivasi community that left the colonial plantations generations ago and who often settled in fallow plantation land. Many continue as temporary workers in tea estates, often accepting lower wages than permanently employed labor (Behal 2012). In Assamese and Hindi, the word *faltu* means redundant, but also has pejorative connotations of being useless.
- 5. Besides government schemes in the wake of a crisis, wealthy sections of the rural Assamese peasantry in Golaghat had "encroached" surplus land belonging to plantations and began cultivating tea in the late 1970s (D. Baruah 2018). A district-level small tea growers' association was formed in 1985, which morphed into a state-wide body in 1987 (D. Gogoi 2018). The latter received support from the Tea Board of India and expertise from the Assam Agricultural University to expand the small growers sector.
- 6. On the wider history of land reclamation in Golaghat, which involved settling sections of the Assamese peasantry and the Adivasi community in land enclosed by the Forest Department during colonial times, see A. Saikia (2008).
- 7. Bigha is a unit of land measurement in Assam and equals 1,337 m².

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