

BECOMING ORGANIC

Nature and Agriculture in the Indian Himalaya



Shaila Seshia Galvin

Advance praise for *Becoming Organic:
Nature and Agriculture in the Indian Himalaya*

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Becoming Organic

Nature and Agriculture in
the Indian Himalaya

Shaila Seshia Galvin

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*For Chris and our children,
Will, Kieran, and Ananya*

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Abbreviations

AFL	Actual farmers list
AOC	<i>Appellation d'origine contrôlée</i>
APEDA	Agricultural and Processed Food Products Export Development Authority
BBA	Beej Bachao Andolan
COF	Centre for Organic Farming
CPP	Cow Pat Pit
DAP	Diammonium phosphate
DASP	Diversified Agricultural Support Project
FAO	Food and Agriculture Organization of the United Nations
GI	Geographical indication
ICS	Internal control system
IFOAM	International Federation of Organic Agriculture Movements
IITF	India International Trade Fair
ITPO	India Trade Promotion Organisation
IWDP	Integrated Watershed Development Project

Abbreviations

NGO	Nongovernmental organization
NPOP	National Programme on Organic Production (India)
OBEP	Organic Basmati Export Program
OPG	Organic producer groups
ST	Scheduled tribe
TTDC	Technology and Training Development Centre
UOCB	Uttarakhand Organic Commodity Board
USDA	United States Department of Agriculture
USOCA	Uttarakhand State Organic Certification Agency

Introduction

Remaking the Agrarian on a Himalayan Frontier

Gita Devi reached down through the folds of her heavily pleated woolen skirt, scooping up a handful of earth from the compost pit on which she stood. Built into the mountainside and bounded by a recently constructed waist-high concrete wall, the pit contained *jaivik khād*, organic manure made from the dung and soiled stall bedding of the cattle, buffalo, and goats kept and cared for by residents of Nagthari, the Himalayan village where Gita Devi lived. Near her, three younger women paused for a moment to consider her outstretched hand and my interest in what she held. They soon resumed their work, filling large handwoven baskets with the khād and then hoisting them onto their backs. From this compost pit on the edge of Nagthari they would carry these baskets, each weighing some sixty pounds, along steep and narrow mountain paths, eventually depositing their contents on terraced fields to prepare near-permanently cultivated land for the coming *rabī* season during the winter months.¹

It was not difficult for me to discern that the khād in Gita Devi's outstretched palm was, in color and texture, qualitatively different

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from the lighter, drier, and often stonier soils of the terraced fields surrounding Nagthari. In this region, as elsewhere in the Himalaya, manure from domestic livestock has long been a primary means for preserving and improving soil fertility and structure, a crucial condition of possibility for cultivating fields on steep and largely un-irrigated mountain slopes. Collecting it daily and moving it to the fields several times a year are among the practices that link ongoing care for animals, land, and crops. Though it is an essential part of agricultural labor, such work has long been seen as routine and unremarkable. Performed predominantly by women, it has remained economically invisible.² And yet Gita Devi's carefully cupped hand displaying the compost made in her village, as well as the concrete pit constructed to hold it, signaled something different.

Since 2003, the village of Nagthari has been part of a program spearheaded by the state of Uttarakhand in India's central Himalaya to promote organic agriculture among smallholder farmers. Uttarakhand's formal adoption of organic agriculture as part of its rural development policy, epitomized by the epithet "Organic Uttarakhand," initially drew me to the region in 2005, curious to learn more about the emergence and rapid rise of organic farming at the beginning of the twenty-first century. As a graduate student in the United States at that time, I could not help noticing how organic agriculture was becoming more prominent in public discourse and how organic products were finding their way not only onto the stands of proliferating farmers' markets but also onto the shelves of mainstream American grocery stores.³ New England farmers' markets near where I lived presented their products as socially and ecologically sustainable, and large supermarket chains with evocative trademarked names such as "Nature's Promise" and "Wild Harvest" promoted an image of organic foods as more natural and more pure than their conventional counterparts.

The marked growth of certified organic agriculture—and sustainable agriculture more broadly—has been understood largely in

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relation to late industrial societies at the end of the twentieth century. In Europe and the United States, organic farming movements are inseparable from experiences of industrialization and urbanization that transformed agriculture in these regions over the last two hundred years, and they trace longer histories rooted in biodynamic, natural, or biological farming and permanent agriculture.⁴ Reacting to these profound changes, proponents of these forerunners to modern-day organic agriculture rejected the notion that agriculture should establish mastery over nature and instead argued that it should mimic “nature’s methods.”⁵ This ideal still informs certain aspects of today’s organic movements, which often hold up organic farming as a means of establishing different relations with nature.

Organic agriculture might seem the perfect agrarian response to recent reckonings with human-environment relations. In an age that some have hailed as the Anthropocene, these debates call for radically different understandings of nature and culture and work to reconceptualize the boundaries of the human and the social.⁶ Yet, at the same time that organic agriculture has been an exemplar of such promise, it has also experienced waves of standardization and codification through the development of national and international organic certification systems and standards. The arrival of organic agriculture in Uttarakhand is part of this larger story of its expansion worldwide. Between 1999 and 2015, the area of land under certified organic production across the globe quintupled to just over 50 million hectares (124 million acres). During the same period, the value of trade in organic food and beverages more than quadrupled to U.S. \$84 billion, consumption being overwhelmingly concentrated in Europe and North America.⁷ These trends are in tension with claims that organic agriculture involves more mutualistic relations with nature. As Julie Guthman observes, on the basis of her pioneering work on organic agriculture in California, “Organic farming is becoming more akin to farming *off* of nature’s

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image, as the idiom of a ‘purer’ nature is deployed to sell what is increasingly commodified nature.”⁸

The rise of organic agriculture is undeniably bound up with the legacies of agricultural industrialization and modernization. But what does it mean to become organic in Uttarakhand, a part of the world where industrial and conventional agriculture never took root? For much of the twentieth century, Uttarakhand remained on the periphery of agricultural transformations occurring mostly in the plains regions of India, such as the Green Revolution, which brought high-yielding hybrid seeds and chemical fertilizers to these regions and, later, the introduction of agricultural biotechnology. Although organic agriculture remains a small market segment in India in terms of both production and consumption, it has expanded remarkably in the years since I began my fieldwork. This is evident in, among other things, the rapid rise of organic retail outlets in many Indian cities, the proliferation of organic terrace gardening in metropolises such as Bengaluru, the conversion to organic agriculture by farmers in the Green Revolution heartland of Punjab, the pursuit of fair-trade and organic certification on tea plantations and smallholder farms in Darjeeling, and the growth of organic cotton production to such an extent that India has become the leading producer globally.⁹

Although the arrival of organic agriculture in Uttarakhand could be told as a story of its global expansion, that is not the approach that I adopt here. Rather, I undertake a situated study of becoming organic in order to probe what organic means and entails for the people and institutions in Uttarakhand charged with its daily production. The meanings of organic farming emerge from its dialectical relation with industrial and conventional agriculture and attendant processes of commodification, globalization, and neoliberalism.¹⁰ But they also extend beyond them. Organic agriculture, I suggest, can be only partially understood through these world historical phenomena, which help situate and explain its emergence.

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Uttarakhand; the inset box shows its location within India.

In this book I build on such framings to show that *organic* is less a physical property of land or its produce than a diffuse quality composed across historical, cultural, institutional, and affective registers.

The compost pit in Nagthari might seem an unlikely place from which to begin such an inquiry. But Gita Devi's deliberate display of jaivik khād gestured toward relatively recent official recognition

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and value accorded to a long-standing practice, while the concrete pit hinted at the way in which this practice had also recently become a site of intervention and investment for state and multilateral actors. The three younger women, I later came to know, hailed from Nagthari's Kolta community, a scheduled caste whose members often labored for Rajput and Brahmin families such as Gita Devi's. As I spent more time in Nagthari in subsequent months, the difference between cradling khād lightly in the hands and hauling it on one's back began to carry new weight. In Nagthari, the advent of organic agriculture cannot be satisfactorily understood as a response to histories of industrialization and conventional agriculture. Instead, other kinds of questions were more puzzling and pertinent: Why and how did compost pits and composting practices, for example, become emblematic markers of organic agriculture in the region? What did the arrival of organic farming mean for configurations of tradition and modernity in a region long seen as underdeveloped in national imaginaries of development? And how, in such an evidently socially and economically stratified landscape, did different cultivators relate and respond to the promise of becoming organic?

This book, then, tells a story about the development of organic agriculture by an ambitious, newly created state government and about what becoming organic signifies for residents of Uttarakhand's villages where the program took root. How does a region that was deemed backward in colonial and postcolonial development discourse for much of the nineteenth and twentieth centuries come to redefine itself as organic in the twenty-first? And, in a region that many insist has always been organic, what does becoming organic mean and entail? My attention to these questions led me not only to Nagthari in the lower Himalaya but also to basmati paddy fields in the Doon Valley, through bureaucratic offices in Dehradun and Delhi, and into state archives. Set in the first decade of the new millennium, in the wake of Uttarakhand's formation as a state, and

over a decade after transformative liberalizing economic reforms were introduced across India, this book recounts how state bureaucratic efforts to remake Uttarakhand's agrarian landscapes as organic encountered the fields, homes, and villages of its farmers.

Assembling Organic: Quality as Method

In its late twentieth-century incarnation, organic agriculture is associated with the "quality turn" in agro-food systems.¹¹ Such a turn is evident, more widely, in the use of particular qualities—such as *fair*, *wild*, *natural*, *artisanal*, and *local*—to distinguish otherwise similar food products. This increased focus on singularity and distinctiveness marks a shift away from an emphasis on quantity and yield associated with a productivist ethos. Instead, particular qualities are negotiated, constructed, and institutionalized in agro-food networks in a range of ways.¹² The quality turn in food and agriculture reflects what Michel Callon and others have called the "economy of qualities," in which differentiating products according to their ascribed attributes has come to be crucial to ordering many different types of markets.¹³

The perspective articulated by Callon and others, and emanating from economic sociology and science and technology studies, differs significantly from approaches that understand agricultural products through commodity networks or value chains. Such studies have helped illuminate colonial and imperial projects, globalization, and the postcolonial character of international trade. Sidney Mintz's pathbreaking *Sweetness and Power* took sugar as a point of departure for considering the origins of capitalism, the interconnected labor regimes of slavery and factory work, and the early formation of modern social class in Britain.¹⁴ Susanne Freidberg's *French Beans and Food Scares* follows the journeys of fresh vegetables from farms in Burkina Faso and Zambia to Parisian markets and British supermarkets to analyze the "social relations of food provisioning on both an interpersonal and transcontinental scale."¹⁵

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My study draws inspiration from commodity histories and, more broadly, biographical accounts of the social life of things.¹⁶ But instead of following organic commodities themselves, I pursue the assembly, or making, of organic quality. In this pursuit, my work is in dialogue with recent anthropological interest in questions of quality more generally. This interest has yielded the insight that quality is never a given essence, but is rather continually produced. For example, in *The Life of Cheese*, Heather Paxson shows how the distinctive qualities of farmstead artisanal cheeses are cultivated through multispecies ecologies that enfold cheesemakers, microbes, and domestic livestock.¹⁷ Karen Hébert demonstrates how the labor of handling, bleeding, and chilling Alaskan salmon is vital to producing it as distinctively *wild*.¹⁸ Through his study of North Carolina heritage, pastured pigs, Brad Weiss examines how *local* food denotes not simply place as geography, but encompasses affect, sentiment, attachment, and ideology.¹⁹ Though these studies attend to specialty or luxury foods, Sarah Besky has explored the making of quality in mass-produced black tea.²⁰ Taking a singular comestible as their focus, these works extend the study of the biographies and social life of food by richly describing and unraveling the material and sensorial dimensions of quality.

But unlike those qualities embodied in artisanal cheese, wild salmon, heritage pork, and mass-market black tea, *organic* is a quality that is largely imperceptible in any obvious physical, sensory, or material sense—despite the material practices and physical labors involved in its creation. In the Doon Valley one would be hard-pressed to distinguish a basmati rice paddy being cultivated organically from one that was cultivated conventionally—never mind to distinguish organic and nonorganic grains of rice themselves. This difficulty of discerning organic quality is one reason the articulation of standards and certification systems has become so crucial in the expansion of organic agriculture, assuring and attesting to organic quality in the absence of more physical or sensory ways of

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perceiving and recognizing it. Guidelines and standards for organic agriculture, in India and elsewhere, have accordingly attempted to grapple with how to assure the singularity and distinctiveness of a quality that is for the most part imperceptible to those not bound up in its everyday production. Invariably, therefore, one finds in such standards a prohibition on parallel production, that is, the simultaneous cultivation of the same or visually similar crops in both organic and conventional systems on the same farm. Since organic quality itself cannot be directly perceived, it must be made indirectly perceptible through other means, such as the selection of seeds. For farmers in Uttarakhand, and elsewhere, such rules exist in tension with other exigencies involved in the selection of varieties for cultivation: seed availability, crop resilience and yield, taste and other sensory or culinary characteristics, the suitability of a given variety to their own household composition and socioeconomic position, to name just a few.

The seeming imperceptibility of organic quality is one of its striking and consequential features, shaping the way in which this quality comes to be constituted. This, then, necessitates a different approach to the study of quality—one that seeks to understand quality not as something that is necessarily physical and sensory, discernable, for example, in the flesh of wild salmon or heritage pork, or in the familiarity of a cup of black tea. My focus is not on a particular comestible and the production of its qualities per se, but the making of a quality—*organic*—that is itself imperceptible, that traverses commodities and their spaces of production.

I trace the composition of organic quality across multiple spaces, practices, and registers: in Uttarakhand, organic quality is assembled through practices that range from making compost to keeping documents, in settings both institutional and agrarian, and in registers that are, among other things, discursive, regulatory, and affective. This involves situating organic agriculture in the specificities of Uttarakhand's regional history in the colonial and postcolonial

periods, during which it came to be popularly known as *devbhumi*, or “abode of the gods.” By doing so, I seek to provincialize, or de-center, the concept of organic that has long been connected to particular historical experiences of agricultural modernization and industrialization in Europe and North America.²¹ Provincializing organic entails, first, paying attention to the intersection of organic agriculture in Uttarakhand with political and economic reforms in India after liberalization, which have, at times, inflected development aspirations and interventions with a notably post-reform and regionally distinctive character. Second, it calls for inquiry into how rural cultivators fashion and navigate agrarian agencies and modes of subjectivity through organic farming. Provincializing organic in this manner allows for taking careful account of what *becoming* organic means and entails for farmers in Uttarakhand. More broadly, it opens up further possibilities for understanding how organic agriculture reworks notions of modernity and tradition, nature and agriculture, that powerfully inform understandings of human-environment relations in the Indian Himalaya and beyond.

State of Nature and “Abode of the Gods”

In the late summer of 2002, just two years after the formation of the new state of Uttarakhand (then called Uttaranchal), R. S. Tolia, its first forest and rural development commissioner, crafted a memo boldly charting a new agrarian future.²² It lay, he suggested, in “turning Uttaranchal Organic in all agricultural and horticultural products in a gradual and systematic manner.” The development of organic agriculture, he argued, would “build Uttaranchal brand-equity as a region ‘pure’ and ‘pristine.’”²³ As a senior officer in the Indian Administrative Service (IAS), the commissioner possessed unparalleled administrative expertise in the hill development of Uttarakhand. In the years before Uttarakhand’s formation, he had served as commissioner of Kumaon division, and he had also worked as head of the hill development department and convener of the

cabinet committee on Uttarakhand in the Uttar Pradesh state bureaucracy.²⁴ Hailing himself from the tribal Bhotia community in Uttarakhand's northeast borderlands, the commissioner had considerable administrative experience with and personal connection to this hill region—both before and after its formation as a separate state—which put him in an incomparable position from which to articulate a new state imagination.

In setting out to establish the state's "brand-equity as a region 'pure' and 'pristine,'" the commissioner sought to capitalize on characteristics long associated with the region using the market-oriented language of post-economic reform development. The notion of the *pahar* (mountains) as pure and pristine is deeply resonant in a region that is both popularly known as *devbhumi* (the abode of the gods) and widely famed for its nature, yet was also left on the periphery of the most transformative changes in agricultural development during the nineteenth and twentieth centuries. This mobilization of brand equity through a broad regional imagination aptly illustrates how cultural and historical differences inflect, shape, and are produced through processes of globalization and global capital.²⁵ In Uttarakhand it was precisely those markers of historical and cultural distinctiveness—the persistence of agricultural and cultural practices understood as traditional, not to mention the religious and ecological significance of landscape—that enabled the new state to articulate its ambition to become organic at the beginning of the twenty-first century. Here tradition and modernity are not so much the end points of a spectrum as endlessly entangled and forever in the making.²⁶ For it is indeed Uttarakhand's status as a region simultaneously marginal, mythical, and wondrous that makes its fashioning of a new organic identity possible.

Notions of Uttarakhand's pure and pristine character are linked with the popular imagination of the region as *devbhumi*, which marks its centrality for Hinduism. References to the region are found throughout many classical Hindu epics and scripture, includ-

ing the *Mahābhārata*, *Vedas*, and Puranas. This form of Sanskritic Hinduism has made the Garhwal region of western Uttarakhand in particular a major place of pilgrimage for Hindus who journey to sites in the upper Himalayan reaches—including shrines near the sources of the revered and sacred Ganges and Yamuna rivers in the Gangotri and Yamunotri glaciers. Epic legends from the Ramayana and Mahabharata are said to be set in the region and are often associated with physical marks in the landscape—lakes, boulders, mountain peaks, ruins, and terraced fields.²⁷ But as the abode of the gods, this Himalayan landscape is also home to an abundance of lesser-known local deities particular to *pabarī* Hinduism who, as Radhika Govindrajan observes, “reside in its mountains and are associated with its stones, streams, and forests.”²⁸ Ritual productions of the *Pandav Lila*, described by William Sturman Sax, or of spirit possession, which I observed in Jaunsar Bawar, connect the region to pan-Indian Hinduism, while simultaneously marking its distinctive place in this wider ecumene. The sacred geography of devbhumi also implies a distinct ontological relation between landscape and religious faith. Nowhere is this more evident than in the divine attributes of the waters of the Yamuna and Ganges, which are capable of purifying, cleansing, and blessing.²⁹ Such ontological positions have found expression in regional environmental activism, such as the Chipko and anti-dam movements, which see “life in all living beings—trees, rivers, and mountains.”³⁰

The idea of devbhumi has been significant in the development of a regional consciousness and imagination because it endows Uttarakhand with pan-Indian significance while simultaneously rendering the region distinctive.³¹ Reviewing several local historiographies from the early twentieth century, Antje Linkenbach observes that their authors were careful not to depict Uttarakhand as an isolated, marginal region, but, rather, represented it as central to the larger Indian polity.³² In the early decades of the twentieth century, the region’s emerging nationalist elite sought to interweave the

area's ancient mythological and scriptural sanctity with an equally ancient Himalayan nature. Ram Bahadur's *Garhwal, Ancient and Modern* emphasizes attributes that rendered Garhwal distinct in the larger mosaic of the nascent Indian nation.³³ In the opening pages of the book, Bahadur implicitly invokes Hinduism as a point of connection between "this small tract of country" and the larger whole, writing, "The whole of India, seems to have been linked with Garhwal from a very remote antiquity by the bond of a highly consecrated faith."³⁴ Bahadur's regional nationalism posits that an implicitly Hindu India is crucially bound to Garhwal on account of the centrality of Uttarakhand's Himalayan nature in the Hindu faith.³⁵ Devbhumi elides the religious and the secular as notions of Uttarakhand as the land of the gods that have infused regional political imaginations.

Colonial understandings of Uttarakhand's Himalayan landscapes further undergird recent figurations of Uttarakhand as a region pure and pristine. A map produced by the East India Company in the eighteenth century shows the land that now constitutes Uttarakhand as a terra incognita, an untouched and unknown region identified only through the words "Extensive Forests full of Bears and Monkeys."³⁶ During the nineteenth century, British colonial officers came to know the region's history largely through texts and epics central to Hindu mythology as interpreted by Orientalist scholars.³⁷ Edwin Atkinson's monumental *Himalayan Gazetteer* connects the region's mythological past with its natural features, hinting at a certain familiarity with devbhumi among colonial officials by noting that the "wanderings of the Pándavas" are inscribed in the landscape.³⁸ Displaying his debt to Orientalist imaginings of the region, he cites at length a passage by von Christian Lassen, a scholar of Hindu literature and history at the University of Bonn during the nineteenth century: "The daily prospect of the snowy summit of the Himálaya glittering far and wide over the plains and in the strictest sense insurmountable, and the knowledge which they

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On this eighteenth-century map, the area that is now Uttarakhand (shown as the region above “Camoun”) is largely blank, save for the words “Extensive Forests full of Bears and Monkeys.” L. S. de la Rochette, *Hind, Hindoostan or India*.

(London: William Faden, 1788; General Collection, Beinecke Rare Book and Manuscript Library, Yale University.)

had of the entirely different character of the table-land beyond, with its extensive and tranquil domains, its clear and cloudless sky and peculiar natural productions, would necessarily designate the north as the abode of the gods and the theatre of wonders; while its holiness is explicable from the irresistible impression produced upon the mind by surrounding nature.”³⁹

These chronicles of the pahar show how in Orientalist visions, renderings of the region as devbhumi were coupled with a wider change in European perceptions of mountain landscapes. For example, the European Alps, which were characterized as “strange,” “horrid,” and “fearful” in the late seventeenth century, became the Romantic subject of “awed praise of mid and later eighteenth-century and nineteenth- and twentieth-century travellers.”⁴⁰ Such changing descriptions make evident broader shifts in understandings of nature.⁴¹

Though some colonial accounts represent the Himalaya as a largely unpeopled land, other records reveal how colonial travelers and officials construed relations between nature and human settlement as harmonious and peaceful. In 1832 Thomas Skinner, a captain in the 31st Regiment of the British Army, published an account of his travels, *Excursions in India*, including a “walk over the Himalaya Mountains to the sources of the Jumna and the Ganges.” Skinner’s “walk” took him through a significant swath of present-day Uttarakhand, not far from Nagthari, where I conducted my fieldwork some 175 years later. Of his excursion in this part of the Himalaya he wrote: “It was three hours before we were able to encamp at Luckwarie. . . . It is a very neat village, built near the summit of a hill, at the base of which, and about one thousand feet below it, flows the Jumna. . . . The village is remarkably clean, and all around well cultivated. The women are busy reaping, for that and drawing water seem to form their regular occupations. They are fair and good-looking, with small and strong but neat figures; their dress consists of a coarse linen petticoat drawn round the waist, with a little jacket, and abundance of rings from the nose to the toes.”⁴² This passage is remarkable for the manner in which it demonstrates the enduring ways in which gender, agricultural practice, and environment are tightly interwoven in depictions of Himalayan village life. Ramachandra Guha, in *The Unquiet Woods*, observes that European travelers to the region in the nineteenth century “were frequently given to lyrical descriptions of peasant life in the Himalaya, comparing it favorably not merely to social conditions in the adjoining Indo-Gangetic plain but also to the everyday existence of British and Irish villagers.”⁴³ Indeed, Skinner’s account variously characterizes the mountain landscape as “quiet and happy,” “an Arcadian picture,” and an “enchanted garden, where the produce of Europe and Asia—indeed of every quarter of the world—was blended together.”⁴⁴

Such idealized depictions of the pahar have persisted in narra-

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tives of travel and tourism in the region into the twenty-first century. A long-standing campaign of the state's Tourism Development Board uses the tagline "Uttarakhand. Simply Heaven!" to promote and describe the region. Advertisements and promotional material prepared by the Tourism Development Board evoke the region's natural splendor, be it in mountains or valleys, rivers or forests. These ads showcase an array of possible experiences, ranging from sport and adventure in trekking, rafting, and skiing to serenity and silence in meditative mountain retreats, to divinity in its sacred rivers and pilgrimage routes.⁴⁵ An advertisement that the Uttaranchal Tourism Development Board placed in a major English-language daily in 2006 reflects the way that its mountainous geography is inscribed with the qualities of purity and pristine nature. The advertisement features a Tetra Pak container branded with the state's tourism logo and the iconic image of Nanda Devi, India's second-highest peak. With trees and forests dotting the foreground, the label invites the reader to "Come to Uttaranchal," while the mountainous terrain depicted on the Tetra Pak blends into the bed of ice on which the package rests. The advertisement describes the region as a "refreshing escape," likening it to a cold drink—something conveniently packaged that may be readily consumed for respite from the heat of India's summer months. Listing the state's natural riches as "dense forests, countless flora and fauna, cascading rivers and rivulets," the text of the advertisement also suggests the kind of pure and pristine nature evoked in discourses regarding the pahar.

Uttarakhand has assumed a central place in India's religious and ecological imagination, but during the twentieth century it occupied a position at the margins of the country's agrarian revolutions and modernization projects. For this reason, agriculture in the region has been characterized as "backward and unscientific."⁴⁶ Such conditions did not simply reflect Uttarakhand's marginal position but were actively produced through it; during much of the last century, the region was a hill hinterland within the large, populous, and

mostly plains state of Uttar Pradesh. In the late 1980s and 1990s, demands for a separate state invoked this experience of economic and political marginality relative to the Uttar Pradesh plains.⁴⁷ The region suffered as policies were devised by bureaucrats stationed in the Uttar Pradesh plains with little attention to, or familiarity with, the specificities of hill environments. In this respect, Indu Tewari opens her monograph *Unity for Identity: Struggle for Uttarakhand State* with the suggestion that “all the decisions and policies of the region have been taken irrespective of its [Uttarakhand’s] uniqueness. This had disastrous effect resulting in mismanagement and degeneration of natural resources and environment. Aberrations in the system further rendered the region a picture of neglect and backwardness.”⁴⁸ Claims for statehood in the latter decades of the twentieth century portrayed this backwardness not as indicative of the region’s original condition, but as politically created through a de facto policy of internal colonialism. Writing of the extractive policies that gave rise to the famed Chipko movement, Gerald Bererman argues stridently: “One might say that Uttarakhand has become a colony with the state and nation which administers it. It is an internal colony, a domestic colony, but a colony nonetheless.”⁴⁹ Paradoxically, in the early twenty-first century, amid growing awareness about the Green Revolution’s deleterious ecological consequences and considerable public controversy about agricultural biotechnology, it is precisely this condition of backwardness and neglect that allowed the new state to reinvent itself as a region where agriculture remains pure and pristine.

Provincializing Organic

Since the last decade of the twentieth century, *organic* has become a term that circulates globally as a signifier of food that is natural, pure, and ecologically produced. Its global expansion has been abetted by the proliferation of organic standards and certification regimes both nationally and internationally. An increasing number

of national jurisdictions have introduced legislation and regulatory standards for organic agriculture. Internationally, initiatives in both the private and public sphere have further encouraged the growth of international trade in organic products. In this realm, the International Federation of Organic Agriculture Movements (IFOAM), a private membership-based association founded in 1972, works to facilitate trade worldwide, and the intergovernmental Codex Alimentarius Commission, which establishes international food standards, created the “Guidelines for the Production, Processing, Labeling, and Marketing of Organic Foods” in 1999. As a consequence of this global expansion, the meanings of organic agriculture now extend beyond the specificities of historical experience from which it emerged in the early to mid-twentieth century.⁵⁰

Against a tendency to regard this rise of organic agriculture internationally as a recent phenomenon, it is worth noting that from some of its earliest formulations, *organic* has been a postcolonial idea. As we shall see in chapter 1, Sir Albert Howard, an imperial economic botanist employed by the British government, spent the first three decades of the twentieth century in India studying methods of improving soil fertility using the “waste products of agriculture.”⁵¹ Returning to England in the 1930s, he drew on his experience in India to become a vocal opponent of the industrialization of agriculture that he observed in Britain; his work helped lay the foundations for the 1946 formation of the British Soil Association, which today remains the preeminent organization in the United Kingdom promoting and certifying organic agriculture.

Such transnational histories of a concept that is now more popularly connected to projects of getting “back to the land” than to those of imperial domination are, perhaps not surprisingly, often effaced. As a result, organic agriculture remains a phenomenon still widely understood as a reaction to the proliferating use of synthetic chemicals and fertilizers, increasing mechanization and factory farming, and rising corporate intervention in agriculture that began in

the early twentieth century and continues—albeit in different forms—to this day. Scholarly debates have explored the extent to which organic agriculture comes to be conventionalized, resembling industrial modes of agricultural production as it scales up and becomes more mainstream; other inquiries have examined how certified organic production affects, positively or adversely, smallholder agriculture in developing countries.⁵² Guntra Aistara complicates binaries of Global North and South that often frame these debates, drawing on her research in Latvia and Costa Rica to advocate instead for a perspective that attends to the rise of organic agriculture as “an outgrowth of locally situated agricultural trends over the course of decades or centuries, resulting in variations in organic agricultural practices and meanings in different contexts.”⁵³ The particular and situated everyday experiences of organic agriculture are thus, on the one hand, shaped by the processes of standardization and harmonization at play in its global expansion; on the other, these distinctive experiences also shape how such processes play out as organic agriculture becomes established in ever more diverse regions of the world.

Despite the fact that the idea of *organic* has circulated globally from its very beginnings, it is still in need of provincialization. Provincializing *organic* means stepping away from the notion that organic is primarily a physical essence or property, and instead seeing it as a quality that is produced from historically situated social, cultural, economic, and political practices and relations. In Uttarakhand, organic agriculture emerged in a landscape where histories of human-environment relations, development, and modernity are notably distinct from those where organic movements first took root in Britain, Europe, and North America. Uttarakhand’s location on the margins of modernizing development in India, and at the center of the nation’s mythological and ecological imagination, trouble the notion that organic farming is simply an alternative to ecologically damaging industrial modes of agriculture associated

with modernity. Uttarakhand's experience helps us better grasp how *organic* acquires meaning and how farmers—and agriculture—in the region are understood to become organic in a postcolonial landscape long seen to be on the margins of modernity.

In this sense, organic agriculture straddles an enduring division between nature and culture that has been identified as a defining feature of modernity.⁵⁴ “The passage from pre-modern to modern,” Timothy Mitchell writes, “is always understood as a rupture and a separation, whether of a rational self from a disenchanted world, of producers from their means of production, or of nature and population from the processes of technological control and separation.”⁵⁵ In the political theory and philosophy of the Enlightenment, for example, the departure from a figurative “state of nature” signifies the advent of political modernity, associational life, and “social man.”⁵⁶ Yet even as nature provided a foil against which civil and political society could be imagined and elaborated, ideas of nature—and of agriculture—were equally shaped by this division.

The notion of an autonomous sphere of nature existing outside human experience and intervention is a defining and well-documented feature of modernity.⁵⁷ From around the eighteenth century in Europe, ideas of “unmediated” nature began to develop at a time of increasing detachment from and exploitation of nature through those signature forces of the modern age—industrialization, urbanization, and imperial expansion.⁵⁸ Raymond Williams and William Cronon, for example, trace how the material, regulatory, and imaginative separation of the categories of city and country was consequential for ideas of nature in England and the United States, respectively.⁵⁹ By the mid-nineteenth century, Cronon writes, “Chicago had become ‘urban,’ spawning belching smokestacks and crowded streets, at the same time that the lands around it became ‘rural,’ yielding not grass and red-winged blackbirds but wheat, corn, and hogs.”⁶⁰ Imperial expansion in Asia, Africa, and the Americas helped sow the seeds of modern European and North Ameri-

can environmentalism from the seventeenth century. These imperial expeditions, often premised on Edenic quests for unspoiled lands, occurred precisely at a historical moment of accelerated degradation and pollution in both colonies and metropole owing to the gathering force of the industrial revolution.⁶¹

Agriculture, understood as the taming and domestication of nature, has long been seen to belong to the realm of culture.⁶² This separation, or purification as Bruno Latour terms it, is arguably nowhere more clear than in the monocultured landscapes, factory farms, and slaughterhouses that have become emblematic of agricultural modernization. Recent organic movements in Europe and North America are, in part, a response to the manner in which the deep and far-reaching division between nature and culture play out in conventional agriculture. Opposing this hierarchical separation of nature and culture, which has so powerfully informed ideas of agrarian modernity, some in the United States have claimed that organic agriculture “implies a fundamentally different worldview and cultural ethos, with a qualitatively different orientation to people-nature relations.”⁶³ The core epistemological basis of organic agriculture, this line of argument goes, instead emphasizes interdependencies and dynamic interaction among humans and nonhumans within agrarian landscapes, along with ethics of stewardship and care. Wary of legislation and standards that elide such foundational differences, these scholars and proponents of organic agriculture contend that in its “purest” form, organic agriculture may offer the possibility of overcoming the binary separation of nature and culture and the kind of human exceptionalism that has long marked agrarian worlds.⁶⁴

In many regions of South Asia, divisions between nature and society not only denote a passage from the premodern to the modern, but also have come to be part of the way that people and land are governed. Forests, in particular, have been much studied as a site where tensions between nature and culture were brought into relief

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with the extension of colonial rule.⁶⁵ The word *jangal*, Michael Dove observes, has only recently come to refer to a densely forested, wild landscape.⁶⁶ Its antecedent, the Sanskrit term *jangala*, was described in Vedic literature as a savannah landscape managed through animal husbandry and fire. Though the more recent *jangal* is associated with barbarism and primitivity, the ancient meaning of *jangala* encompassed society within nature.⁶⁷ These shifts in ways of knowing nature also marked shifts in ways of governing it. Changes in the meanings of *jangal* and of wildness more broadly signaled the positioning of nature in strategies of colonial rule.⁶⁸ In colonial Bengal, K. Sivaramakrishnan shows, “the partitioning of landscapes and social spheres came to characterize large aspects of modernist state formation.”⁶⁹ In the early phases of empire, during East India Company rule, jungle zones in Bengal were seen as “zones of anomaly” resistant to the incursions of the modern apparatus of state and capital.⁷⁰ As forests became zones of wildness and incivility, a distinction was further drawn between forested and agrarian landscapes. In contrast to forests, agrarian landscapes were treated “as the product of culture.”⁷¹

In Uttarakhand, however, forests and agriculture figure rather differently within the ambit of nature, state, and society relations. From the late nineteenth century, as timber extraction gathered pace during the expansion of India’s railways, forests in the Garhwal and Kumaon regions of what is now Uttarakhand were increasingly placed under state control.⁷² Dehradun itself became a center of state scientific forestry in the early twentieth century, with the establishment of the Imperial Forest Research Institute in 1906. When India became independent in 1947, Haripriya Rangan notes, forests accounted for well over half of the land area of the Garhwal region of present-day Uttarakhand; authority over the majority of forested land was granted to the Uttar Pradesh State Forest Department and State Revenue Department.⁷³ The region’s abiding histories of peasant resistance and rebellion, which span the colonial

and postcolonial periods, speak to the ways in which Uttarakhand's forests have been sites of intensive and extractive state-making projects. Unlike other regions of India, then, where agriculture was encompassed within a sphere of culture and state control, while forests existed as a domain of wildness, in Uttarakhand this relation was reversed. In Uttarakhand it is agriculture, rather than forests, that has arguably constituted a "zone of anomaly," as the rugged, mountainous terrain of the region has long been inimical to state projects of agricultural development.

The alignment of agriculture unambiguously with the sphere of culture, then, is certainly not as straightforward as it appears. Seeking to problematize the making of the agrarian—as both idea and landscape—Neeladri Bhattacharya shows that it is far from a timeless given. In colonial Punjab, he argues, it was brought into being as "the universal rural" through forms of conquest, intervention, and control that were part and parcel of British rule.⁷⁴ If the agrarian is to be problematized, as Bhattacharya suggests, what does this imply for Uttarakhand, a Himalayan frontier that has long been outside the fold of both colonial and postcolonial projects of agricultural improvement? In Uttarakhand's hills, popular images of "traditional," "unscientific," and "backward" hill farming position agriculture as closer to nature than to culture. Such associations resonate across the Himalaya, expressed as what Sarah Besky has called "the Third World agrarian imaginary." She explains that this imaginary "is not only an image of farming as an original, ecologically balanced form of connection between people and place but also a set of ideas about the relation between people and nature."⁷⁵ Besky's ethnography of fair-trade Darjeeling tea examines how plantations come to be figured as gardens and workers as stewards, which obfuscates the violence of their ecological and social histories while producing a redemptive narrative about harmonious relations between nature and culture. Yet something of the opposite is true in Uttarakhand. Rather than differentiating itself from the

plantation, that icon of agricultural modernity and industrialization, organic farming in smallholder settings must instead distinguish itself from agricultural practices that are widely seen as traditional at best or backward and primitive at worst. Part of the appeal of organic farming for Gita Devi and others I came to know was the affordances it offered in terms of establishing a stake in the region's cultural and agrarian modernity. Gita Devi's gesture, cupping compost in her hand, was a claim to such modernity. Becoming organic thus entails striking a delicate balance: in Uttarakhand, advocates and practitioners of organic agriculture must both invoke elements of the "Third World agrarian imaginary" and adhere to institutionally recognized practices of certified organic farming that mark it as distinct from visions of timeless and traditional hill agriculture.

Organic Agriculture and Post-Reform Development

Even as it sheds light on enduring debates about the relation between nature and culture, environment and society, organic agriculture has emerged in Uttarakhand at a time when the state and market are assuming new forms in India. These configurations of institutions and practices that the advent of organic agriculture in Uttarakhand has called forth are themselves significant for understanding contemporary development processes.

For much of India's colonial and postcolonial history, agriculture has been a principal site of state intervention in rural areas, as the demarcations of zones of nature and culture served as important axes of state making. In the mid-1990s, Akhil Gupta asked what postcoloniality might mean for villagers of Alipur, in rural Uttar Pradesh. For India's rural population, he argued, the postcolonial condition was defined by hybridity—the coming together of “contradictory logics and incommensurable discourses.”⁷⁶ Many of these contradictions were evident in practices of working the land, he suggested, and related to the categories of modern and traditional, foreign and indigenous. Hybridity could be observed in the ways

that farmers in Alipur combined applications of livestock manure with chemical fertilizers, and in how they interspersed discussions about the application of such synthetic fertilizers with references to the dispositions of soils and the agency of land. The postcolonial condition, moreover, was conjunctural, arising at the intersection of the “apparatus of development,” changing modes of global capitalism, and technologies of agricultural production that emphasized yield with the aim of achieving national food grain self-sufficiency.

Gupta’s research in Alipur was undertaken in the 1980s and 1990s, at a relatively early stage in India’s consequential political and economic reforms. But the postcolonial condition is a key concept in relation to which more recent institutional formations of development and capitalism in agriculture can be reexamined. For a start, the apparatus of development, which Gupta identified as key to the postcolonial condition, is today differently configured, as the role of the national state in development interventions has come to assume different forms.⁷⁷ In the mid-twentieth century the national state played a leading role in the Green Revolution through public-sector agricultural research, development programs, and extension. It is not so much that the state has withdrawn as a consequence of accelerating liberalization in the 1990s as that its role vis-à-vis agriculture increasingly involves establishing legal frameworks, regulations, and standards within which ever more mobile and flexible forms of capital can operate.⁷⁸ Gupta noted the introduction of intellectual property rights as one instance of how “transformations in global capitalism have worked in concert with changes in development orthodoxy and the politics of nation-states.”⁷⁹ The development of standards for organic production and certification is another instance of such shifts, which are also captured in the proliferation of non-state actors—nongovernmental organizations (NGOs) and private companies, among others—in agricultural spheres.⁸⁰

These transformations in the organization of political and eco-

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Certified organic basmati paddy (unmilled rice) is cultivated in the Doon Valley and is procured from farmers under contract farming arrangements. Here laborers load it on a truck bound for a rice mill in the state of Haryana, from where it will be distributed in metropolitan domestic markets and exported overseas. Doon Valley, December 2007.

conomic life have often been heralded in public discourse as indications of a “New India.”⁸¹ If part of what Gupta identified as so central to the postcolonial condition was India’s status as a third-world or developing nation-state, ideas of a “New India” signal something different. India is “no longer representative of deprivation and dystopian collapse, but a signifier of a new world of affluence, enterprise, techno-mobility, consumption and fresh market opportunities that an economically stagnant Western world is in search of.”⁸² But as much as an aura of novelty and dynamism circulates around celebratory notions of a “New India,” popular narratives of its emergence that emphasize novelty and rupture encounter challenges.

Post-reform India continues to wrestle with tensions and contradictions between new and old, modern and traditional. As evidence of this, Kaur and Hansen observe, “‘New’ India is premised on a muscular nationalism espousing a (Hindu) civilizational narrative of the nation and celebrating the achievements and cultural predilections of a largely upper caste Hindu elite and middle class.”⁸³ The popularization of Hindu traditions of ayurveda, yoga, and zero-budget natural farming are just some of the ways in which tradition—and invariably Hindu tradition—is reworked as culturally modern in post-reform India.

Much of the attention paid to India’s program of liberalization has been riveted on those sites where its transformations and effects are most visible: on its cities, emergent and growing middle class, new industries, commodities, and consumption practices. There is also a decidedly urban focus in much of this scholarship. *Becoming Organic* instead moves deliberately to approach liberalization through supply and production in agrarian settings. Specifically, I consider how organic agriculture may be taken as a window onto processes of development and relations between states, markets, and other actors. I do not focus primarily on the national state, as much of postcolonial theory and subaltern studies do.⁸⁴ Rather, I attend to the subnational state and the more flexible and capacious idea of the region. Exploring forms and expressions of development in India, Sivaramakrishnan and Agrawal advanced the term *regional modernities* to capture the many and varied ways in which development is related to modernity, and to recognize “the historically sedimented social, economic, and spatial structures that shape development.”⁸⁵

Such attention to the region, linked with but not limited to particular scalar or geographic referents, is further warranted, given that regional and local states are becoming stronger as a result of decentralization and liberalization.⁸⁶ If the nature of the state is conditioned by globalization and economic reforms, India’s experi-

ence of liberalization is equally shaped by political dynamics of decentralization and devolution.⁸⁷ These phenomena have helped give rise to “regional states,” which now wield primary authority over the industrial and economic policies in their jurisdictions.⁸⁸ Considerable autonomy over private domestic and foreign direct investment has drawn regional states further into competition with each other. Uttarakhand’s formation, then, coincides not only with economic liberalization, but with a broader move to political devolution and decentralization that accentuates the regional character of India’s federal system. *Becoming Organic* speaks to the ways in which the Indian state and state-making processes are reshaped through economic liberalization and political reforms and so condition the forms of agricultural and rural development. The starting point for this inquiry, however, is not at the level of the nation-state, the focus of much postcolonial and post-development theory, but rather the subnational regional state within the specific context of the formation of Uttarakhand. These broader phenomena, however, take shape through the everyday, lived experience of farmers and bureaucrats, certification inspectors and corporate retailers—that is to say, in the subjects and subjectivities fashioned around Uttarakhand’s turn to certified organic agriculture.

Agrarian Subjects after Liberalization

In Uttarakhand, the hill cultivator has long been a vexed and ambiguous figure in public, state, and development discourses, positioned both as a subaltern environmentalist living in harmony with nature and as an unruly and backward peasant degrading the region’s rich and valuable resources. The region’s history of peasant rebellion has powerfully shaped understandings of agrarian subjectivity in the region. This history dates from the precolonial era, but it has been embodied most famously by the Chipko movement, which arose in the 1970s as a popular mobilization against Forest Department rules that restricted access of hill villagers to local for-

ests while simultaneously facilitating access for commercial timber extraction. Subsequently, Chipko has become, though not without debate, an iconic example of grassroots social movements in the Global South, of peasant environmentalism, and of ecofeminist consciousness.⁸⁹ Garhwal villagers at the heart of the Chipko movement have been emblematic of popular resistance to extractive and exploitative colonial and postcolonial state policies pursued in the region. Ramachandra Guha famously argued that hill farmers are environmentalists of a kind: “Peasant movements like Chipko are not merely a defence of the little community and its values, but also an affirmation of a way of life more harmoniously adjusted with natural processes. At one level they are defensive, seeking to escape the tentacles of the commercial economy and the centralizing state; and yet at another level they are assertive, actively challenging the ruling-class vision of a homogenizing urban-industrial culture.”⁹⁰ This claim melds perspectives that position hill cultivators politically and culturally as subaltern subjects of India’s colonial and postcolonial states and as guardians of authentic tradition, while situating them within a balanced agricultural ecology, uncontaminated by modernizing development.⁹¹

From the perspective of state officials and development programs, however, hill farmers have often been construed less as protectors than as poor managers of natural—and, in particular, forest—resources. Arun Agrawal notes that in the early part of the twentieth century, villagers in the Kumaon region of eastern Uttarakhand deliberately set fires to forests to protest strict government policies of forest reservation, earning them a reputation as “fire-wielding, state-defying, rebellious hill men.”⁹² Even as this resistance came to assume more ecological hues in the post-independence period, through the Chipko movement in particular, activities associated with hill farming—especially livestock grazing and the collection of fuelwood and fodder—have been routinely painted as the source of environmental degradation in the Himalaya.⁹³ But the region’s

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strong history of resistance and rebellion, Haripriya Rangan and Emma Mawdsley have pointed out, is less an outright critique or rejection of development than it is an expression of the aspirations and desires of hill farmers for locally meaningful development and of their struggles to realize it.⁹⁴

Agrarian subjectivities in the Himalaya, however, must be parsed more finely than categories such as hill farmer, villager, or peasant allow. Feminist scholars of political ecology have pointed out that agricultural labor and practices are aspects of everyday life not only where such identities and subjectivities are made visible, but also where they are constituted.⁹⁵ Forests and fields are not then purely natural or agricultural spaces; they need to be understood as social and cultural spaces in which forms of identity and subjectivity associated with gender, caste, and age are produced and reproduced.⁹⁶ Pioneering this line of argument, Shubhra Gururani has described how in Uttarakhand's Kumaon region, "forests create cultural spaces through which social relationships and a feminized sense of self, notions of work, proper behavior, and respect are constituted along multiple relations of power."⁹⁷ Along similar lines, Jane Dyson traces how movement associated with herding livestock proves crucial in shaping experiences of gender, youth, and adulthood in Garhwal.⁹⁸ These insights are crucial for the nuanced attention they draw to the ways in which various subjectivities are fashioned in and through Uttarakhand's forested and agrarian landscapes. Recalling the scene that opened this book, the way that compost is handled and carried—cupped in the hand, or hauled on the back—embodies distinctions of caste hierarchy, youth, and age. Newly introduced organic practices, too, are areas in which enduring forms of socio-cultural differentiation are produced and negotiated.

In this book, I pick up the abiding question of agrarian subjectivity in Uttarakhand. But I suggest that when it comes to commercially ambitious, certified organic agriculture in Uttarakhand, we must also look beyond the state as a primary locus of subject

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Preparing land for cultivation on Nagthari's terraces. The figure of the Himalayan hill farmer, and hill farming more generally, has been variously represented and contested in environmental and development imaginations from the nineteenth century to the present day. Jaunsar Bawar, April 2008.

formation and toward new figures and processes at play within Uttarakhand's agrarian landscapes. Scholars of neoliberalism have argued for the emergence of an entrepreneurial self, advancing attendant ideas about the cultivation and valorization of "active" and "enterprising" citizenship. In India, after liberalization, "enterprise—economic and political—is more important to the exercise of citizenship in India than it is before liberalization."⁹⁹ Frequently, such notions of entrepreneurship are deployed in relation to the provision of welfare or worlds of work, where they intersect with gender, race, and class subjectivities.¹⁰⁰ These "active" or "entrepreneurial" citizens are praised for their self-promotion and their understanding of themselves as a "bundle of skills, assets, qualities, experiences and relationships, a bundle that must be constantly managed and constantly enhanced."¹⁰¹ These notions of entrepreneurship have

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tended to emerge in the more familiar post-reform settings of cities, call centers, start-up companies, and the like. In this book I refrain from linking entrepreneurial qualities exclusively with neoliberalism and post-reform development; I show that they are instead part of a more long-standing mode of cultivating agrarian citizens and subjects in the region. To that end, I ask: How are notions of agrarian entrepreneurship expressed in organic agriculture? How do institutions and practices developed to enable organic agriculture—certification, contract farming, composting methods, and marketing fairs—reorient and refashion agrarian subjectivity?

This book also claims, however, that agrarian subjectivity and agency are eminently affective, even as they are conditioned importantly by development policies and institutional practices, as well as by cultural and social positions of caste and gender. The “agrarian landscape is a terrain of natural and moral cultivation,” Anand Pandian writes, demonstrating how working the land entails moral work on the self.¹⁰² For the Kallars, a tribe formerly classified as criminal, and among whom Pandian conducted his research, this work strives toward an ethical life. For farmers in Uttarakhand, organic agriculture holds out the promise of breaking away from stereotypical notions that cast them as either premodern or timelessly traditional. Achieving organic status, therefore, taps aspirational visions and desires for farmers long seen as “backward.”¹⁰³

These aspirations to become organic take shape amid shifting relations of state and market that characterize post-reform development. Sudipta Kaviraj, in an influential essay published in 2005, claimed that the Indian state remains for many of its citizens “the primary source of modernity” as well as the “only repository . . . of people’s moral aspirations.”¹⁰⁴ In the wake of more than two decades of liberalization, however, one might ask how transformations in economic life condition people’s ideas about how to be modern and the horizons of their aspirations. In post-reform India, it is also

possible to speak now of an “enchantment of the market.” Whether in the growing number of vast, air-conditioned malls, in overt displays of private wealth, in a booming IT sector, or in the cacophony of busy call centers, the market too appears to be increasingly a repository for aspirations to modernity and belonging, promising its own opportunities for invention and reinvention.¹⁰⁵ This book, then, offers an account of how people in rural India, navigating changing modes of agricultural production introduced by organic agriculture, come to relate to the state and market, and how this relation shapes their own identities and subjectivities.

Organic Connections: Of Sites and the Field

Tracing what is involved in the making of organic quality required that I move within and between farmers’ fields, government and corporate offices, trade fairs and exhibitions. Fieldwork of this kind is often characterized as multisited ethnography. This rendering of ethnography, as well as notions of circulation, connection, and friction that have attended efforts to think about scale and site in anthropology, have been extraordinarily generative for me.¹⁰⁶ But as I tried to follow various endeavors to remake the agrarian in Uttarakhand, what George Marcus described as the “posited logic of association or connection” was not always evident.¹⁰⁷ Nor was it always clear to me what it was that I was following. For *organic* was not a thing that was given, around which congealed a stable set of meanings or uniform practices; it was, as I have said, a more diffuse quality, one continually in the making. This ethnography is thus only partially the result of having conducted research in different places. It is also an effort to think of the field not only as the “where of anthropology” but also, as Akhil Gupta and James Ferguson have urged, the “what.”¹⁰⁸ The field, in my work, is not the sum total of sites in which I established some physical presence. Rather, it emerged out of the questions and puzzles I encountered; it was

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conditioned by the relations I formed and also by those I did not. It was delimited by what I did and did not, could and could not, do. And it remains to this day a place of ongoing inquiry.

While I conducted the majority of my fieldwork independently, undertaking this research *en famille* meant that I was by no means a solitary ethnographer. Toward the end of my fieldwork, in 2008, I was grateful for the research assistance of Nuri Rawat. Together we undertook a series of in-depth interviews with organic cultivators that inform this ethnography. Throughout the period of my research in 2007 and 2008, Dehradun was home for me and my family. From there I was able to regularly visit the UOCB, as well as other state government offices, and travel to farms and villages in the surrounding Doon Valley. The village of Nagthari, in Jaunsar Bawar, was around three hours from Dehradun, and it became a second home for us as I regularly conducted fieldwork there. Less frequently, my research took me to Delhi, Haryana, and other parts of the Garhwal and Kumaon regions of Uttarakhand.

Uttarakhand's Organic Bureaucracies

It was in the UOCB office that, in 2005, I first became acquainted with some of the board's staff and with the broad scope of its history and activities. I returned in 2006 to lay the foundations for my extended period of fieldwork in 2007 and 2008. Indeed, this period of preliminary research led me to focus on the conjunction of state formation and organic agriculture, so, when I returned to Dehradun in 2007, it seemed logical to locate myself in the UOCB headquarters, the institutional hub and nerve center for the state's organic program.¹⁰⁹ In its office, visions for expanding organic cultivation and forging new market opportunities were imagined and crafted as the day-to-day work of running a statewide organic program—managing records, writing reports, developing communications materials—occurred.

In 2007 and 2008, when I conducted my fieldwork, the head-

quarters of the Uttarakhand Organic Commodity Board were located in a lush residential colony on the outskirts of Dehradun, a stone's throw from the expansive, historic grounds of India's monumental Forest Research Institute, built in the heyday of the British Raj in 1906. Bearing physical testimony to these very different epochs of state formation and to the rapid bureaucratic transformation of Uttarakhand in the wake of the new state's creation in November 2000, the UOCB's office—like those of several other government-affiliated agencies in the same colony—was located in a modest, converted private home.

Establishing my presence at the UOCB took time. Though many people passed through the office, it was clear that I was neither another short-term visitor nor an employee, nor even a volunteer or intern. As much as I sought to immerse myself in the UOCB's work, my research among its registered farmers meant that I also maintained some distance from the board and its staff. This was not a balance struck once, but a challenge that I navigated throughout my fieldwork. Invariably, inquiring into the meanings and practices of organic agriculture in Uttarakhand took me beyond the UOCB's headquarters. Outside its compound walls, I was able to observe the interface among the board, farmers, field staff, private-sector buyers, certification inspectors, bureaucrats in the state and central governments, and a wider public in Dehradun and Delhi.

During my time in Dehradun, I also made several visits to the Uttarakhand State Organic Certification Agency (USOCA). Although my visits to USOCA were less frequent, they proceeded along similar lines as I conversed with external certification inspectors employed by the state and assisted with their work by preparing a comparative chart of standards for organic certification in India, the United States, and the European Union. I also conducted more focused interviews with a range of government officials and with researchers at G. B. Pant Agricultural University. These interviews helped me situate organic farming in the state's wider agri-

cultural policy and observe how the state's own agricultural university responded to the government's initiative to promote organic cultivation.

The research I conducted in the UOCB's headquarters helped me understand how *organic* was both imagined and administered bureaucratically. I recognized, however, that while locating myself within this setting offered me a rare opportunity to observe the work of a novel, partly governmental, partly nongovernmental institution, it also limited my perspective in other ways. Basing myself in the UOCB's office offered insight into how organic agriculture took on bureaucratic life, but it could not shed light on what happened when bureaucratic plans and visions traveled to the fields and homes of the state's organic farmers. What did becoming organic mean to those people whom the Organic Board sought to enroll in the implementation of its vision? Pursuing this question took me to farmers in the Doon Valley surrounding Dehradun and into the lower Himalayan ranges of Jaunsar Bawar.

Contracting Organic Basmati in the Doon Valley

The Doon Valley surrounds the rapidly expanding state capital of Dehradun. It has acquired fame for, among other things, its long-grained, aromatic basmati rice. The valley itself is bounded by the Shivalik Hills to the south and the lower Himalaya to the north. Fertile alluvial soil is fed by the waters of the Ganges and Yamuna rivers and their major tributaries, such as the Tons and Song. Agriculture in the valley is organized mainly around a rice-wheat rotation, although in eastern parts of the Doon sugarcane is also grown. The proximity of the Doon Valley's agricultural land to the rapidly growing city of Dehradun means that farming is no longer a primary source of income for the valley's cultivators. Indeed, among residents of Asanpur—a village in Dharampur block located only about a half hour by car or scooter from the center of Dehradun and where I conducted some of my fieldwork in the Doon Valley—

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many adult male household members held jobs as shopkeepers, drivers, or daily laborers, some ran their own seasonal trucking businesses, and other, more affluent residents relied on army pensions.¹¹⁰ Since 2005, farmers in the Doon Valley have contracted with a large Indian rice retailer, which I call Hira Foods, to produce organic basmati rice for export.¹¹¹ Farmers in the Doon Valley are organized into four farmers' federations, each consisting of several hundred farmers, which act as units for the purposes of group organic certification and contracting with the rice retailer. Under the terms of the contract, members of the federation agree to supply the company with a given quantity of organic basmati at a given time for a prearranged price. During the course of my fieldwork, farmers set up a similar contract with an Indian wheat retailer.

My research in the Doon Valley was, in many ways, a natural extension of my work in UOCB headquarters. Based in its boardroom, I came to learn that traffic between the UOCB's office and the villages and fields of Doon Valley farmers was frequent. Field officers and master trainers often came into the office to meet with the quality, production, or marketing managers. Farmers' federation presidents also assembled for meetings about contract arrangements with officials from the UOCB, Hira Foods, and other prospective buyers, as well as to bring matters of concern to the attention of the board's staff. After some time at the UOCB, I found it relatively easy to accompany officers making visits to farms in the valley as well as to observe the 2007 procurement of basmati rice from Doon Valley farmers and inspections conducted by the UOCB's own internal control system (ICS) inspectors. These visits and the conversations I had on journeys to and from the field allowed me to get to know the staff who worked across the boundaries of office and field and to explore the interface where cultivation practices meet bureaucratic procedures.

In addition to visits of this nature, invariably made with employees of the UOCB or Hira Foods, I came to spend time in the village

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of Asanpur independently of the UOCB. Because I was conducting my research across different sites, I did not take up residence in Asanpur but, rather, made visits at least once a week. Asanpur is located only ten miles from the bustling center of Dehradun, at the foot of the lower Himalaya. It was settled within the past two generations as families in a mountainous village in nearby Tehri Garhwal district moved down to the valley to diversify their cultivation and take up employment and educational opportunities in Dehradun. Close connections remain between immediate and extended kin in each locale, and families exchanged both labor and harvests. All families in Asanpur were of Rajput or Brahmin caste; scheduled-caste families lived a short distance away from the main village. Because most households relied on off-farm income, daily wage labor was used as needed for agricultural tasks such as transplanting, weeding, and harvesting, although at the time of sowing basmati, I observed that male household members plowed the fields and sowed basmati seeds in nurseries. On the whole, farm sizes in Asanpur were small: most families cultivated less than half a hectare (1 ¼ acre) of land.

Cultivating Organic Quality in Jaunsar Bawar

The pattern of agriculture in the Doon Valley, as well as the contract arrangement between Hira Foods and organic basmati farmers there, differs significantly from organic practices in more mountainous tracts of Uttarakhand. With a view to perceiving these differences more precisely, I conducted part of my fieldwork in Nagthari, a village in the lower Himalaya situated above a bend in the Yamuna River at an elevation of approximately 900 to 1,200 meters (3,000 to 4,000 feet).

Nagthari is located on the western boundary of Uttarakhand, in the region of Jaunsar Bawar. Since 1967, when it was declared a scheduled area, residents of Jaunsar Bawar have held scheduled tribe (ST) status; Jaunsaris claim a culture and heritage distinct from

Garhwalis and Kumaonis. Its distinctiveness and tribal designation stem importantly from a tradition of fraternal polyandry based on a claim of mythical descent from the Pandava brothers and their marriage to Draupadi. Indeed, social scientific writings about the region have overwhelmingly latched on to its polyandrous customs.¹¹² Though they hold ST status, residents of Nagthari also adhere to caste distinctions; high-caste Brahmins and Rajputs are included, somewhat unusually, in the ST category alongside low-caste Bajgis and Koltas.¹¹³ The homes of dominant-caste Rajputs are clustered around a central courtyard that forms the heart of the village. Bajgi families, traditionally landless tailors and drummers, also reside around the central courtyard. Koltas, a low-caste group now also designated a scheduled caste, reside in a hamlet a short distance away from the main village, whereas high-caste Brahmins live in an entirely separate village referred to by local residents simply as “Brahmin *gaon*.”

Caste relations within the village permit intermarriage among Brahmins and certain Rajput castes, but in many other respects the caste distinctions are stark and align with divisions of wealth and power. Rajputs and Brahmins, as expected, constitute the wealthy, landowning households in Nagthari. Nagthari's Kolta families, however, own little land today and were historically landless.¹¹⁴ They are often linked to landowning families through a sharecropping system in which they cultivate land in exchange for providing the landowner with half of the harvest from it. In an alternative arrangement that has been described as bonded labor,¹¹⁵ a number of Kolta families have long-standing relationships with Rajput and Brahmin families to whom they provide agricultural labor, care for livestock, and remove the dead, typically for compensation with grain or food.

Unlike that in the Doon Valley, agriculture in Nagthari was largely rainfed (that is, unirrigated), and there was a much higher level of crop diversity. In the main *kharif* (summer monsoon) sea-

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son, when farmers in the Doon Valley planted rice and perhaps sugarcane, farmers in Nagthari planted maize, dryland rice, millet, kidney beans, lentils, amaranth, ginger, and turmeric. After harvesting kharīf crops, some families would plant oilseeds, such as mustard and rapeseed, and subsequently barley and wheat. Some of the wealthier families in Nagthari and its surrounding villages—often higher-caste Rajputs and Brahmins—were further diversifying into horticulture by planting mango, apple, and lychee orchards and producing more vegetable crops. It was these high-caste families who were Nagthari's most frequent adopters of organic methods.

Becoming Organic

In the chapters that follow, I investigate what becoming organic means and entails in Uttarakhand. I demonstrate that *organic* is neither an indelible property of land and agricultural commodities nor a dialectical node in trajectories of agrarian change, but rather a quality that is produced across diffuse and overlapping settings, practices, and registers.

While organic agriculture is often associated with practices of composting and certification, the next two chapters of the book look within each of these practices in turn, in an effort to understand more precisely what constitutes organic quality. Chapter 1 examines how state authority and agrarian agency are co-constituted through discourses about manuring and composting practices and come to crucially inform the meanings of organic agriculture in Uttarakhand. This chapter combines archival research with ethnographic fieldwork in Nagthari to show that relations among cultivators, state officials, and Himalayan earth are significant, if unlikely, sites in which agrarian identities and notions of human agency are produced, represented, and reworked in relation to the larger Himalayan environment. Chapter 2 shifts from practices of composting to those of certification, and from forms of hill agriculture practiced in Nagthari to the contract farming of basmati in the Doon

Valley. In this chapter, practices of certification—in particular document keeping and inspections—unfold in a manner that calls into question the rational and bureaucratic characteristics so often ascribed to it. Ultimately, notions of *viśvās* (trust or faith in Hindi) become as essential to the enterprise of certified organic agriculture as inspections and documentation. Together, these first two chapters show how practices often taken as central to organic agriculture—composting and certification—are undergirded in complex ways by representations of agency, on the one hand, and forms of trust, on the other. Organic quality is thus not simply an outcome of adherence to these practices themselves. Rather, it is produced *within* these practices, as farmers come to be recognized as agentive (or not) in relation to their efforts to improve soil fertility, and as the uncertainties and ambiguities generated by certification processes make trust a sentiment indispensable to sustaining certified organic quality.

The subsequent three chapters focus more particularly on the ways in which state bureaucratic as well as private-sector authority, together with agrarian subjectivity and agency, shape organic quality and converge in the making of new agricultural markets. Chapter 3 examines the relation between the quality of place and organic quality as it is manifest in tensions surrounding the production of organic basmati rice grown in the Doon Valley under a contract arrangement with Hira Foods. Dehradun is famous for its basmati, but the history of commoditization through which basmati came to be globally traded has changed the very definition of the grain. Cultivating organic basmati proves to be a process conditioned not only by practices of organic agriculture and certification, but also by standards defining basmati rice and contract farming arrangements in the Doon Valley. Chapter 4 continues to explore the conditions under which organic produce becomes a marketable commodity, but it shifts attention from basmati to hill crops that are marketed in buyer-seller meets organized by the UOCB. The question of

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agency surfaces again in this penultimate chapter, as imaginative and aspirational agency are key to making markets in Jaunsar Bawar and the wider Uttarakhand Himalaya. Chapter 5 considers how Uttarakhand's "brand equity" is crafted through the idea of organic agriculture. It focuses on a series of trade fairs and *melas* (bazaars or fairs) in which the UOCB participated in 2007 and 2008, revisiting notions of tradition and modernity, nature and agriculture, that underlie and are also complicated by the advent of organic agriculture in Uttarakhand. The book concludes with an epilogue that situates the emergence of organic agriculture in more recent conversations about the green economy and transitions to sustainable agriculture.

To see *organic* as a quality, not a property or an essence, is to understand it as being conditioned historically and composed not only through a myriad of regional, national, and global processes—ranging from political decentralization to economic liberalization, to the mainstreaming of sustainable development agendas—but also within everyday practices. Attending to these quotidian practices directs attention on the minute work of composing and sustaining quality, as well as on how such practices are variously parsed by certification agencies, state bureaucracies, and corporate authorities as part of the production of organic quality. This kind of attention, then, allows us to see in a different light what might be otherwise regarded as innocuous practices—to perceive better what is at stake in keeping compost in a concrete pit rather than in a heap by the side of a field. Such perception enables further inquiry into who is able to become organic under what conditions—and who is not. And to thereby see how organic quality is inflected and conditioned by cultural, economic, and social position, caste and gender relations. In tracing how organic quality is thus composed and contingent, this book is driven by a curiosity to understand what becoming organic means and entails, and for whom. The account offered in the pages that follow describes one effort to differently imagine and constitute relations among agriculture, nature, and develop-

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ment in a region where these relations have long been a source of imagination and a site of tension. In doing so, this work seeks to more fully understand not only what *organic* is, but what *becoming organic* becomes.

Fertile Ground

The Yamuna River snakes three thousand feet below the Himalayan village of Nagthari in Jaunsar Bawar, making its long journey southward where, some 855 miles from its source in Bandarpunch glacier in the Garhwal Himalaya, it eventually joins the Ganges. Its rich alluvial deposits, together with those of the Ganges, have created the Indo-Gangetic plain's fertile Doab region, which encompasses parts of Uttarakhand and western Uttar Pradesh. These rivers, sacred in Hindu mythology, are also revered for the life they bring to land—not only in the form of water, but in the sediments and minerals that they carry down from the Himalaya. The volume of sediment, and the distance it travels, is observable in satellite images that show deposits from the Ganges and Brahmaputra stretching out into the Bay of Bengal nearly as far as Sri Lanka.¹

The power with which water moves earth in the Himalaya became clear to me when a sudden, unexpected spring rainstorm interrupted the intensive labor of readying the land for cultivation in Nagthari. Here on the terraces, cultivators spent weeks before the arrival of the monsoon preparing the fields. Painstakingly they re-

built and reinforced terrace walls, reclaiming cultivable land from the mountainside and clearing away excessive brush and grass from the field perimeters; with bent knees and backs they combed the ground, pulling rocks and stones out of the soil by hand to ensure that the earth would be well-plowed and the growth of young plants not impeded; along narrow, often steep mountain paths they carried large handwoven baskets, heavy with compost, to apply to their fields. Eventually, using bullocks, they plowed the fields and sometimes leveled them before sowing began. On these terraces, they planted a multitude of crops, among them maize, cowpeas, kidney beans, as well as other pulses, millets, and dryland rice.

The torrential rain, however, brought this work to an abrupt halt. Over the next hours and days, I watched as the Yamuna changed its color and form—and as the rains carved channels into terraced fields sown with the seeds of maize and kidney beans only the day before. Pouring over terrace walls, the rains swept rich topsoil into the river below. In a matter of hours the glacial greenish blue of the Yamuna, its constant hue during the preceding winter months, became a surging and swollen muddy brown.

During these pre-monsoonal rains, my host father, Rawatji, beckoned me over to watch a video he had made some years earlier of an organic mela held in Nagthari and attended by the district magistrate and other mid-level government officials. Rawatji hailed from one of Nagthari's dominant-caste Rajput families and was active in local politics in his own village and surrounding ones. He made frequent trips to Dehradun, where his eldest son and nephew were studying and his family maintained a small apartment in the town's main bazaar. Much of his time in Dehradun seemed to be spent in meetings with officials from the *mandī*, the government-regulated agricultural marketing yard, and others in the Agriculture Department and Organic Board, through which he was often able to secure funds for development initiatives in the village. While his wife, Amrita Devi, was president of the village women's self-

help group that operated a microfinance scheme and managed other development initiatives in the village—including the organic program—Rawatji too played a prominent role locally in promoting the Uttarakhand Organic Commodity Board's program for organic agriculture, referred to in Hindi as *jaivik khetī*. This was evident in the video he had personally commissioned to record the proceedings of Nagthari's first organic mela.

This silent film's initial images show women from Nagthari clothed in customary Jaunsari attire of a heavy woolen skirt, buttoned blouse, and scarf tied around the head and walking single file along paths to the barns where livestock are kept. The camera zooms in for close-ups of different kinds of compost prepared by the group, showing women carefully cupping the prepared earth in their hands and stirring liquid manure. In the absence of sound, signs in Hindi indicate the type of compost, such as Cow Pat Pit (CPP), *taral khād*, and *vermī khād*.² The video then shifts to Nagthari's central courtyard surrounded by several houses at the heart of the Rajput settlement, on which crops are dried, grains roasted, local deities propitiated, festivals celebrated, animals sacrificed, and cricket played. On this day, the courtyard serves as the site of the mela and showcases agricultural bounty and handicrafts as villagers gather to listen to visiting officials who deliver speeches from a specially constructed dais.

Even as the rains outside washed away earth only recently and painstakingly manured, plowed, and sown, the images captured by the video convey how Nagthari's residents worked to make their efforts to enrich the soil visible and recognizable to government officials at the mela. Watching these scenes as I listened to rain pound the roof above us brought into relief the sustained, deliberate efforts of Nagthari's cultivators to create fertile ground for their crops and to project their commitment to becoming organic for governmental officials and, through the film, for other viewers. In

and beyond India, agricultural fairs and model or “show” farmers bring a dramaturgical dimension to agricultural practice as they performatively enact narratives of modernity, progress, science, and technology that bind farmers to state institutions and, increasingly, private agribusiness.³ This was no less the case in Nagthari. In a region where hill cultivation has long been neglected by the state, and where cultivators have been portrayed as backward and destructive, the organic mela—and its filming—marked an effort to refashion the much-maligned figure of the Himalayan hill cultivator into an organic farmer. As he redirected my attention away from the dramatic rainstorm sweeping through his village, Rawatji was keen for me to see Nagthari’s cultivators as careful, knowledgeable stewards of Himalayan soil.

Soil has long been at the center of debates about environmental degradation in the Himalaya. From the early twentieth century, the “loss of fine soil to rain-wash” was identified as an impediment to agricultural production across India.⁴ This concern persisted after independence, when the Himalaya became a particular focus for such anxieties. A number of articles in the *Indian Forester*, a journal published by the Dehradun-based Forest Research Institute, cast soil conservation as particularly challenging in such a geologically dynamic region. “Having been formed by the crumpling, folding upthrust of the sedimentary strata in a weak region of the earth’s crust,” V. S. Rao wrote in its pages in 1961, “the mountains are steep and the rock unstable.”⁵ K. M. Tiwari drew attention to issues of forest cover that compound the unpredictability and instability of the region’s geology, arguing that forest cover tempered the intensity of rainfall during the monsoon period and thereby reduced erosion from runoff.⁶ Though Rao conceded that such erosion had occurred since the formation of the mountain range, as is evident from the depth of the alluvium on the plains below, in an article published over a decade later Rameshwar Sahai recast this view on

soil erosion, stating categorically that “the problem of soil erosion is man-made. It does not exist in virgin areas, untouched by man, as such areas have a natural protection of green vegetation.”⁷

From the 1970s onward, those concerned about erosion in the region increasingly cited population growth and increased demand for fuelwood and fodder as a major source of soil degradation. Population growth in the Himalaya also came to be seen as the cause of increased use of ecologically fragile lands for agriculture, which in turn drove environmental degradation through the interlinked processes of deforestation and soil erosion.⁸ Such concerns were framed vividly in publications about the Himalayan environment:

The net effect of overcropping, overgrazing, and overcutting in each geocological zone is accelerated erosion of fertile topsoil. Brown-colored, silt-laden rivers—the Indus and its tributaries, the Ganges, the Yamuna, the Gandak, the Tista, and the Brahmaputra—carry away the soil that forms the basis of life for the Himalayan people. An estimated 250 million cubic meters of topsoil are washed away annually from Nepal Himalaya to the Gangetic Plain in India and Bangladesh. Himalayan silt stains the Bay of Bengal as far as 645 kilometers from the shore, and during the devastating annual floods the debris spreads over the delta. A vast portion of the population of the Indian subcontinent lives on plains of streams that flow from the Himalaya and is thus vulnerable to the consequences of ecological mis-uses upstream. Of immediate concern is the effect of forest clearing on the ambitious and expensive irrigation projects that have sustained the green revolution in northern India.⁹

Evocative images of life-sustaining soil being carried away from the Himalaya, “staining” the Bay of Bengal, and threatening the progress of the Green Revolution created a stark picture of human-induced erosion in the region. State and scientific discourse thus

not only represented Indian cultivators as “obstacles” to progress, but now also posited hill farmers as actively degrading mountain environments.¹⁰

In this region, then, soil forms an enduring medium in which larger ideas about the relations between people and their environment are claimed and contested. Since at least the mid-nineteenth century, human agency has been understood to determine these environmental relations. Agency may be conceived of as “the socioculturally mediated capacity to act,” Laura Ahearn writes, gesturing toward the way in which individual action is socially and culturally conditioned.¹¹ This understanding is also consistent with notions of agency and subjectivity advanced by Michel Foucault, and further developed by Judith Butler, which hold that possibilities of agency are conditioned in and through relations of power.¹² In other formulations, agency is often closely connected to deliberate action. Along these lines, Sherry Ortner conceptualizes agency as “conscious intentionality,” whereas Philip Abrams calls it “purposeful, individual action,” and Ivan Karp depicts it evocatively as “how we work to constitute the world.”¹³ Different ways of conceptualizing what agency is have sparked lively debates within agrarian studies, subaltern studies, and gender and feminist scholarship, among others, about what kinds of capacities, practices, and activities may count as agentive, and about the possibilities of agency within relations of power and domination.¹⁴

In Himalayan agriculture, what I call *agrarian agency* is variously expressed through the practices of manuring land, building irrigation canals, tree lopping and felling, and collecting fodder and fuelwood. But the status of such practices as agentive is not a given in the Uttarakhand Himalaya. Rather, it must be recognized (or not), appraised, and represented by state institutions, development programs, and policies. Agrarian agency, further, is differently evaluated and valued by these same actors—fodder and fuelwood collection have long been seen as examples of destructive human agency, whereas it

is only recently that practices of manuring and composting have been positively evaluated or even recognized as agentive at all. When it comes to enriching and improving the soil, what counts as agency, and who or what is recognized as an agent, is not automatic or self-evident. Indeed, as this chapter will also show, at times these assessments have elevated nonhuman agents in agrarian environments over human cultivators. Agrarian agency in Uttarakhand, then, is not only socioculturally mediated and shaped through relations of power. What counts as agency, and what does not, is itself a mode through which power works.

The qualities mentioned above that are widely ascribed to human agency—intention, consciousness, and purposiveness—were invoked by state officials in Uttarakhand as they characterized the development of organic agriculture in the region. State officials, NGO staff, agricultural scientists, and others often claimed that hill farmers in the region had always been organic. They distinguished traditional forms of hill agriculture, which they described as “organic by default,” from an agriculture that was “organic by design,” marked principally by preparing compost according to methods prescribed in training sessions and brochures about organic farming. Though this distinction may seem simple, it signals the way in which practices that appear materially similar come to be evaluated as differentially agentive in state and scientific discourse. This is not incidental. Though the official recognition of certain composting practices as agentive may be recent, debates about human agency in relation to the soil, and more broadly to Himalayan environments, are entangled with historic and ongoing processes of state formation in the region. This chapter, then, considers these abiding relations, examining the ways in which they figured in both colonial and postcolonial discourses about soil, agricultural improvements, and environmental degradation. By considering the historical record and present-day practice concurrently, I suggest that agrarian practices of working with soil, manure, and compost,

along with their recognition and representation by state institutions as a form of agentic action, powerfully inform state and development interventions and, in the twenty-first century, are central to what it means to become organic.¹⁵

Capital, Energy, and Enterprise: Colonial Reckonings with Agrarian Agency

The question of agency in relation to farming surfaced from the latter half of the nineteenth century through the first decades of the twentieth amid growing colonial concern with agriculture, soils, and the formation of an institutional apparatus for their management.¹⁶ In the 1860s provincial agricultural research stations were formed in the wake of famines, and commercial preoccupation with agricultural productivity grew as the decades passed. In Dehradun district, as elsewhere in the Uttarakhand Himalaya and beyond, settlement reports also expressed colonial concern with the soil, often out of a larger interest in agricultural productivity and the assessment of land for revenue purposes. Landowners and cultivators received little mention in these accounts, or they figured as obstacles to, rather than agents in, the work of improving the soil. In this vein, the commissioner of Meerut, remarking on the 1866 Settlement of Dehradun, compared “the richness and strength of spontaneous vegetation in the Doon” with what he deemed “a slovenly style of tillage,” and he declared that “when man improves his work, it can hardly be doubted that the soil too will respond.”¹⁷

As settlement efforts in the Doon Valley became progressively more elaborate during the last decades of the nineteenth century, government concern shifted somewhat from questions of tenure to the criteria for assessing various rates to be levied. Settlement reports, drafts, and correspondence between officers of the colonial government reveal a preoccupation with the relation between cultivators and the soil, and with the nature of the labor performed to enrich it. In 1883 the settlement officer of Dehradun district, H. G.

Ross, protested the heavier revenue assessment of lands that had received the benefit of farmyard manure in a letter to his superior, W. Lane, Esq., the commissioner of Meerut. Ross wrote: "I observe in most settlements that manure is a factor taken into consideration [in revenue assessments]. . . . I think this is a wrong procedure. . . . Manure is the result either of outlay of capital or the display of energy and enterprise or both combined and so in my opinion should not be taken into consideration. . . . I allude to fields where manure is carried from a distance[,] the manure being stored up with care and labor."¹⁸ The settlement officer supported his claim by pointing out an inconsistency in how the underlying principles for determining revenue assessments were applied in practice: a landowner who invested capital and labor in the construction of an irrigation canal was not taxed at a higher rate so as not to undermine his efforts to improve agricultural productivity, whereas one who instead invested capital and labor in the care of livestock, using manure to enhance the land's fertility, was subject to heavier assessment.

Dismissing these arguments, the commissioner replied some weeks later, "The application of manure appears to me as much a part of the ordinary process of agriculture as water."¹⁹ Against the claims made by Ross, the settlement officer, the commissioner noted that land that is watered from wells is also more heavily taxed. The commissioner's opinion reveals how only certain forms of agrarian practice—notably those clearly linked with specific material forms of capital—were officially recognized as agentic expressions of "energy and enterprise."²⁰ Ultimately, the commissioner's approach prevailed with the Board of Revenue, which deemed the settlement officer's view "rather too liberal." This decision proved consistent with the central place accorded to the development and expansion of irrigation technology in north India during this period. Unlike the work of keeping livestock and manuring fields, the construction of canals was seen to hold the key not just to greater agricultural

productivity, but to the exercise and consolidation of colonial power through “increased government revenue, and enhanced government prestige and control.”²¹ For these administrators, it was not soils or manure in themselves that posed a problem for systems of classifying and taxing agricultural land. Rather, internal debates pivoted on what kinds of agricultural labor could be recognized as agentive. Their correspondence illuminates two remarkably different ways of representing agency in agrarian practices. For Ross, the settlement officer stationed in Dehradun, the care of livestock and the labor of manuring fields were just as deliberate and purposive as the construction of an irrigation canal; for his superior, the commissioner, manuring could not be considered an agentive expression of capital, “energy and enterprise.” For him, this practice was as “ordinary” as water itself, and not at all comparable to the irrigation canals that might carry such water.

Colonial engagement with agricultural concerns deepened in the early years of the twentieth century across India, though it departed little from the earlier stance that denied the agency of cultivators whose ongoing efforts enriched soil with compost and manure. In 1905 Albert Howard, who was to become one of the founding fathers of the modern-day organic movement, arrived in India with his wife, Gabrielle; both took up positions as imperial economic botanists at the newly created Imperial Agricultural Research Institute at Pusa in present-day Bihar (then part of the Bengal Presidency). Tasked with a broad mandate to improve agricultural productivity, the Howards discovered that plant breeding alone could not accomplish this feat, and that the success of improved varieties depended crucially on the condition of the soil and organic matter in it. Later, as director of the Institute of Plant Industry at Indore, in present-day Madhya Pradesh, Albert Howard and his colleague Yeshwant Wad developed the Indore method of manufacturing compost.²² Howard and Wad combined scientific methodology with observations of how India’s cultivators used crop residues and ma-

nure on their fields to develop a precise method for converting agricultural waste into nutrient-rich humus in what they called a “compost factory.” Later, describing the processes of decomposition and decay at work in this method, Howard wrote that “living organisms, and not human beings, are the agents which make compost.”²³ Although the Indore method drew on extant cultivating practices, cultivators themselves were largely absent in this work, as earthworms, mycorrhizal fungi, and soil bacteria became Howard’s protagonists.²⁴

Such sentiments reveal a value accorded to nonhuman agencies that not only predates more recent attention, but that also demphasizes and marginalizes human agencies in the making of compost.²⁵ What the Howards call “the human factor” hinders rather than advances efforts to improve soil fertility through composting. They write: “Everywhere it is the human factor which stands in the way of progress. . . . Till the inhabitants of the villages of India can be awakened and till a general desire for rural uplift can be implanted in the people themselves, it must take centuries to effect any real and lasting development.”²⁶ In writings that the Howards produced decades apart, the vitality of spontaneous vegetation and soil organisms serves as a foil to the imputed inertia of the Indian cultivator.

These colonial reckonings with soil and compost illuminate abiding tensions that are contained within the recognition and representation of both human and nonhuman agencies, and that arise from their discursive separation (and, more broadly, the separation of nature and culture). For colonial officers and scientists, such tensions were very much bound up with—and necessary for—the administration of land, the development of colonial science, and the advancement of efforts to intervene in Indian agriculture. In these milieus, denying the possibility that human agency might be exercised in the labors of manuring fields or preparing compost went hand in hand with the elevation of nonhuman or “natural” agency.

This denial was a vital precondition both for the assertion of colonial power over land and cultivators and for determining the precise manner in which agriculture was to be made more productive.

Dung and Development Policy in Uttarakhand

Debates about Himalayan soil stemming from the late colonial and post-independence eras infuse the recent promotion of organic agriculture, continuing to inform the way that contemporary policy makers and cultivators alike understand the environment in which they work and live. As we sat in the vast Dehradun office of the forest and rural development commissioner one bright October morning in 2007, she explained to me carefully:

Landholding in Uttarakhand is minuscule and fragmented. Most households have less than 0.8 hectare, and even this is fragmented into smaller plots. Holdings are very marginal. So any kind of farming is very marginal to the economy of the farmer. We have to make it economically worthwhile. Second, the area is ecologically very fragile. Eighty percent of land is subject to heavy soil erosion. There are forty tons per hectare per year of topsoil loss. So the preservation of soil health, conservation are critical. Government programs are focusing on conserving soil health and optimizing the productive capacity of the soil. We need to see clearly where intervention is required. In the mountains, chemical farming is a no-no, both from the point of view of soil erosion and returns to the farmer.

With reference to Uttarakhand's mountainous environment, the commissioner articulated the concerns about ecological fragility and soil degradation so widely expressed in development policies in the region. She also linked those concerns to both economic and environmental rationales for organic agriculture. Such views, I found, extended beyond the offices of state bureaucrats in Dehradun and

into the hills of Jaunsar Bawar. Several months later, my host father, Rawatji, remarked to me emphatically:

Why the hill region is being declared organic state? It is being declared because our plains are completely chemical fertilizer. There is pollution, plastic, all sorts of garbage, all sorts of fertilizer, all sorts of poison, all sorts of factories, all sorts of industries. Everything is polluted. The water people drink, the water that goes down from here they drink that water again. Everything is contaminated. So, it is the thinking of our government of India and our India and our scientists and the scientists of our country and foreign countries. They have made a pattern that first we make this region organic because one hundred percent water comes from the hill region. If we don't consider one hundred percent, still eighty to ninety percent water goes down from here only. . . . Suppose we are forty-two to forty-three families. And from every family one bag [of urea] will be used. . . . This way we used forty-two bags of urea and fertilizer during the rains. All that urea mixed water is going down. . . . Now you can calculate that if each family is using one bag of urea or DAP or potash or phosphorous, all of its water will flow down to the plains.

Homing in on contaminated water rather than soil erosion, Rawatji's words demonstrate his own perception of the interconnect-
edness of hills and plains—one that inflects long-standing concerns about Himalayan environmental degradation with a new valorization of organic practices.

Both the Uttarakhand Organic Commodity Board itself and its efforts to promote composting among the region's farmers trace their antecedents to a number of distinct development projects funded by the World Bank, the government of India, and the EU/EEC and centered on averting soil erosion and environmental degradation. Among international actors in the region, the World Bank

has been involved in watershed development the longest, through the Himalayan Integrated Watershed Management Project in Pauri Garhwal and Almora districts from 1983 to 1992 and the multistate Integrated Watershed Development Project (IWDP or Hills II) from 1999 to 2005. These projects sought to marry development and conservation by combining income-generation initiatives with the introduction of technologies for conserving soil and soil moisture. In these project frameworks, efforts to address watershed degradation and enhance rural incomes support each other; the World Bank claimed that curbing erosion “will improve income from grain crops, horticulture, fodder, fiber, fuelwood and livestock.”²⁷ Over time, income generation has acquired even greater prominence in project objectives and activities. Following the conclusion of IWDP (Hills II), the formation of Uttarakhand as a separate state led to a new project called the Uttaranchal Decentralized Watershed Development Project (UDWDP). Running from 2004 to 2012 with a loan of nearly U.S. \$70 million, this World Bank project aimed at win-win solutions as it sought to “improve the productive potential of natural resources and increase incomes of rural inhabitants in selected watersheds through socially inclusive, institutionally and environmentally sustainable approaches.”²⁸ In 2014 this project was renewed until 2021 with a loan of U.S. \$120 million. In addition to continuing interventions to increase agricultural productivity, for the first time project planners articulated the objective of developing entrepreneurial and small-scale agribusiness opportunities in hill areas, promoting, among other things, the adoption of organic practices.

While the farming practices advocated by the IWDP and UDWDP were not exclusively directed to organic production, the Diversified Agricultural Support Project (DASP) in Uttar Pradesh, which was funded by the World Bank from 1998 to 2004, promoted organic farming by emphasizing green manuring, composting, and other methods that decreased reliance on synthetic chemical in-

puts. Sharing the other projects' focus on increasing rural incomes, the DASP aimed to improve agricultural productivity by demonstrating integrated plant nutrient and pest management and disseminating technologies for it; increasing the availability of improved seeds; encouraging farmers to take up organic farming by promoting NADEP, vermicompost, CPP, and green manuring technologies; and providing opportunities for farmers to enhance their technical skills.²⁹ The DASP's approach laid important groundwork for the activities of the UOCB in years to come.

The rural development and agricultural strategies developed through the IWDP and DASP were channeled more directly toward organic production through the Technology and Training Development Centre (TTDC) and the Macro-Mode Management Scheme, two projects funded by the government of India that have been managed by the Uttarakhand Organic Commodity Board since its formation in 2003. The TTDC began in 2000 as part of the Swarna Jayanti Gram Rozgar Yojna, a governmental scheme to alleviate poverty through the development of small-scale industries. Project activities were transformed when management shifted from the government of Uttar Pradesh to that of the newly formed state of Uttarakhand in 2001. Industries originally identified for development in the region included the manufacture of colored light-bulbs, soft toys, and handicrafts, but, upon review, Uttarakhand officials in the Rural Development Department concluded that this "was a classical case of a generic proposal being made on the assumptions of an average Uttar Pradesh district without any thought of the mountain specificities."³⁰ Their project report conveys a lingering sense of grievance, tied to Uttarakhand's long agitation for statehood, about the irrelevance of development interventions designed in the plains for hill regions. Thus, in 2002 Uttarakhand planners hastily redesigned the project over the course of two months. According to their report, "The technology which was ul-

timately selected for transfer in the rural areas of Uttaranchal, is called the Bio-Dynamic (BD) Composting, a timesaving technology of German origin, which would become the foundation for ushering in Organic Farming in the ecologically sensitive mountain state. It has subsequently been recommended by the Working Group of the Ministry of Agriculture, Government of India, on the one hand; and being recommended for promoting sustainable agriculture in the highly fragile mountain conditions of the Himalayas.”³¹

In revamping the project, planners made a self-conscious effort to cast composting as “technology” and to ensure that it was suited to the region, “especially from the point of view of a new mountain state which would prefer to pursue a strategy which is markedly different from its parent state.”³² Nonetheless, their report also accords considerable weight to the German origin of biodynamic composting and its systematized procedures, standard ratios of inputs, and technical, time-saving aspects. In this respect, even while presenting the scheme as “culturally appropriate,” the report adhered to the long-standing pattern of welcoming foreign technological interventions in agricultural development. It noted not only that biodynamic composting technology would improve agricultural productivity—allegedly suffering because of poor traditional methods of compost preparation—but also that the compost could be exported to other areas of India via the region’s road and rail networks. The TTDC envisioned creating rural organic marketing centers where farmers could purchase organic inputs and sell organic produce, as well as establishing biotourism sites where foreign and Indian tourists might experience life in a “traditional”—and now organic—hill village. In this respect, the TTDC brings into relief a tension that lingers in the contemporary promotion of organic agriculture. In a region where the collection of dung and crop residues to make compost has long been a common agricultural practice, what does it mean to become organic?

Organic, by Default or by Design?

On numerous occasions during the course of my fieldwork, I heard policy makers, bureaucrats, agricultural research scientists, and workers involved in regional NGOs assert that Uttarakhand is “organic by default.” For example, a senior plant scientist based at Uttarakhand’s G. B. Pant Agricultural University remarked to me emphatically that “the hills are by default, you can say they are organic . . . it is by default organic because of the little amount of pesticides used.” A page on the Organic Board’s website from this time further elaborated on the expression: “Mountains by their sheer geographical features were bypassed by the green revolution. By default and need, farm operations continued with what was available in nature. . . . Leaf litter, which forms the bedding of the domestic animal in the barn ‘goth’ is cyclically removed from the barns and used in the farms every year if not twice a year. The rich manure is the only reason mountain agriculture has survived over the years.”³³ These perspectives weave a narrative of the close relations among agriculture, animal husbandry, and forest resources due to the region’s mountainous terrain, which made it ill-suited for the high-yielding seeds and irrigation projects of agricultural development interventions elsewhere in India. Notably, isolation here is an attribute of Uttarakhand’s geography rather than its politics or economy, as advocates of statehood would claim. This isolation—once held responsible for the region’s historic *lack* of development—is now precisely the basis on which Uttarakhand’s ambition to become an organic state is staked.

Because the expression “organic by default” punctuated conversations frequently over the course of my fieldwork, it became a matter of interest to me in itself. In a region where the divisions and relations of nature and culture have long been vexed, I puzzled over what meanings were contained in and conveyed by an expression that parsed organic agriculture in this way. “In Uttarakhand, there is not any fertilizer. Uttarakhand is organic by default. FYM

[farmyard manure] is easily available,” a third-party certification inspector remarked as he inspected the milling and processing procedures for basmati rice that would be certified as organic. On another occasion, at one of the Organic Board’s buyer-seller meets, a representative of a major Indian company that sells crop protection chemicals and seeds told me, “For India, organic agriculture is from ancient times,” expressing his company’s aspiration to enter the organics sector through a contract farming agreement with organic producers in Uttarakhand.

I was struck by the insistence on the label “organic by default” in part because, though the region had been historically isolated from the Green Revolution, synthetic inputs had found their way to the hills, as a 2004 report commissioned by the UOCB documented.³⁴ Moreover, in terms of eligibility for certification, it made little difference whether farmers were already “organic by default,” as all producers must typically undergo a three- or four-year conversion period.³⁵ The ubiquity of the phrase and similar expressions prompted the questions: What does it mean to be “organic by default”? And how does this differ from being organic?

The expression “organic by default,” I found, was often used to emphasize or affirm the strong connection between Himalayan nature and agriculture. This connection was often made with further specific reference to the abundance of, and reliance on, leaf litter in agriculture, something that was often held up as a foil for synthetic inputs. Use of the latter, described as *rasayanik khād*, or more broadly as chemical agriculture, was regarded as historically negligible or entirely absent because of the isolation and rainfed conditions prevailing in much of the region. These recent endeavors to foreground in a favorable manner the link between nature and agriculture in the Himalaya have as much to do with development trajectories outside the region as with the daily labor of cultivation in it. Illuminating this, Uttarakhand’s secretary of agriculture explained: “Actually, we have got an inherent advantage in our state,

because traditionally we have been doing organic agriculture since ages. The so-called Green Revolution did not percolate to this area, especially the hills. It is home to enormous biodiversity. India got around 2 percent of world's area, land area. And contains about 8 percent of world's biodiversity, and out of that 8 percent, 30 percent is contained in Uttarakhand." The secretary, like others I met, took care to explicitly separate Uttarakhand's trajectory of agricultural development from the Green Revolution's introduction of hybrid seeds and synthetic fertilizers. He did so, moreover, by aligning organic agriculture with traditional farming and connecting both with environmental conservation and biodiversity. Organic agriculture in Uttarakhand, in this framing, is not a recent phenomenon but a timeworn tradition that stewards a significant share of India's biodiversity.³⁶

Yet in many of these same conversations, bureaucrats and NGO staff attributed the quality of being "organic by default" not simply to Himalayan earth, but also to those who cultivate it. The depiction of Uttarakhand as pure and pristine was often accompanied by the ascription of a certain innocence to its cultivators, owing to their putative isolation from modern industrial agriculture. In June 2006, in an air-conditioned office in the south Delhi headquarters of the Agricultural and Processed Food Products Export Development Authority (APEDA), which oversees India's national standards for organic certification, the authority's adviser on organic production, Dr. Verma, remarked to me that in India "we have been eating organic but did not know." Seventy percent of agriculture in India, she explained, is rainfed and has not been exposed to chemicals. But, she went on, being "organic by default" is not a quality of agriculture alone. "In the hills," she added, "people don't know what are chemicals." Dr. Verma thus articulated an idea that often accompanied notions of being organic by default—that hill farmers had never heard of or encountered synthetic inputs. The innocence

and even ignorance persistently attributed to hill farmers may also be linked to popular perceptions of paharīs as more honest than plains dwellers because of their connection with the mountains and the perceived purity of the environment in which they live.³⁷

At this point, it is worth returning to the “Forests full of Bears and Monkeys” depicted on the eighteenth-century East India Company map discussed in the introduction, to the commissioner of Meerut’s nineteenth-century assertion that the application of manure was merely ordinary, and to twentieth-century understandings of both the region and its people as isolated and backward in relation to transformative agrarian development. In its refusal to recognize farmers’ efforts to enrich the soil as agentic, the expression “organic by default” aligns with these views. Instead, agricultural practices deemed traditional—though acknowledged to resemble present-day organic production practices—are understood as the result of “neglect,” as one official put it, rather than as intentional and strategic actions in themselves. In this longer historical perspective, the current expression “organic by default” may perhaps be seen as the most recent incarnation of a persistent narrative in official and state bureaucratic discourses that represents the Himalayan environment as constituted more by its nature than by its people.

The centrality of farmers’ agency for the meaning of organic agriculture was brought into relief on a crisp winter morning in Dehradun, in the garden of Vinod Chamoli, an activist engaged in efforts to preserve the region’s seed biodiversity and protect rural livelihoods. Vinod had deep connections to many of Uttarakhand’s historic social and environmental movements, and he explained to me that “our own assumption is that people who are away from the roads, . . . who have not been touched by development, have tended to remain organic, by default or by choice, whatever.” Vinod paused, lingering on the words *default* and *choice*. He then continued, “I

mean, they almost have no choice . . . but then there are now, there are many other farmers, there are many groups who are consciously reverting back to the state of being organic.”

Initially, it was Vinod’s emphasis on reverting to being organic that drew my attention, for it complicated linear ideas of progress and modernity. But equally intriguing was his emphasis on choice and consciousness. In his framing, these conditions are apparently absent among farmers who are “organic by default,” while being a principal marker of those who are “reverting back” to being organic. Choice, intention, consciousness are, as we have seen, also the terms scholars have used to describe and characterize agency. It turned out, over the course of my fieldwork, that Vinod was not alone in identifying choice and consciousness as important aspects of what it means to become organic, but at that point their significance as a fulcrum on which the meanings of *organic* turned was still somewhat obscure to me.

The key role of agency revealed itself more strikingly in a conversation a few days later with Uttarakhand’s first forest and rural development commissioner, who had penned the memo charting its future as an organic state. When I asked him to explain to me the term “organic by default,” he responded: “In layman’s terms I would say that organic can never be by default. What they mean to say is that thanks to the deficiencies in the delivery system of inputs, and thanks to your conditions of being rainfed, you are not able to use chemical fertilizer. Organic farming can never be by default. When you say you have to be certified, certified means you have to take many precautions, many steps have to be taken before I declare you to be an organic producer. A knowledgeable person who knows about organic farming will never say it is by default; it has to be by design.”

But what does it mean to be “organic by design”? Here the commissioner emphasized certification, knowledge, taking precautions, and adhering to procedures as defining what it means to be organic.

As this book will show, organic certification required farmers to register with the state's organic program and maintain records of their agricultural activities in farmers' diaries. Through certification, they were required to adhere to a national framework of organic production standards that obliged them to implement measures to minimize the risk of contamination of organic fields and crops, for example by maintaining buffer zones between conventional and organic fields, by ensuring thorough separation of conventional and organic crops in post-harvest processing, storage, and transport, and by avoiding the use of the same crop variety in both organic and conventional production. In certain instances, farmers were also required to comply with the terms and conditions of contracts with commercial buyers. Narendra Singh, a professor at G. B. Pant Agricultural University, extended the attributes of being "organic by design" by connecting consciousness with knowledge, education, and a scientific and commercial outlook: "Organic farming by consciousness, by keeping what you say the commercial end in mind, requires understanding of the procedures that should be followed. Unlike what people think that you don't have to follow any scientific practices, you have to be still more scientific here. And that probably requires education."

The forest and rural development commissioner at that time also emphasized knowledge, arguing that one "cannot be organic simply because one has not had access" to synthetic fertilizers and pesticides; instead, farmers must be "knowledge-based organic." This knowledge, she explained to me, was itself to be cultivated through a hierarchically organized network of institutions and experts, including district-level Krishi Vigyan Kendras, the centrally funded Agricultural Technology Management Agency, Nyaya panchayats, farm-level demonstrations, and a toll-free help number through which farmers could access a "panel of experts."³⁸ For these individuals, who held senior positions in the state government and scientific establishment, "organic by design" designated certified organic,

commercially oriented farmers who adhered to scientific procedures and pursued knowledge through state institutions of agricultural extension and training. In other words, being “organic by design” hinged on the farmers’ expression of choice, purposive action, and conscious intention—in short, qualities that institutions recognize and represent as constituents of human agency.

In the context of the contemporary expression “organic by default” and the longer histories of state making in the region, the organic designs described by newly appointed civil servants in Uttarakhand place the region’s farmers in a different relation both with the land they cultivate and with the state. Participation in Uttarakhand’s organic initiative draws its cultivators into wider networks of policy, regulation, and power as certification agencies evaluate their cultivation practices for compliance with national and international standards for organic production. Farmers’ demonstrations of institutionally recognizable forms of intentional practice and purposive action—such as the completion of farmers’ diaries and the observance of buffer zones—become the fulcrum on which their organic status turns. But is this the sum total of agentive possibility available to farmers in their efforts to become organic?

State Power, Rural Development, and the Parsing of Agrarian Agency

Even as they are hailed as evidence of consciousness, intention, and purpose, the entailments of being “organic by design” speak also in more Foucauldian terms of the ways in which people come to be constituted as subjects of power through a variety of institutional practices and in which they learn to discipline and regulate themselves in conformity with wider norms and expectations. The subject-making work of organic certification schemes appears to resonate broadly with Arun Agrawal’s claim about the logic of environmentality—that “widespread involvement in specific regulatory practices is tightly linked to the emergence of greater concern for

the environment” and to transformations of environmental subjectivity.³⁹ One might advance a similar claim that farmers’ participation in organic certification schemes helps cultivate the consciousness and knowledge crucial for becoming “organic by design.”

These organic designs—in which farmers must demonstrate the steps they have taken to become certified and the practices they have internalized through formal training—leave little room for human agency understood expansively as “how we work upon the world.”⁴⁰ But compliance with organic standards is not the sum total of agentive expression available to farmers in their efforts to become “organic by design.” Nor are farmers who are “organic by default” without consciousness and knowledge. What then does becoming organic in Nagthari entail? How does one navigate practices that are organic by default and those that are organic by design? How are these categories socioculturally mediated within the village itself? In the midst of these contemporary relations among cultivators, soil, and compost, what forms of agrarian subjectivity are produced, and what meanings and identities generated?

Much of my time in Nagthari was spent observing and sometimes participating as people cut, gathered, and carried grass; fed and milked livestock and cleaned their stalls; drove plows, planted seeds, weeded fields, and harvested grains. As I proceeded among homes, barns, and fields, the cyclic movement of basic agricultural inputs quickly became apparent. Those who kept livestock mixed crop residues of rice, finger millet, barnyard millet, and other grains that had been dried and stored for months with freshly cut green grasses and leaves to feed their cows, bullocks, and buffalo; they tied and suspended the leaves and twigs of trees for their goats. Men and, especially, women gathered these animals’ manure at least twice each day and piled it, mixed with the soiled straw from livestock stalls, in a heap or pit. In some households, they also added manure to concrete compost pits constructed during World Bank development projects or under the Organic Board’s auspices. Several weeks



Women return from common lands on mountain slopes, carrying bundles of grass for domestic cattle. Such practices, frequently marked by gender as well as by caste and economic position, have been represented in development discourses as ecologically destructive. But the intertwined labors of caring for domestic ruminants and crops is also a crucial condition of possibility for maintaining soil fertility on steep and unirrigated mountain terraces. Jaunsar Bawar, March 2008.

before, or sometimes after, sowing, farmers and laborers gathered decomposed manure and carried it out to spread on the fields. As I observed how people used grasses, fodder, dung, and compost to produce Nagthari's soils—which themselves produced more crops, livestock, and manure in return—I could understand why many applied the label “organic by default” to hill agriculture. Less clear to me, however, were the implicit associations of “default” with neglect, isolation, ignorance, and lack of consciousness or agency.

The management of soil fertility in Nagthari, as elsewhere in the Himalaya, hinged on maintaining livestock. Of the twenty-four Nagthari families with whom I conducted in-depth, structured interviews, seventeen had at least four cattle (including cows, buffalo,

bullocks, and their calves) and twenty-one kept goats. These families dedicated enormous amounts of time and labor to caring for domestic ruminants.⁴¹ Although a number of families applied urea to their fields, none could imagine farming without *gobar khād*—a term that literally means cow manure but is used broadly to refer to the manure of all livestock.

Ethnographic fieldwork in the village of Nagthari, then, brought into sharp relief some of the disjunctures between the discourses about mountain agriculture and people that I encountered in the offices of bureaucrats and the lived experiences of cultivation. Considerable daily labor was dedicated to gathering leaf litter and plant residues, but these practices involved much more knowledge and deliberation than representations of them might suggest. In the process of selecting the trees to lop or grasses and crop residues to gather, Nagthari cultivators drew nuanced distinctions among the properties of different leaves and plants, the ways in which livestock digested them, and the differing qualities of manure that these animals produced as a result.

While all families emphasized the necessity of *gobar khād* for agricultural practice, so too did they differentiate among its qualities and effects. Goats, in particular, emerged as animals whose manure was particularly prized. I discovered this initially from Kishan, who belonged to Nagthari's scheduled-caste Kolta community and operated a small water mill near the village. As he described his land, work, and livestock, Kishan's reserved tone became suddenly animated when he told me that one basket of goat manure was equivalent to two baskets of cow dung and that, moreover, a field enriched with the manure of goats would produce far higher yields. These comments were echoed by others, who sometimes referred to cow dung as *mōta* (thick, fat) *gobar* and described how its thicker texture meant that it took longer to decompose, mix with the soil, and release its nutrients to growing crops.

For all Nagthari's cultivating families, *gobar khād* was the pri-

mary means of improving soil fertility. Though some families supplemented this with urea, they applied it selectively and often sparingly, usually only to their maize, but sometimes also to wheat, ginger, and oilseed crops. Many of those who acknowledged using urea, however, also decried its effects, describing how it dried out the earth and caused diseases in plants and domestic livestock that fed on fodder from crop residues. Usha Devi, an elderly Rajput widow, explained that her family, like several others, purchased urea to apply to maize. But she did so with some reservations: "Urea is a strange thing. It gives an increased crop of maize, but the grass and cattle catch disease with this urea; therefore, urea is used less. Now people say prepare organic manure, so we prepare organic manure."⁴²

The preparation of organic compost was indeed promoted in Nagthari, but Usha Devi offered insights from her own experience about how socioeconomic changes have reshaped family structures and, with them, the viability of agrarian livelihoods and organic agriculture specifically. Sitting in a small courtyard in front of the home she shared with her only son and daughter-in-law, both well into middle age themselves, she got up and called us inside to proudly show us photos of her great-grandchildren and of her grandson, now a driver in Dehradun, as a child. Reflecting on these photos and on the migratory journeys that had dispersed her own family, she spoke of some of the resulting changes in village life:

Now the men in the villages have started going out to join service; their wives go along with them, and only old mother and father are left in the village. They are illiterate and unable to manage alone, so they grow only a few crops. . . . Earlier, there used to be many more crops, but now people are educated, they go away from the village for service. . . . Everyone has become officer—they don't know the agricultural work. In every village there is a school; all the children are studying.

Boys are studying, even the girls are studying. They join a service, work there for three, four years, and get married. The husband leaves the village, and along goes the wife. Who cares for the old parent living in village? There is hardly anyone who gives any money to his parents. We are eight people in the family, but out of eight, five members are out of village.

The fragmentation of joint families brought about by increased levels of education and the lure of service jobs in urban centers was a facet of life in Nagthari often mentioned by elderly family members who remained. Some associated this fragmentation with the increased reliance on urea, as families no longer had sufficient labor to care for domestic animals and thus lacked sufficient manure to apply to their fields.

In my own interviews with Nagthari's families, however, though there was some association between larger households and greater numbers of livestock, the two were only weakly correlated. But if caste is taken into account, some differences in the relation between household size and livestock (cattle) holdings do reveal themselves. On the basis of my interviews with Rajput families, I found that the average household size was between five and six members and an average of five cattle. Among Kolta families, while the average household was over 20 percent larger (between seven and eight members), the average number of cattle maintained was still five. In most cases, I found, Rajput families maintained more livestock than Kolta families of the same size. This suggests that family size alone is certainly not the only, or indeed the primary, factor determining the number of livestock kept by one household.

Of more relevance, it seems, is the way that labor is mobilized within and outside the household. For example, as in Usha Devi's case, it may be possible for Rajput families with only two cultivating members to maintain a reasonable number of livestock (her family had two bulls, one cow, one calf, and approximately thirty

goats) by engaging the labor of Kolta families and compensating them with grain or cash. Thus, Kolta families, who often work as laborers for others in addition to carrying out their own household and agricultural work, have fewer options for mobilizing labor outside the household. The extra demands on the agricultural labor of Koltas, therefore, meant that they had less time to devote to cultivating their own fields and caring for their own livestock. On the other hand, Nagthari's dominant-caste families, capable of tapping outside labor, were better able to meet the extra labor requirements that are widely understood to be necessary for organic cultivation—not only to maintain domestic livestock, but also for tasks such as weeding and pest control. Significantly, though six of the seven cultivating Rajput families with whom I conducted survey interviews affirmed their exclusive commitment to organic agriculture, only two of fourteen Kolta families did the same.⁴³

Despite these substantial differences in the extent to which they described themselves as practicing organic farming, all families in Nagthari applied some form of composted manure at least once per year, and some applied it for both their *kharīf* (summer) and *rabī* (winter) crops. How much was applied to any given field depended first on its availability and then on variables such as the condition of the soil, the previous crop grown in the field, and the crop to be sown. Many families chose to apply it for both *kharīf* and *rabī* crops, while others applied it only for the *kharīf* crop. This did not seem to be entirely a result of its availability, as some of the families with large numbers of livestock applied it only once per year, in the *kharīf* season. Quantities applied, therefore, varied dramatically, from three baskets (about 150 kilos, or 330 pounds) to as many as forty to fifty baskets (2,000 to 2,500 kilos, or 4,400 to 5,500 pounds) per field. Some families chose not to apply manure to certain crops, such as pulses and finger millet, and they would cultivate relatively more of these crops if they lacked adequate manure. Because, however, the root structure of finger millet altered soil texture, leaving



Gobar khād is applied to fields several weeks before sowing. Here it lies on a terraced plot cultivated by one of Nagthari's low-caste Kolta families. Jaunsar Bawar, May 2008.

large clods of soil, many noted that manure had to be applied before planting wheat in a field where finger millet had been harvested. On the other hand, those with ample supplies of manure were able to cultivate manure-intensive cash crops such as ginger and taro.⁴⁴

But not all gobar khād, I learned, is considered equal. Just as the qualities of cow and goat manure were differentiated, so too were distinctions made between preexisting composting practices and introduced techniques for preparing jaivik khād. Indeed, the fluency with which some of Nagthari's residents spoke of jaivik khetī and jaivik khād, while many others expressed confusion about the meaning of the term *jaivik*, further indicated how social and caste relations mediate the ability to become organic. The compost pit was an important marker of such processes of mediation, for it was often around the pit that larger social boundaries and distinctions were drawn. Invariably during my fieldwork, on any initial visit to a

village registered with the Organic Board, I would be shown compost pits that had been constructed under the board's auspices. This was particularly true if I was accompanying an employee of the board. These pits were a potent symbol testifying to participation in the organic program. As farmers cupped handfuls of compost, demonstrating the "tea leaf" texture of vermicompost or explaining their discovery that the compost could destroy the larvae of harmful insects, these pits and the rich microbial worlds they contained provided material affirmation of cultivators' efforts to become, or be, organic. In this respect, twenty-first-century compost pits signified in much the same way as nineteenth-century irrigation canals: both provided potent material symbols, recognizable to state officials, of individual efforts to improve agricultural land.

The iconic, even fetishized status of these pits was reinforced to me one day by the director of a Dehradun NGO that operated several rural development projects in Kumaon, Uttarakhand's easternmost region. She remarked with frustration and exasperation that the Agriculture Department had informed her that the construction of vermi compost pits by farmers wishing to become organic was necessary even to be considered for participation in the state's organic program. The pits, in this sense, not only were a marker of organic status or intention to become organic, but also more broadly signaled engagement with state development and the technologies it offered. Indeed, the need to demonstrate such engagement put pressure on master trainers, employed by the board to promote and offer training in organic agriculture at the village level. Ram Lal, the master trainer for several villages in Dehradun district, including Nagthari, relayed his difficulty in meeting the state Agriculture Department's annual construction quota of seventy pits. The problem, he explained, was that the department subsidized only part of their cost, leaving cultivators themselves responsible for the remaining outlay of 1,100 to 1,500 rupees per pit. As compost pits became a required symbol of being organic by design, their



This mural on a building in the Rawalnagar mandī (market), where many Nagthari residents sell their cash crops, describes a range of composting methods that point toward a central word, *jaivik* (organic). Doon Valley, October 2008.

construction was thoroughly bureaucratized in the form of targets and quotas against which the performance of master trainers was assessed.

Nagthari residents who had constructed compost pits took care to describe the ways in which their current practices differed from earlier ones. Girish, a middle-aged man belonging to one of the village's lower castes, described local economies for *gobar khād* and fodder as he explained that he lacked livestock but would obtain manure in exchange for the residues of paddy, finger millet, and other crops that could be used as livestock fodder. Having constructed compost pits, he told us, "We use only this manure after preparing it properly in the pit, not simply accumulating it in one place." Similarly, Sushil, a young man belonging to one of the few

Kolta families that possessed a pit, recounted how his family learned about methods of composting from the members of the women's self-help group. "Before that," he said, "we just accumulated the cow dung. Now we keep it in a pit. We don't put cow dung into the field but wait for six to seven months. . . . Before this, the grass remained as it is; now in the pit it gets decayed. Before that we just accumulated cow dung at any place." For these farmers, using constructed compost pits not only distinguished their current methods from past ones, when they collected manure in an open heap, but also separated their pursuit of organic designs from the practices of those who remained organic by default. In Nagthari, organic agriculture acquired a meaning that, for some cultivators, extended beyond the physical work of cultivation or the material conditions of rural development, creating new opportunities for fashioning agrarian identities in concert with Uttarakhand's distinctive claim to modernity.

Others, however, were more uncertain and ambivalent about the meaning and practices of *jaivik khetī* (organic farming). "I do not know what do we understand by this word. Had I been educated, I might perhaps know its meaning," explained Manto, a young father of Kolta caste. We sat in the courtyard outside his home in what was known locally as the *barijan basti*—an area of Nagthari, set apart from the dwellings of Rajputs and other higher castes, where Koltas lived (Brahmins lived in a separate village entirely). As Koltas, in addition to cultivating their own fields, Manto and his family often labored in the fields of higher-caste Rajputs and Brahmins. His words "had I been educated" seemed to corroborate the views of Uttarakhand's civil servants who sought to impress on me that organic agriculture is, at its core, an enterprise that demands formal education and revealed how organic agriculture, or *jaivik khetī*, held little meaning for some of Nagthari's cultivators. Though he did not count his family among those Nagthari residents who participate in the board's organic program, Manto nonetheless was vehement

about the importance of gobar khād for agriculture, saying, “We used gobar khād before we used urea.” He went on: “We can do without urea, but gobar khād keeps the fields in good condition. Actually, urea destroys the land.” Manto was not alone in expressing uncertainty about the meaning of jaivik khetī even while remaining adamant about the importance of livestock manure for his land.

His experience, and that of others like him, demonstrates that what may appear to be modest differences between existing composting practices and newly introduced technologies become consequential axes for distinguishing those who are “organic by default” from those who are “organic by design.” Thus, the recent advent of organic agriculture does not hold out the promise of new forms of organic modernity to all equally. In Nagthari, those cultivators who have long been most marginalized through their caste and socio-economic position seemed particularly likely to be left out. As is the case with so many other development projects, Uttarakhand’s program of organic agriculture unfolds on a stratified social landscape and may work to further stratify it.

Other families in Nagthari, including those belonging to its dominant Rajput and Brahmin castes, also regarded organic agriculture’s potential to represent long-standing cultivation practices in new ways and forge new relationships with state officials with a degree of ambivalence. In addition to the construction of compost pits, some dominant Rajput families in Nagthari emphasized the importance of specific techniques and methods of preparing compost. For these families, discussing the meaning and entailments of organic farming offered an opportunity to recount what they had learned through board-organized training programs. Toward the end of the monsoon season, late in the afternoon one day, I sat with Rawatji and his wife, Amrita Devi, as they described in detail the crop protection and composting techniques they now used as part of the organic program. Recounting the preparation of a liquid compost, taral khād, they began to debate and dispute both the

quantity of water needed to dilute the mixture and the units of measurement. Amrita Devi protested that the proportions her husband was detailing would yield too strong a mixture, creating a “poison,” and that this is what they had been told in training they had received. Rawatji replied vehemently: “No, no, there is nothing in that training. I know that. What training will they give? Will they give a better training than us? The stronger the mixture, the sooner the insects will die. It [the amount of water] should not be more than eight kilos.”

This disagreement between a long-married couple reveals the complex place of training in the formation of new agrarian subjectivities among Nagthari’s residents. In many ways, Rawatji and Amrita Devi were the greatest proponents of organic agriculture in Nagthari through their leadership within the village’s women’s self-help group and Rawatji’s political maneuvering in Dehradun. Opportunities to receive training were clearly considered integral to *jaivik khetī* and affirmed their close relationship with the Organic Board and the state government. Many Kolta families, on the other hand, had not received the training afforded to Rawatji, Amrita Devi, and other dominant-caste families in Nagthari. These Kolta cultivators told me that instead they relied on ash from their hearths to combat crop pests. The agrarian practices used by Koltas who had not gone through training programs were thus seen to be an artifact of a lack of education, and made them far less likely to be recognized by the state as endowed with agentive capacities. By contrast, the explanation of Rawatji and Amrita Devi of the method for preparing *taral khād* performatively illustrates how becoming “organic by design” relies on the ability to express what state officials would recognize as agency—knowledge, consciousness, and deliberate action. Like Girish and Sushil, they found in the opportunity to become certified organic the chance to redefine their own agrarian identities—something that the film *Rawatji* commissioned

to demonstrate villagers' familiarity with composting methods further affirmed.

But this newfound agrarian subjectivity is clearly double-edged, for just as becoming "organic by design" affords opportunities to fashion new forms of self-identification, so too does it enfold cultivators in power-laden relations of expertise, knowledge, and capital with the Uttarakhand state through the Organic Board's extension workers, training programs, and composting technologies. This dimension of agrarian subjectivity is, as their conversation revealed, fraught with an ambivalence that surfaced nowhere more clearly than in Rawatji's sharp outburst: "What training will they give? Will they give a better training than us?" For even the most committed proponents of *jaivik kheti*, the promise of organic modernity not only offers newly recognized forms of agrarian agency, but also entails new forms of subjectivity.

In Nagthari and elsewhere in the Himalaya, agrarian agency has long been treated as negligible and as politically and historically conditioned by the region's position on the margins of India's projects of agricultural modernization. This legacy is clearly evident in contemporary distinctions between "organic by design" and "organic by default." As cultivators adopting the methods and compost technologies associated with certified organic agriculture come to be seen as newly agentic, progressive, and conscientious stewards of sustainable agriculture, everyday practices such as the collection of fodder and dung are cast as lesser forms of agrarian agency—"organic by default." These distinctions between "default" and "design" may not go quite as far as the commissioner of Meerut, who described the work of manuring land as merely "ordinary" in the mid-nineteenth century. But they are not far off that mark.

Becoming organic by design requires the kinds of capital, energy, and enterprise that nineteenth-century officials used to distinguish cultivators who invested in the construction of irrigation

canals from those who merely manured their fields. In spite of the fact that organic agriculture was adopted and promoted by the state government because it was taken to be more culturally and ecologically suited to the development needs of Uttarakhand's hills, expressions of human agency, intention, and purposiveness continue to be parsed and evaluated in relation to its interventions. As this happens, certain forms of agrarian practice come to be recognized as agentive when they align with development projects undertaken through state and multilateral capital, infrastructure, institutions, and expertise. Expressions of agrarian agency, and the ways these are varyingly recognized, ignored, and misrecognized, are thus crucially constitutive to processes of becoming organic. But organic quality is also produced through other kinds of entanglements of material infrastructures and practices with different human capacities. As we shall see in the next chapter, in the Doon Valley, infrastructures of organic certification and contract farming call forth, reconfigure, and ultimately come to depend on the mobilization of sentiments of trust.

TWO

The Limits of Transparency and the Farming of Trust

In the summer of 2008, as crops matured in farmers' fields, some 4,500 blank farmers' daily diaries lay neatly stacked in the foyer of the Uttarakhand Organic Commodity Board awaiting distribution to organic farmers across this largely Himalayan state in northern India. In these diaries, organic farmers registered with the board were supposed to document their agricultural activities, such as procurement and treatment of seeds, cleaning of agricultural tools, source of livestock feed, and use of medicines, as well as which inputs were applied, in which quantities, and at which times. In other regions of the world, writing practices have long been woven into agricultural life,¹ but in Uttarakhand diary keeping and the larger regime of record keeping of which it forms a part only recently became a routinized element of agrarian practice.

Farmers' diaries are the foundational document of organic certification. Individual farmers registered with the board are supposed to update these diaries regularly. In this sense, farmers' diaries, like the compost pits discussed in the previous chapter, are an important means through which organic farmers demonstrate agrarian

agency, expressing their status as “organic by design.” By keeping these diaries, they engage in a practice recognized as agentive by the state government, certification agencies, and private-sector buyers, among others. Unlike every other kind of certification document, the diaries remain with the farmer at his or her home, where they are intended to make the everyday work of organic farming transparent, classifiable, and translatable. On them rests an elaborate scaffold of certification documents, institutions, and procedures that connect cultivated fields in Uttarakhand’s Doon Valley with bureaucratic and corporate offices in Dehradun, the state capital, and in Delhi and beyond. As the primary written record through which compliance with nationally and internationally defined organic standards can be monitored and evaluated, farmers’ diaries are linchpins in the system of organic certification.

So great was the level of detail required by these diaries that Dr. Sharma, technical adviser for Hira Foods, the company that procured organic basmati paddy through contract farming with Doon Valley farmers, described them to me as a “mirror of the field.” Dr. Sharma’s analogy resonated uncannily with Foucauldian understandings of diary keeping as a key technology of the self.² Early confessional diaries illustrate this notion: “Puritans replaced Catholic confession to a priest with the confessional diary, an account book of one’s state of sin. . . . The ‘work’ of the journal was precisely to effect this linkage of self with biblical standards of measurement.”³ Like the seventeenth-century confessional diary, Uttarakhand’s twenty-first-century farmer’s diary functions as both a mirror and a metric. Intended to capture and reflect agrarian practices, the farmer’s diary is a documentary thread linking the organic farmer to a wider world of organic standards. Like the early confessional diary, it is supposed to serve as an “account book” of an individual farmer’s “organicness.”

When I first encountered this certification apparatus, it appeared to exemplify a modernist project of legibility: its mechanisms doc-

Limits of Transparency and Farming of Trust

DETAILS OF BIO-COMPOST

जैविक खाद का विवरण

Plot No. खेत संख्या	Crop/ Variety फसल / प्रजाति	Area (Hectare) क्षेत्रफल (हे०)	Name of compost/ Bio-agent जैव-नयितृक के नाम	Source (Made on farm/ Purchased from outside) स्रोत (परक्षेत्र पर बना / बाहर से खरिदा गया)	Address of Seller वकिरेता का पता	Method & Date of Application जैविक खाद डालने की तथि तथा वधि	Quantity (Quintal) मात्रा (कुनतल)	Total cost (Rs.) कुल लागत (रु०)

Reproduction of a sample page from a farmer's daily diary. Farmers' diaries were crucial documents in organic certification efforts and came to be objects—not just instruments—of certification inspections. Adapted from Uttarakhnad Organic Commodity Board.

ument, quantify, and classify both agrarian practices and farmers themselves.⁴ Its efforts to enroll farmers as participants in this process through the diaries also seemed to illustrate governmentalized logics more recently associated with neoliberalism and audit.⁵ Such commitment to transparency in organic cultivation was initially lauded by food scholars: “In organic agriculture the fetishized abstraction of food is intentionally unveiled, bringing the complex filaments of food provisioning explicitly into focus. That is, the organic agro-food network invites scrutiny of its constituent metabolic relations, an interrogation that follows from its organizational and ethical premises of connectivity, in contrast to the punctualization or black boxing characteristic of industrial agro-food networks.”⁶ More recently, however, the expansion of international and national

organic certification regimes has been described as a “neoliberal trade strategy” and a Weberian “extension of revised forms of bureaucratic rationality through a national and transnational institutional matrix.”⁷ At the same time, the instruments and practices of certification—such as documents and inspections—make it consistent with audit cultures.⁸ Audit is intended to establish accountability and trust by affording “external visibility of internal processes,” often by providing third-party verification of compliance.⁹ Indeed, regulatory agencies that promote organic certification schemes in Europe and the United States, which together account for 84 percent of global retail sales of organic food, frequently assume that certification and accountability guarantee public trust.¹⁰

The qualities of bureaucratic rationality and neoliberal governmentality associated with certified organic agriculture, however, are often at odds with established forms of sociality and morality in agrarian settings and food systems. In fact, fair-trade and organic certification may undermine historically situated moral economies of production.¹¹ As consumers, “we are continually asked to place our trust in standards and certification processes at the expense of our trust in interpersonal relationships and daily interactions informed by wisdom locally generated and grounded in place.”¹² Thus, while regulatory authorities hail certification as the guarantor of public trust in organic agriculture and other domains, the everyday practices of certification may displace or erode forms of sociality and morality that surround production relations.

As organic agriculture becomes established under state government auspices in the Doon Valley, trust is neither solely emergent in personalized relations and situated moral economies nor simply an outcome of certification processes. Instead, practices of organic certification condition and reconfigure trust, and, paradoxically, trust also sustains practices of certification themselves. During my fieldwork in 2007 and 2008, farmers’ diaries, perhaps unsurprisingly, did not prove to be mirrors of the field. The diaries did not

reflect actual agricultural practices, for they were often not filled in by farmers but rather completed by master trainers who worked for the Organic Board.¹³ Across a range of bureaucratic settings, audit cultures and practices rarely achieve transparency; instead, the instruments intended to yield it often produce opacity and ignorance.¹⁴ Though similar observations could also be made about organic certification in the Doon Valley, they do not capture the whole story. The apparent failure of certification to produce transparency not only generated impulses for more expansive and intensive forms of surveillance, but also meant that certification inspectors and master trainers came to rely on moral evaluations of farmers and on what they described to me as *viśvās*, or trust.

As these officials grappled with the fact that documents were both vitally important and frequently incomplete, and with the impossibility of monitoring all the fields of every farmer, many came to understand organic agriculture as a moral enterprise and to describe organic farming as *viśvās kī khetī*, the “farming of trust.” Precisely because documents were central to certification and the processes for producing them were limited and imperfect, sentiments of *viśvās* (trust, belief, or faith) became integral to the making—and the meaning—of certified organic farming. In the Doon Valley, then, organic fields are also moral fields and *viśvās* is a managerial sentiment necessary for sustaining certification.

“For a Commercial Way, You Have to Have Some Standards”

The entrance hallway of the Agricultural and Processed Food Products Export Development Authority (APEDA), a central government agency tellingly housed within India’s Ministry of Commerce, showcases a range of products—from tea to pickles—that are exported from India to other parts of the world. Though agricultural products from India have circulated around the world for several millennia, these days their global trade is subject to standardization and regu-

lation at multiple levels, from the international and national to the local. In the last chapter, I noted that Dr. Verma, head of APEDA's division on organic production, maintained that much agriculture in India was effectively organic because it was based on traditional cultivation practices. She did so not only to suggest that India was, in some ways, naturally suited to take up organic farming but also to mark the difference between traditional cultivation and the kind of organic agriculture that APEDA and its affiliated agencies promoted and regulated. In the 1990s, she said, the government of India saw the growth in international markets for organic products and decided to "go for it in a commercial way." "For a commercial way," she emphasized to me, "you have to have some standards."

In Dr. Verma's account, then, organic standards are closely tied to the development of commercially oriented organic agriculture. When farmers in Uttarakhand register with the UOCB, they agree that they will cultivate their crops in accordance with India's National Programme on Organic Production (NPOP), which sets the standards for organic production and certification. The NPOP framework came into being in October 2001 under the Foreign Trade and Development Act and governs all facets of organic production. It creates parameters for inspection and certification by stipulating standards for crop production, animal husbandry, and food processing, handling, labeling, storage, and transport. India's NPOP framework is part of a further network of equivalence whereby national standards for organic production are recognized as equivalent to those in other countries. Thus, for example, in 2006 India's NPOP system received equivalence with European Commission regulations on organic production and labeling, meaning that organic products certified in India, by certification agencies accredited by APEDA, can be exported and sold as organic in the European Union. India reached a similar agreement in 2006 with the United States Department of Agriculture (USDA). According to it, organic products from India that are certified according to Amer-

ican National Organic Program (NOP) standards can be exported and sold in the United States using the USDA's organic seal and logo along with India's own "India Organic" seal. Such recognition opens regulatory doors to new trade opportunities and lucrative export markets for organic foods.¹⁵

Farmers in Uttarakhand who register with the state's Organic Board are required to cultivate their crops in accordance with NPOP standards and to maintain a record of their practices in the farmers' daily diaries. Since most farmers cultivate less than two hectares (five acres) of land and because the costs of certification would be too much for them to bear on their own, individual farmers join farmers' federations. As the bedrock of group certification, farmers' federations constitute internal control systems (ICSs) that are mandated under national and international protocols for organic certification. India's NPOP standards devote considerable attention to organic group certification through internal control systems. ICSs have been adapted to smallholder organic agriculture from audit procedures more typically associated with financial accounting and public management, where they provide organizations with in-house mechanisms for ongoing monitoring, measurement, and surveillance. In the Doon Valley, there are four farmers' federations, each of which had between three and four hundred farmers in 2007 and 2008.

The Organic Board's own in-house or "internal" inspectors conducted inspections of each farm twice per year, at which time they reviewed the farmer's diary and other farm-level documentation as part of the ICS. These inspectors then prepared reports that were forwarded to a third-party certification agency. Once a year the third-party inspectors reviewed the ICS inspection reports and other documents and prepared risk assessments that identified which farmers were at greatest risk of noncompliance. Third-party inspectors conducted their own inspections on the basis of these assessments, focusing their efforts on those farmers who, in the words

of one inspector, were deemed to be “risky.” If certification was granted, the federation—not the individual farmer—qualified as certified organic in India and, because of harmonization agreements, in other national jurisdictions as well. Thus, what enables regulators to declare organic production in such vastly different agrarian settings equivalent is not only shared standards but also recognized infrastructures of audit, founded on document keeping and inspections, to enforce them.

Configuring Trust through Audit and Certification

As a technology of government that proliferated in the late twentieth century, audit brings transparency and trust into relation with each other. Built on mechanisms that afford visibility and legibility, in which document keeping and inspections figure heavily, audit is often understood as a key element of transparency projects. But transparency is not the endgame of audit. Rather, the transparency produced through audit is supposed to be instrumental to achieving other normative outcomes, such as accountability and public trust.¹⁶ While audit culture is often thought to have emerged because of a “general decline of trust,” audits themselves paradoxically demand that trust be placed in their procedures and conclusions.¹⁷ Thus, audits are not simply “trust-making” regimes designed to enable widespread public trust,¹⁸ but are also internally premised on trust themselves.¹⁹

Trust has long been understood as a sentiment kindled through personal relations and forms of solidarity forged over a period of time, often through institutions and practices involving the circulation of money or material objects and couched in terms of kinship, friendship, exchange, reciprocity, and obligation.²⁰ Trust is frequently conceptualized as a synthetic or binding force in society; influential bodies of social and political theory treat it as the basis of social capital, associational life, markets, and even democracy.²¹ Beyond such functionalist accounts, trust—and its reverse, betrayal—

may be understood as historically contingent and culturally conditioned “forces of production.”²² Though I remain interested in tracing what trust, or *viśvās*, enables and does, through my research I became even more intrigued and puzzled by what it means and how it comes to be. On numerous occasions, certification inspectors and master trainers described organic farming to me as *viśvās kī khetī* or *viśvās walli cheez* (something to do with trust): the importance they attributed to *viśvās* was my cue to explore how it emerges and what it means in processes of certification.

Viśvās is usually translated to English as trust, faith, or belief. Woven through everyday speech and popular culture in Hindi-speaking north India, it shares with its English analogues a resistance to precise or definitive specification.²³ Trying to pinpoint its meanings lays bare “the difficulty of putting into words what is clearly a matter of feeling.”²⁴ For example, the *viśvās* that a healer inspires in a patient is understood as indispensable to the healing process and may be distinguished from *andha viśvās*, or “blind beliefs.”²⁵ Here, *viśvās* emerges “below the level of consciousness, [as] the patient is busy registering how well the healer opposite him fits into his culturally determined idea of the ideal healer.”²⁶ In the realm of friendship, *viśvās* conveys intimacy and is associated with love or relations that are enduring and sometimes ritualized.²⁷ Under these differing conditions, *viśvās* is personal and relational, a sentiment inspired by and placed in people.

The inspectors and master trainers whom I came to know conveyed a sense of *viśvās* that does not conform to these framings. *Viśvās kī khetī*, or “the farming of trust,” as they called it, was neither understood in terms of personal relations nor wholly inspired by farmers who conformed to a “culturally determined ideal.” On the contrary, citing their often brief and cursory interactions with farmers as well as the inevitable constraints on their power to monitor farming practices, certification inspectors and master trainers invoked *viśvās* and trust as a way of managing these limits. Trust

need not arise only under conditions of long-standing personal relations or widely held values. According to the sociologist Diego Gambetta, trust may also arise as “a tentative, intrinsically fragile response to our ignorance.”²⁸ “To trust,” then, “is to risk betrayal,” writes Parker MacDonald Shipton with regard to practices of transfer, exchange, and entrustment among the Kenyan Luo.²⁹ In addition to the ever-present potential for breach latent in trust, in many instances trust also emerges out of and remains inextricably tied to uncertainty and ignorance.

This is relevant for audit and certification because indeterminacy and lack of information are recognized to be crucial features of both processes—so much so that audit work itself may amount to the “certification of the unknowable.”³⁰ The very practices of audit designed to yield transparency and certainty may, in fact, produce illegibility, opacity, concealment, and ignorance.³¹ As a kind of audit culture, organic certification introduces into Uttarakhand a form of institutional power that attempts to make newly transparent and legible the agricultural practices of the region’s aspiring organic farmers. In a milieu where such outcomes were rarely achieved, certification inspectors and master trainers came to depend on *viśvās* as they evaluated not only the organic qualities of crops and land but also the moral qualities of farmers—their honesty and commitment. *Viśvās* thus emerged as a necessary and crucial response to the kinds of opacities and ignorance that proliferated in organic certification, generated by precisely those mechanisms of audit intended to yield transparency and knowledge.

Writing the Field

In the work of organic certification, elaborate arrays of documents are intended to render agrarian practices legible as they standardize the meanings of *organic* within and across regulatory jurisdictions. Producing and maintaining written documentation—from farmers’ diaries and farm files to actual farmers’ lists, inspection reports, risk

assessments, and evaluations—constitute much of the work of organic certification in the Doon Valley. These documents pass through the hands of many different people: farmers, master trainers, farmers' federations, private-sector buyers, and the board's internal inspectors as well as inspectors from a third-party certification agency. As they move among these parties, the documents are supposed to make the work of organic agriculture legible for certifying authorities within the ICS and external agencies.

Of all the records in this elaborate regime of certification, the actual farmers' list (AFL) is the quintessential example of the project of legibility.³² A continually changing spreadsheet, the AFL presents in succinct fashion all the production details for every farmer registered with the board. Each row of the spreadsheet represents an individual farmer and details their agricultural production, including the total cultivated area and expected yield of each crop variety in each year since conversion, along with the date when the farmer was first enrolled in the ICS. The Organic Commodity Board's staff members generate and maintain the AFL at their headquarters; during internal inspections, they update the AFL with the date of the inspection, the initials of the inspector, and any observations of noncompliance or risks that could possibly compromise organic status. Though farms are geographically dispersed and each farmer's cultivated areas are often small and noncontiguous, the AFL makes it possible for certification inspectors, master trainers, managers, and government bureaucrats to know who is producing how much of what crop and where in any given season.

It is tempting to see this sort of documentation as a contemporary phenomenon, even one associated specifically with neoliberalism, but in this region of the Indian Himalaya land surveys and revenue assessments were introduced in the mid-nineteenth century. As was evident in the preceding chapter, the monitoring, surveillance, and documentation of agricultural land have long been part of the way in which agriculture (and people) are governed.³³

The novelty of certified organic agriculture's documentary infrastructure lies in its attempt to enroll farmers as participants in making farming practices legible. A leaflet explains to farmers that "the documentation of all agricultural activities is an important point of certification process" and explains the task of maintaining a farmer's diary as follows: "The diary contains the farmer's full name, address, code, total area, and organic area. It also contains all the activities relating to farming such as ploughing of the field, sowing of the seeds, harvesting, quantity of seeds, expected production, actual production, manure used and quantity of insecticides etc. These details are filled daily or weekly. During the inspection, these details are carefully examined by the inspector. Farmers are expected to fill this diary carefully and with responsibility."

Farmers responded to these efforts to enroll them as participants in producing documents in a range of ways. Some embraced practices of document making willingly. Comparing organic certification to a degree certificate, a large family of brothers, several of whom had retired from the Indian army, characterized organic farming as *ām kisān se alag khetī*, "cultivation different from the common farmer's," and emphasized the requirements of documentation as a mark of their distinction from those who, transformed by the Green Revolution, had adopted high-yield seeds and fertilizer packages. For them, completing their farmers' diaries did not neutrally fulfill a bureaucratic requirement for certification but became a way of fashioning wider social and symbolic meaning. In a setting where literacy practices do not saturate agricultural life, the farmers' diaries proved to be an important venue for displaying particular literacy skills that facilitated broader assertions of social and cultural distinction.³⁴

For other farmers, diaries were important because they effected sought-after linkages to the state. One afternoon I sat with Nisha Chauhan and her mother, Usha Devi, discussing organic certification. Because her husband was involved in trucking and sand min-

ing in the Doon Valley in addition to farming their two hectares (five acres) of land, Usha Devi had spent much of her married life raising their four children and maintaining her home and livestock on her own. Of organic certification, she remarked to me, “What is there to understand—we got it and that is enough. Now we know that we are organic farmers, what else is there to know about it?” At this point, her daughter Nisha, who had recently graduated with a degree in business administration, interjected: “Proof is necessary. . . . This is a government rule and you have to follow it. Government is emphasizing on the benefits of organic farming and giving several facilities. . . . If we have this certificate we can attend the meetings, otherwise not, and you have to return home without attending the meeting.” Showing her familiarity with the way that paper artifacts may confer status, not to mention their necessity for receiving other kinds of benefits, she went on, “This certificate is like a passport and visa. Farmers are getting so many facilities from the government.” Her analogy highlighted the ways in which official documents confirm identity and afford opportunities for mobility—as passports and visas enable travel across national borders, organic certification permits farmers to participate in far-flung domestic and global markets.

Through the literacy practices that certification requires, organic agriculture entails “writing the field” as much as cultivating it. It is significant that some organic farmers also held, or had recently retired from, positions as schoolteachers or officers in the Indian army or bureaucracy. A number of others had some experience working in banks, insurance companies, and businesses in Dehradun. It was usually these farmers who completed their diaries consistently, which suggests that experience with other genres of writing and record keeping helped some farmers “write the field” more readily than others. Indeed, although basic literacy rates are quite high in Uttarakhand, not all farmers were equally likely to complete their diaries.

Limits of Transparency and Farming of Trust

In practice, not all organic farmers were skilled in keeping their diaries, nor were they all equally inclined to view filling out farmers' diaries as a worthwhile exercise. Laxmi, a widow with two small children, told me that she had received a diary from employees of what she called the organic department. She explained: "The employees come, they fill up whatever is required, sign it, and go away. We don't write anything in it. We only sign it." Gita, who had been married just a few months when I met her, corroborated the way in which employees of the Organic Board would complete farmers' documentation. She recalled her father-in-law's response when asked to enroll in the organic basmati export program: "My father-in-law said no, we will not do it, who will do it [complete the diary]? . . . They said that your daughter-in-law can do it. They said that you simply go to the meetings, we will fill up all the forms, but I did not do it." Unlike those who saw in farmers' diaries the chance to refashion their agrarian identity, Gita, Laxmi, and numerous others like them were indifferent toward or minimally engaged with them. For them, the farmer's diary functioned not as a technology of the self or an account book of organicness, but instead as a place where board officials narrated organic status.

Writing practices are at the heart of what it means to be certified organic. Farmers become disciplined adherents to organic norms and rules as much through keeping records "carefully and with responsibility" as through working in their fields. Farmers did not respond to certification by uniformly becoming compliant subjects, however. Instead, many of the organic farmers I interacted with experienced the task of daily record keeping as tedious and alien to their practices of cultivation, choosing to engage with it minimally or not at all. Their disengagement exposes some deep fractures in what appears and aspires to be a system of agrarian governmentality.³⁵ Over time, it became increasingly clear that theoretical moorings such as governmentality and legibility, which have so powerfully anchored analyses of audit and certification, are not adequate

for understanding the practices of certification I observed. Puzzled and conceptually adrift, I wondered: How does certification actually proceed?

On Inspections, and (Not) Knowing the Field

“It’s all an idea,” Dilip Kumar remarked to me with some resignation. “It all depends on interviews, documents. What we find in the plot or here, in interviews. Not in foods. Whenever farmers use chemicals, they do not express this in the interview. I do not declare that they use chemicals because it is out of our standard. I am not finding chemicals on the spot.”³⁶ It was late February 2008 and I was accompanying Dilip, one of the board’s internal inspectors, and Mohan Singh, a master trainer, while they conducted internal ICS inspections before the wheat harvest in the Doon Valley’s Dharampur block at the foot of the Himalaya. Forgoing meals and breaks, we had spent the day walking from house to house, through several villages, searching out farmers registered with the board as Dilip recorded his observations and comments in individual inspection reports and updated the AFL.

In many instances, inspections and interviews were brief. Dilip inquired about the amount of land registered with the board, the crops grown, and the source from which wheat seeds were procured. The responses farmers gave were often as uniform as the questions Dilip posed, but he recorded each one of them in his inspection reports. Visits were concluded with Dilip’s asking for the signature or thumbprint of the person interviewed, a practice that hinted at the ways in which it is not just land, but farmers, who are embodied as subjects of inspection. Dilip’s weary reflection revealed his sense that there was possibly little correspondence between interviews and documents, on the one hand, and organic practices of farming and food, on the other. Efforts to produce organic quality, he suggested, instead hinged on the communicative and literacy practices surrounding organic certification, words exchanged dur-

ing interviews and recorded in documents, rather than on agricultural practices and what is found “in food.”

In the Doon Valley, certification inspections often began by following the path carved through the fields by a concrete irrigation channel that then branched off into smaller, earthen bunds and ended up in the individual plots where rice and wheat were alternately cultivated during the year. I accompanied Dilip and Mohan to the village of Sarola, where J. P. Sharma, husband of the village *pradhan* (elected village head), acted as our guide. We set off single file along a concrete irrigation channel that, Sharma explained, had been built by the World Bank a few years earlier. The channel, dry during the winter months, when rain was less frequent, nonetheless provided us with an easy path and a clear vantage point from which to view plots in the area. Indeed, on this short excursion, as on others, we strayed at most only a few feet from the concrete platform of the irrigation channel. Sharma directed Dilip’s attention to fields in the distance, pointing out which field belonged to whom and noting whether the field was registered with the Organic Board.

In a comment similar to many I would hear over the course of my fieldwork, Dilip remarked that agriculture in this area is *pāramparik*, or traditional, and that although not all farmers have registered with the board and become certified organic, none uses synthetic chemicals. This commonly expressed belief was based on the notion that hill farmers had been cut off from the Green Revolution and isolated from agricultural modernization. (Many, including the valley’s own residents, considered the Doon Valley part of the hills.) Dr. Verma’s comment at APEDA in 2006 construed this isolation as a kind of ignorance: farmers “don’t *know* what are chemicals.” As I showed in the previous chapter, such distinctions between traditional and organic agriculture—“organic by default” and “organic by design”—proved to be ways of parsing the agentic capacities of Uttarakhand’s farmers. In the context of certification inspections, however, these distinctions achieved a different effect. Claims about

the isolation and traditional nature of hill agriculture dispensed with the need to conduct assessments of individual plots to determine the adequacy of buffer zones and other conditions that might compromise the integrity of organic plots. Yet the very assumption that agriculture is traditional and does not depend on synthetic inputs itself became part of the audit process by shaping inspections. Indeed, the remark seemed to be a justification of the inspection's brevity—a way of rationalizing the inevitable limitations of such surveys and the practical impossibility of an exhaustive audit.

As the inspections unfolded, they revealed room to maneuver within seemingly rigid standards. This became apparent to me when questions arose about how farmers sourced their wheat seeds. As the Organic Board's inspectors carried out certification, they asked farmers where seeds had been obtained—whether they had been purchased from the block office (in which case they were assumed to be chemically treated) or saved from a previous crop. In many instances, farmers replied that they had purchased a commonly grown variety of wheat seed from the block office—a response that was duly classified by inspectors in their reports as noncompliance.³⁷

Though the use of chemically treated seeds is regarded as a fairly major breach of organic standards, conversations with external inspectors from the Uttarakhand State Organic Certification Agency (USOCA) revealed that this requirement, too, was negotiable. Thus, Ashutosh, one of the USOCA inspectors, explained to me: “If the organic seed is not available, the first condition is that conventional untreated seed can be used. [If neither is available] he can use treated seed also. But the ICS has to verify at what places they have tried to procure the organic seed or chemically untreated seed. They have to give us proof. And if [the certification] committee is satisfied, then only can certification be granted, even after using treated seed. But it totally depends on what efforts ICS has done to get the organic and chemically untreated seed.” Ashutosh went on to explain that this proof could be in the form of a letter to the state seed

corporation, or to several major agricultural universities, documenting that requests had been made for organic or untreated seeds. If such requests were unfulfilled, Ashutosh added, “it can be decided this year there was no availability of wheat organic seeds or wheat untreated seeds; under this condition certification can be granted. Then another condition arises. What generally they do if they have procured treated seed, they again treat it with some biocontrol agents, this has to be documented in farmers’ diary. Trichoderma, hot water, saltwater. Generally what happens is that the seeds they are superficially treated and they can be washed.” At this point, Manisha, another inspector, interjected to remark that “we verify efforts farmer has made to get rid of particular chemical, whether he has done it or whether he has sold it like this.”

What became apparent through this exchange was that decisions about what meets the criteria of “organicness” are based not simply on evaluations of the physical qualities of land, seeds, or inputs, but also on assessments of the conduct, efforts, and intent of farmers and even local ICS officials. These assessments, made during the course of certification inspections, seek out evidence of consciousness and intent, particular demonstrations of agrarian agency that become legible during certification inspections. Beyond this, as we shall see, such assessments and evaluations also probed the moral commitment of farmers to the organic program. Through these inspections, farmers became organic—or did not—partly through steps taken to verify their compliance with wider organic standards but also, and equally importantly, through the initiative they and ICS officials exercised to achieve that end.

Scholars have shown how communicative encounters and interactions that take place during inspections are crucial to establishing organic status. Jillian Cavanaugh found that, among Italian heritage food producers, this communication took the form of “economic sociability”—banter, laughter, and light conversation among

farmers, inspectors, and other authorities—that proved vital to neoliberal food production’s audit cultures when documents themselves could “only ever partially represent what they were meant to capture.”³⁸ This sort of economic sociability, she argues, helps produce “relationships of responsibility” that run parallel to, or buttress, “structures of accountability” established by the documentary requirements of food safety inspections.³⁹

Such sociality was rarely evident during the certification inspections that I observed Dilip and others undertake. Because inspectors were obliged to complete hundreds of interviews over the course of a few weeks, pleasantries and other conversations were invariably minimal and perfunctory. In most encounters I observed, inspectors directed and shaped the exchanges that took place with farmers, not straying far from topics necessary to completing their inspections reports.

Inspections, therefore, offered little opportunity for development of the wider economic sociability and personal relations that Cavanaugh identified as so essential for production processes in Italy. One day, as we sat in the Organic Board’s offices, Dilip told me that before becoming an inspector he had worked in the mountains as a master trainer. He lamented that his present role, unlike his earlier one, precluded “any sympathy with farmers. It is not a long relationship, we just go for the inspection.” By invoking the notion of sympathy, Dilip highlighted the way in which his role as an inspector had transformed and reconstituted his relationship with farmers. The monitoring and surveillance functions of his work were now much more clearly defined and did not foster a spirit of sympathy with farmers, as his visits consisted of cursory interviews conducted under time pressure. Dilip’s admission that he was required to take farmers’ words and documents at face value and his self-awareness about the limits of his inspectorial powers, moreover, conveyed a pervasive sense of uncertainty about the processes he was charged

with certifying. By relying on what was said or documented, and on what could be seen in fields and farms at the time of inspection, Dilip implied that documents and inspections worked performatively to enact “an idea” of organic agriculture.

During these inspections, it often became apparent that farmers had not made entries in the diaries given to them. Often, finding the diary incomplete, Dharampur’s master trainer Mohan would speak with members of the farming household and fill in some of the diary as Dilip conducted his inspection interview. This was a fairly common occurrence. The fact that master trainers often completed diaries on behalf of farmers was well known among inspectors, the board’s managers, the external agency, and representatives from the company procuring organic basmati. This practice was, to some extent, also sanctioned by the Organic Board in the leaflet mentioned earlier, which explained that the diary “may be filled by the farmer himself or by the *mukhiyā* (village head).” Such allowances were made in recognition of the fact that, as managers in the board headquarters and field-level master trainers noted, farmers were not in the habit of maintaining written records, and many were not accustomed to such genres of record keeping. To be sure, I never encountered master trainers knowingly entering false data in the diaries. Rather, such explanations were offered to reconcile the realities master trainers and inspectors faced with the exigencies of certification.

The manner in which diaries were often produced, however, did not diminish the importance of documentation. Affirming its central role in certification, Raju, a master trainer for Rawalnagar block, remarked: “Only a document will prove anything. A verbal statement can be changed every two minutes. Documents cannot be changed again and again. Once an entry is made that in this much area there is basmati, then it will remain that much. Documents are necessary, proof is necessary. In organic farming you will find documents with every farmer. Documents are a must; otherwise, there will be no certification—on what basis will the certificate be given

if there is no record?” As he emphasized its necessity, Raju made the practice of document keeping tantamount to the production of proof, privileging the written word as something inherently more reliable and less malleable than oral accounts. As the quality of being organic came to be constituted through paperwork as much as through agricultural practices, documents became the objects rather than the instruments of certification efforts. In this manner, documents and inspections were marshaled to create a semblance of certainty and transparency even as uncertainty and unknowability abounded in the certification process itself. And as this happened, certification inspectors and others recast farmers as moral, rather than purely agrarian, subjects.

Moral Fields

“There are four pillars of organic farming: trust, honesty, transparency, and honor to commitment,” Dr. Sharma counseled in our first meeting as we sat in the grounds of Raiwalla’s block headquarters in December 2007, waiting for farmers to bring their recently harvested organic basmati paddy to be inspected, weighed, and formally procured by Hira Foods. This depiction of organic agriculture as an enterprise dependent on a morally uncontaminated character as much as on chemically uncontaminated land was something I repeatedly encountered. Organic certification, captured in these terms, required more than adherence to national and international standards. Notably, none of Dr. Sharma’s “pillars” referred to land or agricultural practices, the focus of so much documentary labor. Instead, organic certification probed the moral character of farmers themselves. For those charged with certification authority and procurement power, compliance with organic standards became a means through which judgments about the moral qualities of organic cultivation and cultivators were articulated.⁴⁰

The use of organic agriculture and its certification as a register of a farmer’s honesty and commitment was brought into sharpest

relief when instances of noncompliance surfaced. One such occasion arose in the summer of 2008, when it came to the attention of the Organic Board that several farmers in Raiwala block had revealed to the third-party certification agency—but not to the board's own internal inspectors—that they had used prohibited chemicals. As we left the board's office that evening, Satish, the quality manager charged with overseeing the certification program, said to me with some exasperation, "The farmers are very clever. They disclose to the external agency but they do not disclose to us. We went to check, and they told us no one came. But they have signed the forms [inspection reports]. They are telling lies." In practice, I learned, such discrepancies might arise quite reasonably when internal and external inspectors did not interview the same household member, or when, in larger joint families spanning two or more generations, not all members of the household were necessarily engaged in farming themselves. Though third-party inspectors often deliberately chose to interview family members who had not been previously interviewed by the internal inspectors, such techniques could generate uncertainties and opacities when accounts of farming practice were inconsistent or appeared noncompliant with organic standards.

In such circumstances, Satish extended Raju's suggestion that "only a document will prove anything." Signed forms did more than provide proof, as Raju had suggested; when interviews yielded contradictory responses, Satish implied that documents could become arbiters of farmers' morality. Satish went on to claim that these discrepancies reflected a weakness of the ICS. He added, however: "One cannot blame the ICS inspectors. They apply their methodology. They ask questions, survey fields. But if the farmer does not tell the truth . . . basically it is up to the farmer. They are willingly not doing organic farming. We need a different methodology. ICS does not do inspections like the CBI [Central Bureau of Investigation]. Presently the ICS method is like a police constable. The external

certification agency is like the CBI. Like if there is a crime and the local police cannot solve it, they will make a complaint to the CBI. They [the CBI] can easily find out. We need to apply this methodology, and be like the CBI.” As Satish likened instances of noncompliance to criminal acts, he also made the powers of certification agencies comparable to state institutions of policing and intelligence gathering. Far from enacting economic sociability, the inspection interview in the Doon Valley was a communicative medium that Satish depicted as akin more to a criminal investigation.

Satish’s remarks also underscore how logics of audit and certification create pressure for ever-finer modes of inspection, monitoring, and surveillance. In organic certification, more intensive surveillance may take different forms: Satish advocated detailed information and intelligence gathering targeting farmers, whereas others advocated testing the grain itself for chemical residues. Although more stringent testing requirements may seem to narrow the scope for uncertainty and opacity in certification, Elizabeth Dunn observes that the incremental expansion and intensification of audit procedure—the push for “continuous improvement”—nonetheless always produce “a domain of wildness” beyond the range of audit oversight and control, the existence of which then calls for its further expansion.⁴¹ In the Doon Valley, opacity and ignorance were produced not only by the absence of residue testing but also in myriad other ways, among them the practices of keeping (and not keeping) farmers’ diaries, the time pressure inspectors faced, and the sheer impossibility of knowing the agricultural practices of every farmer in detail.

Sentiments of frustration, disappointment, and even betrayal, I came to learn, were bound up with the work of certification, but they were not unique to master trainers and inspectors. Besides farmers who embraced certification enthusiastically and those whose participation was minimal or nonexistent were a number who had once participated in the organic program but had since become dis-

illusioned. Sunder Lal, a relatively prosperous farmer whose main source of income was his non-farm employment in Dehradun's private sector, expressed what many others conveyed to me when he said: "At that time we thought that the federation people [farmers' federation] are going to make much more improvements and we will be benefit. If we had known that we are not going to get anything from the federation, then nobody would have taken this headache. We thought that the federation had given us this book, and that by doing the fill up we would get some facilities or benefits from the federation, or maybe they are going to tell us some new methods." In these remarks, Sunder Lal located diary keeping in a larger moral economy of certification, which entailed different but reciprocal obligations and commitments.⁴² Although he had once enthusiastically kept the diary, his expectations about the benefits of organic production had been disappointed, and he had recently decided to leave the program. He was not alone in his disenchantment. A number of farmers I met in 2007 and 2008 expressed varying degrees of disillusion, frustration, and even anger with the program. Many were dismayed that the price they received under the contract arrangement was not significantly higher than the market price of basmati despite the additional costs and labor that were required to produce it organically. Compounding this, they lamented, yields of the commercially available variety of basmati that they were required to grow organically for Hira Foods were lower than yields of their own landrace, *mōta* (thick) basmati.

For others in Raiwalla block, however, disenchantment stemmed from their own perceptions of trust betrayed and contractual commitments breached. Much of their disillusion centered on the farmers' federation, responsible for distributing payments to farmers for the basmati rice they sold to Hira Foods. Several farmers related to me that they had not been paid by the federation for basmati they sold to Hira Foods some six months before. For farmers, this breach

of the terms of their contract was also a breach of trust based on exchange and reciprocity. Indeed, late payments and nonpayment were the most common reasons farmers gave for their decision to abandon the program. “When it is time to pay, the payment does not come. We are poor people, how can we manage if we don’t get payment in time?” explained Savita Devi, who together with her husband farmed their land jointly with his brothers. Sunder Lal related his own reason for leaving the program: “People have to invest in bulls, labor, seeds, and we give the paddy but still the payment is not made on time. What is the benefit of doing this?” These sentiments show that farmers and officials alike perceive a gap between what the others say and what they do. Farmers calibrated their participation in the program according to not just its documentary demands but their sense of the larger moral economy of contract farming. Yet farmers were positioned differently from officials as subjects of certification’s power—they not only were required to adopt new agricultural practices, but also were expected to be honest, trustworthy, and committed to the program.

In the Doon Valley, organic certification is a form of audit that aims to promote transparency and compliance but, in practice, often does not accomplish either of these goals. Documents that were intended to facilitate transparency also created opacities, which, as in the case of farmers’ diaries, sometimes occurred with the tacit acceptance or active collaboration of fieldworkers, inspectors, and even company representatives. In other instances the inevitable limits on certification’s panoptic power seemed to stymie and exasperate officials, prompting calls for more stringent surveillance and testing. But opacity and uncertainty generated other sentiments as well. In the same conversation in which he extolled the necessity of documents as immutable proof of adherence to organic standards, Raju, Rawalnagar’s master trainer, made an entirely different and what seemed a deeply paradoxical appeal. Observing that at certain

times of year he could not visit and monitor all the fields of every farmer, he reflected, “*Organic farming jō hai, vo viśvās kī khetī hai*”—“organic farming, that is the farming of trust.”

Viśvās kī khetī: The Farming of Trust

As master trainers and inspectors acknowledged the impossibility of knowing the agricultural practices of each individual farmer enrolled in the program, they sometimes, like Raju, invoked the notion of viśvās to describe organic agriculture. Toward the end of my fieldwork, in late 2008, I drove back to the board’s headquarters with Birendra, one of its internal inspectors. We had spent the day with representatives from Hira Foods, visiting farmers in advance of the basmati harvest to assess the quality and estimated yield of the crop. Recent internal inspections were, in fact, on Birendra’s mind as he told me that he had found noncompliances among a large swath of farmers. He corroborated what others had also told me when he said with some sympathy that farmers do not always know what organic means. He explained that though they recognized the white granules of urea, a common nitrogen fertilizer, to be a form of *rasayanik khād* (chemical fertilizer), during the early years of the program they did not recognize that earth-colored DAP (diammonium phosphate) was also prohibited. Noncompliance, he intimated, was often unwitting.

But Birendra was also clearly troubled by the possibility that as farmers became more acquainted with organic standards and certification, some instances of noncompliance could be intentional. Speaking in Hindi, he described organic farming as *viśvās walli cheez*, or something involving or based on trust. I asked what he meant by this. Why, given all the documents and inspections, is certified organic agriculture, in the end, *viśvās walli cheez*? Alluding to the limits on his own powers of inspection and his capacity to monitor every detail of what farmers do, he replied: “Farmers can go secretly to the field at night and apply chemicals to their

fields. His neighbors will not know, we will not know.” He made this point not to suggest that farmers really engaged in such secretive practices, but rather to underscore the utter inability of field officers and inspectors to be all-knowing and all-seeing. Inspectors, he emphasized, cannot be in the fields all the time, and so organic agriculture depends on *viśvās*. Third-party certification inspectors—those whom Satish had likened to the CBI—voiced similar views. As we sat around a boardroom table in the offices of the third-party certification agency, one inspector, speaking in English, volunteered: “Certification is based on trust. You have to believe that what they are saying is true unless there is a reason to doubt it.”

How do organic certification practices and inspectors’ labor conditions shape what *viśvās* means and what it does? Inspectors and master trainers invoked and relied on *viśvās* in ways that resemble Georg Simmel’s conceptualization of trust, which entails “some additional affective, even mystical, ‘faith’ of man in man.”⁴³ This additional quality of faith is distinct from trust based on “good reasons.”⁴⁴ These “good reasons” may be created through personal relations over time, conceived in terms of friendship or reliability; they may also be connected to the economic sociability of inspections in other settings.⁴⁵

But “good reasons” are not what inspectors and master trainers mentioned when they called on the notion of *viśvās*. Rather, they emphasized the limits on their powers of surveillance and inspection, drawing attention to the way in which lack of knowledge, uncertainty, and even doubt make *viśvās* an indispensable part of organic certification. According to Simmel, trust arises not as a result of certain knowledge, but in the midst of uncertainties and unknowabilities.⁴⁶ In the Doon Valley, master trainers and inspectors are all too aware that such affectively charged conditions exist not only despite but also because of an extensive documentary and inspections apparatus to promote transparency. Ultimately, it is their acceptance of organic agriculture not as a transparency regime, but

as *viśvās kī khetī*, that enables those wielding certification authority to “bracket” or “suspend” what they do not and cannot know in order to proceed with the work of certification.⁴⁷ *Viśvās* of this sort differs crucially from trust based on “good reasons” because it does not come from personal connections or shared histories that inspire confidence and certainty. Rather, it is a sentiment that emerges under conditions that demand a resolution of lingering uncertainty, ignorance, and even doubt. *Viśvās* “bridges the synapse between evidence and conclusion” and so simplifies the material, cognitive, and social complexities that abound in organic certification.⁴⁸

Trust at the Limits of Transparency

Audit cultures associated with neoliberalism and post-reform development have taken root in the Doon Valley’s agricultural fields through organic certification. By requiring document keeping and regular inspections, certification seeks not only to make agricultural practices legible, but also to refashion farmers as agents of their own surveillance and compliant subjects of national and international certification regimes. Becoming “organic by design,” then, also relies on demonstrably agentive engagement with organic standards—through, for example, the handling of chemically treated seeds. It also presumes a familiarity with the literacy practices and skills of record keeping.

But documents, particularly the farmers’ diaries that formed the edifice of certification infrastructure, did not work in such Foucauldian ways. More often than not farmers did not complete the documents required of them—sometimes because it was not a familiar habit or literacy practice, but in other cases because their own trust in the promise of becoming certified organic had been disappointed when the farmers’ federation paid them late or not at all. This betrayal of trust stemmed from a breakdown of reciprocity and exchange at the core of their contract with Hira Foods, and it prompted some farmers to engage with the program minimally or

abandon it altogether. The consequences stemming from farmers' sense of betrayals of trust and moral economy—namely, the indifference that many displayed toward the program—compounded the uncertainties and unknowns that are always and already inherent in certification and audit cultures. In the end, much came to lie beyond the realm of what was knowable through documents or realistically inspectable and auditable. To grasp how organic certification works, therefore, requires more than exploring how farmers participate in it. It also demands focused attention on how those who wield certification authority come to reconcile the need for transparency and knowledge with the not-infrequent reality of their incompleteness.

Gaps, fissures, and failures in audit practice specifically, and governmentalized schemes more generally, often produce calls for their expansion and intensification.⁴⁹ A reading of organic certification along these lines might cast it as an ever-widening and self-reinforcing circle of technocracy in which the shortcomings of neoliberal practices such as audit result in their proliferation. In many instances this is borne out. In the Doon Valley, the inability of documents and inspections to capture the intricate temporal and spatial patterns of agricultural practice elicited calls for more stringent certification procedures, which led eventually to routine residue testing of all harvested paddy.

By invoking and describing *viśvās* as a critical part of certification, however, master trainers and certification inspectors such as Raju and Birendra foregrounded another significant dynamic latent in the apparent failures of certification. As we have seen, inspections, farmers' diaries, and other documents—the very mechanisms intended to allow transparency and visibility—at times generated uncertainties and opacities. *Viśvās* became vitally important precisely because of the limits of monitoring and the elusiveness of transparency. For this reason, Raju articulated two apparently contradictory ideas about organic certification—that “only a document

will prove anything” and that organic farming is ultimately *viśvās kī khetī*. Raju showed how certification relies on sentiments of trust to ameliorate uncertainty and unknowability, thereby enabling documents to remain the ultimate, material source of proof. For master trainers and inspectors, then, *viśvās* was not simply the outcome of their certification work, but a sentiment on which the whole edifice of it thoroughly depended.

Raju, and others in his position, complicate and challenge critical perspectives contending that audit and its associated documentary infrastructures replace or erode relations of trust.⁵⁰ They urge us to attend to trust as a sentiment emanating from something other than the kinds of personal or long-standing relationships, mutuality and reciprocity, forms of exchange, or robust knowledge documented in many anthropological and sociological accounts. In this way, their expression of *viśvās* directs our attention to the way that trust is also powerfully configured through uncertainty, and even by the opacities generated by transparency regimes. Such sentiments, then, prove crucial to sustaining the infrastructure of certification in the Doon Valley. But as the process of organic certification contributes crucially to the formation of organic quality, we may inquire further into its ostensible object—*basmati* rice—by asking: On what basis does the grain itself become certifiable as organic?

THREE

Becoming Basmati

In the early years of the twenty-first century, the production of organic basmati rice in the paddy fields of the Doon Valley revived the cultivation of a grain for which Dehradun has long been famous. In India, basmati is historically associated with long-grained, aromatic rice grown in the sub-Himalayan regions of the Indo-Gangetic plain. Basmati grown in the Doon Valley is reputed to be among the finest produced in the relatively narrow sub-Himalayan tract that extends from Punjab and Sindh in Pakistan through the Indian Punjab, parts of Haryana and Rajasthan, Jammu and Kashmir, Himachal Pradesh, western Uttar Pradesh, and Uttarakhand. H. G. Walton, in his *Gazetteer of Debra Dun*, observed: “The fine kind of rice known as *bansmati* is almost the only food-grain exported to the plains. It is much appreciated in the plains and is a favorite form of gift sent by sojourners in the Dun to friends and relatives on the plains.”¹ The distinctive qualities of Dehradun basmati include its aroma, taste, and non-sticky grains that elongate substantially during cooking. These prized characteristics have been

attributed to the environment in which it is grown and, more particularly, to the soils, climate, and waters that nourish it.

In recent decades, however, it has become increasingly difficult to find Dehradun basmati in the shops and markets of Dehradun itself. In 2007 and 2008, nearly a century after the publication of Walton's *Gazetteer of Debra Dun*, a crowd of shops in the vicinity of Dehradun's railway station advertised "Dehradooni Basmati," giving some indication of its continued status as a popular last-minute purchase for tourists and travelers departing the valley from nearby hill stations and pilgrimage routes. In 2016 I discovered that these shops had all but disappeared. Only after slipping off the main thoroughfares into nearly vehicle-free side alleys did I come across a few shops on whose sun-bleached, fading signboards the words "Best Quality Dehradun Rice" and "Dehradun's Delicious Basmati Rice" were still just barely discernable.²

Among these establishments, Ram Kumar's store has stood in Darshani Gate near the railway station for over sixty years. A family business spanning three generations, today it is squeezed between a pharmacy on one side and a mobile phone and money transfer vendor on the other. One of the few merchants who still sources Dehradun basmati directly from farmers in the vicinity of the city, Ram Kumar told me that Dehradun basmati is all but gone, vanishing as the expansion of the city in the years after Uttarakhand's formation consumed prime agricultural land. Parts of the valley once home to some of the region's most prized basmati have become subject to intense infrastructure and real estate development. One of these areas, Majra, is now the location of Dehradun's new bus depot, and progressive urbanization elsewhere in the city has brought new high-end apartment dwellings and shopping complexes.

With their construction and the proliferation of heat-absorbing concrete, Ram Kumar and others explained, the valley has become too hot to produce good basmati. Before, he told me, in an account

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Basmati grown in the Doon Valley is increasingly difficult to find in the city of Dehradun itself. Faded shop signs advertising “Dehradun Basmati Rice” also signpost a different era, a time when the reputation of the grain was more closely linked to “where it’s from.” Dehradun, April 2016.

that I heard on a number of occasions, basmati rice grown in Dehradun was short-grained but had a good smell. Referring to new, long-grained varieties such as Basmati-370, and to even newer hybrid varieties developed to meet growing world and domestic demand for basmati, such as Pusa 1121, Ram Kumar lamented that now the grain is long and fine but has no smell. In Dehradun, it

seems, luxury apartments are displacing a luxurious rice. The area's once-famous, short-grained *mōta* basmati is quite literally fading from the valley, on shop signs and in the fields.

Newer varieties of long-grained basmati rice—including the organic basmati now cultivated in the paddy fields of the Doon Valley—are increasingly defined, transformed, and conditioned by political, technical, and economic processes in places far from where they are grown. This I learned in the sleek South Delhi headquarters of Hira Foods, a leading Indian rice and food products company that, as I mentioned in the introduction, has contracted with Doon Valley farmers since 2005 to procure organic basmati rice both for export and for sale at upmarket food retailers in India. In a conversation in late 2007, two of Hira Foods' young marketing executives offered their perceptions of the shifting forms of identification and qualification attached to this most luxurious and expensive Indian grain.

VIVEK NAUTIYAL: We used to write, all of us used to write, the tagline “Dehraduni basmati rice.” At one time basmati rice in Dehradun used to be very famous. Now no one writes that. There is no more basmati in Dehradun, basmati just vanished from Dehradun. Also the grain is very short, though the smell is much better than basmati from Punjab and Haryana.

PRATAP SINGH: I would suggest that rather than emphasizing as basmati from Doon Valley, it would be better to emphasize organic.

VIVEK NAUTIYAL: Maybe to some people Dehradun basmati might have some connotation. But to the customer who is buying it, they are buying it just for it being organic rather than it being from the Doon Valley. They are not so concerned about where it's from, but rather what it is.

PRATAP SINGH: What the customer is seeing is that it is stamped by IMO or whichever organization is certifying the rice as or-

ganic.³ That it is from Dehradun hardly matters—what matters more is that it is organic and it is healthy.

For the marketing executives of Hira Foods, *organic* was a more salient and lucrative signifier of quality than *Dehradun*. Indeed, although the company began its venture into the organic basmati market by contracting exclusively with farmers in the Doon Valley, nowhere on the branded packaging of Hira Foods organic basmati rice was Dehradun mentioned. The specificities of locality and place, they implied, are no longer compelling qualifiers of the grain. They made clear that in the world of Indian rice retail—in both domestic and export markets—being certified organic trumped the seemingly more ineffable qualities of place in the making and marketing of basmati rice.⁴

Vivek's contrast between “where it's from” and “what it is” runs against the positioning of locality as central to a product's quality and value in India and elsewhere. Whether the product in question is Darjeeling tea from India's eastern Himalaya, Umbrian extra-virgin olive oil, or Reblochon cheese from the alpine environs of the French Haute-Savoie, “where it's from” is often taken as integral to “what it is.”⁵ In France, region and environment have long been recognized as salient to the material qualities of comestibles through notions of *terroir* and systems such as the *appellation d'origine contrôlée* (AOC, or controlled designation of origin). The European Commission has taken up AOC principles through the adoption of the *appellation d'origine protégée* (AOP, or protected designation of origin) system. Globally, there have been attempts to establish geographical indications (GI)—a novel form of intellectual property, which stipulates that “a product's quality, reputation, or other characteristics can be determined by where it comes from”—in the World Trade Organization.⁶

Such efforts to institutionalize and legally protect the connection between a product's place of production and its material qualities

are distinct from the more recent flourishing of local food movements and locavore cuisine, which oppose industrial food regimes, whether conventional or organic. In North America, with its scater histories of terroir, place and locality have come to denote not regionally unique production methods, but more broadly social relations and “ecologies of production” that encompass human and nonhuman worlds and imaginaries of authenticity. In the work of Heather Paxson and Brad Weiss, respectively, New England farmstead cheeses and Piedmont heritage-breed pigs materially produce value that is at once economic and noneconomic.⁷ Locality can be a crucible for the making of value and a repository of authenticity in these settings because of its relation to regional and national histories of industrialization and to the contemporary realities of factory farming in the United States.

The rise of organically cultivated basmati in the Doon Valley reveals a different story about how value and quality are made. Here the reputation of Dehradun basmati is more aligned with Old World notions of terroir than with local food movements’ more recent projects of meaning making.⁸ Long-standing and widely held understandings of Dehradun basmati’s unique qualities, however, have not found expression in AOC-type protection. Indeed, as I will show later in this chapter, the recent award of a geographic indication to basmati nationalizes the grain as Indian while excluding Dehradun’s remaining local cultivars from protection. Such regulatory exclusions underscore Vivek’s assertion that what matters in the contemporary world of basmati rice retail is not where it’s from, but what it is.

Quality organic basmati is forged not only through practices and processes directly tied to organic production—including agentive demonstrations of composting and the particular ways in which trust comes to be configured within certification, as discussed in the first two chapters of this book—but also, and just as fundamentally, through the sociomaterial qualities of the grain itself, which

have been conditioned by basmati's histories of commoditization. In the Doon Valley, organic basmati cultivation hinges not just on what it takes for farmers to become organic, but on the very nature of basmati itself, from the criteria and characteristics that define the grain to the practices involved in bringing "quality" basmati into being.

The definition of basmati is, however, not as self-evident as it may appear. The Sanskrit-derived name *basmati* translates simply as "possessing fragrance" and so gives little away about what else, beyond its aromatic properties, might define the rice.⁹ Historically, and to this day, in its everyday use the term *basmati* signals particular material qualities of the uncooked and cooked grain: its non-sticky texture, the elongation of the grains after cooking, and its aroma. As I noted earlier, basmati has long been strongly associated with a transnational region of cultivation in the sub-Himalayan areas of India and Pakistan and parts of the Indo-Gangetic plain. In this respect, the term *basmati* does not denote a particular variety (as, for example, wine grape varieties like sauvignon blanc and merlot do), nor does it unproblematically reference a bounded region or place (as Darjeeling tea does). "What it is," therefore, has been notoriously difficult to pin down, and for much of its history basmati has been endowed with an expansiveness that belies the smallness and seeming simplicity of grains of rice. Partly for these reasons, basmati has been the focus of various efforts, legal and otherwise, to define and lay claim to what it is and is not. An attempt by the U.S. company RiceTec to patent basmati is an infamous example of this; another is the government of India's award of a GI for basmati in 2016.

This chapter does not seek to resolve the tension Vivek posited between "where it's from" and "what it is." Older basmati cultivars are fast disappearing from the fields and markets of the Doon Valley even as basmati varieties bred in the formal sector experience a renaissance due to the advent of certified organic agriculture. In

this milieu, I take Vivek's felicitous framing of basmati's multiple qualities—its locality, its status as organic, and its physical and material characteristics—as an invitation to explore their points of articulation and to inquire into how organic basmati in the Doon Valley comes to be what it is. Becoming organic basmati, I suggest, is a process shaped not only by the standards and practices of organic agriculture and certification, but also by the conditions of contract farming established in the Doon Valley in the early 2000s by means of the longer histories of commoditization through which basmati became a globally traded grain.

The production of quality is central to many agro-food systems and to market activity and global value chains more broadly.¹⁰ For some time, a product's quality—that which makes it distinctive or singular—was understood to be in tension with its commoditization.¹¹ But more recently, quality has emerged as key to understanding how many markets work and even as the basis on which they are constituted.¹² Moreover, quality itself is not taken to be an intrinsic feature of a product, but the outcome of a process of construction or configuration that is sometimes referred to as “qualification.”¹³ Such perspectives, emanating from actor-network theory and recent work in economic sociology, direct attention to the forms of human and nonhuman networks assembled around a product or commodity through its stages of production and consumption. In these analyses of everything from cars to orange juice to laundry detergent, the consumer, variously understood as calculative or affectively and emotionally charged, is often a conceptually significant figure.¹⁴

The work of qualification is integral to production as well, enrolling producers and intermediaries alike in the making of a quality product, as Callon and others have pointed out.¹⁵ For example, Luc Boltanski and Arnaud Esquerre describe what they call the economy of enrichment with its ever-increasing focus on the creation of luxury and wealth through the production of singularized goods.¹⁶

Processes of enrichment hail a storied past and are built on heritage, craft, or tradition. In their work, Boltanski and Esquerre focus on the worlds of fine art, tourism, and stamps and other collectibles rather than food. Nonetheless, basmati has been subject to relentless efforts at enrichment, by means not only of sociotechnical standards and regulations but also of the trials and tests through which the grain must pass at various stages of its production.

This chapter, then, examines the sociotechnical and socionatural practices that converge to make basmati what it is. Basmati's distinctiveness and singularity are materialized through processes of qualification within agricultural and post-harvest practices and constitute enrichment work. In other words, rice grown by Doon Valley farmers must be not only certified organic but also recognized as basmati. That organic basmati must also be considered basmati may seem an obvious, even banal, assertion. But the qualification practices and trials that surround its cultivation reveal that basmati—which has eluded precise definition for quite some time—is less a grain that simply “is” (or is not) than one that must, in many important respects, continually become. This chapter shows how basmati became a distinct category of rice—a category brought into being through government notifications, export quality standards, and geographic indications established far from the Doon Valley fields where it is cultivated. Farmers' work of cultivation is not limited to raising a crop in compliance with organic standards, but involves ongoing efforts to enrich basmati by nurturing and selecting for those qualities that give it value by making it “what it is.”

What's in a Name?

Contemporary contract farming of organic basmati in the Doon Valley builds on a much deeper history of producing, consuming, and commoditizing basmati in the subcontinent. An eighteenth-century poem by the famed Punjabi poet Waris Shah is known as the first written record of basmati; the grain finds mention along

with other fine rice in an account of the wedding of the poem's heroine.¹⁷ From early records, it is apparent that, like other aromatic rice, basmati enjoyed special status among royalty and nobility. Aromatic rice, though not named as basmati, is detailed in the *Ain-i-Akbari*, an extensive sixteenth-century record of the Mughal Emperor Akbar's household, court, and administration.¹⁸ Other accounts suggest that the medieval king of Bara, in what is today part of Pakistan, directly supervised the cultivation of basmati. In present-day Uttarakhand, Tapovan basmati was once grown, in the village of the same name, exclusively for the king of the princely state of Tehri Garhwal and later as an offering at the Bharat Mandir in Rishikesh.¹⁹

Basmati was clearly prized and highly valued, but there is little record about whether and how the grain may have circulated as a commodity before British colonial rule. Opportunities for such circulation certainly existed. In Mughal India, rice was exported to central Asia from the Punjab, although it is not typically noted as a significant export for the Mughal empire, which instead relied on spices, sugar, indigo, certain drugs, precious stones, and animals.²⁰ The Mughal period also saw the elaboration of a land revenue system, first on the basis of in-kind payments of grain and later through cash payments. The collection of revenue, particularly in cash, relied importantly on an extensive and well-established system of rural markets and the cash cropping of cotton, oilseeds, sugarcane, and indigo.²¹ Despite the commoditization of certain crops in pre-colonial India, basmati appears to have remained outside emergent systems of land revenue collection and circulated instead in a regionally delimited realm of exchange restricted to royalty, nobility, and religious authorities.

By the late nineteenth century, however, basmati grown in the Doon Valley was recognized as a superior grain in British colonial records. Atkinson's *Gazetteer* documents three main varieties grown

in Dehradun, noting: “The *kyári* furnishes rice of the best quality; the seeds are sown in nurseries in April–May, and the young plants are transferred in the following two months to well irrigated fields, where they are carefully weeded. The principal varieties are the *ramjawáin* and *basmati*, and these grow best in the warm valleys and along the great rivers where there is much moisture.”²² Although recognized to be of fine quality, basmati from the region does not appear to have participated substantially in trans-Himalayan trade. In general, little trade took place between the sub-Himalayan plains where basmati was grown and the hill areas incorporated in centuries-old circuits of Himalayan trade routes.²³ George Watt, who in the late nineteenth century compiled a six-volume dictionary of economic plants and produce of India, noted that rice from the Northwest Province and Oudh (forming much of present-day Uttarakhand and Uttar Pradesh) was exported to “Rájputana,” “Pánjab,” central India, and Bombay, but he observed that little was exported to “foreign countries.”²⁴

In northern India generally, basmati does not appear to have been a significant cash or revenue-paying crop or to have circulated widely as a commodity; instead, it appears more as a prestige crop that participated in a different order of exchange and tribute and was produced, exchanged, traded, and consumed mainly at local and regional levels. Its more limited circulation corresponded historically with more open, loose definitions of basmati, in which its value was determined not only by its aromatic or physical qualities but also by its participation in noble or religious spheres of exchange. Today, basmati is a mass commodity, but these elite associations are reinscribed through brand names—“Trophy,” “Royale,” or “Taj Mahal”—in the relatively new and burgeoning domestic market for branded rice. The commoditization and large-scale export of basmati have thus been accompanied by progressive standardization and delimitation of what basmati may be.

Mass Commoditization and the Metrics of Quality

Despite its renown in India over several centuries, the mass commoditization and global circulation of basmati is a relatively recent phenomenon, dating only to the 1980s.²⁵ Indeed, basmati exports have grown exponentially over the past three decades. For example, from April to December 1981, India exported 168,298 metric tons of basmati,²⁶ whereas from 2016 to 2017, India exported nearly four million metric tons of basmati to more than 150 countries. During this period, the value of these sales was over U.S. \$3 billion, which accounts for nearly one-fifth of the value of all products within APEDA's purview.²⁷ Because of the significance of basmati for agricultural export earnings, APEDA classifies it separately from other "non-basmati" rice and offers tax and duty concessions for exporters.

The production of basmati for export is connected with post-Green Revolution initiatives in plant breeding. Efforts to improve basmati cultivars began much earlier, however, in 1920 at Kala Shah Kaku in what is now the province of Punjab in Pakistan. There, basmati 370, an improved variety derived from Dehradun cultivars, was released in 1933. Basmati 370 subsequently became a parent line for many other varieties and today remains among those preferred for export production in India and Pakistan.²⁸ Following the Green Revolution, breeding efforts that sought to enhance crop yields were expanded to improve the quality characteristics of rice varieties—in particular basmati, which commanded a premium in domestic and export markets. These quality standards included, among other things, basmati's physical characteristics, such as the length, breadth, shape, and color of the grain; its behavior upon cooking, including its absorption of water, volume expansion, and kernel elongation; nutritional qualities such as its protein content; and milling qualities.²⁹ From the 1980s through the 1990s, the development of basmati cultivars accelerated (see Table 3.1). Both

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TABLE 3.1. DEFINING BASMATI: VARIETIES OF BASMATI NOTIFIED
UNDER THE GOVERNMENT OF INDIA SEEDS ACT (1966)

Variety	Year of Notification
Basmati 217	1969
Basmati 370	1973
Type 3 (Dehradun)	1978
Punjab Basmati-1	1984
Pusa Basmati-1	1989
Kasturi	1989
Haryana Basmati-1	1991
Mahi Sugandha	1995
Taraori Basmati	1996
Ranbir Basmati	1996
Basmati 386	1997
Pusa Basmati 1121	2008

pure line cultivars of local landraces and high-yield varieties including, most recently, hybrids such as Pusa Basmati 1121, were bred.

A more general expansion of the domestic and international markets for branded rice over the past two decades has accompanied the diversification of commercially marketed basmati varieties. In 2007 branded basmati rice accounted for one-third of the total volume and one-half of the total value in the domestic market for basmati. Like the expansion of basmati exports, the growth of a market for branded rice in India is recent. Hira Foods, for example, was incorporated only in 1989, when it established its own flagship brand of basmati rice. In 2007 approximately 56 percent of the company's turnover stemmed from sales of branded basmati rice; 37.5 percent of the total turnover was accounted for by sales in the domestic market and 18.5 percent in the export market.

Though formal plant breeding efforts have supported the growth of basmati exports since the 1980s, its global circulation has also involved allegations of adulteration and the widespread use of ad-

mixtures in exported rice labeled as basmati.³⁰ In response, international food standards authorities and those in exporting and importing countries have developed precise definitions about what is and isn't basmati through both regulatory and voluntary frameworks.

The emergence of basmati as a global commodity is thus associated with progressive moves to specify and limit "what it is," marking a break with a past in which basmati's meanings and qualities were rather more open. These recent regulatory efforts reshape what kinds of rice may be considered basmati quite literally. To set parameters for export-quality basmati, for example, in 2003 the government of India developed standards that included the minimum precooked grain length, the minimum length-breadth ratio, and the minimum elongation ratio after cooking (see Table 3.2). These parameters were intended as thresholds that would ensure basmati's continued reputation in export markets as famously slender, long-grained, non-sticky, aromatic rice.³¹ Other quality parameters, such as those pertaining to moisture content and extraneous matter, were developed to be compatible with existing international food standards, in particular the Codex Alimentarius Commission's Codex Standard for Rice.³² Importing countries have adopted similar standards. In the United Kingdom, a major importer of basmati, a voluntary code of practice offers the following definition: "Basmati' is the customary name for certain varieties of rice that are grown exclusively in specific areas of the Indo Gangetic Plains, which currently includes the Punjab (on both sides of the Indian and Pakistani border), Jammu, Haryana, Uttaranchal [Uttarakhand], and Western Uttar Pradesh in India."³³ Crucially, this definition of basmati goes on to limit it to "certain varieties" as well. These varieties must be notified by the government either of Pakistan or of India (as in Table 3.1), "have at least one parent, which is an Historic Land Race variety," and meet specific quality criteria for "basmati."³⁴ These regulations ensure that, in U.K. markets, the term *basmati* can be applied only to a narrow range of notified rice

TABLE 3.2. SCHEDULE OF STANDARDS FOR EXPORT-QUALITY MILLED INDIAN BASMATI RICE

Grade	Min. average precook length (mm)	Min. length/breadth ratio	Max. moisture content (%)	Max. damaged discolored grain (%)	Max. chalky grain/black kernels (%)	Max. broken grain and fragments (%)	Max. foreign matter (%)	Max. other grain (%)	Max. other rice varieties (%)	Max. under-milled and red striped grain (%)	Max. paddy grain (%)	Min. elongation ratio	Max. green grain
Special	7.1	3.5	14	0.5	3	2	0.1	0.1	5	2.0	0.1	1.7	-
A	7.0	3.5	14	0.7	5	3	0.25	0.1	8	2.5	0.2	1.7	-
B	6.8	3.5	14	1.0	7	5	0.4	0.2	15	3.5	0.3	1.7	-

Source: Government of India, Notification no. 67, January 23, 2003, <http://115.112.238.112/eic/qc&i/enotfn-rice-67.htm>, accessed December 20, 2019.

varieties that display specific characteristics and are grown in particular geographic regions.

Efforts to police the borders of basmati have been pursued in legal arenas as well; such contests center on who may claim ownership of basmati and on what grounds. The most famous of these battles played out in 1997, when the U.S. Patents and Trademarks Office granted a wide-ranging patent on basmati to the U.S.-based company RiceTec. The original patent granted RiceTec exclusive use of the term *basmati*, proprietary rights to new varieties developed by RiceTec using parent lines from Indian and Pakistani accessions held in U.S. germplasm collections, and process rights to breeding methods and techniques used to assess the cooking qualities and starch content of newly developed varieties.³⁵ Trademarks granted on RiceTec's Texmati and Kasmati brands would have allowed it to use the label "Indian style basmati rice." Indian nongovernmental organizations, such as Vandana Shiva's Research Foundation on Science, Technology and the Environment, generated significant public resistance and the government of India legally contested the patent in 2000, leading to RiceTec's eventual withdrawal of important elements of the patent.

Geographical indications offer something of an antidote to such attempts to claim proprietary rights to basmati by legally making where it's from integral to what it is. Under the World Trade Organization's Agreement on Trade-Related Aspects of Intellectual Property Rights, GIs are novel forms of intellectual property that build, in some sense, on older place-based proprietary claims, such as the French AOC, which originated in wine production but has been applied to cheeses, meats, walnuts, olive oil, and melons as well.³⁶ GIs differ from other forms of intellectual property in important ways: unlike patents, which are held for a fixed period, a GI may be held in perpetuity; unlike trademarks, which may be obtained on a product regardless of its place of production, a GI is territorially based.

India introduced a system of GI in 2003, but basmati presents

special challenges for GI protection. Unlike the aforementioned products, basmati is grown by millions of cultivators across a vast area in a transnational region. Though some products, such as Darjeeling tea, obtained a GI rather quickly, it was not until February 2016 that basmati was awarded a GI by India's Intellectual Property Appellate Board. This designation came after a long and contested process that involved both India and Pakistan and brought individual Indian states into conflict with each other. Ultimately, however, the basmati GI has conferred legal protection for basmati rice grown in India's sub-Himalayan region—in places like the Doon Valley. Now standards for export-quality basmati are used to determine not only which basmati qualifies for export but also which forms of basmati are protected by the GI. Indeed, the GI designation conferred on basmati is limited to those varieties that have been notified by the government of India (see Table 3.1). These varieties were developed in public- or private-sector plant-breeding programs, and all conform to the specifications for export-quality basmati. Thus, these standards now work to delimit basmati as intellectual property, nationalize the grain as Indian and reshape profoundly what it is and can be.

What's in a Grain?

As I conducted research in the Doon Valley in 2007 and 2008, residents of Asanpur, a village that had acquired particular fame for basmati, gave me small bags of a cultivar that was different from the one they were growing commercially. This cultivar was a landrace bred through farmer selection rather than a government-notified variety developed by a public- or private-sector breeding program and sanctioned for commercial sale. Farmers grew this landrace for their own consumption and often spoke of how its aroma was superior to that of any commercially available varieties. They called it simply *mōta* basmati—*mōta* in Hindi means fat or thick. *Mōta* basmati shares many of the characteristics of the government-notified

commercial varieties, especially its elongation upon cooking and its distinctive fragrance. But, as the word *mōta* suggests, before cooking the grain is short and bold or thick—not long and slender, as is more typical of commercially available grains. Despite its dubious appearance, residents of Asanpur spoke nostalgically of the wondrous aroma of *mōta* basmati, recalling childhood memories of its scent wafting through the village whenever it was cooked.

While Dehradun basmati is often described as if it were a single variety of rice, experienced cultivators discerned differing qualities across basmati produced in different locales in the Doon Valley.³⁷ Though named for a physical property of the grain, its thick kernel, *mōta* basmati's qualities were clearly also understood to exceed these parameters. In March 2008, shortly after the festival of Holi, I listened to Vinod Chauhan, an elderly resident of Asanpur, speak of the grain his village is known for. By the time that we met, he had passed the work of cultivation on to his sons, who also hold jobs in Dehradun. But a lifetime working his fields gave him an intimate knowledge of the micro-environment of Asanpur, the subtleties of its seasonal and daily rhythms, and their influence on basmati quality. Though increasingly frail in health, Vinod Chauhan spoke proudly of Asanpur's *mōta* basmati. Explaining how he and others in Asanpur accounted for *mōta* basmati's superiority, he remarked: "Above all else is the sun's warmth. When the first morning rays of the sun enter a house, it will be very good, no? It warms the house. So it is with basmati." Gesturing to the nearby foothills, he went on,

The wind blows down from the mountains and hills, down into the valley, at night. From this wind, what happens? It disperses the mist and dew from basmati. In places where the dew remains, there basmati—or any kind of grain—will not be good, it will become weak. The water also gives strength. Water cools the land when it is hot. In the rainy season it comes down from the mountains, it flows through the jungle, underneath the

Becoming Basmati



Organic basmati must conform not only to standards of organic production, but to government-mandated export-quality standards for basmati rice. Such quality is coaxed from the grain through the labors of farmers and agricultural workers. Doon Valley, July 2008.

leaves, and through the springs, and it gives much strength to the land. Also, in this water, calcium is more, and this also gives strength to the land. Here there are three canals. The water from two canals is good, they contain water from the Song and Bandal. This water, for paddy, for rice, it gives much strength. But water from the Baldi, in it there is lime, and it makes the rice weak.

He added that the more recent arrival of synthetic chemicals such as urea and DAP diminished the aroma of basmati, destroyed the fertility of the soil, and made the land hard. The optimum conditions for good basmati, he related, were those in which the land itself was agentive; evoking earth that springs underfoot, he noted, “The field should catch our feet.”

Vinod Chauhan conceived of basmati's qualities as contingent and relational. Rather than being fixed in the grain, its most salient characteristics were the product of a complex ecological interplay, not just of climate and water, but of the wind's specific directions at certain times of day, the warmth of morning sunlight, and the courses along which water flows. By describing what makes *mōta basmati* distinctive, he also affirmed the inseparability of "where it's from" from "what it is." His account resonates with notions of terroir that attribute the quality of wine or cheese to the physical and material characteristics of the environment where it is produced as well as to "the cultural know-how behind agricultural products that helps constitute 'place' as a locus of shared custom and affective belonging."³⁸ If we extend the implications of Vinod Chauhan's description, it becomes clear that the socioecological characteristics of particular places and localities arguably matter as much for basmati as they do for wine or cheese. For him, as for others, *mōta basmati*'s qualities are manifestly not inherent in the grain, or programmed through a given production process, but conditioned by variations in weather, the water's temperature and mineral content, the use of fertilizers, and the rapidly expanding frontiers of the city. In this sense, then, *mōta basmati*'s qualities are forged ecologically and relationally, rather than being constituted primarily through measurable and calculable means.³⁹

During the course of my fieldwork I found that, like Vinod Chauhan, a number of organic farmers in the Doon Valley grew a local basmati cultivar, such as *mōta basmati*, alongside the certified organic, government-notified variety they were contracted to grow for Hira Foods. Yet the differences between the notified varieties of basmati cultivated for organic markets and Asanpur's *mōta basmati* made only more urgent the question of what basmati is. In the summer of 2008, I took this puzzle, along with a few grains of *mōta basmati*, to an eminent rice geneticist at the G. B. Pant Agricultural University. Our conversation was initially wide-ranging, as he ac-

knowledgeed that the term *basmati* is “a confusion.” He elaborated: “If you go to the rural area, you will find the basmati of every village. Every village has its own basmati.” This seemed to me an opportune moment to ask him about *mōta basmati*.

Taking out a small sample of the grains that I had carried with me, I was curious to see—though thoroughly unprepared for—his response. Because he was a rice geneticist, I had perhaps naively expected that he would be *au fait* with the variability and diversity of basmati. But his initial reaction was dismissive. He inspected the small, thick grains before him, looked up, and said, “But, Madam, this is not technically basmati.” He went on to explain his reasoning: “The grain is very coarse, there is lot of mixture [of other grains], and then more than 75 percent of grains, they are short and they are bold.” Pressing on this assessment, I told him that despite the appearance of the grain, it elongated significantly when cooked. Firm in his assessment, he replied that many such varieties elongate substantially, even “too much,” and that this does not make them basmati. Nonetheless, he genially asked his lab assistant to cook them, and his skepticism was tempered when we observed that the grain, as he put it, “behaved like basmati” and after cooking resembled basmati, lengthening and becoming fine and flakey. Despite the way in which cooking transformed the grain, however, he maintained that this could not be true basmati on account of the length and breadth of the uncooked grain. Rice, he noted, is the only grain that is consumed predominantly in an unprocessed state, that is, without milling or grinding (unlike wheat, barley, maize, and millets). Thus, he explained, the size and shape of the uncooked grain, and not just the cooked grain, are integral to characterizing its physical qualities. Contrasting basmati with more recently developed, high-yielding varieties, he noted that for basmati, “we may sacrifice yield, but we cannot sacrifice the cooking quality, eating quality, the physical quality. Because if there is no quality, it is not basmati.”

In rejecting Asanpur’s *mōta basmati* as basmati for want of the

right qualities, this rice geneticist no doubt probably had in his mind India's export-quality standards, which now also limit the scope of India's GI for basmati. These standards stipulate not only the length, breadth, length-breadth ratio, and elongation ratio but also percentage parameters for foreign matter, other rice varieties, other grains, and so on (see Table 3.2). Thus, the rise of basmati as a globally traded grain has had two major ironic effects. First, it has shifted the locus of quality to the physical properties of the grain and to a geography defined spatially rather than socioecologically and affectively. Second, it has expelled local cultivars like *mōta* basmati, in which the specificities of place and ecology are integral to the nature of the grain, from recent regulatory definitions of the very category of basmati. In other words, as a result of recent processes of qualification, the most locally particular and distinctive kinds of basmati are no longer considered basmati at all.

Contracting Quality

Despite Dehradun's history of basmati cultivation and prolific range of basmati cultivars, basmati's production waned in the latter decades of the twentieth century as it was replaced by higher-yielding, semidwarf rice varieties. Rice researchers working in the region attributed the decline in basmati to the high cost of inputs, particularly pesticides, needed for this disease-prone grain; to the availability of disease-resistant rice varieties with higher yields; and to labor out-migration and rapid urbanization.⁴⁰ The extent of the decline in varieties such as *mōta* basmati was reinforced for me one winter morning when J. P. Sharma, a farmer in Dharampur block of Dehradun district, described as *paaramparik* (traditional) Pusa Basmati 1, a semidwarf hybrid first notified by the government of India in 1989, which, though labeled basmati, traces only one basmati parent line.⁴¹

Dehradun's renaissance in basmati cultivation has its origins in the World Bank's Diversified Agricultural Support Project (DASP),

which ushered in organic agriculture. The DASP also laid the foundations for contract farming and subsequent transformations in what basmati means and is in the Doon Valley. Initiated for the state of Uttar Pradesh in 1998, before the formation of Uttarakhand, the DASP had as its purpose the promotion of the diversification of agricultural production and livelihoods through interventions in the agriculture and horticulture sectors as well as through projects to improve rural infrastructure, build human capacity, and encourage the development of the private sector. With the formation of Uttarakhand in 2000, the DASP was effectively implemented as two separate projects, albeit with common, overarching objectives. In practical terms, this meant that Uttarakhand claimed U.S. \$15 million of the \$160 million allocated to the project as the DASP came to cover 1,218 “bio-villages” in twenty-seven development blocks spread across five of the new state’s thirteen districts. As part of its effort to encourage agricultural diversification, an important objective of the DASP in Uttarakhand was to promote a shift from subsistence to commercial agriculture and from the production of low-value food grains to higher-value crops. In its early years, the project demonstrated a concern for questions of sustainability—both in an ecological sense and in terms of the long-term viability of project activities. Integrated pest management, integrated plant nutrient management, and composting technologies were among the key interventions in the agriculture sector.⁴²

The Organic Basmati Export Program (OBEP), then called the Organic Basmati Production Program, began under DASP auspices in 2002 with the aim of boosting the incomes of farmers in the low-lying blocks of Dehradun district and Udham Singh Nagar. In 2003 the APEDA and the Uttarakhand state government reached an agreement to designate Uttarakhand an agri-export zone (AEZ) for basmati. The AEZ designation carried the promise of financial and technical assistance from central and state governments to increase basmati exports from the region and promote direct business

relationships between buyers and producers. Upon its completion in 2004, the OBEP was absorbed by the recently formed Uttarakhand Organic Commodity Board (UOCB) and subsequently came to be partly financed by the Sir Ratan Tata Trust, one of India's oldest and most well-established private philanthropic foundations.

With its incorporation into the newly formed UOCB, the OBEP took on a mission never expressed in World Bank reports—"to retrieve the lost glory of Dehraduni basmati." While the UOCB built on DASP interventions by encouraging composting, biodynamic farming, and effective microorganism technology, the board also combined the cultural work of reviving Dehradun basmati's "lost glory" with the economic work of enhancing rural incomes, identifying several "seed villages" in Dehradun district to produce government-notified organic Dehraduni basmati (Type 3) seeds. As part of its efforts to promote the production of organic basmati for export, in 2005 the board facilitated a contract between farmers' federations in the Doon Valley and Hira Foods. Farmers registered with the board in the four blocks of the Doon Valley agreed to sell basmati directly to Hira for a fixed price through farmers' federations, while Hira Foods would in turn provide extension advice and inputs as well as oversee cultivation. To this day, the UOCB remains a liaison between Hira Foods and the Doon Valley's four farmers' federations, coordinating internal and external inspections, recruiting and training farmers, and providing technical assistance.⁴³

An important component of DASP was the formation of self-help groups (SHGs) and, crucially, the aforementioned farmers' federations. Such groups were not unique to the OBEP; they were part of a strategy to provide rural credit more broadly, disseminate training and technology, and form market linkages. In 2002 nearly 1,900 village-based SHGs had been set up across the state. Though these mainly provided credit and small loans, in a number of areas several SHGs combined at the level of the development block to form farmers' federations for the purpose of marketing specific com-

modities. Requisites for the formation of larger farmers' federations included a turnover of over 5 lakh (then equivalent to approximately U.S. \$10,350), a membership of over twenty SHGs or one hundred farmers, and registration under the Societies Registration Act of 1860.⁴⁴

In the four development blocks of Dehradun district that participated in the OBEP, farmers' federations became essential institutional linchpins in the system of contract farming established between Doon Valley farmers and Hira Foods as well as in the administration of organic certification. Federations serve several important functions. They are units of group certification, as we saw in the last chapter. They also provide a conduit for information, extension advice, and training through both the Organic Board and contracting companies. Through them, farmers negotiate contracts with companies such as Hira Foods; they also disburse contractually agreed inputs, supplies, and payments. By enabling farmers with limited landholdings under organic cultivation to economize on the costs of certification and to pool their harvests, federations give farmers direct avenues to large retail markets that would otherwise be inaccessible.

Moreover, federations are also important for companies, such as Hira Foods, that seek to enter the organic trade. For companies seeking to sell organic products, the traditional method of procurement through India's *mandī* system is untenable. *Mandīs*, or regulated marketing yards, are the cornerstones of many agricultural markets in India. In them, produce, including rice, is auctioned through an interlocking chain of government-registered brokers. They are not well equipped, however, to deal with the extensive documentation and traceability systems demanded by organic certification, nor do they allow for direct contact between the mills and farmers to ensure the provision of organic inputs, appropriate training, and opportunities for inspection.⁴⁵

The demands of certified organic farming therefore invite—and

indeed require—contract arrangements. Until April 2011, however, Uttarakhand had not made legislative amendments to its Agriculture Produce Marketing Committee Act to enable contract farming and authorize direct procurement by companies outside the mandī system. In the years preceding the development of the act, farmers' federations served as innovative and pliable entities through which contract arrangements could be established within the government mandī system. In Rawalnagar block, the farmers' federation obtained government registration to operate a shop in the mandī at its block headquarters. Thus, though paddy was procured from individual farmers at designated collection centers operated by each federation, it was then transported to the mandī office, where financial transactions occurred and were recorded. In effect, the farmers' federations allowed contract farming to operate within the regulatory framework of the mandī system in the years before legislation to govern contract farming existed in the state.⁴⁶ Thus, novel institutional formations that fashion connections between farmers and the private sector, from farmers' federations to the UOCB itself, prefigured and underpinned contract farming as an emerging form of agricultural marketing.

Producing organic basmati in the Doon Valley today occurs mostly through contract arrangements. In July 2005 federation presidents representing the four farmers' federations in the Doon Valley, the general manager of Hira Foods, and the Organic Board signed a three-year contract in which the federations agreed to sell their entire quantity of certified organic basmati to Hira Foods. In the inaugural year of the program, Hira agreed to purchase basmati rice for a price of 2,100 rupees per quintal for certified organic basmati and 1,900 rupees per quintal for basmati produced on land still in conversion to organic methods.⁴⁷ The company further agreed to provide packing materials and tags and arrange for weighing and transport to their Haryana rice mill; in subsequent years, they also provided seed and technical assistance and offered federations ad-

vances and support for the purchase of inputs. Beyond the standards that must be met to receive organic certification, the contract laid out certain metrics of quality to which basmati must conform. Thus, moisture content must be less than 16 percent, matter other than the basmati less than 0.5 percent, red grain less than 0.5 percent, green grain less than 4 percent, and damaged and broken grain less than 0.5 percent. Paddy must also be of uniform variety and size; to ensure this, farmers were encouraged to undertake “roguing,” the practice of uprooting off-type varieties.

Earlier in this chapter, I noted that the social life of basmati includes histories of royal supervision, elite consumption, and proprietary contestation.⁴⁸ Modern contract farming arrived in the Doon Valley with Hira Foods in 2005. While situated broadly in the transformations brought about by India’s program of liberalization, contract farming may also be understood as part of a set of practices of surveillance, exchange, and control to which basmati has been subject for some time. Indeed, contract-like arrangements may not be entirely new to the production and marketing of basmati in the Doon Valley. According to the accounts of farmers and traders in and around Dehradun, during the early and mid-twentieth century basmati farmers maintained similar trading relationships with the city’s rice merchants. In exchange for access to credit, advance payments, inputs, and assistance with major family expenses such as those incurred for weddings, basmati cultivators committed to sell their harvest to particular traders. Though such agreements were verbal, embedded more in established social relationships than in the idiom of contract, they did share the forward-looking element of today’s contract farming, which, at its most basic, is an agreement for exchange at a given price to take place at a future date.

Contract farming is frequently understood as an extension of the logic of capital accumulation—an exemplar of industrial agriculture’s neoliberal form. Contracts assure farmers that they will receive a certain price for what they produce, and they may also provide for

inputs or training, but they also transfer much of the risk of production to farmers, who must comply with quality standards or face the possibility that their crop, or a portion of it, will be rejected by the contracting company.⁴⁹ Many studies of contract farming focus on farmers themselves, examining how growers or producers become subjects of new contracting regimes. Roger Clapp characterizes contract farming as a kind of “proletarianization” in which “the farmer is required to work but not think.”⁵⁰ Though relations between contractors and growers are undoubtedly asymmetrical, some have noted the potential for the development of moral economies through which farmers may renegotiate or resist the terms of contract by creatively reinterpreting their contract conditions, finding means for opting out, siphoning resources, or adulterating their products.⁵¹

Even as contract farming repositions farmers in agricultural markets, demanding conformity with new standards, it also shapes and conditions the nature of production itself. In this regard, Michael Watts argues that while contract farming may well be a form of “Fordist” agriculture, geared to mass production of a standardized product, it simultaneously imposes grading and quality standards “that allow the commodity to be rigorously classified, screened, differentiated, and priced in the contract.”⁵² Processes of singularization and commoditization, of distinction and standardization, converge around the quality that the contract seeks to elicit and assure in production processes. In the Doon Valley, it is precisely by means of such contract arrangements that processes of qualification and enrichment are brought to farmers’ fields and into the very practices of cultivating crops themselves.

Ecologies of Enrichment

In the midst of a monsoon downpour in August 2008, Dr. Sharma, the technical adviser for Hira Foods, stood on the edge of a paddy field pointing his finger at the young, bright green basmati plants.



“Brown spot” on basmati paddy may cause blemishes and discoloration of the milled and polished grain. Employees from Hira Foods enjoined farmers to work to produce “quality” grain through labor and care that would mitigate such problems of quality. Doon Valley, October 2008.

Flanked by field officers and master trainers from the UOCB as well as the farmer whose crop he was gesturing to, Dr. Sharma sought to draw their attention to yellowish brown spots on the leaves of the young plants. As he and those around him huddled under umbrellas, Dr. Sharma fervently compared the cultivation of basmati to providing for the nourishment and health of a child, urging on this and other occasions I observed, “*Jaiṅvik khetī me, khana chahiye, darwai chahiye, panī bhī chahiye*” (in organic agriculture, food is needed, medicine is needed, water is also needed). For Dr. Sharma, these signs of brown spot—as well as those of other diseases such as blast, nutrient deficiencies, and pest problems such as leafhopper and stem borer that he noted on his tour of the valley—bode ill not only for the final crop yield but also for the quality of the harvested grain. Though Hira Foods did not maintain a continuous presence in the valley, Dr. Sharma made regular visits to monitor the quality

of the paddy at various stages of its growth over the crop cycle and at the moment of procurement, when farmers took their harvested grain to the company for inspection and sale. Contract farming thus accomplished much more than assuring buyers of their supply, and farmers of a price and buyer. It also afforded Hira Foods unprecedented access to farmers' fields in order to monitor the production level and quality of the basmati it had contracted farmers to grow.

If agriculture across much of India since the Green Revolution has emphasized production and yield, the advent of contract farming in the Doon Valley has inaugurated other priorities—not only organic farming methods, but also a particular concern with quality. Though such concerns were expressed through standards codified in lists, tables, and regulations, enacting quality entailed socio-ecological labor—work in and on fields and plants. The progressive standardization of basmati that accompanied its increased commoditization may have created parameters and frameworks for its enrichment, but these characteristics themselves had to be coaxed from the crop. In other words, quality itself had to be brought into being in individual grains of rice. In this sense, economies of enrichment do not necessarily function distinctively from the worlds of labor, as has sometimes been claimed, but rather rely on it. Karen Hébert lucidly shows how new norms and standards regarding the definition of quality in wild Alaskan salmon depended critically on harvesting practices and the labor of handling, bleeding, and chilling individual fish.⁵³ Scholarship on economies of quality or enrichment has drawn attention to the ways in which consumer agency and reflexivity confer value.⁵⁴ Such economies, however, are also present in the world of production and become the means of distinguishing among comestibles.

The cultivation of quality basmati proved to be new to farmers bound by the contract with Hira Foods, and it was one of the principal challenges that Hira employees identified as they spoke of the

company's experience in the Doon Valley. Hundreds of kilometers away from Doon Valley fields, in his office near the company's labyrinthine rice mill, the general manager of Hira Foods explained to me that in the early years of the program, pains were taken to assess the quality of the basmati as it grew in the field and to "show" the farmers what "quality" basmati was—apart from the organic standards to which they were also committed. Quality basmati rice, he explained to me, was uniformly long, without wild rice admixtures or other residues, and with minimal green, red, and broken or damaged grains. Intimating that initially farmers did not grasp these meanings of *quality*, he reflected that with time and training, "now they know this quality, they assess the quality themselves."

Dr. Sharma, who has worked as technical adviser for Hira Foods in the Doon Valley since the inception of the contract, spoke more candidly. The early years of the program, he declared, were a "hodgepodge." Initially, the company had not provided farmers with seeds, a "package of practices" for organic basmati cultivation, or arrangements for inputs. Accordingly, he explained, Hira had no way of ensuring the uniformity and quality of the grain it procured. The evolution of the program in subsequent years brought a greater level of systemization. Hira now provides seed and advances for inputs if required; it also purchases "zero year" paddy, or rice in the first year of organic conversion, when farmers are likely to experience yield decreases but cannot access price premiums by selling their paddy as organic. The company, through Dr. Sharma, has also developed a "package of practices," with detailed guidance on sowing, spacing, transplanting, weeding, nutrient management, manure and composting, disease and pest management, and so on. This package forms the basis for more standardized training and technical advice provided by Hira Foods and master trainers at the UOCB.

The parameters outlined in the package of practices, as well as the contract arrangement itself, create a picture of strict standards and Hira's active disciplining of rice. Yet, while Hira Foods has

been critical in shaping quality through the inputs it provides and the extension advice offered by Dr. Sharma and the UOCB's master trainers, the labor of producing quality basmati ultimately fell on farmers themselves. Farmers were enjoined to grow "quality" basmati by uprooting what was deemed "rogue rice"—that is, cultivars of other varieties that sprout unexpectedly in the fields of their own accord. By uprooting off-type plants, farmers ensured greater uniformity in the harvested grain and compliance with the standards for export-quality basmati. At the time of my fieldwork, however, even the most dedicated organic farmers experienced some frustration with the standards. A number complained about the high labor costs associated with weeding and pest control. For wealthier farmers, these costs were felt in the wages paid to hired laborers; for those farmers who undertook the work themselves, the cost was of their own time. On other occasions, farmers expressed discontent with the seeds that Hira Foods supplied, remarking that the organic basmati appeared more prone to disease and pest infestations than other seeds.

Intense focus on the quality of the grain became even more pronounced at the time of procurement, when farmers came to sell their harvested paddy to Hira Foods. Procurement marks the moment of transaction and transfer: technical inspectors from Hira Foods weigh and evaluate the paddy, make tallies, and, if the basmati meets quality standards, fix the total amount that a farmer receives on the basis of the quantity of paddy, the stage of conversion, and the procurement price. The sociological study of markets and valuation has shown the critical role of such *épreuves* or tests in affirming quality.⁵⁵ When farmers arrived at the collection point, they were met by Dr. Sharma and two aptly named "quality inspectors" from Hira Foods. As bags of paddy, or unmilled grain, were unloaded and weighed by wage laborers, quality inspectors used a long metal sampler to draw out grains of paddy from each sack. Examining each handful carefully, the inspectors visually assessed



During procurement, a moisture meter is used to test a sample of paddy for moisture content. Failure to comply with quality standards can result in rejection of the paddy by Hira Foods, although in most instances work-around solutions are identified. Doon Valley, December 2007.

the presence of green grains, rogue grains, and broken grains, casting their handfuls down on the ground after each evaluation.

On the occasions when I observed procurement in late 2007, it seemed that much of the basmati paddy brought by farmers satisfied Hira's quality standards. On a few occasions, however, the quality of the basmati became an issue. One morning, as I sat with Dr. Sharma and his employees in Dharampur block, a farmer brought paddy whose moisture content was higher than that stipulated in the contract and governmental standards. A sample of the paddy was placed in a "moisture meter." Dr. Sharma, the quality inspector, a field officer from the UOCB, and the farmer sat round a table as the meter confirmed that the paddy's moisture indeed exceeded the maximum level of 16 percent. Outright rejection of the paddy is one consequence of failing to meet quality parameters. If that had occurred, it would have validated the disciplinary conse-

quences of the contract and brought into sharp relief the asymmetries of power that Clapp identified as integral to contract farming.

What transpired, however, was something quite different. Dr. Sharma expressed a desire to avoid “discouraging” farmers through rigid interpretation of standards. In these initial years of contract farming, he suggested, it was important to affirm and recognize the commitment to the contract that each demonstrated by bringing paddy for procurement. Though standards themselves were not altered, Dr. Sharma made compromises or devised work-around solutions to avoid rejecting the paddy altogether. After much discussion, it was decided that the paddy would be taken out from the bags and spread on plastic tarps to allow it to dry further in the sun. Toward the end of the day a sample was taken for reading in the meter. Again the reading showed that the moisture content remained elevated. Despite the meter readings and the moisture content, Dr. Sharma decided that the paddy would be purchased, explaining that the grain would have further time to dry at the rice mill. On another occasion, samples taken by a quality inspector showed an excessive percentage of green (or immature) grain. This too could be grounds to reject the paddy, but again Dr. Sharma decided to accept it with the caveat that extra paddy for which the farmer would not be paid would be loaded into each bag to compensate for the higher proportion of green grain that would have to be weeded out at the rice mill.

That Dr. Sharma devised such compromises to avoid rejecting paddy outright does not negate the disciplinary aspects of contract farming or the inequalities of power that attend it. On the contrary, it was Dr. Sharma alone who could initiate a compromise and devise alternatives. Farmers themselves were not involved in making the compromise and, on each occasion, were left on the margins to wait for Dr. Sharma’s final decision. If anything, the discovery of these instances of noncompliance worked to further inculcate the disciplinary aspects of the contract by bringing into sharp relief the

standards against which the paddy—and by extension the farmers—were measured. These compromises, moreover, were possible because the quality inspections undertaken at the time of procurement represented just one step in a much longer process of qualification that would continue at the rice mill.

Dr. Sharma's technical advice, dispensed to farmers on the edges of basmati fields, the "package of practices" he devised to familiarize farmers with Hira Foods' expectations of quality, and the negotiations and compromises he struck with farmers during the time of procurement worked to engrain the production of certain forms of standardized quality within everyday acts of cultivation. In this way, the production of organic quality may be understood not only as a sociotechnical but a socionatural practice, one that enriches the economic value of organic basmati grains through efforts to coax and nurture from them particular physical, material, and even biochemical properties. Structuring this process were a panoply of standards, which not only defined the requirements of organic production, but also limited which seeds could be considered basmati and which particular configurations of physical properties would render basmati of "export quality." As much came to depend on these progressive limitations of what basmati is, or could be, earlier ways of naming and knowing basmati on the basis of "where it's from" were eclipsed. Local landraces such as *mōta* basmati were gradually disappearing from the Doon Valley, as standardized varieties of government-notified basmati were taken up for cultivation.

These processes are relevant for thinking further about the distinction between "organic by default" and "organic by design," discussed in the first chapter. The production of quality basmati, in many respects, relied on farmers who demonstrated a deliberate commitment to being "organic by design," who adopted and enacted agricultural labors and practices that would yield basmati with particular quality characteristics. In the Doon Valley, this proved to be a process akin to that by which hill farmers were enjoined to

demonstrate their status as “organic by design” through adherence to particular composting practices and methods (see chapter 1). But, as we shall see in the next chapter, considerations of quality were important for hill areas too. They incited, conditioned, and came to trouble the imagination and aspirations of board officials and hill farmers for organic supply chains that would connect Uttarakhand’s mountain districts to lucrative, far-flung metropolitan and international markets.

FOUR

*Market Imaginaries and
the Horizons of Aspiration*

Because of its histories of commoditization and ongoing qualification through organic cultivation and international trade, the biography of basmati differs sharply from those of many staple hill crops grown in the Uttarakhand Himalaya—millets, other coarse grains, and a myriad of pulses among them. Deepa Agarwal, program manager of the UOCB, remarked on this as she reflected on her three years managing the work of the board: “When I started, I realized that never before had products from the mountains, organic or inorganic, been sold. The task of bringing markets is a big one. An entire supply chain has to be put in place.” Himalayan crops have long circulated in regional markets and via trans-Himalayan trade routes, but these historical market connections were not what Deepa Agrawal had in mind as she linked the need to build supply chains with the work of “bringing markets” to the mountains. This chapter turns from the basmati fields of the Doon Valley to Uttarakhand’s mountainous regions, and in particular the village of Nagthari, in order to explore this self-described challenge and, through it, the ways in which organic quality catalyzes imaginations

of, and everyday aspirations for, new agricultural markets. I examine both how the bureaucratic state is imbricated in market making in the mountains and, equally, how residents of Nagthari in Jaunsar Bawar participate in these efforts. As commercially oriented organic agriculture in Uttarakhand enlists hill farmers in reimagining and refashioning their connections to markets, the chapter is animated by a simple question: In this region of the Himalaya, how are new agricultural markets being made?

Establishing agricultural markets in the Uttarakhand Himalaya has been one of the great challenges of rural development in the region. In the wake of economic liberalization, pressure for increased private-sector involvement in agricultural markets has mounted. This has resulted in, among other things, the recent rise of contract farming, as we saw in chapters 2 and 3. On the whole, however, agricultural market relations and supply chains in India continue to be predominantly configured through the state-operated *mandī* system. Selling grain and produce in these venues presents farmers across India with its own set of challenges linked to intermediation and price setting, but Himalayan cultivators must surmount additional challenges even before their crops arrive at the market.¹ For those who live far from a road, the journey may begin on foot or by mule and then continue by means of the shared jeeps, buses, and trucks that ply mountain roads. In some cases, particularly when perishable fruits and vegetables are involved, farmers sell their produce to roadside intermediaries who aggregate produce from a number of growers and then transport it to the *mandī*—and who often pay farmers a fraction of the price they would receive in the *mandī*.²

Developing rural markets in the Himalaya is thus often framed as a challenge of overcoming the constraints of the region's mountainous geography by building physical and institutional infrastructure to reduce farmers' reliance on such intermediaries. These efforts include facilitating post-harvest processing, storage, and transporta-

tion as well as adapting or establishing institutions to aggregate crops and provide access to credit. A report on the development of high-value crops in Uttarakhand by the International Food Policy Research Institute advised the state government to proceed along these lines: “To better connect farmers to the market and to enable farmers to take advantage of the new opportunities offered in the market place, the state of Uttarakhand should change its role from tax collection and regulation to facilitation where a private market-driven agricultural environment is created that will benefit producers and consumers alike. . . . The state should turn attention to getting the institutions and infrastructure in place as to allow private trade to flourish.”³

The technical, institutional, and infrastructural emphasis of such assessments of agricultural marketing, however, belies other dimensions of what is involved in “bringing markets to the mountains.” In this chapter, I attend to imagination and aspiration as forms of affect and elements of human agency that are equally central “forces of production” in forging new market connections in Uttarakhand’s Himalayan regions.⁴ Efforts to develop certified organic agriculture and, through it, to establish news kinds of market connections and relations hinged on the imaginative possibilities conceived by Organic Board officials and farmers alike, as well as their aspirations and strivings. Charles Taylor’s work on the modern social imaginary is instructive here. He explains the social imaginary expansively as “the ways in which people imagine their social existence, how they fit together with others, how things go on between them and their fellows, the expectations that are normally met, and the deeper normative notions and images that underlie these expectations.”⁵ Taylor illuminates the ways in which ideas and ideals central to European and Anglo-American modernity—particularly those relating to the economy, public sphere, and democratic self-government—acquire meaning in everyday life and popular imagination, thus shaping and producing forms of social practice.⁶

The notion that imagination and aspiration are conditioned by, and in turn condition and shape, social and cultural worlds has been articulated more pointedly by Arjun Appadurai. Identifying imagination as a key aspect of agency, he argues that “the imagination has become an organized field of social practices, a form of work (in the sense of both labor and culturally organized practice), and a form of negotiation between sites of agency (individuals) and globally defined fields of possibility.”⁷ Aspirations hinge on the work of imagination, and they are similarly conditioned, “always formed in interaction and in the thick of social life.”⁸ Though imagination and aspiration themselves are multiple and diverse, and the “capacity to aspire” may not be equally distributed, they constitute a key element of the affective force of development and modernity.⁹

In postcolonial India, Sudipta Kaviraj has argued, the state is the site of everyday aspirations and political imaginaries for elites and subalterns alike.¹⁰ In “the Nehruvian state,” he writes, “there was a historic convergence of radically different expectations. The upper classes saw it as an instrument of economic growth. . . . Lower strata in Indian society were drawn into it by the promise of social dignity, and end of the caste system, and a distant dream of economic re-distribution.”¹¹ But in post-liberalization India, as in neo-liberal settings around the world, the state is no longer a singular “source of modernity” and locus of everyday aspirations. In the wake of liberalization, aspiration, as a well-developed literature demonstrates, has also come to be importantly intertwined with consumer citizenship, forms of education and employment, varying forms of mobility, and temporally situated ideas of progress.¹²

This chapter argues that aspiration and imagination are, in Appadurai’s sense, forms of work and social practice, as well as sites of negotiation, in rural and agrarian worlds. In Jaunsar Bawar, and the wider Uttarakhand Himalaya, multiple imaginaries and aspirations, both realized and unrealized, play a crucial role in making markets. My analysis departs from the tendency to view the work of making

markets through an understanding of economic agency as primarily calculative, an approach characteristic of both recent behavioral and actor-network approaches.¹³ Instead, I understand imagination and aspiration as elements of an ineluctable human agency that are central to market making. In what follows, I first consider the ways in which different kinds of aspiration and imagination encounter each other, and are negotiated, in the context of buyer-seller meets organized by the UOCB to bring hill cultivators together with potential buyers. Then I shift to the headquarters of the UOCB itself to understand the bureaucratic imagination through which its managers organize organic agricultural production in the hills in a manner amenable to the supply-chain logistics of metropolitan and international buyers. Finally, I turn to the village of Nagthari in Jaunsar Bawar and examine how its residents aspire and act to cultivate new forms of market participation.

The Buyer-Seller Meet

I met Amrita Devi for the first time in the fall of 2007, at a buyer-seller meet held at an ashram near the UOCB's headquarters. She, along with other cultivators from the hill regions of Uttarakhand, had traveled to Dehradun for the meet in the hope of finding buyers for their freshly harvested kharif crops. With farmers, master trainers, and buyers assembled in a single space, these meets provided an occasion for representatives from the UOCB and the state's Department of Agriculture to articulate a vision for the future agrarian development of Uttarakhand and describe how to achieve it. Uttarakhand's secretary of agriculture opened the day's proceedings with remarks that held out the promise of better prices and access to export markets through organic agriculture. Holding up basmati rice as an example of a crop that had attracted successful contracts with large retailers, he suggested that such arrangements might be replicated for other crops in the region.

Basmati, however lucrative it may be, cannot be grown in moun-

tainous environs. Amrita Devi, one of the few women participating in the meet, stood up and asked pointedly: “What are we to do if we cannot grow basmati?” Her question revealed the hope and frustration that are intermixed through hill farmers’ efforts to forge new market connections for food grains that are often little known among urban consumers. One such grain is *jhangōra*, or barnyard millet, grown widely in the hills and consumed there mainly as a subsistence crop. As we spoke over lunch, I told her how I prepared *jhangōra* for my one-year-old son. Surprised at my familiarity with this coarse grain, at the end of the day she pressed a small, neatly packaged bag of *jhangōra* into my hand. At the meet, I learned, she had found no buyers for this crop. I would soon come to know Amrita Devi and her family well, as she would come to know me and mine; our acquaintanceship later led me to locate part of my fieldwork in her village of Nagthari. But although Nagthari was among those villages that had invested in equipment and training for basic post-harvest processing, contracts with buyers and private-sector companies still proved elusive.

Buyer-seller meets were among the principal events that the UOCB organized to facilitate the formation of market linkages. For organic basmati farmers in the Doon Valley, the proximity of the state capital meant that such meetings often occurred on the periphery of farmers’ fields or in the office of UOCB with the presidents of farmers’ federations. Perhaps testifying to the greater challenge of establishing links between hill farmers and buyers, efforts to facilitate new market opportunities in mountain areas took the form of annual or biannual buyer-seller meets that convened a larger number of people in a single venue. Those that I attended in 2007 and 2008 were occasions when the potential for market making was palpable, along with the affective dimensions of such efforts.

At the 2007 buyer-seller meet where I met Amrita Devi, Deepa Agarwal, the UOCB’s director, elaborated on the aspirations for far-flung markets kindled by the agriculture secretary. Crops produced

in the hills of Uttarakhand are found nowhere else in India, and this, she emphasized, created a unique market opportunity. Exports, she explained, could be realized only through organic certification—something the UOCB could help with. It would also be necessary for farmers to form federations, or clusters, to ensure that they could supply adequate quantities to buyers. “What buyer from Punjab or Haryana,” Deepa Agarwal asked rhetorically, “is going to buy thirty kilos of *rājmā* [kidney bean]?” These ambitious opening comments envisioned an agrarian future based on contracts and export markets, one that would require new levels of coordination among hill farmers for certification, supply, and post-harvest processing.

At both of the buyer-seller meets in which I participated, the transition from opening remarks to the activity of the meet itself was marked by a transformation in the spatial layout of the room. Tables and chairs that had been set up conference-style were separated to allow people to move around individual tables. The physical rearrangement of the room was, I discovered, accompanied by a rearrangement in market imaginaries. Official pronouncements about orderly supply chains functioning for the volume production of certified organic crops under forward contracts, in which buyers and sellers agree on the price and quantity of a crop to be exchanged at a future date, yielded to diverse and at times incompatible sets of expectations and hopes. Buyers circulated around the individual tables on which farmers displayed their crops and produce. At each meet, the atmosphere was initially frenetic as buyers sought out those sellers whose products most interested them. As time progressed, it became evident that certain farmers and groups attracted more buyers than others. While some of those assembled were master trainers, service providers, or heads of farmers’ groups or federations, others were cultivators independent of any larger affiliation.¹⁴

This was true of Kamal Singh and Ruchi Devi, an elderly couple whom I met in early August 2008 at a buyer-seller meet convened in a hotel on the outskirts of Dehradun. They had traveled thirteen

hours from Pithoragarh, a northeastern district of Uttarakhand abutting Nepal and Tibet, bringing with them a bag of soybeans and a small plastic bag of kidney beans that they were sorting carefully into three different varieties. When I asked how they grew their crops and what they had to do to be organic, they replied, “*Kuch nahīn karte, eśī local*” (We don’t do anything, this is simply local). Their response was one I often heard from hill cultivators, particularly those whose ties to the UOCB were weak. While more prominent organic farmers, such as Rawatji and Amrita Devi, had embraced the organic program and spoke eagerly of their efforts to implement new composting methods, as I described in chapter 1, other hill farmers, like Kamal Singh and Ruchi Devi, often spoke in more understated registers about their own agrarian labor and agency, indicating that there was nothing particularly special about how they farmed organically and glossing their crops as “only local.” As I sat with Kamal Singh and Ruchi Devi, a prospective buyer approached to inquire about their soybeans—his interest hinging on how much they would be able to supply him. Kamal Singh considered his reply to the question for some time, eventually responding that his village would be able to supply twenty-five quintals (2,500 kilograms, or 5,500 pounds). The potential buyer quickly dismissed this amount and, with a wave of his hand, walked away in search of other prospects. Throughout the rest of the day, few buyers lingered long at Kamal Singh and Ruchi Devi’s table.

As the meet progressed, it became clear that the negotiations were largely buyer-driven—deals were struck if a buyer’s requirements could be satisfied; if not, they faltered. One buyer, in conversation with the UOCB’s service provider from Tehri Garhwal district, Ram Das, declared that he required soybeans to be between 4.5 and 4.75 millimeters (about 3/16 inch) in diameter, and that anything falling outside those parameters would be used as feed grain for livestock. Further, the color of those soybeans that met the size criteria would have to be uniform and not green. Finally,

the buyer required 220 to 250 quintals (22,000 to 25,000 kilos, or 48,500 to 55,000 pounds). Ram Das agreed, but he explained that he would need to confer with master trainers from Tehri Garhwal and Chamoli districts to procure this quantity. In this manner, Ram Das was able to leverage forms of state capital far more extensive than those available to Kamal Singh and his wife.¹⁵

Many discussions that I observed at buyer-seller meets centered on the quality parameters required by buyers. During a question-and-answer session at the conclusion of one meet, a buyer stood up in front of all assembled to lament that farmers' samples had no uniformity and to declare that agreements cannot be made without grading and quality standards. Rajendra Shastri, the UOCB's technical manager, explained that in many instances the seeds farmers used were those of "traditional varieties" that they selected, saved, reused, and exchanged. This inevitably led to a lack of uniformity in the harvested crop. He went on to discuss the UOCB's efforts to train farmers in practices such as "roguing" and assured the assembled buyers that uniformity would be achieved "next year."

Looking Forward, Working Backward

For the bureaucrats who work in the headquarters of the UOCB, the challenge of creating markets for organic produce from the hills became all too apparent in settings such as buyer-seller meets. Supporting hill farmers to produce grains that met the exacting quality standards of buyers, in the quantities that they demanded, was a key aspect of the spatial, aesthetic, and institutional work of creating a supply chain. As she professed the UOCB's ambition to bring markets to the mountains at our initial meeting in 2006, Deepa Agarwal explained to me that the Organic Board's main challenge was that demand for organic products outpaced supply. The UOCB needed both to expand the range and to increase the volume of organic commodities in order to create a supply chain. Sitting at her desk, an air conditioner humming behind her, she told me confidently

that the board was working to “convert organic farming into something with a trade focus.”

How was this conversion imagined and enacted bureaucratically? At that time, the Uttarakhand Organic Commodity Board’s website showed how it conceptualized and represented its role in generating markets for organic products in the region. Though the content and appearance of the website have since changed, at that time the UOCB used the platform to characterize itself as the “prime facilitator for backward as well as forward linkage in the state.” The website described how the UOCB designed and disseminated product plans on the basis of market demand, assisted farmers in forming organic producer groups, and linked them with markets. Summing up its purpose, the website declared that the UOCB provides “the vital fill in the blank service.” This prompts the question of how exactly to understand the “blank” in the first place. For hill farmers growing crops organically in Uttarakhand, market formation is fraught with expectation and disappointment owing to discrepant ways of imagining what an organic market is. For the UOCB, then, filling in the blanks means reshaping expectations and imaginations about what *organic* is. In the mountains, this sort of work was an important way in which organic markets were made.

As an institution affiliated with the state government and registered under the Societies Registration Act of 1860, the UOCB is not permitted to buy, store, or sell organic products. How, then, does an entity that cannot itself participate in markets generate both supply and demand for organic commodities from the region? The UOCB coordinates an organic supply chain through inter-related subdivisions—the quality cell, the production cell, and the marketing cell—that have distinct institutional genealogies. The latter two cells fall under the ambit of the Centre for Organic Farming (COF), an initiative funded in 2003 by the Sir Ratan Tata Trust, a large philanthropic organization established by a key figure in one of India’s preeminent industrialist families of the early twentieth

century. The state government's original submission to the trust proposed that the COF would be housed in an NGO. But with the formation of the UOCB in 2003, it was decided that the COF could exist as a distinct entity housed within the UOCB. In an everyday sense, there is little to distinguish the COF's work from that of the UOCB, as personnel share office space and collaborate closely on shared projects. While their work is organizationally distinct and there is a well-specified division of labor, their deep symbiosis also blurs the boundaries between state and nonstate entities and produces an institutional hybridity that is, arguably, a product of economic and governance reforms undertaken in the name of structural adjustment as well.¹⁶ Indeed, Deepa Agarwal herself described the UOCB to me as "a kind of hybrid."

Under the auspices of the Centre for Organic Farming, the decision was made to establish organic producer groups (OPGs) distinct from but connected to the UOCB's macro-mode bio-villages. The term *bio-village* arrived in the region in the 1990s through the World Bank's DASP, which was first implemented by the state government of Uttar Pradesh and subsequently handed over to the newly formed Uttarakhand government. Under DASP, bio-villages were initially conceived as model or demonstration villages for composting technologies and biofertilizers. Following the completion of DASP, the bio-village effort was expanded through the government of India's Macro Management of Agriculture scheme, which, in line with broader moves toward more decentralized government administration, shifted the central government's emphasis on programmatic interventions in agriculture to a "macro managerial" approach coordinating different projects through work plans devised by federal states. Under this scheme, more bio-villages were added to the DASP's original sixteen, initially expanding the total number to ninety-five. The DASP's concept of bio-villages was broadened to include a substantial technical-assistance component with the creation of a cadre of master trainers to advise farmers on

organic cultivation practices, certification requirements, and so on. Whereas bio-villages were thus envisaged as nodes in a wider network of extension and training in organic production methods, OPGs were clusters of villages that joined together to assume responsibility for grading, post-harvest processing, storage, packaging, labeling, and microfinance. OPGs were equipped with the necessary facilities and infrastructure—such as graders, threshers, scales—to carry out this role. Officials within the UOCB and COF believed that devolving this work to the village or cluster level would give owner-cultivators more control over the marketing of their crops, promote the concentration of particular crops in particular geographic areas, and facilitate farmers' incorporation into supply chains.

Because of their symbiotic relationship, the UOCB and the COF together carried out work of a scope and scale that neither a state agency nor an NGO would be able to undertake alone. The existence of the COF quite literally within the compound walls of the UOCB gave the state a hand in activities not normally within its remit—namely, building private institutions to act as hubs of local agrarian commerce. At the same time, these institutions relied critically on the state-funded extension network of master trainers to provide technical advice and act as liaisons among the villages, the government bureaucracy, and wider markets. This hybridity allowed the UOCB to “fill in the blanks.”

Cultivating Demand

Over the course of my time at the UOCB, efforts to create market linkages—and indeed markets themselves—took varied forms, including selling organic products in melas and exhibitions, which I discuss in chapter 5, as well as buyer-seller meets on a range of scales, from small-group discussions on the margins of cultivated fields to organized meetings in larger venues. The UOCB stood between Uttarakhand's hill farmers, who cultivate crops little known in urban markets, on the one hand, and a still-inchoate world of

existing and prospective buyers, markets, and consumers, on the other. One day, Deepa Agarwal departed from the bureaucratized language of “facilitation” to describe the UOCB more powerfully and evocatively as an “umbilical cord” for the region’s hill farmers—a conduit of technical and institutional nourishment that would in time enable them, in her words, to “stand on their own feet.”

She was not alone in her conviction that the UOCB’s work was to grow markets and organic farmers together. In late 2007, Ajay Solanki, the marketing manager of COF, told me that they began with “a base of products that had never before been seen in markets” in Delhi and other metropolitan areas. These products included finger millet, barnyard millet, black soybeans, and other coarse grains, pulses, and dryland rice. Of the forty-odd organic commodities on their product list, he observed, only ten—among them spices, kidney beans, cereals, wheat, and vegetables—had reasonable demand in the market. The challenge for the marketing cell was to discern where there was demand and organize for its supply, an approach that Ajay described as consumer-driven. Though this had been accomplished in the Doon Valley for basmati and, more recently, wheat, it has proved more difficult in the hills, where production is more geographically diffuse and the diversity of crops and varieties is higher. In this circumstance, the UOCB sought to identify niche markets for spices such as chili, turmeric, and ginger as well as certain kinds of pulses and coarse grains. For example, the UOCB has worked to cultivate a market for *paharī toor* in Delhi, as *toor* (pigeon pea) is a pulse widely used in regional cuisines across India.

Demand for other hill crops does not exist simply because such crops are not widely consumed outside the region or in urban centers. The UOCB has struggled to find a market for finger millet, for instance. With high calcium and iron content, this crop is produced mainly for subsistence. Indeed, in conversations with urban and suburban residents, I encountered the perception that the dark color of the flour produced from finger millet, which is often con-

sumed as *roti* (a type of flatbread common in many regions of north India), would make one's complexion "black," something that many considered undesirable in a cultural milieu that privileges fair skin.¹⁷ Wheat, rice, and maize were therefore preferred cereal crops. When I arrived in 2007, the UOCB had already undertaken a series of efforts to find buyers for this widely cultivated coarse grain. These included an agreement with a Japanese buyer to export finger millet for use in baby food and a separate effort with a buyer to export millet-husk baby pillows. Neither of these initiatives bore fruit, but in the winter months of 2008, the UOCB secured a contract with the state government to procure several tons of finger millet for private vendors to use in the state's midday meal program. Deepa Agarwal described how this agreement had been forged through a conversation with an acquaintance of hers at the World Food Program. They decided that, since finger millet is rich in minerals essential for childhood health, it should be incorporated into the "India Mix" for midday meals—rather than crops such as soybeans imported from outside the region. The World Food Program provided financial support for research at G.B. Pant Agricultural University to develop a formula for the mix, while the UOCB's field staff worked continuously for several months to procure adequate quantities of the crop from across the state. Although the finger millet was sold to private vendors who received a contract from the state to prepare the mix, the formation of a market for it was not a private undertaking but instead a result of public and intergovernmental efforts.

In recent years, the UOCB has also sought to leverage other channels to shape demand and taste for hill crops such as finger millet through an initiative to develop "green restaurants." This idea, floated during my time at the UOCB, came to fruition in June 2012 with the opening of Haritima organic restaurant. In its invitation for expressions of interest, the UOCB described the aim of this "organic kitchen of Uttarakhand" as being to "promote the

highly nutritious but lesser known cuisines of Uttarakhand. . . . It is envisioned that the traditional cuisines would be developed for the cosmopolitan palette [*sic*].”¹⁸ Aiming to develop Haritima as a prototype, the UOCB initially retained considerable control over the restaurant’s cuisine, recipes, and marketing and required the operator to adhere to its guidelines on décor, management, and operations.¹⁹ Although Haritima closed only a few years after opening, the UOCB has since undertaken similar initiatives to expand its reach to urban consumers through, for example, opening an organic shop in Dehradun in early 2018 and establishing a weekly farmers’ market.

Mobilizing Supply

As the marketing cell works to cultivate demand for hill crops and engages with potential buyers, it communicates closely with the production cell, which is formally administered by the COF. This cell, as its name suggests, is responsible for organic agricultural production; it works to expand the area under cultivation, conduct benchmark surveys of new villages, and organize training for new farmers. Much of this work is performed by field staff—that is, master trainers and service providers across the state—and by leaders of farmers’ federations and organic producers’ groups. I accompanied the federation president for Dharampur block, R. S. Bisht, and the block’s master trainer, Mohan Singh, on one such visit. Claiming that this was “the original organic village,” Bisht guided us through households, seeking to generate interest in and commitment to the program with promises of “company tie-ups,” good profits, and the provision of inputs and training. Progress, he expounded to those we met, entails *mehnat khetī*, thus enjoining them to see cultivation (*khetī*) as a quest for progress and improvement through hard work and toil (*mehnat*). Our visit, he explained, would be followed by one from a UOCB internal inspector who, Bisht was careful to mention, should be told that no chemicals are ap-

plied to the fields. As efforts such as these occur across the state, farmers' names are recorded along with details of farm size, fields, and cropping practices.

The field-level work to expand the UOCB's presence in Uttarakhand's villages and to recruit new organic farmers informed bureaucratic imaginations and planning efforts in UOCB headquarters. One afternoon toward the end of the kharif season, I found Monish, a UOCB field officer, sitting at the boardroom table preparing three lists: one of new villages recently recruited into the organic program, a second of new farmers registered in villages where the UOCB already has a presence, and a third of currently registered farmers who have expanded the land area that they cultivate organically. These lists gave bureaucratic life to encounters between farmers and field staff, like those described above, as they classified the UOCB's efforts at expansion. In conjunction with the production of such lists, Monish also produced a map of the state with individual villages color-coded by the dot of a felt-tip pen, each color representing a different crop. As Monish added dots with pointillist precision to the rainbow-hued mosaic in front of him, I learned that the map showed clusters of villages specializing in the production of particular crops. The map not only visually depicted the spatial organization of crop production in the state, but also, perhaps more important, was a sign of the UOCB's ambition to develop geographic clusters specializing in the production of particular crops to make grading, post-harvest processing, and packaging easier for potential buyers.

This effort to nurture a particular spatial organization of agriculture was first explained to me in 2006 by the marketing manager, who described the UOCB's work to develop commodity villages that would specialize in the production of particular crops. To do this, he said, farmers would need to be encouraged to abandon existing mixed cropping or intercropping practices. Rajendra Shastri,

the UOCB's technical manager and leader of the production cell, was more cautious in characterizing the board's efforts to promote crop specialization over traditional mixed cropping practices. Describing their efforts to identify marketable crops in conjunction with the marketing cell and then to conduct benchmark surveys to determine which crops could be produced in which areas, Rajendra noted that though the UOCB had established fifteen crop clusters, maintaining agricultural biodiversity was also his concern and farmers would, of necessity, continue to produce a range of crops in the hills. These sorts of decisions faced by managers in the UOCB required them to confront and navigate the tension of being organic by default and organic by design; while the former was anchored in practices that favored multiple forms of agricultural biodiversity, the latter pulled toward specialization, commodification, and greater degrees of uniformity.

Bureaucracies, Michael Herzfeld writes, are not abstractions or ideal types, but institutions deeply enmeshed in social and cultural relations.²⁰ His argument is somewhat symmetrical to those of anthropologists and economic sociologists who have long contended that economic life is similarly embedded.²¹ Herzfeld points to the ways in which ritual, symbolic actions, and affective bonds demonstrate that “bureaucrats and their clients alike are potential *bricoleurs*, working both within and upon ‘the system.’”²² At the UOCB, such bricolage is evident in the ways in which staff members endeavor to reconcile the standardizing supply-chain logics of private agrarian capital with the market aspirations of hill cultivators in a setting where high levels of agrodiversity and lack of uniformity among grains has historically been a mainstay of agricultural livelihood strategies. As they navigate discrepant understandings of what organic is—something that is “just local” or something with a “trade focus”—officials from the UOCB attempt to knit together the imaginations and practices that shape both supply and demand.



Intercropping is common in mountain villages such as Nagthari, but it may be at odds with the specialization and volume production sought by many private-sector buyers of organic crops. Jaunsar Bawar, June 2008.

“Āj, har chīz commercial hai”
(*Today, All Things Are Commercial*)

In the summer of 2010, my father unpacked his suitcase in our New Haven apartment and handed me an envelope of photos he had carried with him from India. Several months earlier he had traveled from his boyhood home in Mumbai to Dehradun to meet friends he had made there during several extended stays with us during my fieldwork in 2007 and 2008. Among those friends were Rawatji and Amrita Devi, whose warmth and care for my family during our stays in Nagthari had made a deep impression on him and fostered enduring gratitude. As he made his journey north, I asked my father to give Rawatji and Amrita Devi several recent family photos from New Haven—I was keen for them to see our younger son, who was born not long after I finished my fieldwork, as well as how our elder son had grown in the months since we left India. This gesture, it seemed, was reciprocated, and my father recounted how Rawatji had insisted on going out to the bazaar to get copies of the prints I now held in my hand. Enclosed in the envelope were a passport-sized photo of a young Rawatji and two photos of Amrita Devi in her youth—one taken outside their home in Nagthari and another in a verdant hill pasture. Most of the photos, however, were of their orchard. Several photos showed established mango and lychee trees, frail new saplings, and fields of chili; in another, their Nepali *chowkidar* (watchman) crouched in a field of cabbages, holding a green hose; others showed greenhouses constructed to grow tomatoes; and still more showed a newly whitewashed house built at their orchard. Like those I had sent of my young family, these photos spoke in their own way of growth, change, and aspiration.

Two years before, in the early weeks of the 2008 kharīf season, I stood with Amrita Devi, her brother-in-law Surbir Singh, and her sister-in-law Raksha Devi in their orchard several hundred feet above the Yamuna River and adjacent to the Chakrata-Kalsi road. Their family had been among the first in the area to establish one, and it

marked a diversification from agriculture into horticulture—a shift increasingly taken up by dominant Rajput and Brahmin families. The land, I learned, had been owned by Rawatji and Surbir Singh's father, and in earlier years they took their livestock down to this lower elevation to protect them from the bitter cold of the Himalayan winter months. Some thirteen years earlier, seeking to become more involved in horticulture, they had planted mango and lychee saplings on this land for the first time, constructed two greenhouses, and built a small house on the premises where a Nepali couple, whom they paid 700 rupees a month, lived and managed the orchard.

On this day in late May, we came to the orchard to plant ginger. Over the preceding few days I had joined them in preparing fields and sowing maize, an important cash crop, at higher elevations. As I spread a thick layer of compost across this field, Surbir Singh showed a concern for this crop that he did not for maize, giving me careful instructions about how to prepare the field, how to space the rhizomes, and at what depth to plant them. As I came to learn more about ginger—that one can expect a tenfold increase in yield over the rhizomes planted and that the harvested ginger may command between 2,000 and 8,000 rupees per quintal (100 kilograms, or 220 pounds)—I grasped part of Surbir Singh's concern.

I learned that several years earlier the UOCB had encouraged villagers in Nagthari to plant more ginger, noting its lucrative market potential. Many families already planted ginger for household consumption, but on this advice many more families took up ginger cultivation. A mere three years later, however, the cultivation of ginger had waned substantially among Nagthari residents. What prompted disenchantment with a crop that had such market potential? The chief difficulty, it seemed, was labor. The substantial effort involved in preparing the large amount of compost required at the time of sowing was only the beginning of the labor necessary for this crop to be successful. Amrita Devi described the need to mulch the planted rhizomes to encourage sprouting and to weed the grow-

ing crop many times. Effort invested, however, was not necessarily rewarded, as the crop was susceptible to ruin through disease and pest attacks.

The family's tangible investments of labor and capital in their orchard over the previous decade joined with a less tangible aspiration, evident in spindly young mango saplings and colorful blooms of gladioli planted in an experiment with floriculture, for greater integration with a commercial agricultural economy beyond the regional mandī several hours away. This aspiration for new and different market connections was brought home to me one afternoon when Rawatji arrived back in Nagthari after a trip to Dehradun and remarked as we talked over a cup of chai:

Today you must have seen a truck coming from this side [gesturing to a distant hill]. In that truck there is a banner. On that banner are the words written "Mother Dairy." There is written "Azadpur Mandī, New Delhi." From here, from Naugaon, from Lohari, ginger, arbi [taro], chili, potato, apple, vegetables, spices are packed in crates and loaded in the truck. The truck was full. I just met it here. There is a banner, how beautiful it looked. It will go straight to Delhi. It will go to Delhi. Now the farmer will get a good profit. The produce of this region is the apple of Uttaranchal. In the morning you go to the intersection for three roads. One road is for Vikasnagar, one is for Mussoorie, and one is for Chakrata. Trucks all loaded with apples, all fully loaded are coming from Uttarkashi, Purola, Jarmola, Badkot, Naugaon, and from Himachal. All the apple of Hatkoti and Simla, all the apple comes from this valley. And where will this apple go? Delhi, Bombay, Calcutta. All the apples will go there.

With these words, Rawatji painted a vivid picture of agrarian abundance and prosperity, one in which the far reaches of a productive and bountiful Himalaya are linked with India's metropolitan cities

through the transport of fruits, vegetables, and spices. Yet Rawatji's lyricism also spoke to specific kinds of market connection. Mother Dairy, a subsidiary of the National Dairy Development Board, is among a handful of companies laying the foundations for contract farming in the Uttarakhand Himalaya by procuring fruits and vegetables that meet certain quality parameters for a fixed price.²³ Azadpur Mandī is among Asia's largest wholesale fruit and vegetable markets; spread across ninety acres in and around Delhi, it accepts and distributes produce across the country. In 2000 to 2001, the most recent date for which figures are readily available, Azadpur Mandī accepted nearly four million metric tons of produce.²⁴

In the world of fruit and vegetable marketing, Mother Dairy and Azadpur Mandī are at opposite ends of a spectrum. Though it is a national subsidiary, Mother Dairy relies on direct relationships and contracts with producer groups, whereas Azadpur is the locus of a vast and intricate supply network that stretches across large tracts of the subcontinent and involves several thousand commission agents at the maṇḍī alone. Nonetheless, these substantially different modes of agricultural marketing are two important figurative threads from which Rawatji's dreams of market connection are woven. A third, of course, is the neighboring state of Himachal Pradesh, which in many ways pioneered horticultural development and whose most famous product is the apple. Here, the apple is appropriated as "Uttaranchal's," while the bounds of the two states are blurred as Rawatji lists regions and towns in both.²⁵

As he narrated this tale of the market's promise, Rawatji also observed its perils. Apples, he told me, sell for fifty to sixty rupees in Dehradun, but farmers get merely one fifth of this price. The difference is taken by those involved in their transport, storage, and sale. "The farmer," he declared bluntly, "is dying." Keenly aware of the larger socioeconomic and demographic changes occurring in Nagthari, he noted that more and more people are giving up agri-

culture, leaving their villages, and going to study or “for service” in towns and cities in an array of service jobs. Though his own sons are among those who have made such moves, Rawatji was quick to warn, “One who goes for service, what will he eat if he doesn’t get grain in the market? Money is not everything. Money is not eaten. The stomach is filled only with the grain. Money will not fill the belly.” Emphasizing the continued importance of agriculture in supporting ever-greater numbers of people who have migrated to urban areas, Rawatji argued that to survive, the farmer needs the help of the government: “If, in each village, a small cold-storage facility, a processing center, is built, then the farmer will benefit.” Pointing across the valley to peaks that towered above the far bank of the Yamuna, he spoke, impassioned: “From these mountains, peas, tomatoes, apples, walnuts, pear are grown. But how will they arrive at the road below? For these things, a trolley, a ropeway, must be built to bring them to the road. In this way it can be brought straight from the fields. Fresh! From the fields [snapping his fingers] it will be in Dehradun in ten minutes. Just as in Himachal.”

For Rawatji, agrarian prosperity—and indeed the viability of agricultural livelihoods in the mountains—hinged on infrastructure such as cold storage, ropeways, and processing centers for packaging and grading. These, he believed passionately, would give cultivators greater control over the marketing of their crops. Over the course of my fieldwork, some of these aspirations and infrastructural imaginaries were realized. Indeed, among the first things I was shown in Nagthari was the *khaliban*, the threshing floor, located on a hillock directly behind the scheduled-caste Kolta settlement. The *khalihan* was a circular pit lined with slate, at the center of which was a wooden stake several feet tall. Amrita Devi explained how, to thresh grain, the walls and floor of the pit would first be lined with cow dung to create a clean, smooth, and extremely level surface. Dried crops of wheat, barley, pulses, and millets would be spread out on the floor and bullocks, tethered to the wooden stake, would

be driven in a circular fashion over the crops, thereby gradually separating the grain from the stalks and chaff. I did not have the opportunity to see the khalihan in use during my stays in Nagthari, but it was apparent as I looked at the uneven slate flooring that simply creating a level surface across this fairly large area so that grain could be evenly threshed would involve painstaking labor.

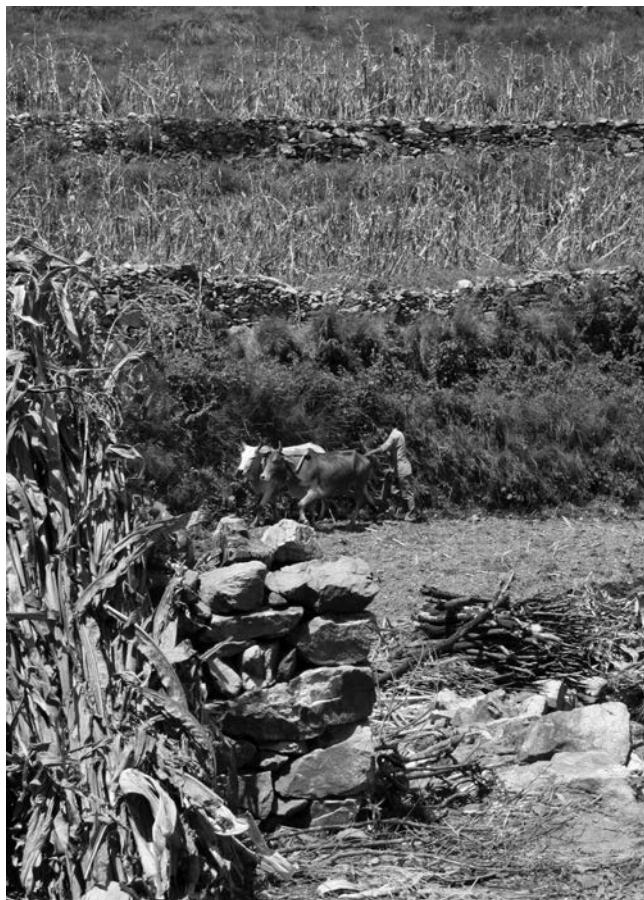
From the khalihan, Amrita Devi took me into a large brick building that was still under construction. Inside the building, she showed me a motorized threshing machine and explained that it had been purchased by the women's self-help group in Nagthari that helped organize the village's involvement in organic agriculture and community rural development, among other things. Several months later, I was in Nagthari to witness the arrival of an electronic scale. The scale generated excitement and curiosity and, in its early days, was a source of much amusement, as women took turns weighing themselves and commenting on the weight of others. The threshing machine and the electronic scale were both forms of post-harvest technology that would facilitate market participation—the former by allowing larger quantities of crops to be threshed with less labor, the latter by allowing cultivators to weigh their own crops with precision and thus loosen their dependence on mandī operators, who, many felt, underreported the actual weight of the crop. Both would also provide farmers more leeway in establishing direct marketing or contracting agreements.

Many families in Nagthari were seeking new ways to participate in markets, but such participation was not new in itself. In this respect, the experience of Nagthari's cultivators does not bear out the putative distinction between subsistence and capitalist rural economies.²⁶ In Nagthari, maize has long been an important cash crop, one that all families cultivate and, after holding some back for subsistence needs and seed, sell in the market either on the cob or as grain.²⁷ Hung in garlands from the eaves of houses, between doorways, and over balconies, it provides an important, visible index of

agrarian prosperity and integration into agricultural markets. Garlands are densely packed in rows and layers on some homes, while on others a few meager cobs are hung above a doorway.

For many of Nagthari's lower-caste families, participation in agricultural markets, like other forms of social, political, and economic participation, is conditioned by their caste position. This is true for Bimla Devi, one of the Kolta women whom I met from time to time during my stays in Nagthari. At the time of the kharif harvest in 2008, I walked with Bimla Devi to her fields in the cultivated area known as Tikro, a rocky outcrop about half an hour from the main village. As I followed her along the path, winding through fields and along the ridge that would eventually take us to her land, she told me that she makes this journey several times each day, as her cattle and goats are housed in a barn located here. While she worked in the fields, her two cattle and five goats grazed alone in the jungle below Tikro. Her husband is one of five brothers; although the others also reside in the village, they live and farm separately, in a pattern that seems common among a number of Nagthari's Kolta families.²⁸ With a grown son working in Dehradun, Bimla Devi and her husband had to manage their land alone.

As we arrived at her fields, her husband was already plowing the last stubs of maize into the soil to prepare it for planting rapeseed. I noticed that both the barn where she housed her animals and the stones holding the terrace walls in place appeared relatively unweathered, and Bimla Devi's husband told me that they built the terraces thirteen years earlier. After picking up rocks in the field to prepare the ground for planting, I moved with Bimla Devi to the barn as she gathered dung and leaves from the stalls and added them to an adjacent concrete compost pit. Like the higher-caste Rajput families, but in a more limited way, she and her husband engaged in cash cropping and planted maize, chili, and taro. The monkeys, she told me, eat everything, even the chili, and as if on cue a troupe took up position on the boundary wall above, seemingly oblivious



In Nagthari, land farmed by low-caste Kolta families is often located far from the village, which makes it more difficult to access, and the crops grown are more susceptible to being ravaged by monkeys, birds, and other animals.

Jaunsar Bawar, September 2008.

to the rocks we threw to scare them off. Because their fields are located at a distance from any human settlement and they lack sufficient labor to guard the ripening crops or the wherewithal to hire others to do so, the outcrop of land farmed by Bimla Devi and her

husband did not seem to hold the lucrative potential of Rawatji and Amrita Devi's orchard, tended by a Nepali chowkidar and his wife, on the other side of the hill.

One evening, conversing with his neighbors about the condition of agriculture in the hills, an elderly resident of Nagthari, G. N. Dogra, commented that '*āj, bar chīz commercial hai*' (today, all things are commercial). This is increasingly true for Nagthari's cultivating families, virtually all of whom engage in some form of cash cropping. The ability to participate in agrarian markets is conditioned importantly by caste and wealth; connected with this are the structure and composition of the household, and the ability of its members to command their own and others' labor. Nagthari's dominant-caste families, such as Rawatji's and G. N. Dogra's, have larger landholdings in prime locations, the ability to mobilize labor within their usually larger joint families, and the ability to command the labor of Koltas and Nepali migrants. Many of these families have also acquired a familiarity with development interventions and new technologies through training, field trips, and regular interactions with field and bureaucratic officials. Together, these constitute important sources of capital, in a Bourdieusian sense. They also form the conditions of possibility for incipient efforts at commercial horticulture and floriculture in Nagthari. For Bimla Devi and most others of Kolta caste in Nagthari, the horizons of agrarian commerce do not extend as far. Limited, marginal landholdings, the want of labor, and the inability to fully command their own labor (which is also commanded by dominant and high-caste families drawing on long-standing intercaste relations often spanning several generations) circumscribe the extent of engagement with agrarian markets, including those for organic products. These inequalities, rooted in caste, ripple through agrarian practices and possibilities in Nagthari. As they do, they structure and stratify the horizons of imagination and aspiration among its residents.

The task of creating organic markets in the Himalaya, then, is

importantly constituted through diverse and at times incongruent aspirations and imaginations. This marks a difference from the Doon Valley, where, as the previous chapter demonstrated, market arrangements for organic basmati have already been established through contract farming, and the status of organic basmati as an elite, sought-after export crop has made it the object of much enrichment work and processes of qualification. Organic markets and supply chains across Uttarakhand's hill regions, in contrast, remain largely aspirational. But market imaginaries and aspirations assume concrete forms as they are articulated, channeled, conditioned, and negotiated in everyday ways.

In Uttarakhand, the work of making markets takes place in buyer-seller meets and training programs, through the purchase and use of electronic scales, and in decisions to cultivate crops such as ginger and spices for which consumer demand already exists. Hill cultivators are thoroughly implicated in the work of making organic markets, but they are enrolled in it differently, depending on whether they labor in their own fields or in the organic fields of others. Becoming organic, then, is by no means something to which all aspire, in part because the forms of market participation that organic production takes presume social, cultural, and economic capacities that cultivators do not possess in equal measure. As the foregoing chapters have also indicated, however, the subnational state is also thoroughly involved in the work of making markets. And this, as the next chapter will show, extends to reimagining and branding the region itself.

Exhibiting Organic Uttarakhand

Sonali Devi sat on the floor of the verandah outside the Dehradun headquarters of the Uttarakhand Organic Commodity Board, methodically filling clear plastic bags with dark red kidney beans that she drew from a worn machine-woven plastic sack. At the top of each bag she left a little room and, giving it a shake to settle the contents, placed it in a bag sealer to close it. On the front of each sealed package she then carefully attached a printed green sticker with a circular photo showing ripe maroon-colored bean pods and, below, a label reading, “Ramgarh Beans,” in English. Above this sticker she attached a smaller, round label with the logo “Organic Uttaranchal,” as the state was then known. Sonali Devi had come to Dehradun from the hill district of Nainital, joining other farmers from across the state to sell her produce at Virāsāt, an annual mela in which the UOCB was participating for the first time. As they arrived at the board’s headquarters in the lead-up to Virāsāt, farmers brought with them finger millet, buckwheat, kidney beans, red chilis, aromatic and medicinal herbs, and other products from villages and districts throughout Uttarakhand. Their reused woven

sacks of grains, legumes, and dried herbs and chilis lined the perimeter of the UOCB's boardroom, temporarily transforming it into a storeroom.

As UOCB officials, immersed in certification documents or the development of marketing strategies, worked at their desks in other areas of the office, Sonali Devi's quiet labor on the verandah was easy to overlook. But as she individually packaged and labeled her kidney beans, she too participated in a process of qualification, transforming beans from a straightforward economic good into a product on which a variety of characteristics and identities are inscribed.¹ Through packaging and labeling, her kidney beans became not only "Ramgarh Beans," but also identifiably organic and explicitly linked to "Organic Uttaranchal." During this process, the beans themselves also became both more and less generic. Packed into bags of uniform size, affixed with labels printed in a similar style, they acquired a certain uniformity, like products one might find on the shelf of a grocery store. But, simultaneously, they were also rendered more distinctive and recognizably authentic than they would have been if they had remained in the old, unmarked gunnysacks and plastic bags in which they had been transported. Whatever their local origins, the beans came to be marked with a larger regional identity and to participate in a wider state project of brand building.² This project was crystallized in the name "Organic Uttarakhand" (succeeding "Organic Uttaranchal") itself, which the UOCB developed as a common brand for all the organic products grown under its auspices, from kidney beans and buckwheat to millets and spices from far-flung hill regions. This brand was reproduced in brochures and pamphlets as well as on the stickers affixed to commodities themselves.

The Organic Uttarakhand brand proved crucial not only as a marketing strategy for products, but also as a way of making organic quality in Uttarakhand by reworking ideas of nature, tradition, and modernity long in play in the Himalaya. Earlier chapters of this

book have traced the historically and regionally situated ways in which organic quality is assembled through particular expressions and representations of agrarian agency, intentionality, and moral subjectivities; through the productive force of sentiments of trust (*viśvās*) and aspiration; and through the practices of composting, certification, and contract farming. Branding efforts work in a different way to produce organic quality and embed it in the region. The UOCB's public messages reverse entrenched representations of the South Asian rural area or village as backward and in need of development. Indeed, it is this very history of backwardness and isolation from development and modernization that the UOCB consciously invokes to make its claim for the state's organic status. By reinventing entrenched ascriptions of the region's backwardness as the mantle for a newfound organic status, the UOCB makes the quality of being organic intrinsic to the region itself.

The process of packaging and visibly marking or branding agricultural products by region of origin, and sometimes also by locale, is relatively new in Uttarakhand.³ Here, as in other regions of India, dry food grains and pulses have historically been unlabeled and unbranded. Though a certain volume of select essential staple foods is procured by the Food Corporation of India and sold in fair price shops through the public distribution system, the vast majority of agricultural goods are traded through the government-regulated *mandī* system. Until recently, much of the retailing of dry goods occurred in *kirana*, or shops owned by individuals or families.⁴ Food retail in India has been overwhelmingly dominated by what is often referred to as the “unorganized” or “traditional” sector that, in addition to pushcarts, hawkers, and wet markets (purveyors of perishable foods), includes millions of small *kirana* shops.⁵ In these retail settings, food products have remained largely unlabeled and unbranded, often sold by weight in paper or plastic bags. But even as such individual- and family-run enterprises remain the cornerstone of food retail across the country, the rapid rise of supermarkets in

India since the 1990s has been accompanied by the wider availability and prominence of packaged, labeled, and branded food.⁶

Though Sonali Devi's efforts participated in these broader transformations in how unprocessed dried food is marketed in India, they were not directed solely at the beans themselves. They also enacted a strategy to brand Uttarakhand as organic, a plan that had been first charted in the summer of 2002 by the inaugural forest and rural development commissioner of Uttarakhand, who declared an ambition "to build Uttaranchal brand-equity as a region 'pure' and 'pristine.'" In the realm of advertising, brands have been described as "immaterial capital"⁷ and famously by David Ogilvy as "the intangible sum of a product's attributes."⁸ For this reason, brands are often understood to belong to the immaterial realm of meaning and to stand apart from the materiality of the product they represent.⁹ For Adam Arvidsson, the meanings embodied by and realized through the consumption of brands are also critical components of a product's use value.¹⁰ In this sense, cultural anthropologists and sociologists have noted the broader work that brands do, observing that they may be "resources for constructing imaginary worlds."¹¹ Consumers thus participate in the construction of a brand's image and reputation through the attachments and loyalties they form.¹² As "metonymic symbols" of larger entities, such as capitalism, Orientalism, or tradition, brands may index a multitude of "imaginative geographies" insofar as their "circulation defines a broader social imaginary, whether it is the market, the nation, or the empire that in part gives them meaning."¹³

Though the locations and modalities of production for certain commodities—from smartphones to shoes—are obscured through branding and marketing, place sometimes figures prominently and specifically in the branding of agricultural products. Qualities of place, region, terroir, craft, and heritage, as chapter 3 discusses, have long been important to the branding of wine, foods, olive oil, tea, and the like.¹⁴ But the development of Uttarakhand's organic brand

equity bears greater resemblance to nation-branding. Scholars understand nation-branding as a process whereby national identity is formulated as a brand identity and statecraft comes to resemble brand marketing.¹⁵ In India, nation-branding has taken place mostly through tourism campaigns. Pathbreaking among these was Kerala's campaign to brand the state "God's Own Country" in the 1990s. In 2002 the Incredible India campaign replicated this at the national level. As these campaigns show, nation-branding seeks to attract not only tourists but also foreign and domestic capital.¹⁶ At the sub-national level, branding projects undertaken by Indian states form part of the regional character of liberalization: in a liberalized economic and investment environment, individual states in India's dynamic federal system seek to establish niches that are based on claims of regional distinctiveness.

Endeavors to brand Uttarakhand organic also reveal how sub-national state institutions configure their role in capitalist processes of commoditization and marketing in the wake of liberalization. As I noted earlier, the UOCB is not authorized to engage directly in the purchase or sale of agricultural products. Yet, operating as a hybrid institution with features of both a state agency and a non-governmental organization, the UOCB has facilitated market linkages by managing organic certification, enabling contract farming, and convening buyer-seller meets.

In this chapter, I explore how the UOCB participates in building a brand and how "Organic Uttarakhand" comes to brand not just pulses, grains, and spices, but the region itself. I consider three distinct exhibition spaces in which the UOCB participated in 2007 and 2008: the UOCB's organic pavilion at the Dehradun folklife festival Virāsat, the "Spirit of Uttarakhand" festival in the craft bazaar of Dilli Hāt in New Delhi, and the sprawling grounds of the India International Trade Fair (IITF) at New Delhi's Pragati Maidan. Exhibitions, world's fairs, museums, parades, and cultural theme parks have long been sites for studying the public performance of state or

colonial power, national identity, and heritage. While Virāsat, Dilli Hāt, and the IITF were important venues through which the UOCB sought to connect rural producers with urban consumers through the sale of organic products, these exhibitions were also part of the creative and discursive project of reinventing Uttarakhand as it aspired to carve a distinct place within the pantheon of Indian states. These exhibitions proved to be crucial sites in which the promotion of organic agriculture was linked with efforts to build the state's brand equity as "Organic Uttarakhand." The circulation of discursive and material artifacts—signs, posters, and brochures as well as agricultural products from the mountains—formed part of the exhibitionary complex and helped produce Organic Uttarakhand as a brand. At the same time, abiding social imaginaries of Uttarakhand as a place of nature and an abode of the gods were also conjured in these domains and endowed organic products with a singular authenticity as they circulated through new market channels.

(Agri)cultural Authenticity

In northern India, public exhibitions, melas, and fairs are seasonal phenomena, accompanying the dip in temperatures after the monsoon rains, the kharīf harvest, and the onset of the major Hindu festival of Dussehra.¹⁷ Events such as these may be religious, agricultural, cultural, or purely commercial; among the most ubiquitous in urban centers are handicraft exhibitions that showcase the craftwork of artisans from across India. In late 2007 and early 2008, the UOCB took part in two such exhibitions—as a high-profile participant in the Virāsat folklife festival in Dehradun and as the prime organizer of the "Spirit of Uttarakhand" festival at Dilli Hāt in New Delhi. Both the UOCB's participation in these events and their locations were significant: the UOCB's effort to root organic agriculture in an ecological authenticity associated with Uttarakhand's mountain geography mirrored the grounding of Indian cultural authenticity in folklife and craftwork.

The roots of present-day craft exhibitions lie in rich colonial and postcolonial histories of relations among craft, empire, and nationalism. The amalgamation of diverse local and regional craft traditions into a national idea of “Indian Design” occurred, significantly, in the Orientalist space of the Great Exhibition of 1851.¹⁸ Craftwork and artisanal production were central in the iconography of the nationalist movement, as the *charkha*, or spinning wheel, and homespun cloth, or *khadi*, became emblematic of the Gandhian principle of *swadeshi*.¹⁹ Today this craft heritage is further invoked as an affirmation of national identity and Indianness through institutions such as the National Craft Museum, which seeks to preserve, manage, and even mold India’s diverse craft traditions. Such exhibitionary endeavors privilege folk culture and artisanal traditions. In annual Republic Day parades, processions of distinct state floats similarly celebrate the heterogeneity of India’s regional traditions. Museum exhibitions abroad, such as the 1985 Festival of India in Washington, D.C., aim to present what is authentically Indian for foreign audiences.²⁰

Yet at the heart of many such displays and celebrations of folklife and artisanal craft is an ideal of cultural authenticity that seeks to distill the essence of India or that of a particular region. Notions of authenticity and tradition are closely linked because “authenticity is . . . equated with the transmission through time of a tradition, that is, an objectively definable essence or core of customs and beliefs.”²¹ Thus, Paul Greenough observes that, at the craft museum, artists are valued for their ability to achieve “parity with the past,” while innovation, exchange, and the melding of different regional craft traditions is discouraged.²² Similarly, “concern for authenticity, root forms, and community-oriented performance” was evident at the 1985 Festival of India, where performers were prohibited from singing contemporary film songs.²³

Between Dussehra and Diwali—two major Hindu festivals celebrated widely across India in October or early November—Dehradun

hosts Virāsat. A Dehradun NGO called Rural Entrepreneurship for Art and Cultural Heritage (REACH) organizes Virāsat, which it claims is “Asia’s biggest heritage festival.” It brings together artists from across India in a celebration of rural folklife that also aims to provide a venue where independent artisans can sell their work. Virāsat distinguishes itself from other handicraft exhibitions through an explicitly articulated sense of cultural mission, and its location in Dehradun is significant. The 2007 festival program announces: “Welcome to the abode of the Gods. . . . Virāsat is held at Dehra Dun since this town is the gateway to the Himalayas, the fountainhead of our pluralistic, diverse culture. . . . It generates economic means for artisans and performers from remote regions, while it introduces the urban people to the innate beauty of our folk traditions. It gives people a respite from their mechanized existence and . . . an opportunity to reinvent themselves. The Festival is a microcosm of the greater Indian culture that spans the entire sub-continent.”²⁴ In promoting the festival, the organizers play on the idea of *devbhumi*, “the abode or land of the gods,” often used to describe the Uttarakhand Himalaya, whose landscape and geography are imbued with religious and mythological meanings central to Hinduism.

The festival program not only invokes the Himalaya as the authentic fountainhead of India’s culture and thus implicitly glosses that culture as Hindu, but also promises to connect rural artisans with an urban public alienated from their cultural roots by their “mechanized existence.” Indeed, the festival organizers tap into a discourse that is skeptical of and disillusioned with modernity in describing their mission:

It is becoming evident that the advance of modernity is not an unmixed blessing and it is essential to counterbalance its negative aspects by initiating appropriate measures. The distinctiveness of Indian Culture over millennia has lain in the unique fact that its matrix has been its villages from where its cities

have drawn their cultural nourishment. However, in the last fifty years our villages have suffered a cultural drain, especially because they have ceased to function as the spring-wells of our national culture, and during all this time, ideas, values, norms and forms of living have tended to flow in one direction, that is from the city to the village. This development coupled with the growth of modernism is bound to aggravate the negative fall-out of modernistic development, which can be counter-balanced and negated by ensuring the cultural vitality of village life and its multifaceted forms. *Virāsat* is a step towards this revitalization process.²⁵

By locating villages at the center of India's cultural heritage, the festival program suggests that in them may be found a counterweight, if not an antidote, to the ills of modern urban life. The festival is thus more than an amalgam of handicraft stalls and cultural programs; it is a space in which organizers seek to revitalize the village traditions that they valorize as the cornerstones of national culture. In this respect, *Virāsat* is part of the wider nationalist exhibitionary tradition of festivals, parades, and museums that treat rural folklife, craftwork, and artisanal production as the keystones of national identity.²⁶ It connects the cultural authenticity of rural folklife with the sacred geography of the Himalaya, captured by the festival catchphrase "the hills come alive to the rhythm of heritage."

In 2007 the festival, while claiming its place in the "abode of the gods," was housed in a large, open-air stadium owned by the Oil and Natural Gas Corporation of India, a public corporation that epitomizes extractive modernity and mechanization.²⁷ Leaving the traffic and throng of balloon and popcorn hawkers and street food vendors outside the stadium, visitors entered the grassy festival grounds and browsed leisurely through rows of stalls selling Madhubani paintings from Bihar, shell jewelry from the Andaman Islands, pearls from Hyderabad, saris from Tamil Nadu, woolens from

Kashmir, and even survey equipment from the historic military cantonment town of Roorkee in Uttar Pradesh. Popular regional and national foods were available, as were small cups of sweet coffee dispensed from a Nescafé machine. A large stage area that re-created an ancient temple complex dominated the grounds. The festival grounds remained largely empty during the still-hot days, but at nightfall they filled with crowds that flocked to the stage area to watch performances of folk and classical music or dance and theater and to browse for festival gifts amid the handicraft stalls.

Though Virāsat has been held since 1995, the Uttarakhand Organic Commodity Board did not register as a participant until 2007. In its first year there, the UOCB was by far the festival's largest participant, having purchased what would have been fifteen individual stalls for the organization, farmers' groups, and NGO affiliates. A day before the festival opened, staff from UOCB headquarters and fieldworkers assigned to work at the stalls surveyed the space allotted to them. The festival organizers had already set up temporary structures with bamboo frames and jute and cotton partitions to create individual stalls for vendors. While this suited the needs of smaller artisans with diverse wares, it was evidently not the layout the UOCB had envisaged. As assembled staff discussed how best to assign and apportion space, the UOCB's director, Deepa Agrawal, arrived and wasted no time in expressing her dissatisfaction with the individually partitioned stalls. With the vision and determination that I soon learned were characteristic of her leadership, she issued directions to dismantle the partitions and instead create a single pavilion that would house all the organic producer groups participating in the festival. Laborers were called to execute the task, and they quickly restaked bamboo poles, laid down green felt mats as carpet, removed inner partitions, and created outer walls. Deepa Agrawal watched carefully, keen to ensure that the structure itself contributed to the idea of Organic Uttarakhand that would be presented to the public under its roof. To this end, special

calls were made to procure additional jute or burlap to replace bleached white cotton as the fabric of choice for the outer walls, which thus gave the pavilion a more natural and unrefined feel. In a short time, the subdivided area was transformed into an open pavilion that represented a singular, unified Organic Uttarakhand spatially. Within the walls of the UOCB's pavilion, however, tables were arranged to create independent booths so that each group could sell its own products.

With the basic structure and layout in place, the remaining work focused on creating a display that would present the idea of Organic Uttarakhand to the public. At the front entrance of the pavilion, a banner was put up that read, in English, "Barahnaja Organic Food Festival." The term *barahnaja* refers to the practice of mixed cropping, which is common in hill agriculture, and specifically to a system in which up to twelve different crops are grown in a single field. This system is often held up as a model of the inherent sustainability of traditional hill farming. The UOCB's use of the term *barahnaja* thus married the notions of traditional and organic agriculture. As we saw in chapter 1, many made this link when describing hill farming practices as "organic by default," though in other instances being certified organic or "organic by design" was distinguished from traditional hill farming.

With the basic structure and layout of the pavilion established, colorful posters, printed on PVC, were unrolled, and debate ensued about which ones should be pinned to the pavilion's jute walls. The posters, which were exclusively in English, had not been created specifically for this festival and were instead recycled from past exhibitions in which the UOCB participated in New Delhi. As the posters were unfurled in a new venue, staff showed some anxiety about ensuring that posters with out-of-date information were not included in the display. In the end, several posters with photos that vibrantly depicted village life as well as organic grains and spices were put up near the entrance to the pavilion. Inside, a series of four

other posters interspersed photos with text to convey particular messages about organic farming. Despite the invocation of the *barahnaja* system on the pavilion's banner, photos on these posters tended to show single field crops of vegetables, coarse grains, and oilseeds being cultivated or tended.

In these exhibitions, the UOCB aimed in part to raise awareness among the public about hill crops rarely consumed in urban centers such as Dehradun. A poster titled "Grains of Tomorrow," for example, provided a description and photos of several varieties of millet, amaranth, and buckwheat, which are commonly grown in hill regions. The description of each crop included nutritional information—in particular its protein, calcium, and mineral content and its medicinal properties—as well as how to use the grain to prepare food. The poster sought to pique viewers' curiosity and ultimately to develop a taste, demand, and market among urban populations for some of the lesser-known coarse grains cultivated in the hills. It thus reinvented so-called minor crops, which grow in largely rainfed conditions and typically receive few resources in crop improvement programs, as the "grains of tomorrow."

Three other posters pinned to the walls did a different kind of marketing work. Titled "Uttarakhand: An Organic State," "The Most Preferred Organic Destination," and "Unlimited Options in Organic Farming," they invoked notions of geography, nature, ecology, and traditional agriculture to cultivate an image of Uttarakhand as a natural location for organic farming: "The pristine ecosystem of Uttaranchal is vulnerable to the slightest disturbances, making organic farming an ecological imperative rather than an economic one. Prevalent traditional farming systems in Uttaranchal are eco-friendly. Forests of oak, pine, sal etc. together produce over 10 million tons of leaf litter annually. Traditionally, mountain farmers have been using the litter for 'Compost' as an essential farming input. As a result, 75% of the agriculture in the hill regions of the State is chemical free." These posters highlighted the fragility of

Exhibiting Organic Uttarakhand



Dehradun basmati is displayed in a stall in the Barahnaja Organic Food Festival pavilion managed by the UOCB. Dehradun, October 2007.

Uttarakhand's environment, the purity of its "snow clad mountains," and the fertility of plains irrigated by the Himalayan waters of the Ganges and its tributaries to make an ecological case for organic farming. By characterizing Uttarakhand's mountain ecosystem as "pristine," such public messages challenged long-held notions of Himalayan environs as degraded and threatened by population growth and villagers' destructive livelihood practices. They also pro-

moted a sense of agro-ecological authenticity untouched by, and in need of protection from, modernizing agricultural development.²⁸

Discourses of pristine nature and enduring tradition, however, coexisted with an equally emphatic articulation of the state's commercial and global ambitions in the sphere of organic agriculture. For example, the poster promoting Uttarakhand as "The Most Preferred Organic Destination" stated: "Uttaranchal, one of the youngest states of India, is today geared up to extend its traditionally strong agricultural base into Organic Farming. In the next five years it is envisaged that over 2,000 villages will be providing a range of commodities for domestic and export markets, bringing the total area covered under organized organic agriculture to over 20,000 hectares [50,000 acres]. Considering all its geographical and ecological advantages, Uttaranchal has tremendous potential to become a major player in the world organic market." This poster suggests that it is precisely the agro-ecological purity of the region's past that provides the basis for a high-value agrarian future. In the process, however, it uses the words "organized organic agriculture," a phrase with similar connotations to "organic by design," to distinguish this certified organic future from its claimed base in traditional farming.

It was through these efforts that the UOCB branded organic commodities for domestic and international markets alongside branding the region itself. Claims about the region's pristine ecosystems and its traditional and ecologically sound farming practices are some of the "brand associations" that the UOCB seeks to link to organic agriculture and Uttarakhand. Values accorded to place and product are thus intertwined and come to shape each other: the distinctiveness of Uttarakhand's organic commodities emerges from the particularities of the environment in which they are grown, while agricultural practices preserve the pristine character of that environment.²⁹

As it crafts its messages to brand both the region and organic

commodities, the UOCB articulates a complex vision for the state's agricultural development. In the *Virāsat* spirit, it expresses a certain skepticism about the kind of development that has transformed agriculture in other parts of India. At the same time, however, the UOCB is not lacking in commercial ambition and displays an eagerness to make Uttarakhand a leading actor in world markets for organic food. Indeed, whereas *Virāsat* affirms and celebrates an ideal of cultural authenticity through craft and folklife, the UOCB's Barahnaja Organic Food Festival proclaims the state's unique agricultural authenticity in a bid to expand its domestic and international markets.

Branding Organic Uttarakhand in the National Capital
Located in a lush, shady, and protected compound set some distance back from Sri Aurobindo Marg in South Delhi, Dilli Hāt is a permanent, year-round outdoor craft market with handicraft and food stalls from virtually every state in India. Yet, in contrast to the majority of markets or bazaars in India, Dilli Hāt is a managed space established in a joint endeavor by the New Delhi Municipal Corporation and the Delhi Tourism and Transportation Development Corporation. In 2007 and 2008, Dilli Hāt, unlike an ordinary market, required a modest admission fee of fifteen rupees (less than forty U.S. cents) and required that visitors pass through a security checkpoint. The grounds of the market were immaculately kept, paved with brick, and meticulously landscaped. Permanent stalls, also made of brick, lined the perimeter and, at certain points, the middle of the main pedestrian thoroughfare. Artisans and craftspeople rotated through these stalls, offering a living kaleidoscope of India's diverse regional craft traditions, as the website of the Delhi Tourism and Transportation Department attests. While Dilli Hāt aims to create a market atmosphere, it lacks the level of activity, the crowded streets and alleys, and the sensory intensity of many other markets. Indeed, it is a far cry from even the upscale Indian

National Airways (INA) market directly across the road, which specializes in imported food products and produce such as asparagus and fresh basil and targets those with foreign culinary tastes, among them wealthy Delhi residents and expatriates. Many of the same people who scour INA's narrow passages for imported luxury items and exotic produce also frequent the carefully planned space of the Dilli Hāt Bazaar to consume handicrafts that are seen as authentically Indian. Dilli Hāt provides an ordered, clean, and peaceful space in which one can eat and shop at leisure, and for this reason it is a popular destination for Delhi residents and tourists seeking souvenirs of India's craftwork tradition—everything from bamboo desk organizers, pashmina shawls, and wooden toys to coconut placemats, brass jewelry, and marble coasters.³⁰

From late January to early February 2008, the UOCB organized the third annual “Spirit of Uttarakhand” festival at Dilli Hāt. While the festival was intended to promote the state generally, the UOCB took a special interest in the venue as a space in which its farmers' groups could market their produce. The festival brought together a range of enterprises and organizations involved in artisanal pursuits as well as in both certified and uncertified organic production. The Barahnaja Organic Food Festival took place under the awning of a single pavilion at Virāsāt, but at Dilli Hāt the UOCB purchased exhibition space for a sum of 2.5 lakh (then the equivalent of U.S. \$6,172) to allow each group to have its own stall. A large billboard listing the names of the UOCB's twenty-four participants, with photos of snow-capped Himalayan peaks, village women surrounded by harvested maize, and a hill village nestled among cascading agricultural terraces, marked the entrance to its 2008 exhibition. These photos emphasized the natural abundance, fertility, and purity of Uttarakhand's agricultural landscape.

Whereas participants in the Barahnaja Food Festival at Virāsāt were brought together through a common connection to organic or traditional food products, the Spirit of Uttarakhand Festival at

Dilli Hāt incorporated a more eclectic group of participants. What united them was an emphasis on artisanal production, both craft-oriented and agrarian. A number of stalls in the exhibition were dedicated to food and agricultural products, ranging from grains and spices to honey, other condiments, and juices. In addition, however, several stalls sold soaps and clothing. Though the UOCB's pavilion at Virāsāt was explicitly focused on organic agriculture, the organic theme at the Spirit of Uttarakhand festival was significant but not singular. Despite these differences, both Virāsāt and Dilli Hāt shared a vision of artisanal work as emblematic of, or essential to, Indian culture.

As the prime organizer of the Spirit of Uttarakhand festival at Dilli Hāt, the UOCB occupied four prominent stall spaces at the entrance to the exhibition area. In contrast to Virāsāt, however, its stalls placed less emphasis on raising public awareness about organic agriculture and greater emphasis on sales. This was perhaps to be expected, as Delhi is the largest market for farmers registered with the board and, for the past several years, sales at the Spirit of Uttarakhand exhibition had yielded significant income for farmers' groups. Like those at Virāsāt, the UOCB stalls at Dilli Hāt were run by field staff and farmers from across the state. Much of my time at these exhibitions was spent with them, and our conversations focused on the villages and regions from which they hailed, the crops most commonly grown there, and the challenges of their work. The master trainers at these exhibitions were entirely young men, many of them single or just starting the process of becoming engaged, married, or raising families.

Through my conversations with farmers and fieldworkers about place, work, and family, I learned that sales at Dilli Hāt were disappointingly lackluster that year. They remarked that though sales in 2007 had averaged 18,000 to 20,000 rupees per day (U.S. \$460 to \$512), in 2008 sales averaged only 4,000 to 5,000 rupees (\$102 to \$128). They attributed this to the fact that their exhibition slot had

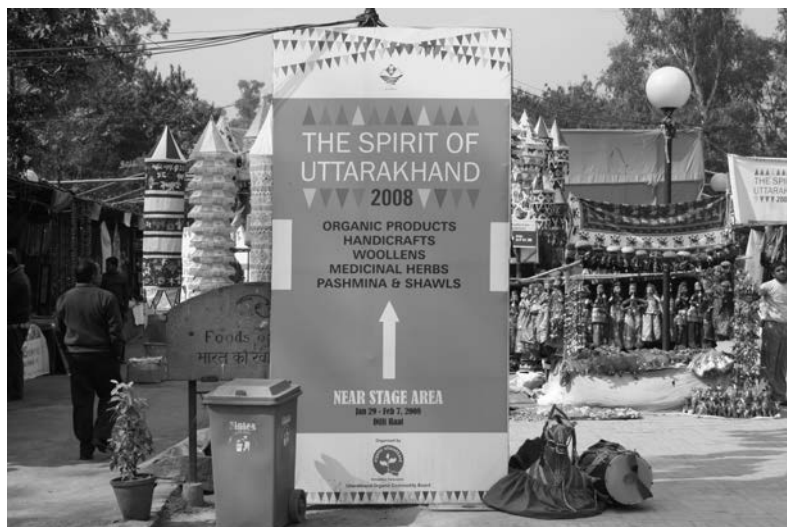
been allotted late in the agricultural year, whereas in earlier years the festival had followed close on the heels of the kharīf harvest, which enabled farmers to bring freshly harvested produce to Delhi consumers eager to buy food in large quantities for the festival season and winter months. In 2008, with the festival falling in late January and early February, consumers were less interested in making purchases, having already stocked up several months before. Compounding the poor timing was what they perceived as the poor location of the Spirit of Uttarakhand exhibition, tucked in a far corner of the Dilli Hāt grounds away from the main bazaar, food court, and stage area. Though colorful signs about the exhibition were abundant in the main bazaar, UOCB staff lamented that with so many other visual attractions, no one stopped to read the signs or walk the short distance to the exhibition.

In discussing sales, fieldworkers described to me their unique role in the UOCB's network to link rural producers with urban markets. More than just extension workers, they were also importantly brokers and entrepreneurs who, in many respects, made the movement of produce from the hills to the cities possible. Because the UOCB cannot directly sell the products of farmers affiliated with it, fieldworkers—principally master trainers—bought produce from farmers who, as they put it, “do not want to take the risk” of selling at a distant market where demand is uncertain. In the master trainers, then, farmers have an assured buyer, and in theory the master trainers recoup the costs of the initial purchase through sales at exhibitions such as Dilli Hāt. In doing so, however, they shouldered the financial risk that farmers sought to avoid, and, in 2008, when sales were poor, many were experiencing a loss. Telling me that there was no point taking the produce back with them, they explained that they would instead sell it in Delhi for less than what they paid for it. When I asked how they would deal with this loss, they explained that while they experienced a loss on certain crops, such as finger millet, they would be able to mitigate it through the

higher prices that other crops, such as spices, commanded. In my conversations with them, it became clear that the production of Organic Uttarakhand in these spaces occurs not only discursively, but practically and logistically through vast regional networks. The linchpin of these networks was, in many cases, the liminal figure of the fieldworker who moved among villages, the UOCB, and urban markets and exhibitions.

As much as Uttarakhand may claim to be a natural home for organic agriculture, the term *organic*, both in English and in its Hindi form, *jaivik*, is not one that resonates deeply with either farmers or urban publics. As I pressed this apparent paradox, one fieldworker in the program, Vinod, observed that farmers tell him that they are already organic but do not understand what organic means. Alluding to the tensions between being “organic by default,” and becoming “organic by design,” he went on to explain that it is only with the transfer of new technology, in particular vermicompost and biodynamic farming, that they come to understand how organic agriculture differs from what they do and that, according to him, they realize it is better than traditional technology because compost may be prepared in a shorter period. Though the UOCB’s posters and banners root the development of organic agriculture in the region’s “traditional” agricultural base, for Vinod organic agriculture is linked to a long-standing developmental project of improvement through technology transfer. Implicit in Vinod’s account is the ascription of a certain foreign quality to organic agriculture, as the transfer of modern technology for organic agriculture is a foil to indigenous, local, and traditional practices—or “what farmers already do.”

A steady trickle of visitors passed through the exhibition. Generally middle- and upper-middle-class Delhi residents and expatriates, most visitors browsed but did not buy any of the products for sale. One potential customer remarked with an expression of disbelief that half a kilogram of *moong* dal cost the same as one kilogram



Although prominently placed signs for the Spirit of Uttarakhand festival at Dilli Haat directed visitors to the exhibition space, board staff lamented that in 2008 the festival was poorly attended. New Delhi, February 2008.

in the market. Indeed, if anything deterred people from buying, it was the higher price of organic products. This, however, was not a deterrent for all. One older Delhi resident made a large purchase that included 17 kilograms (37 1/2 pounds) of organic basmati rice from Dehradun. He told me that he had bought the organic products for the first time the previous year and, finding the quality good, returned this year. Reminiscing that in his childhood everything was organic, he remarked that organic foods are not easily available now in the market and that they taste better than their conventionally produced counterparts. He pays the price premium not simply for organic production methods, better taste, or purported health benefits, but also for an affective connection with his childhood that consuming organic food enables him to reestablish.³¹

Other customers, however, expressed different reasons for buying organic. An American man took particular interest in organic

turmeric rhizomes and discussed the possibility of juicing them with his Indian companion. Though turmeric has a wide range of culinary, medicinal, cosmetic, and ceremonial uses in the subcontinent, the consumption of its juice is not commonly among these.³² He told me of his plans to open an Ayurvedic spa and treatment center in Dehradun; he was experimenting with products to use in its “rejeuvamixes.” After purchasing 3 kilograms (6 1/2 pounds) of the rhizomes, he commented to me enthusiastically that “you can feel the vibrations of this organic stuff.” For him, organic consumption was less about memory and childhood nostalgia than about the intrinsic powers of organic produce itself—and its potential to generate commercial profit.

There is no doubt that the consumption of certified organic products both reflects and produces social distinctions in India. Much consumption literature to date draws inspiration from Pierre Bourdieu’s pathbreaking study of the links between the constitution of class and the development of taste in France.³³ Subsequent studies in the Indian context have documented everything from how relations of power were constituted through cloth and clothing in the late colonial period to how “gastro-politics” in Hindu South Asia conveys social hierarchies and meanings, how festivals, museums, and exhibitions help shape modern Indian citizens, and how middle-class taste is cultivated through exposure to India’s craft traditions.³⁴ Arguably, the consumption of organic foods in contemporary India may produce social distinctions in analogous ways.

In India, organic food occupies an extremely small niche in the overall food market, and organic products are often significantly more expensive than their conventional counterparts. Organic food is also not widely available, and at the time of my fieldwork it was sold primarily through markets such as Dilli Hāt, high-end Indian retail chains, and independent grocers. Though the organic consumption patterns of Indian consumers require more in-depth study, my research suggests that social distinctions produced through the

consumption of organic foods may not provide a window into the reproduction of class. Rather, what emerged from the remarks of visitors at Dilli Hāt was the multiplicity of meanings and the lack of uniformity in what one might call “taste” circulating around the ambiguous label *organic*.

The UOCB was just one of several groups participating in the Spirit of Uttarakhand exhibition; other groups highlighted the differing ways in which *organic* is represented and branded. Another significant presence was that of the Beej Bachao Andolan (BBA), an NGO that was founded in the 1980s but has deep roots in historic social and environmental movements in the region, including the Chipko movement.³⁵ Although the BBA has become involved in organic agriculture, its primary mission differs from that of the UOCB: it works to identify and encourage the preservation of local seed varieties unique to Uttarakhand’s mountain agro-ecosystems. For example, the BBA has documented and collected the many varieties of kidney bean found in the hills.

With an extensive network stretching from the villages of Tehri Garhwal in Uttarakhand to affluent colonies of south Delhi, the BBA, like other NGOs, has identified a potentially lucrative market for organic foods in India’s urban centers.³⁶ The BBA’s stall at the Spirit of Uttarakhand festival sold kidney beans and chili as well as lesser-known products that had undergone some basic processing to make them more amenable to urban tastes, such as popped amaranth, pickles, and malt powder made from finger millet. Dry goods were packaged in small brown paper bags with colorful labels handwritten in English. In 2008 the UOCB packaged its produce in clear polythene bags with computer-generated English labels, although the products themselves had undergone little processing. Such differences in processing, packaging, and labeling signaled, perhaps, more fundamental differences in the ways in which these organizations envisioned the “organic.” Thus, while the UOCB’s slick packaging declared its ambition to develop “high value organic

produce” and establish the state’s position in world organic markets, albeit with products that were minimally processed, the Beej Bachao Andolan cultivated a more artisanal image of organic production while simultaneously offering a wider range of processed organic foods.

Visual differences in labeling and packaging were mirrored by differences in the marketing philosophy and style of each organization. One of the BBA’s Delhi members, Anil, described the BBA’s endeavor to establish markets in Delhi for little-known products by highlighting their health benefits—a strategy that the UOCB also employed through its “Grains of Tomorrow” poster. He noted that, because of the BBA’s efforts to introduce Delhiites to minor hill crops, the group now has a dedicated consumer base that generates demand for lesser-known products, such as horse gram, said to be good for kidney stones, finger millet, and amaranth. At the same time, given its concern with the erosion of local agricultural diversity, the BBA engaged in what he described to me as “creative marketing” to farmers themselves. That is, the NGO sought to affirm and enhance the “social and cultural” value of these crops by highlighting demand for them in cities and encouraging farmers to continue growing them. In this respect, the BBA’s model was almost diametrically opposed to that of the UOCB, which established what its marketing manager described as “backward linkages” from consumers to farmers—first identifying crops already in demand in urban areas and then encouraging farmers to grow more of those crops.³⁷

According to Anil, the BBA also addressed rural and urban divisions that appeared to be growing even starker in India after liberalization. The BBA’s work on organic agriculture, like that of the UOCB, created networks between rural and urban areas. The two organizations, however, imagine these networks differently. While the UOCB fosters linkages that are primarily commercial and income-generating, the BBA sees its role in a broader social sense.

Anil remarked: “There is a big gulf between the city and the village, and it’s hierarchical. Though the Himalayas are much higher, the guys from the cities think they are much more civilized and the villages are backward, country bumpkins or whatever. So this is also an attempt to . . . make human-mountain-city connections, rural-urban or mountain-city connections where people from the hills come and share what they do, what they have, out of their choice, and so it’s like having an equal kind of relationship. Here actually it’s the village guys coming and telling the city guys something.”

In exhibition spaces, both the UOCB and the BBA clearly foregrounded connections between rural and urban, village and city that were fostered through the production and consumption of organic food. Yet, compared with other nongovernmental organizations participating in the same exhibitions, the UOCB operated at a more explicitly regional level—and more consciously within a larger national context—by branding Uttarakhand as India’s first organic state. The UOCB’s claim about Uttarakhand resonated with those of other organizations that similarly emphasized the “rediscovery” of ancient food grains and the sustainable integration of agriculture and Himalayan ecology through traditional farming practices. Significantly, at both Virāsat and Dilli Hāt, the UOCB’s bid for Uttarakhand’s agricultural authenticity was arguably enabled by a milieu that celebrated craft traditions as emblematic of Indian cultural authenticity.

Place Making and Post-Reform Agriculture

The India International Trade Fair differs significantly from Virāsat and Dilli Hāt in scale and mission. It is held annually in New Delhi, at Pragati Maidan, a premier exhibition complex that houses a number of permanent pavilions, many dedicated to each of India’s states, across approximately 130 acres of sprawling, landscaped grounds. The complex is located a short distance from India Gate, among institutions and monuments that represent India’s national

patrimony—including the Supreme Court, National Gallery of Modern Art, National Handicrafts and Handlooms Museum, National Zoo, and National Stadium.³⁸ While Virāsat, Dilli Hāt, and the IITF all shared a focus on the kaleidoscopic diversity of India's states and regions, the IITF was not a celebration of folklife. Rather, it was organized by the India Trade Promotion Organisation (ITPO) of India's Ministry of Commerce and Industry and focused explicitly on both domestic and international trade. Officially targeting representatives from government and industry, the fortnight-long exhibition also attracts middle-class Delhi residents and school groups who flock to it in large numbers to take in the colorful displays of each state pavilion and the eclectic mix of regional cuisines, cultural programs, and opportunities to browse and buy everything from Afghan rugs to plastic kitchenware. The name of the complex, Pragati Maidan, is itself significant: in Hindi, *pragati* means progress, and the grounds themselves have provided physical space for the expression of India's trade aspirations since the inception of the IITF in 1980. Indeed, the ITPO claims that the venue is a symbol of “progress and development through trade.”³⁹

At the 2007 India International Trade Fair, visions of progress and development revolved around rurality and the theme of “processed food and agro-industries.” State pavilions dominated the exhibition grounds; many states were housed in their own buildings, and spectacular displays created a theme park of rural development. In each state pavilion, an elaborate and distinctive exterior facade enticed visitors through the doors and then channeled them along a set path past posters, booths, stalls selling all manner of consumer products, and displays promoting the state and its activities, particularly in food and agricultural industries.

The IITF participates in what the ITPO calls “Modern Fair Culture.”⁴⁰ This culture has historic roots in what Tony Bennett termed the “exhibitionary complex,” an array of institutions—from the museum to the department store—that emerged in the nine-

teenth and early twentieth centuries.⁴¹ The exhibitionary complex, Bennett argues, presented a performative and spectacular facet of state power, but one no less essential to the modern state's development than the discipline and biopower associated with institutions such as the prison and the census.⁴² Scholars have shown how imperial powers constructed their colonies and colonized peoples as objects of knowledge through world exhibitions and museums and projected their power in colonial contexts through public spectacles, such as the imperial *darbar* (coronation assembly).⁴³

Literature on exhibitionary phenomena draws attention to the spectacular, performative dimensions of state making and nation building in imperial and postcolonial contexts, but it has not yet considered the ways in which these displays are invested with different meanings in the post-reform, liberalized economic environments of many postcolonial states, including India. Indeed, I suggest that in India a "post-reform" condition may be taking its place alongside the postcolonial condition, as both India and individual states in it redefine their roles in an increasingly liberalized economic environment. The once singular central state has yielded, in some domains, to something resembling a confederation of regional states as individual state governments set their own economic policies and compete for corporate and private investment.⁴⁴

In this context of increased state competition through economic policy, the distinctiveness of place and culture is no less significant. At the IITF, the celebration of cultural and regional diversity is wedded to trade and investment ambitions for post-reform development. The ITPO thus proclaims that "the fair mirrors India's 'Unity in Diversity' to the rest of the world that the country . . . is not only emerging as a successful economic power, but also a tolerant, peace loving and cosmopolitan nation." The IITF's state pavilions vibrantly testify to the continued salience of the nationalist mantra of "unity in diversity" while they reveal the ways in which different states seek to project and position themselves in the tap-

etry of trade and development on the exhibition grounds and, more broadly, in India's post-reform economy.⁴⁵

Exterior facades offer a glimpse into such efforts of image and brand building, akin to the state floats at the annual Republic Day parades. Some state pavilions, for example those of Rajasthan and Orissa, emphasize the cultural, artistic, and architectural heritage of their regions. Others, such as the Haryana and Tamil Nadu pavilions, are a curious mosaic of future-oriented visions of development and depictions of the region's heritage or rural life. The facade of Haryana's pavilion provides images of its agri-food sector—including towering grain silos, large tracts of land burgeoning with ripened grain, and a culinary bounty of breads, pastries, honey, and other food products. These are linked with banners that read "Prosperous Haryana" and "The Small State of All Things Big." Immediately in front of these larger-than-life emblems of modernity, abundance, and prosperity is a diorama of village life in miniature, complete with straw-roofed mud huts and women engaged in activities such as churning butter, tending livestock, and receiving instruction in a village training center. Far from denying or omitting what in many areas continues to be common agricultural activities, the idealized depiction of rural life is presented as the foundation for the bold visions and plans for Haryana's agri-food future.

In a similar vein, the facade of the Tamil Nadu pavilion juxtaposes fine-grained photos of its agri-food industries and pharmaceutical sector with images of its famous temples. Inside the exhibition, dioramas of rural life offer depictions of the All Village Anna Renaissance Scheme, in which a rural village is laid out in a grid pattern, with a school, paved roads, substantial houses, streetlights, public transport, and a common tap where women collect water in earthen pots. Another scene shows an agro-forestry and horticulture plantation in which women carry produce from plantation grounds to an adjacent food processing and packing facility, where workers clad in blue sterile gowns transform the raw agricultural

product into a commodity ready for consumption. Scenes such as these capture in highly schematic and symbolic form the kinds of visions, intentions, and ambitions state government planners wish to communicate to industry and investors, and to urban publics more generally. More than simply a celebration of regional and cultural diversity, state pavilions reference icons of place, region, and rural cultures as resources for the achievement of economic and development goals.

Indeed, themes of prosperity, development, and progress abound throughout the exhibition. These themes are expressed in relation both to the agriculture sector specifically and to India's development trajectory more generally. In one state pavilion, a poster depicts an image of a smiling farmer cutting crops with a sickle in a lush, green field. The English caption reads: "Your future is still before you. Your land is a vast storehouse of mineral and agricultural wealth awaiting further development for the benefit of mankind. Its potentialities are magnificent." In many respects, the statement captures the spirit of the fair, the sense conveyed through many displays and pavilions of promise and potential, of natural wealth waiting to be tapped and molded into a form that will bring prosperity.

In this process, the role that state governments identify for themselves provides a window into the reconfiguration of government and private sector activity and relations in India's post-liberalization economy. Marking this reconfiguration, a poster in Madhya Pradesh's pavilion declares, "Government Synonymous to Business," and proceeds to emphasize the ways in which the state government is working to create an enabling environment for business and investment in the state. This general sentiment is reflected in the displays of other state governments as well, and much attention is given to the ways in which government is working to attract and support private industry and investors through schemes such as food parks and land and tax concessions.

In all this, the spectacle produced by the IITF projects a certain nationalist pride, but one that differs in important respects from earlier, more statist expressions of nationalism in that it emanates from the dynamism of India's private sector channeled through state governments and the country's projected future potential as an economic superpower. Exhorting IITF visitors to "come and experience the real India," the Business Visitors' Guide describes the IITF as "a mega celebration of the new India that is fast taking shape. It is an India that is confident, stepping out into the world with pride and ambition. It is an India that believes that it is finally reaching its 'tryst with destiny.'" Drawing directly on nationalist discourse from the very moment of India's independence, the IITF organizers redefine visions of India's destiny at the turn of the millennium.⁴⁶

Though state pavilions are clearly the key attraction of the IITF, the exhibition also features pavilions created by different government ministries—for example, the Ministry of Agriculture, Ministry of Defense, Ministry of Power—as well as pavilions dedicated to specific industries or sectors. Many of these tend not to be as elaborate, but others, such as the Ministry of Agriculture, clearly participate in the makings of an agrarian theme park at IITF with a facade depicting joyous, smiling villagers and a banner that reads "Prosperous Farmer: Advanced Nation." On entering the pavilion, one encounters a display of more joyful farmers, dancing with drums, arms raised in celebration. Further dioramas of rural life depict women sitting on the ground with cooking pots and glass jars of what looks like tomato ketchup—intended to suggest, one might guess, the possibility of value addition and value creation in agro-food products through village-level processing schemes. Other areas of the ministry's exhibition area are devoted to displays of tractors and mechanical equipment such as reapers, as well as dedicated areas set aside for private companies promoting pesticides, weed killers, and related equipment. In the space of the ministry's

exhibition, these coexist with stalls and displays by different government research institutes that fall under the umbrella of the Indian Council on Agriculture Research (ICAR), indicating the reconfigured relationship between the state and corporate sector vis-à-vis the development of agriculture. In the ministry's pavilion, technology, conventional inputs, mechanization, productivity, and yield are featured prominently, whereas little attention is drawn to questions of environmental sustainability. The exception is a rather innocuous stall, containing limited informational material, set aside for the National Project on Organic Farming.

But what of Uttarakhand in the theme-park atmosphere of the IITF? Uttarakhand occupies a strategic location in the exhibition grounds—it is housed in Hall 6, the “Hall of Nations,” which is the largest building in the Pragati Maidan complex, located a short distance from one of the main gates to the IITF grounds from Bhairon Marg and elevated above the other pavilions and buildings in the complex. Uttarakhand shares the space with the Ministry of Power, and given both the fact that the space is shared and the sheer size of the pavilion, the exterior facade is not as elaborate as those of other pavilions. It consists chiefly of a banner depicting a high-alpine meadow in which sheep are grazing as snowy Himalayan peaks rise in the background. Beneath this billboard plastic flowers and fruits offer a sense of the state's natural and agricultural bounty.

Ascending a ramp or stairs up to the pavilion from the main pedestrian thoroughfare of the exhibition grounds, then passing underneath the banner and through a security checkpoint, one immediately encounters a large billboard with “at a glance” figures on processed food and agri-industries. The state's net sown area, irrigated area, production and productivity levels, and major fruits, vegetables, spices, and floriculture are listed against background photos of gerberas growing in a greenhouse and being tended, cut,

and arranged for sale. The hall's vast floor space teems with people observing and gazing at the various exhibits but who, for the most part, rarely stop to engage more actively with them. The pavilion, like others, offers a visual feast for hungry visitors as they are confronted with an eclectic mix of displays describing state activities in various sectors, and stalls selling items such as soaps, pickles, shawls, and handicrafts. Above the stalls that line the perimeter of the pavilion are banners that read "Uttarakhand: A State on the Move," "Uttarakhand: The Floriculture State," "Uttarakhand: The Land of Celestial Beauty," "Organic Uttarakhand," and "Uttarakhand: Simply Heaven."

The tenor of Uttarakhand's agri-food exhibits clearly emphasizes high-value commodity crops, and it is in this context that the high profile accorded to organic agriculture may be seen. Indeed, Uttarakhand's attention to organic agriculture appears unique among other exhibits at the IITF, even those of such states as Himachal Pradesh that have also sought to develop their organic sectors. Inside the stall a large poster about organic agriculture is subtitled with the phrase "Delivering Prosperity with a Focus on Posterity," an ambition that marries development and wealth creation objectives with sustainability goals. The UOCB has space allotted across several stalls and, I am told by one of the fieldworkers staffing it, that despite the large potential consumer base, emphasis is being placed much more on awareness raising and information sharing than on sales. Large posters at the rear of its stall describe the state's vision and strategy for organic agriculture, articulate its long-term and short-term goals, and provide data on area expansion under organic cultivation, though few visitors cross the threshold of the stall to read the posters in any detail. The language of these posters is in keeping with the state's depiction of its overall development ambitions, emphasizing the organic certification system, contract farming arrangements, supply chains, and "progressive" farmers.

Yet, as it brands itself the “Organic Capital of India,” for all its future-oriented focus on high-value commodities and its elaborate contract and marketing arrangements, the Uttarakhand exhibit also consciously grounds itself in discourses about the region that play on ideas of environmental richness, diversity, and natural purity. Indeed, the fusion that the state seeks to achieve between narratives of pristine nature and the development of high-value agri-industries is not reflected in discourses about organic agriculture alone. Along with organic agriculture, the state claims to be “The Floriculture State,” and a brochure published by the Department of Horticulture remarks that with “the pristine beauty of the Himalayas . . . refreshing climate all year round, favorable government policies and easy accessibility to markets . . . what more does an entrepreneur need to start a flourishing floriculture business in Uttarakhand? It will hardly be surprising if people around the globe soon start associating quality flowers to this small hill state in India.”⁴⁷

By invoking images and discourses of nature, the state government seeks to build on and reinforce popular ideas about the region. Eliciting some of these ideas and perceptions through conversations and short interviews with visitors to the pavilion, I found that many identified Uttarakhand with nature, purity, and good health and saw its people as being correspondingly honest, “less cunning,” simple, and hardworking. In making these observations, however, an older gentleman also commented that the region was “somewhat backward” in terms of science and technology, drawing a contrast with states such as Haryana, where “every village has running water and electricity.” In the mind of this individual, then, the positive qualities of honesty and natural purity are also associated with a relative absence of modernizing development. In these short narratives, Uttarakhand was often held up as a foil to Delhi, as qualities of peacefulness, harmony, and a lack of pollution were contrasted with characteristics of the national capital, which was described in largely negative terms as a dusty, dirty, hectic place



“Organic Uttarakhand” at the India International Trade Fair.
New Delhi, November 2007.

where people are selfish and dishonest. Interestingly, sentiments of these Delhi residents echoed those of the UOCB’s fieldworkers at Virāsat, many of whom hailed from Uttarakhand’s villages. Such views may not be unique to Uttarakhand itself, but may map, more broadly, onto the stereotypical contrast drawn between *pahar* (mountains) and *maidan* (plains). Linkenbach suggests that in the *paharī* imagination the fresh air, clean water, and cool weather of the hills are connected to characteristics of honesty, generosity, and solidarity, whereas plains dwellers, living amid dust, heat, and pollution,

are characterized as dishonest, not to be trusted, and greedy. What is of interest about such views is less the sentiments that they convey and more the way that the Uttarakhand state government has mobilized such popular imaginings in its effort to craft a distinctive image and brand equity.⁴⁸

In Uttarakhand the urge to develop brand equity is bound up with its recent formation as a new state. This move cannot be seen as the sole consequence of the “contemporary history of capital” or the expansion of neoliberalism; rather, it is entwined with distinct though interrelated political and economic processes of regionalism and state reorganization at the subnational level in India. Such entanglements invite reflection on processes of nation branding. Related to claims hailing the arrival of the brand state and corporate nationhood is an assertion that, as part of this phenomenon, states themselves are becoming more like corporations.⁴⁹ Of the three exhibitions, the IITF was the most revealing of the manner in which state governments from across India chose to position or “brand” themselves in a liberalized trade environment—for example, as being investor-friendly or creating an enabling economic environment for the development of the private sector. Yet, while statements such as that in the Madhya Pradesh Pavilion—“Government Synonymous to Business”—seem to lend credence to the heralding of state-as-corporation, close attention to the nature of the board’s participation in different exhibition spaces offers a different picture. Indeed, at both Virāsat and Dilli Hāt, the board used its convening power as a state-affiliated entity to gather together different public, private, and nongovernmental groups and so project an organic identity for the state that was based on something larger than itself as a single organization. Thus, the UOCB is able to brand Uttarakhand as India’s first organic state not only because of its own intensive efforts to realize this ambition but also because of the momentum generated by a dynamic nongovernmental sector and a growing group of organic entrepreneurs and small businesses.

Exhibiting Organic Uttarakhand

In this manner, the board's efforts in region branding do not equate it with a corporation; rather, they gesture to the ways in which Uttarakhand, in the wider landscape of post-reform India, fashions and projects its future through mobilizing and reinventing historical ascriptions of nature, ecology, culture, and tradition.

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Promises of Transformation

In the summer and fall of 2008, while I conducted my fieldwork in Uttarakhand, food prices in many regions of the world surged upward and subprime mortgage lending began to unravel in the United States, gathering over a matter of weeks into a global financial crisis. The spike in food prices was felt in India, though its effects were more muted there than elsewhere, in part because of the domestic regulation of food supply and prices. Still, I wondered at the time, what did a global event such as this one mean for the pursuit of organic agriculture in Uttarakhand? As I reflected on various possible connections, the looming financial crisis still seemed incomprehensible and remote. Newspaper photos I saw late that summer of investment bankers carrying cardboard boxes on the streets of New York appeared a world away from the daily work of becoming organic in Uttarakhand. When I returned to the United States in early 2009, the crisis was full-blown. From there, surrounded by field notes, transcripts, photos, and documents, I began to write my dissertation. But, over the years it took to complete this work, I have come to perceive how these global events—and more

particularly their afterlives—might not be as distant as they seemed at the time from Uttarakhand's organic fields.

The events of 2008, in themselves as well as their points of conjunction, helped bring forth what is now widely known as the green economy. To be sure, the concept of the green economy was not invented in their wake; it had, rather, been around for some time.¹ But the convergence of the food, environmental, and economic crises of 2008, which arose within specific locales and touched down differently around the world, enabled the green economy to be launched as an idea whose time had come. In June 2009 the United Nations issued an interagency statement titled “Green Economy: Transformation to Address Multiple Crises,” which advocated that “investing stimulus funds in such sectors as energy efficient technologies, renewable energy, public transport, sustainable agriculture, environmentally friendly tourism, and the sustainable management of natural resources including ecosystems and biodiversity, reflects the conviction that a green economy can create dynamic new industries, quality jobs, and income growth while mitigating and adapting to climate change and arresting biodiversity decline.”²

In 2011 the United Nations Environment Programme (UNEP) published a report that, like many analyses at the time, framed crisis as opportunity. It noted that “recent traction for a green economy concept has no doubt been aided by widespread disillusionment with our prevailing economic paradigm, a sense of fatigue emanating from the many concurrent crises and market failures experienced during the very first decade of the new millennium, including especially the financial and economic crisis of 2008. But at the same time, we have seen increasing evidence of a way forward, a new economic paradigm—one in which material wealth is not delivered perforce at the expense of growing environmental risks, ecological scarcities and social disparities.” It proclaimed further that “the rewards of greening the world's economies are tangible and considerable, that the means are at hand for both governments

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and the private sector, and that the time to engage the challenge is now.” A green economy, it explained, is simply one that is “low carbon, resource efficient and socially inclusive.”³ Following this logic, green economy initiatives have since been promoted as triple-win solutions to what are often presented as the multifaceted economic, environmental, and societal challenges of our time. In this context, organic agriculture has been enthusiastically mobilized and lauded as an important element of this transition. Organizations such as the International Federation of Organic Agriculture Movements have foregrounded the compatibility of certified organic agriculture with green economy objectives, and the Organisation for Economic Co-operation and Development and the World Bank now also identify its relevance for broader strategies of “green growth.”⁴ More recently still, organic agriculture, along with sustainable agriculture initiatives more broadly, has been identified as a target of private capital in relation to the rise of green bonds, sustainable finance, and impact investing.

Uttarakhand’s pursuit of organic agriculture, of course, predates the rise of the green economy and exceeds simplified narratives of globalization or neoliberalism. Contemporary organic agriculture in Uttarakhand, I have argued in this book, is entangled historically with long-standing imaginaries of nature and agriculture in the Himalaya, and with recent efforts to *reimagine* them. It is also, nonetheless, uniquely poised in relation to gathering interest in the green economy. This broader interest, then, is far more recent and was by no means as widespread when I began my fieldwork in 2005. Indeed, in some of my first interviews, board officials and civil servants recounted the resistance they encountered from state bureaucrats and agricultural scientists when they initially proposed the promotion of organic agriculture in the state. Well over a decade later, organic agriculture is increasingly pursued as an element of agricultural and rural development policies by a range of states across India. In 2016 Sikkim, in northeastern India, became the

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country's first "fully organic" state. Meanwhile, elsewhere in India, Karnataka, Kerala, Andhra Pradesh, Madhya Pradesh, Gujarat, Mizoram, and Nagaland are among the other states that have taken up the promotion of organic agriculture, or declared their intention to. But what, then, has the rise of the green economy meant for Uttarakhand's organic fields?

In March 2016 I arrived at the new headquarters of the Uttarakhand Organic Commodity Board on Dehradun's ring road, where many other state government offices are now located. Processes of state formation had continued to make a physical mark on the city, and four months earlier, the UOCB had relocated to a new three-story, expansive glass and brick structure with granite floors, elevators, and a wide central staircase. Ascending the stairs, I noted that the building brought together under one roof many of the institutions created in the early 2000s, at about the same time as the UOCB—among them the horticulture and tea boards and the state's seed and organic certification agency. These changes spoke of the ongoing expansion and consolidation of state institutions, and of the entrenchment of these newly created bureaucracies in the government of rural and agricultural life.

Seemingly small changes provided an indication of the shifting position of the Organic Board in Uttarakhand's bureaucratic landscape. Offices of board officials now projected far more strongly the aura of state authority. In the period from 2005 to 2008, while I was conducting my fieldwork, the UOCB had been located in a bungalow near the Forest Research Institute, and its quarters had very much retained the sense of a converted private home. At the time Satish, who throughout this period had remained in charge of the certification division, shared a small office with several other employees. With the move, his division now occupied its own distinct section in the UOCB headquarters. Outside Satish's office were several computer terminals and desks, arranged in an open plan, where other members of the quality cell worked to manage

the internal control system and certification processes. Satish's office was equipped with a large L-shaped desk, computer, printer, and scanner. Among the most striking changes were the several rows of chairs positioned in front of his desk for receiving visitors, something I was accustomed to seeing more in offices of government bureaucrats than in the headquarters of the Organic Board. In its former premises, even the office of Deepa Agrawal, then the senior program manager of the UOCB, was not laid out in such a manner.

The symbolic power conveyed through these rows of chairs signaled a change both in Satish's status and in that of the board itself. After I took a seat in one of the chairs, Satish described to me not only the changes in the system of certification that I discussed in chapter 2, but also the expansion of the UOCB's work across the state's thirteen districts. In recent years, the focus had intensified on ways to address challenges of marketing organic produce from the state's hill regions, and on methods for establishing supply chains for organic products from these regions. Under the auspices of a state government-funded program, a strategic decision had been made to select certain development blocks within which to focus on the promotion of a particular organic commodity: spices, kidney beans, chili, amaranth, or basmati. Other initiatives within the state government also tell of the ways in which it seeks to direct and shape the organic transition within the region—recent years have seen the drafting of an Organic Agriculture Bill to establish a legal framework for organic production and marketing within the state, as well as plans for the development of a dedicated organic mandī.

In the years from 2005 to 2008, the UOCB had been what Deepa Agarwal described as “a kind of hybrid”: it brought together the mandate and structure of a state government agency with those of an NGO through its philanthropically funded marketing arm and Centre for Organic Farming. In those years the very creation of the board as a novel bureaucratic entity affiliated with the new state

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government appeared to me as part of a process of state formation in Uttarakhand. In the years after 2008, these processes had only intensified. In 2013 the UOCB was brought more fully under the auspices of the state government; a number of staff positions became permanent government positions, staff numbers more than doubled, and a prominent state politician assumed the role of chairperson, a position that had once been held by a government civil servant. Around this time, Deepa Agarwal stepped down from her position, and a new managing director was appointed to lead the board. Further interconnecting state bureaucratic authority with private-sector and market orientation, the new managing director held an MBA in agribusiness management and brought with him experience working for the Indian arm of a large multinational food corporation as well as for an Indian pesticide company. The board, then, evidently still was a “kind of hybrid,” but in the composition of its senior staff and its strategic priorities, it appeared now to combine the power of a state bureaucracy, the formalization of closer ties with state-level politicians, and the ambition of India’s growing private food and agricultural sector.

This impression of the growth and dynamism of organic agriculture that pervaded the board’s headquarters did not, however, reach Nagthari in the mountainous tract of Jaunsar Bawar. In the years since I completed my fieldwork, the road to Nagthari had been extended up to the village itself. And as the road traveled up, people continued to travel down. Returning to Nagthari in 2016, I discovered that a number of the young children of Rajput caste whom I had known in 2007 and 2008 had left the village, sent by their parents to Dehradun and other towns in the Doon Valley to pursue better educational opportunities. While a few of these children returned to Nagthari to continue farming, many did not. “*Niche, niche, niche*”—“down, down, down”—Rawatji remarked, describing the migration of now-grown children from the village to Delhi, Bangalore, Mumbai, and the Gulf states. His aspirations for better

road connections had been realized, but the same was not true for the hopes he had harbored for organic agriculture. Though residents of Nagthari participated occasionally in select markets for organic kidney beans, in 2016 the kind of commodity production envisioned by the UOCB had not taken off.

The story in the Doon Valley was rather more mixed. Not far from the board's new headquarters lies Asanpur, where I had conducted part of my fieldwork in 2007 and 2008, at a time when families in the village participated in the contract with Hira Foods. Usha Devi, whose family I had come to know and remained in touch with, had chosen to stop producing organic basmati once the contract between Hira Foods and the Dharampur farmers' federation (to which organic farmers in Asanpur belonged) ended in 2009. Her family was not alone. The Dharampur farmers' federation, I learned, had entirely disbanded and Hira Foods now procured organic basmati from the remaining federations in the Doon Valley. The numbers of farmers in those federations had also shrunk substantially, and by 2016 the total number of farmers supplying organic basmati to Hira Foods had fallen from over one thousand to about five hundred.

Despite leaving the program, Usha Devi told me that she continued to practice largely organic methods. But it was evident that she did not see her family's future in the cultivation of niche crops for distant organic markets. Her husband, in addition to the sand-mining business he continued to run, had opened his own hardware shop in Dehradun, and it was clear that for them the possibilities of small business ownership in the rapidly expanding capital of Dehradun afforded more promise and potential than the production of organic basmati for export markets. While farmers from Asanpur and the larger Dharampur block had abandoned the contract farming of organic basmati, in the western Doon Valley, where the farmers' federation had always been strong, and relations with Hira Foods were of longer standing, many continued enthusiastically.

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These farmers, on the whole, tended to be larger and more well resourced than others, and when I returned in 2016 I found that a number of them not only cultivated organic basmati to supply to Hira Foods but also were diversifying their farms to supply organic herbs and spices to other private food retailers.

The emergence of organic agriculture in Uttarakhand, then, invites reflection on what it promises, and for whom. Assessing the promises, and the problems, of organic production was, of course, something farmers did themselves. In 2007 and 2008, many of the farmers in the Doon Valley decried the price they received for their paddy, which was, they noted, not competitive with prices they received in the *mandī* and too low to compensate for the additional labor they needed to expend in cultivating it organically—at the time, they received between 2,100 and 2,400 rupees per quintal (then equivalent to about U.S. \$53 and \$61 per 100 kilos, or 220 pounds) of paddy. On occasion, during these conversations, I would be asked by farmers if I knew how much consumers paid for organic basmati. They were aghast when I told them that one kilo (a little more than two pounds) of organic basmati in an upmarket Dehradun grocery store sold for over 300 rupees (\$7).

When I returned to the Doon Valley in 2016, even those farmers who had maintained their contract with Hira Foods expressed ongoing difficulties reconciling the price they received and the costs they incurred. Rajesh Uniyal was among them, but in recent years he had decided to diversify his production into other crops. Looking over plots once planted with basmati, which he now dedicated to the cultivation of chili and parsley, he told me that there is no *phāyadā* (profit) in basmati. The price, he indicated, fluctuates wildly (basmati, unlike many other food grains, does not have a government-regulated minimum support price to ameliorate price declines). Enumerating the labor and input costs involved in its production, he told me that there was little to be gained by its cultivation. By comparison, the small plots of chili and spices, coriander and parsley,

were more lucrative. “*Ismein, phāyadā hai*”—in this, he said, there is profit.

In both Asanpur and Nagthari, larger and more well-resourced farmers—invariably those in dominant or high-caste positions, and especially those with other significant income streams—were those most able to become organic, for it was they who could bear the risk and mobilize the labor, infrastructure, and inputs required by organic practices. In both places, caste and social position also proved crucial in shaping access to training and seeking out potential marketing opportunities. Certification practices (in particular diary keeping), moreover, presumed literacy skills and a familiarity with paperwork and regimes of record keeping that not all farmers possessed or expressed in equal measure. Becoming organic, then, was not a narrowly agricultural endeavor, but a process that was profoundly conditioned by social position, capacities, and relations. For those who could avail themselves of training, invest in compost pits, hire or otherwise mobilize labor; who could tolerate price fluctuations and stringent quality standards; who had a facility with documents and an aptitude for interacting with bureaucrats and buyers, organic agriculture held out a meaningful avenue for re-fashioning their forms of identity and subjectivity as cultivators vis-à-vis broader shifts in visions of agrarian modernity.

Needless to say, many cultivators were neither equipped nor necessarily inclined in this way. In previous chapters, notably chapters 1 and 4, I have shown further how many of the labors that are especially associated with organic agriculture—in particular the care of domestic animals, collection of their manure, and weeding—are strongly gendered, as women from within the household, or whose labor was mobilized on a wage or in-kind basis, assumed responsibility for such tasks. Within these rural communities, the rewards and toil associated with organic agriculture were therefore unevenly shared. The ambivalent promise of organic agriculture in Uttarakhand is, therefore, worth noting in relation to some of the more

celebratory proclamations associated with the green economy. The account offered in this book invites more critical interrogation of its promise of “triple-win” solutions and transformations that are socially, economically, and environmentally sustainable. In 2016 it was arguably the Organic Board itself that had experienced the most striking changes, growing and consolidating its bureaucratic power.⁵

In this manner, Uttarakhand’s experience may also speak to contemporary and more overtly political discussions about food sovereignty that advocate for access to and control of resources within farming systems that are ecologically and socially sustainable. These discussions gathered force in the wake of the food and economic crises late in the first decade of this century, drawing together scholars, activists, and social movements.⁶ Organic agriculture has occupied an ambiguous place in discussions of food sovereignty. As Guntra Aistara notes, it has been subject to criticism because “the transformative potential of organic movements is seen as necessarily tempered by their ties to state regulatory powers and neoliberal markets, as mediated by certification.”⁷ Like Aistara’s study of the negotiation of sovereignty within organic movements in Latvia and Costa Rica, Uttarakhand’s experience can be instructive for thinking about these ongoing discussions. It reveals, for example, the coexistence—and also the co-constitution—of multiple forms of sovereignty by both the regional state and organic farmers.⁸ Moreover, the diversity of farmers’ experience with organic agriculture, certification, contract farming, and marketing underscores a very real need to parse finely the pathways through which some cultivators are more able to exercise or claim sovereignty than others. This work then speaks to questions about what *organic* becomes, and for whom, when it is increasingly incorporated into modes of economic and financial action that proclaim themselves as green.

But it is also the case that ideas of *organic*, which build on and relate to ideas of nature, retain a sense of possibility about differently imagining what agrarian relations might be, especially as the

myriad negative effects of industrial modes of agricultural production are increasingly felt, known, and contested. Organic farming is replete with possibilities for thinking through the productive agencies and industries of the nonhuman. Such accounts are not entirely new. As I discussed in chapter 1, in colonial India Sir Albert Howard engaged in precisely such thinking when he declared “living organisms,” and “not humans,” to be the real agents in making compost. At the same time, soil and compost are once more sites for thinking afresh about agency, labor, and the category of the human. Donna Haraway, whose scholarship reworks notions of agency and categories of being, addresses calls to move beyond the human through a play on words that invokes these earthy agencies: “we are all compost, not posthuman.”⁹

In this sense, the idea of *organic* appears to offer a way of responding to new reckonings of the human and posthuman brought forth by the Anthropocene. The creation of Uttarakhand in the year 2000 coincided with the heralding of the Anthropocene, which in subsequent years has catalyzed varying ways of reckoning life on a planet increasingly acknowledged to be shaped by human action from the microscopic to planetary scales.¹⁰ The Anthropocene, as others have noted, marked the agency of humans, as a species, on a geological scale. It has spurred varied critical responses, many of them in some way linked in their efforts to nuance how this agency is understood and historically located.¹¹

In the preceding chapters, agency has proved of crucial significance for what it means to be, and become, organic. Throughout this book, I’ve grappled with a related tension between being organic by default and organic by design, a tension made palpable by the difficulty of perceiving *organic* quality in a directly physical, sensory, or material way. Becoming organic by design meant constructing compost pits, demonstrating intentional efforts to adhere to organic standards, and carrying out deliberate agricultural work to produce organic basmati that met export-quality standards. These

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practices distinguished those farmers who pursued such endeavors from those deemed merely organic by default. To be organic by default, in other words, was to have one's agency remain unrecognized. Though in melas and trade fairs, narratives of tradition were discursively invoked to brand the region as by default organic, in matters of everyday agricultural practice, organic standards and certification, contract farming, and marketing, becoming organic—and being certified as such—relied on farmers' demonstrating institutionally recognizable forms of agrarian agency.

The recognition—and misrecognition—of human agrarian agency is not unique to organic agriculture, for questions of agency have long been crucial to figuring human-environment relations in the Himalaya and beyond. Encounters that take place in Uttarakhand's agricultural fields, and in the practices that have come to surround certified organic agriculture in the region, show us that there are also many ways in which this agency is parsed. The layered histories of human, environmental, and agricultural relations in the Uttarakhand Himalaya are thus a reminder to contend with agency—human and otherwise—in its many dimensions, and as a politically constituted and historically conditioned capacity.

In showing us how the world might be connected through a spoonful of sugar—linking West African slaves to the British working class, the Caribbean plantation to the northern English factory, and slavery to capitalism—Sidney Mintz pioneered a way of thinking not only about, but with, agricultural commodities. The rise of organic agriculture invites us, as Mintz urged his readers, to reconsider “what commodities are, and what commodities mean.”¹² In taking up this call, however, my work has not focused on a specific commodity form per se. Instead, I have asked related questions about what *organic* means, and how it comes to be. This approach challenges the notion that *organic* might ever have a purified essence or embody a carefully cultivated material property. *Organic* is, I have suggested instead, a more contingent quality, eminently assembled

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and composed, hinging in Uttarakhand on historically conditioned notions of nature and human agency, on sentiments of trust and aspiration, as well as on the institutional infrastructures of standards and audits. These, to be sure, are different from the forces of production and commodity chains, networks, and webs that have long shaped understandings of how agricultural commodities come into being. But as agriculture remains a medium for the formation of states and markets, and for the co-constitution of myriad social, cultural, and ecological relations and practices, the production of such qualities is acquiring a force that we must also heed.

Notes

Introduction

1. Throughout this manuscript, I use pseudonyms for people, individual villages, and subdistrict-level administrative areas known in Uttarakhand as development blocks. I retain the names of districts, large cities, prominent public figures, public institutions such as the Uttarakhand Organic Commodity Board, and most other institutions.
2. Roger Jeffrey, Patricia Jeffrey, and Andrew Lyon, "Taking Dung-Work Seriously: Women's Work and Rural Development in North India," *Economic and Political Weekly* 24, no. 17 (1989): WS32–WS37; C. Carpenter, "The Role of Economic Invisibility in Development: Veiling Women's Work in Rural Pakistan," *Natural Resources Forum* 25 (2001): 11–19; Shubhra Gururani, "Forests of Pleasure and Pain: Gendered Practices of Labor and Livelihood in the Forests of the Kumaon, Himalayas," *Gender, Place, and Culture: A Journal of Feminist Geography* 9, no. 3 (2002): 229–43.
3. Michael Pollan, *The Omnivore's Dilemma: A Natural History of Four Meals* (New York: Penguin, 2006). See also Michael Pollan, "Naturally: How Organic Became a Marketing Niche and a Multibillion-Dollar Industry," *New York Times Magazine*, May 13, 2001, 30–37; Michael Pollan, "Mass Natural," *New York Times Magazine*, June 4, 2006, 15.
4. W. Lockeretz, ed., *Organic Farming: An International History* (Trowbridge, U.K.: Cromwell, 2007); see also Randal S. Beeman and James A. Pritchard, *A Green and Permanent Land: Ecology and Agriculture in the Twentieth Century* (Lawrence: University Press of Kansas, 2001).

5. Albert Howard, *An Agricultural Testament* (Oxford: Oxford University Press, 1940).
6. Anna Lowenhaupt Tsing, *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins* (Princeton: Princeton University Press, 2015).
7. Helga Willer and Julia Lernoud, *The World of Organic Agriculture: Statistics and Emerging Trends, 2017* (Bonn: Research Institute of Organic Agriculture (FiBL), IFOAM—Organics International, 2017).
8. Julie Guthman, “Regulating Meaning, Appropriating Nature: The Codification of California Organic Agriculture,” *Antipode* 30 (1998): 136.
9. A growing body of literature addresses the rise of sustainable agriculture in India. See, for example, Camille Frazier, “‘Grow What You Eat, Eat What You Grow’: Urban Agriculture as Middle Class Intervention in India,” *Journal of Political Ecology* 25 (2018): 221–38; Divya Sharma, “Techno-politics, Agrarian Work and Resistance in Post-Green Revolution Indian Punjab” (PhD diss., Cornell University, 2017); Debarati Sen, *Everyday Sustainability: Gender Justice and Fair Trade Tea in Darjeeling* (Albany: State University of New York Press, 2017); Sarah Besky, *The Darjeeling Distinction: Labor and Justice on Fair Trade Tea Plantations in India* (Berkeley: University of California Press, 2014); Andrew Flachs, *Cultivating Knowledge: Biotechnology, Sustainability, and the Human Cost of Cotton Capitalism in South India* (Tucson: University of Arizona Press, 2019); Sapna Thottathil, *India’s Organic Farming Revolution: What It Means for Our Global Food System* (Iowa City: University of Iowa Press, 2014).
10. Daniel Buck, Christina Getz, and Julie Guthman, “From Farm to Table: The Organic Vegetable Commodity Chain of Northern California,” *Sociologia Ruralis* 37, no. 1 (1997): 3–20; Guthman, “Regulating Meaning, Appropriating Nature.”
11. J. Murdoch, T. Marsden, and J. Banks, “Quality, Nature, and Embeddedness: Some Theoretical Considerations in the Context of the Food Sector,” *Economic Geography* 76 (2000): 107–25; David Goodman, “Organic and Conventional Agriculture: Materializing Discourse and Agro-Ecological Managerialism,” *Agriculture and Human Values* 17, no. 3 (2000): 215–19; David Goodman, “The Quality ‘Turn’ and Alternative Food Practices: Reflections and Agenda,” *Journal of Rural Studies* 19, no. 1 (2003): 1–7.
12. Lawrence Busch and Keiko Tanaka, “Rites of Passage: Constructing Quality in a Commodity Subsector,” *Science, Technology, and Human Values* 21, no. 1 (Winter 1996): 3–27; Laura T. Reynolds, “The Organic Agro-Export Boom in the Dominican Republic: Maintaining Tradition or Fostering Transformation?” *Latin American Research Review* 43, no. 1 (2008): 161–84; Jason Konefal and Maki Hatanaka, “Enacting Third-Party Certification: A Case Study of Science and Politics in Organic Shrimp Certification,” *Journal of Rural Studies* 27, no. 2 (2011): 125–33.
13. Michel Callon, C. Méadel, and V. Rabeharisoa, “The Economy of Qualities,”

- Economy and Society* 31 (2002): 194–217; J. Beckert and C. Musselin, *Constructing Quality: The Classification of Goods in Markets* (Oxford: Oxford University Press, 2013). Karen Hébert illustrates this through the study of Alaskan salmon, observing that “whereas salmon in past decades was churned out almost entirely in bulk form—as nearly generic cans lining supermarket shelves, or vast shipments of fish frozen whole—it now increasingly takes the shape of specialized packages that might be set apart as high in Omega-3 fatty acids, medically documented to promote heart health; certified as sustainably harvested by the nonprofit Marine Stewardship Council (MSC) organization; labeled as a quality product subject to the most rigorous of inspections; or caught by fishing families in Alaska Native communities, among other qualifiers.” Karen Hébert, “In Pursuit of Singular Salmon: Paradoxes of Sustainability and the Quality Commodity,” *Science as Culture* 19 (2010): 556. See also Karen Hébert, “The Matter of Market Devices: Economic Transformation in a Southwest Alaskan Salmon Fishery,” *Geoforum* 53 (2014): 21–30.
14. Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York: Viking, 1985).
 15. Susanne Freidberg, *French Beans and Food Scares: Culture and Commerce in an Anxious Age* (New York: Oxford University Press, 2004).
 16. Arjun Appadurai, “Introduction: Commodities and the Politics of Value,” in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1986), 3–63.
 17. Heather Paxson, *The Life of Cheese: Crafting Food and Value in America*. Berkeley: University of California Press, 2012.
 18. Hébert, “In Pursuit of Singular Salmon.”
 19. Brad Weiss, “Making Pigs Local: Discerning the Sensory Character of Place,” *Cultural Anthropology* 26, no. 3 (2011): 438–61.
 20. Sarah Besky, *Tasting Qualities: The Past and Future of Tea*. Oakland: University of California Press, 2020.
 21. I adopt the notion of “provincializing” from Dipesh Chakrabarty, who uses it to capture the way in which experiences of political modernity in India may be better understood through forging connections between analytic and universalizing social theories associated with Marx, with more hermeneutic traditions of social thought associated with Heidegger. See Dipesh Chakrabarty, *Provincializing Europe: Postcolonial Thought and Historical Difference* (Princeton: Princeton University Press, 2000).
 22. Present-day Uttarakhand was known as Uttaranchal in the years immediately following the state’s creation. The name was formally changed to Uttarakhand in 2007. For the sake of clarity, I usually call the state Uttarakhand even when referring to the period from 2000 to 2007.
 23. R. S. Tolia, *Food for Thought and Action* (Dehradun: Bishen Singh Mahendra Pal Singh, 2004).

24. The Rama Shankar Kaushik Committee, created by the government of Uttar Pradesh, in 1994 recommended the area that is now Uttarakhand be separated from Uttar Pradesh and made into its own state.
25. Chakrabarty, *Provincializing Europe*; Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization* (Minneapolis: University of Minnesota Press, 1996).
26. E. J. Hobsbawm and T. O. Ranger, *The Invention of Tradition* (Cambridge: Cambridge University Press, 1992); William Mazzarella, *Shoveling Smoke: Advertising and Globalization in Contemporary India* (Durham, N.C.: Duke University Press, 2003).
27. See William Sturman Sax, *Dancing the Self: Personhood and Performance in the Pandav Lila of Garhwal* (Oxford: Oxford University Press, 2002), 43–44.
28. Radhika Govindrajan, *Animal Intimacies: Interspecies Relatedness in India's Central Himalayas* (Chicago: University of Chicago Press, 2018); Sax, *Dancing the Self*.
29. Diana L. Eck, "The Imagined Landscape: Patterns in the Construction of Hindu Sacred Geography," *Contributions to Indian Sociology* 32, no. 2 (1998): 165–88.
30. Mukul Sharma, "Passages from Nature to Nationalism: Sunderlal Bahuguna and Tehri Dam Opposition in Garhwal," *Economic and Political Weekly* 44, no. 8 (2009): 36. As Sharma shows, environmental movements in the region have at times aligned with Hindu nationalist organizations such as the Rashtriya Swayamsevak Sangh (RSS) and Vishva Hindu Parishad (VHP) to oppose the construction of dams on major tributaries of the Ganges.
31. Antje Linkenbach, "Nature and Politics: The Case of Uttarakhand, North India," in *Ecological Nationalisms: Nature, Livelihoods, and Identities in South Asia*, ed. K. Sivaramakrishnan and Gunnell Cederlöf (Seattle: University of Washington Press, 2006), 162–64.
32. Antje Linkenbach, "A Consecrated Land: Local Constructions of History in the Garhwal and Kumaon Himalayas, North India," in *A Place in the World: New Local Historiographies from Africa and South Asia*, ed. Axel Harneit-Sievers (Leiden: Brill, 2002), 309–30.
33. Rai Pati Ram Bahadur, *Garhwal, Ancient and Modern* (1916; repr., Gurgaon: Vintage, 1992).
34. *Ibid.*, 7, iii.
35. The region that now constitutes Uttarakhand is composed of two divisions, Garhwal in the western half of the state and Kumaon in the eastern half. These divisions arose from both pre- and postcolonial political and administrative histories of each region.
36. L. S. de la Rochette, *Hind, Hindoostan or India*, map (London: William Faden, 1788).
37. The authoritative role of religious texts in shaping colonial knowledge has been noted in other contexts as well. Nicholas Dirks, for example, argues that

- Vedic scriptures offered “transregional and metahistorical modes of understanding Indian society” that proved critical in shaping understandings of caste and establishing it as the organizing principle of Indian society. Dirks, *Castes of Mind: Colonialism and the Making of Modern India* (Princeton: Princeton University Press, 2001), 14. Dirks, of course, builds on and extends arguments made by Edward Said, who, in *Orientalism* (New York: Pantheon, 1978), demonstrated the role of textual exegesis in the formation of Orientalist knowledge.
38. Edwin T. Atkinson, *The Himalayan Gazetteer; or, The Himalayan Districts of the North Western Province of India*, vol. 1 (1881; repr., Delhi: Low Price Publications, 2002), 281. The Pandavas are five brothers from the Hindu epic, the *Mahābhārata*. In the epic, they share a common wife, Draupadi, and fight and win the battle of Kurukshetra against the Kauravas.
 39. Von Christian Lassen, quoted *ibid.*, 285.
 40. Raymond Williams, *The Country and the City* (New York: Oxford University Press, 1973), 128.
 41. These and related themes are explored in Shafqat Hussain, *Remoteness and Modernity: Transformation and Continuity in Northern Pakistan* (New Haven: Yale University Press, 2015).
 42. Thomas Skinner, *Excursions in India, Including a Walk over the Himalaya Mountains to the Sources of the Jumna and the Ganges* (London: Henry Colburn and Richard Bentley, 1832), 241.
 43. Ramachandra Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya* (Delhi: Oxford University Press, 1989), 15. For a further account along these lines, see also the Settlement Report of Jaunsar Bawar by H. G. Ross, Uttarakhand State Archives, Dehradun, Post Mutiny Records, 1880–1888, list 2, dept. I, file 2, box 1, “From the Commissioner, Meerut Division to The Secretary to the Board of Revenue, North-Western Provinces, Mussoorie, 28th October 1872.”
 44. Skinner, *Excursions in India*, 202, 242, 247.
 45. Uttarakhand Tourism Development Board, “Advertisement of Uttarakhand,” <https://uttarakhandtourism.gov.in/advertisement-uttarkhand/>, accessed August 8, 2019.
 46. Indu Tewari, *Unity for Identity: Struggle for Uttarakhand State* (New Delhi: K.K. Publishers, 2001), 23.
 47. Pradeep Kumar, *The Uttarakhand Movement: Construction of a Regional Identity* (New Delhi: Kanishka, 2000); Niraja Gopal Jayal, “Uttaranchal: Same Wine, Same Bottle, New Label?” *Economic and Political Weekly*, December 2–8, 2000; S. S. Negi and Atul Saklani, “Uttarakhand in Making,” in *Garhwal Himalaya: Nature, Culture and Society*, ed. O. P. Kandari and O. P. Gusain (Srinagar: Transmedia, 2001). In addition to claims of relative deprivation, Emma Mawdsley considers caste especially important in understanding the emergence of demands for a separate state. She notes that while upper-caste

- Brahmins and Rajputs constituted about 11 percent of the population of Uttar Pradesh, they represent 80 to 85 percent of the population in the hills. The rise in support for statehood during the mid-1990s, she argues, was a product of a decision made by the government of Uttar Pradesh to extend caste-based reservations to other backward castes (OBCs), following the recommendations of the Mandal Commission in 1991. The new policy reserved an additional 27 percent of jobs or places for OBCs, in addition to the existing 7.5 percent for scheduled castes and 15 percent for scheduled tribes. Given the caste structure of the hills, and the large proportion of high-caste groups in the region, the decision incited much opposition and protest. Mawdsley, "Nonsecessionist Regionalism in India: The Uttarakhand Separate State Movement," *Environment and Planning A* 29, no. 12 (1997): 2217–35.
48. Tewari, *Unity for Identity*, 7.
 49. Gerald Berreman, "Chipko: Nonviolent Direct Action to Save the Himalayas," *South Asia Bulletin* 5, no. 2 (1985): 10.
 50. To be sure, a sizable body of literature, based mostly in Europe, North America, Australia, and New Zealand, has emerged to anchor understandings of organic agriculture and movements in particular regional and agrarian histories. See, for example, Hugh Campbell and Ruth Liepins, "Naming Organics: Understanding Organics Standards in New Zealand as a Discursive Field," *Sociologia Ruralis* 41, no. 1 (2001): 21–39; Julie Guthman, *Agrarian Dreams: The Paradox of Organic Farming in California* (Berkeley: University of California Press, 2004). For a more recent example, see Guntra A. Aistara, *Organic Sovereignties: Struggles over Farming in an Age of Free Trade* (Seattle: University of Washington Press, 2018).
 51. Albert Howard and Yeshwant D. Wad, *The Waste Products of Agriculture: Their Utilization as Humus* (New York: Oxford University Press, 1931).
 52. See, for example Guthman, *Agrarian Dreams*; Buck, Getz, and Guthman, "From Farm to Table"; Brad Coombes and Hugh Campbell, "Dependent Reproduction of Alternative Modes of Agriculture: Organic Farming in New Zealand," *Sociologia Ruralis* 38, no. 2 (1998): 127–45; Johannes Michelsen, "Organic Farming in Regulatory Perspective: The Danish Case," *Sociologia Ruralis* 41, no. 1 (2001): 62–84; Tad Mutersbaugh, "Fighting Standards with Standards: Harmonization, Rents, and Social Accountability in Agrofood Networks," *Environment and Planning A* 37, no. 11 (2005): 2033–51; Laura T. Raynolds, "The Globalization of Organic Agro-food Networks," *World Development* 32, no. 5 (2004): 725–43; Sen, *Everyday Sustainability*.
 53. Aistara, *Organic Sovereignties*, 14.
 54. Bruno Latour, *We Have Never Been Modern*, trans. C. Porter (Cambridge: Harvard University Press, 1993).
 55. Timothy Mitchell, *Questions of Modernity* (Minneapolis: University of Minnesota Press, 2000), 18.
 56. I borrow the term *social man* from Raymond Williams, *Problems of Material-*

- ism and Culture: Selected Essays* (London: Verso, 1980). See also Arun Agrawal and K. Sivaramakrishnan, eds., *Agrarian Environments: Resources, Representations, and Rule in India* (Durham, N.C.: Duke University Press, 2000), who observe that the relation between nature and human society encompasses, more specifically, the basis on which property developed. They write that “attempts by Hobbes, Locke, Hume, and Rousseau to think about political order and property depended on an original assumption that nature exists separately from humans” (2).
57. William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: Norton, 1996); Latour, *We Have Never Been Modern*; Philippe Descola, *Beyond Nature and Culture*, trans. Janet Lloyd (Chicago: University of Chicago Press, 2013).
 58. Williams, *The Country and the City*, 3.
 59. Williams, *The Country and the City*; William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York: Norton, 1991).
 60. Cronon, *Nature’s Metropolis*, 7.
 61. Richard H. Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600–1860* (Cambridge: Cambridge University Press, 1995).
 62. For a review of anthropological debates in this area, see Shaila Seshia Galvin, “Interspecies Relations and Agrarian Worlds,” *Annual Review of Anthropology* 47 (2018): 233–49.
 63. Timothy Vos, “Visions of the Middle Landscape: Organic Farming and the Politics of Nature,” *Agriculture and Human Values* 17, no. 3 (2000): 252.
 64. Jonathan Murdoch, “Inhuman/Nonhuman/Human: Actor-Network Theory and the Prospects for a Nondualistic and Symmetrical Perspective on Nature and Society,” *Environment and Planning D: Society and Space* 15, no. 6 (1997): 731–56; David Goodman, “Agro-Food Studies in the ‘Age of Ecology’: Nature, Corporeality, Bio-politics,” *Sociologia Ruralis* 39 (1999): 17–38; Pernille Katloft, “Organic Farming in Late Modernity: At the Frontier of Modernity or Opposing Modernity?” *Sociologia Ruralis* 41, no. 1 (2001): 146–58; Vos, “Visions of the Middle Landscape.” These works predate more recent interest in the posthumanities. See, for example, Donna J. Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008); Eduardo Kohn, *How Forests Think: Toward an Anthropology beyond the Human* (Berkeley: University of California Press, 2013); Tsing, *The Mushroom at the End of the World*.
 65. Mahesh Rangarajan and K. Sivaramakrishnan, in *India’s Environmental History* (Ranikhet, Bangalore: Permanent Black, 2012), have observed, “Few landscapes have attracted as much attention in terms of social conflict or ecological enquiry as forests” (1). See also K. Sivaramakrishnan, *Modern Forests: Statemaking and Environmental Change in Colonial Eastern India* (Stanford: Stanford University Press, 1999); S. Ravi Rajan, *Modernizing Nature: Forestry*

- and *Imperial Eco-development, 1800–1950* (New York: Oxford University Press); Nandini Sundar, *The Burning Forest: India's War in Bastar* (New Delhi: Juggernaut, 2016).
66. Michael R. Dove, "The Dialectical History of 'Jungle' in Pakistan: An Examination of the Relationship between Nature and Culture," *Journal of Anthropological Research* 48, no. 3 (1992): 231–53.
67. Ibid. As Dove notes, the term *jangli* continues to be used in northern India as a pejorative label for a person who is uncivilized.
68. Ajay Skaria, *Hybrid Histories: Forests, Frontiers and Wildness in Western India* (Delhi: Oxford University Press, 1999).
69. Sivaramakrishnan, *Modern Forests*, 4.
70. Ibid.
71. Agrawal and Sivaramakrishnan, *Agrarian Environments*, 3.
72. Ramachandra Guha, "Forestry in British and Post-British India: A Historical Analysis," *Economic and Political Weekly* 18, no. 44 (1983): 1882–96. Guha, "Scientific Forestry and Social Change in Uttarakhand," *Economic and Political Weekly* 20, no. 45/47 (1985): 1939–52. S. Pathak, "State, Society and Natural Resources in Himalaya: Dynamics of Change in Colonial and Post-Colonial Uttarakhand," *Economic and Political Weekly* 32, no. 17 (1997): 908–12.
73. HariPriya Rangan, "From Chipko to Uttaranchal: The Environment of Protest and Development in the Indian Himalaya," in *Liberation Ecologies: Environment, Development and Social Movements*, ed. Richard Peet and Michael Watts (London: Routledge, 2004), 338–57.
74. Neeladri Bhattacharya, *The Great Agrarian Conquest: The Colonial Reshaping of a Rural World* (Ranikhet, Bangalore: Permanent Black in association with Ashoka University, 2018), 9–10.
75. Besky, *The Darjeeling Distinction*, 30. See also Wolfgang Mey, "Shifting Cultivation, Images, and Development in the Chittagong Hill Tract of Bangladesh," in *Ecological Nationalisms: Nature, Livelihoods and Identities in South Asia*, ed. K. Sivaramakrishnan and G. Cederlöf (Seattle: University of Washington Press, 2006).
76. Akhil Gupta, *Postcolonial Developments: Agriculture and the Making of Modern India* (Durham, N.C.: Duke University Press, 1998), 6.
77. For a landmark ethnography on the apparatus of development see James Ferguson, *The Anti-politics Machine: Development, Depoliticization, and Bureaucratic Power in Lesotho* (Minneapolis: University of Minnesota Press, 1994).
78. The notion that the state in India has been weakened absolutely, or is in retreat, in the wake of liberalization does not bear scrutiny. Shalini Randeria, for example, examines how state authority and sovereignty are reconstituted within processes of globalization more broadly, and she advances the notion of the "cunning state" to analyze "how states render themselves unaccountable to international institutions and citizens alike." See Randeria, "The State of Globalization: Legal Plurality, Overlapping Sovereignties and Ambiguos

- Alliances between Civil Society and the Cunning State in India,” *Theory, Culture & Society* 24, no. 1 (2007): 7.
79. Gupta, *Postcolonial Developments*, 13. See also Shaila Seshia, “Protection of Plant Varieties and Farmers’ Rights in India: Law-Making and the Cultivation of Varietal Control,” *Economic and Political Weekly* 37, no. 27 (2002): 2741–47.
 80. A. Flachs, “‘Show Farmers’: Transformation and Performance in Telangana, India,” *Culture, Agriculture, Food and Environment* 39 (2017): 25–34; Glenn Davis Stone, “Agricultural Deskillling and the Spread of Genetically Modified Cotton in Warangal,” *Current Anthropology* 48, no. 1 (2007): 67–103. For more on the increasingly blurred boundaries between the state and NGOs, see Aradhana Sharma, *Logics of Empowerment: Development, Gender, and Governance in Neoliberal India* (Minneapolis: University of Minnesota Press, 2008).
 81. Ravinder Kaur, “Nation’s Two Bodies: Rethinking the Idea of ‘New’ India and Its Other,” *Third World Quarterly* 33, no. 4 (2012): 603–21. More recently, of course, Narendra Modi made “New India” a key slogan in his 2019 election campaign.
 82. R. Kaur and T. Blom Hansen, “Aesthetics of Arrival: Spectacle, Capital, Novelty in Post-Reform India,” *Identities* 23 (2016): 266.
 83. *Ibid.*, 267.
 84. See, for example, P. Chatterjee, *The Nation and Its Fragments* (Delhi: Oxford University Press, 1995) and *The Politics of the Governed: Reflections on Popular Politics in Most of the World* (New York: Columbia University Press, 2004); Ranajit Guha, *Dominance without Hegemony: History and Power in Colonial India* (Cambridge: Harvard University Press, 1997); Sudipta Kaviraj, “On the Enchantment of the State: Indian Thought on the Role of the State in the Narrative of Modernity,” *Archives Européennes de Sociologie* 46, no. 2 (2005): 263. In placing focus on the region instead of the national state, I draw inspiration from the approach to theorizing development and modernity outlined in K. Sivaramakrishnan and Arun Agrawal, eds., *Regional Modernities: The Cultural Politics of Development in India* (Oxford: Oxford University Press, 2003).
 85. Sivaramakrishnan and Agrawal, *Regional Modernities*, 16.
 86. Assema Sinha, “An Institutional Perspective on the Post-Liberalization State in India,” in *The State in India after Liberalization*, ed. A. Gupta and K. Sivaramakrishnan (New York: Routledge, 2011), 49–68; Gupta and Sivaramakrishnan, introduction to *The State in India after Liberalization*, 1–28.
 87. Gupta and Sivaramakrishnan, introduction to *The State in India after Liberalization*.
 88. Sinha, “An Institutional Perspective,” 57.
 89. Rangan, “From Chipko to Uttaranchal”; Emma Mawdsley, “After Chipko: From Environment to Region in Uttaranchal,” *Journal of Peasant Studies* 25, no. 4 (1997): 36–54. The prominent environmentalist Vandana Shiva was influential in casting Chipko as an ecological movement and drew on it in

- articulating ideas of ecofeminism. See, for example, Vandana Shiva and Jayanta Bandyopadhyay, “The Evolution, Structure, and Impact of the Chipko Movement,” *Mountain Research and Development* 6, no. 2 (1986): 133–42.
90. Guha, *The Unquiet Woods*, 196. See also HariPriya Rangan, *Of Myths and Movements: Rewriting Chipko into Himalayan History* (New York: Verso, 2000).
 91. See Subir Sinha, Shubhra Gururani, and Brian Greenberg, “The ‘New Traditionalist’ Discourse of Indian Environmentalism,” *Journal of Peasant Studies* 24, no. 3 (1997): 65–99; Besky, *The Darjeeling Distinction*.
 92. Arun Agrawal, *Environmentality: Technologies of Government and the Making of Subjects* (Durham, N.C.: Duke University Press, 2005), 11.
 93. P. P. Karan and Shigeru Iijima, “Environmental Stress in the Himalaya,” *Geographical Review* 75, no. 1 (1985): 71–92.
 94. Rangan, “From Chipko to Uttarakhand”; Mawdsley, “After Chipko.”
 95. See Gururani, “Forests of Pleasure and Pain.”
 96. Focusing on youth masculinities, Leah Koskimaki explores how aspirations for development and regional identity more broadly must themselves be parsed through the intersections of gender, age, and caste. Koskimaki, “Youth Futures and a Masculine Development Ethos in the Regional Story of Uttarakhand,” *Journal of South Asian Development* 12, no. 2 (2017): 136–54.
 97. Gururani, “Forests of Pleasure and Pain,” 237.
 98. Jane Dyson, “Life on the Hoof: Gender, Youth, and the Environment in the Indian Himalayas,” *Journal of the Royal Anthropological Institute* 21, no. 1 (2015): 49–65.
 99. Gupta and Sivaramakrishnan, *The State in India after Liberalization*, 20.
 100. See, for example, Purnima Mankekar and Akhil Gupta, “Future Tense: Capital, Labor, and Technology in a Service Industry (The 2017 Lewis Henry Morgan Lecture),” *HAU: Journal of Ethnographic Theory* 7, no. 3 (2017): 67–87.
 101. Ilana Gershon, “Employing the CEO of Me, Inc.: US Corporate Hiring in a Neoliberal Age,” *American Ethnologist* 45, no. 2 (2018): 175. But as liberalization has unleashed tremendous aspiration, so too has it given rise to youth unemployment and the frustration of ambition and hope. See Craig Jeffrey, *Timepass: Youth, Class, and the Politics of Waiting in India* (Stanford: Stanford University Press, 2010).
 102. Anand Pandian, *Crooked Stalks: Cultivating Virtue in South India* (Durham, N.C.: Duke University Press, 2009), 3.
 103. In the context of organic and fair-trade tea in Darjeeling, Debarati Sen has explored forms of entrepreneurship pursued by women tea plantation workers and smallholder farmers. See Sen, *Everyday Sustainability*.
 104. Kaviraj, “On the Enchantment of the State,” 263, 295.
 105. Lydia Polgreen, “India’s Smaller Cities Show Off Growing Wealth,” *New York Times*, October 23, 2010, www.nytimes.com/2010/10/24/world/asia/24india.html; Jim Yardley, “Soaring above India’s Poverty, a 27-Story

- Home,” *New York Times*, October 28, 2010, www.nytimes.com/2010/10/29/world/asia/29mumbai.html; C. J. Fuller and HariPRIYA Narasimhan, “Information Technology Professionals and the New-Rich Middle Class in Chennai (Madras),” *Modern Asian Studies* 41, no. 1 (2007): 121–50; Purnima Mankekar, “Becoming Entrepreneurial Subjects: Neoliberalism and Media,” in Gupta and Sivaramakrishnan, *The State in India after Liberalization*, 213–31.
106. George E. Marcus, *Ethnography through Thick and Thin* (Princeton: Princeton University Press, 1998); Appadurai, *Modernity at Large*; Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection* (Princeton: Princeton University Press, 2005).
107. Marcus, *Ethnography through Thick and Thin*, 90.
108. Akhil Gupta and James Ferguson, “Discipline and Practice: ‘The Field’ as Site, Method, and Location in Anthropology,” in *Anthropological Locations: Boundaries and Grounds of a Field Science*, ed. Akhil Gupta and James Ferguson (Berkeley: University of California Press, 1997), 2.
109. In this respect, Laura Nader’s classic essay “Up the Anthropologist” is a source of inspiration. See Nader, “Up the Anthropologist: Perspectives Gained from Studying Up,” in *Reinventing Anthropology*, ed. D. Hymes (New York: Pantheon, 1969), 284–311. In the anthropology of South Asia, a significant body of research has emerged in a variety of institutional sites, including NGOs (Sharma, *Logics of Empowerment*), foreign aid agencies (David Mosse, *Cultivating Development: An Ethnography of Aid Policy and Practice* [London: Pluto, 2005]), government offices (Chris J. Fuller and Véronique Bénéï, eds., *The Everyday State and Society in Modern India* [New Delhi: Social Science Press, 2000]), IT companies (Fuller and Narasimhan, “Information Technology Professionals”), and advertising agencies (Mazzarella, *Shoveling Smoke*). Institutionally located research of this kind has shed light on discursive practices that produce social control or popular culture. In my own study, it is indispensable for understanding how and why organic agriculture came to be a state project through which a particular brand identity is created.
110. Here, as elsewhere, I use pseudonyms for both the name of the village and the development block. I retain true names for districts.
111. The name Hira Foods is a pseudonym.
112. Dhirendra Nath Majumdar, *Himalayan Polyandry: Structure, Functioning and Culture Change, a Field-Study of Jaunsar-Barwar* (Bombay: Asia Pub. House, 1962); R. N. Saksena, *Social Economy of a Polyandrous People*, 2nd ed. (New York: Asia Pub. House, 1962); Gerald D. Berreman, “Himalayan Polyandry and the Domestic Cycle,” *American Ethnologist* 2 (1975): 127–38.
113. Further explanation of the history of Jaunsar Bawar’s scheduled tribe designation may be found in G. S. Bhatt, “Polyandry in Western Himalaya: Some Notes and Observations,” in *The Himalayas: An Anthropological Perspective*, ed. M. Jha (New Delhi: M. D. Publications, 1996), 37–44.

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114. Majumdar, *Himalayan Polyandry*, 325.
115. Anmol Jain, *Study of the Eradication of Bonded Labour in Chakrata Block of Dehradun District* (Geneva: International Labor Organization, 2005).

ONE

Fertile Ground

1. David E. Ludden, *An Agrarian History of South Asia* (Cambridge: Cambridge University Press, 1999).
2. “Cow Pat Pit” is a form of biodynamic compost in which cow dung is combined with eggshells, basalt, dust, and a special biodynamic preparation in a brick-lined pit approximately one and half feet deep. The board advises that the manure is ready after sixty days. *Taral kbād* is a form of liquid manure described later in this chapter. *Vermi kbād* is a type of compost combining cow dung and worms in a pit; according to the board, it is ready for use forty-five to sixty days after preparation.
3. This phenomenon is widely recognized. See, for example, Eric Worby, “Tyranny, Parody, and Ethnic Polarity: Ritual Engagements with the State in Northwestern Zimbabwe,” *Journal of Southern African Studies* 24, no. 3 (1998): 561–78; H. Ritvo, *The Animal Estate: The English and Other Creatures in the Victorian Age* (Cambridge: Harvard University Press, 1987); Flachs, “Show Farmers.”
4. Albert Howard, *Soil Erosion and Surface Drainage*, Agricultural Research Institute, Pusa, Bulletin no. 53 (Calcutta: Superintendent Government Printing, 1915).
5. V. S. Rao, “Some Problems of Soil Conservation and Proper Land Use in the Himalayan Region of West Bengal,” *Indian Forester* 87, no. 6 (1961): 339–48.
6. K. M. Tiwari, “Soil Conservation for Watershed Protection and Flood Control,” *Indian Forester* 90, no. 7 (1964): 431–35.
7. Rameshwar Sahai, “Monograph on Soil and Water Conservation in Uttar Pradesh during the V Five-Year Plan,” *Indian Forester* 99, no. 1 (1973): 36–42.
8. Jack D. Ives and Bruno Messerli term this the “theory of Himalayan environmental degradation” in *The Himalayan Dilemma: Reconciling Development and Conservation* (London: Routledge, 1989). See also Julie Guthman, “Representing Crisis: The Theory of Himalayan Environmental Degradation and the Project of Development in Post-Rana Nepal,” *Development and Change* 28 (1997): 45–69.
9. Karan and Iijima, “Environmental Stress in the Himalaya.”
10. The alleged downward spiral of population and environmental degradation is, however, not without controversy and has been subject to critique since the 1980s. Blaikie, for example, argues that the causes of soil erosion may be

- outside the immediate area, and he points to the wider institutional, political, and economic dynamics that drive processes such as deforestation, erosion, and the conversion of forests to agricultural land. Michael Thompson, Michael Warburton, and Tom Hatley go further, questioning the very existence of such a “downward spiral” and stressing the considerable scientific uncertainty about the extent and dynamics of deforestation in the Himalaya. Indeed, some critics of the theory have suggested that rates of deforestation since the 1960s are considerably lower than what they were during the colonial period, when much timber was required to maintain navies and construct railways throughout the subcontinent. But the persistence of this “downward spiral” theory in scholarly and development practitioner circles has led to everything from interventions to control human fertility to projects for watershed protection and afforestation. See Ives and Messerli, *Himalayan Dilemma*; P. M. Blaikie, *The Political Economy of Soil Erosion in Developing Countries* (New York: Longman, 1985); Thompson, Warburton, and Hatley, *Uncertainty on a Himalayan Scale: An Institutional Theory of Environmental Perception and a Strategic Framework for the Sustainable Development of the Himalaya* (London: Ethnographica, 1986); Guthman, “Representing Crisis”; J. C. Kuniyal, “Regional Imbalances and Sustainable Crop Farming in the Uttaranchal Himalaya, India,” *Ecological Economics* 46, no. 3 (2003): 425. See also Sumit Guha, introduction to *Growth, Stagnation or Decline? Agricultural Productivity in British India*, ed. S. Guha (New Delhi: Oxford University Press, 1992).
11. Laura M. Ahearn, “Language and Agency,” *Annual Review of Anthropology* 30 (2001): 109–37.
 12. Michel Foucault, *The History of Sexuality*, vol. 1, *An Introduction*, trans. Robert Hurley (1976; repr., New York: Vintage, 1990); Michel Foucault, “The Subject and Power,” in *Michel Foucault: Beyond Structuralism and Hermeneutics*, ed. Hubert L. Dreyfus and Paul Rabinow (Chicago: University of Chicago Press, 1982), 208–26; Judith Butler, *Bodies That Matter: On the Discursive Limits of “Sex”* (New York: Routledge, 1993).
 13. Sherry Ortner, “Theory in Anthropology since the Sixties,” in *Culture/Power/History: A Reader in Contemporary Social Theory*, ed. N. Dirks, G. Eley, and S. Ortner (Princeton: Princeton University Press, 1994), 372–411. Philip Abrams, *Historical Sociology* (Near Shepton Mallet, Somerset, U.K.: Open Books, 1982). Ivan Karp, “Agency and Social Theory: A Review of Anthony Giddens,” *American Ethnologist* 13 (1986): 131–37.
 14. Ranajit Guha, *Elementary Aspects of Peasant Insurgency in Colonial India* (Delhi: Oxford University Press, 1983); Guha, *Dominance without Hegemony*; Saba Mahmood, *The Politics of Piety: The Islamic Revival and the Feminist Subject* (Princeton: Princeton University Press, 2004).
 15. In this respect, Dove and his colleagues also move away from debates about what constitutes agency and consider instead the question “Who gets to define and assign agency?” with respect to conservation and development proj-

- ects. See Michael R. Dove, Andrew Salvador Mathews, Keely Maxwell, Jonathan Padwe, and Anne Rademacher, “The Concept of Human Agency in Contemporary Conservation and Development,” in *Against the Grain: The Vayda Tradition in Human Ecology and Ecological Anthropology*, ed. B. B. Walters, B. McCay, P. West, and S. Lees (Walnut Creek, Calif.: Altamira, 2008), 225–53.
16. A. Borthakur and P. Singh, “History of Agricultural Research in India,” *Current Science* 105, no. 5 (2013): 587–93.
 17. “Resettlement of Dehra Dun by Mr. C. A. Dannial in 1866,” Post Mutiny Records, 1858–1901, dept. 1 (Settlement), box 6, file 11–13, State Archives of Uttarakhand, Dehradun.
 18. “Assessment of Soils Having Advantage of Manure,” Post Mutiny Records, 1880–1888, dept. 1 (Settlement), box 9, file 39, State Archives of Uttarakhand, Dehradun.
 19. *Ibid.*
 20. The commissioner’s view also reflects the privileged place of irrigation technology in what David Gilmartin has called “imperial science.” Of the major canals of the Indus River basin, Gilmartin writes that “few undertakings so caught the imperial imagination and expressed the politically legitimizing power of technological transformation as ‘the grand edifice’ of these canals.” Gilmartin, “Scientific Empire and Imperial Science: Colonialism and Irrigation Technology in the Indus Basin,” *Journal of Asian Studies* 53, no. 4 (1994): 1127–49.
 21. *Ibid.*, 1143.
 22. Albert Howard and Yeshwant Wad, *The Waste Products of Agriculture: Their Utilization as Humus* (New York: Oxford University Press, 1931).
 23. Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (1947; repr., New York: Schocken, 1972), 212. For more on the significance of the nonhuman in science and technology studies (STS), see, for example, Bruno Latour and Steve Woolgar, *Laboratory Life: The Construction of Scientific Facts* (Princeton: Princeton University Press, 1986), and Michel Callon, “Some Elements of a Sociology of Translation: Domestication of Scallops and the Fisherman of St. Brieuç Bay,” in *The Science Studies Reader*, ed. M. Biagioli (London: Routledge, 1999). For work in multispecies ethnography, which is itself informed by STS, see for example S. Eben Kirksey and Stefan Helmreich, “The Emergence of Multispecies Ethnography,” *Cultural Anthropology* 25, no. 4 (2010): 545–76.
 24. The Indore method that Howard promoted made him something of an orthodox figure in agricultural research, which was, at the time, moving toward the development of synthetic fertilizers. In *An Agricultural Testament*, Howard writes—somewhat unconventionally for the time—that “Europe has much to learn from Asia in the cultivation of the soil” (35). Statements such as these turn on their head a strain of recent scholarship that examines

- how colonial knowledge—through institutions such as the census, cadastral surveys, museums, and even practices of dress—was formative in producing “modern India.” For examples of that scholarship, see Bernard Cohn, *Colonialism and Its Forms of Knowledge: The British in India* (Princeton: Princeton University Press, 1996), and Dirks, *Castes of Mind*. Instead, what *An Agricultural Testament* and the figure of Howard himself demonstrate is the way that colonial knowledge also flowed the other way, from colony to metropole, to produce a different vision of modernity. Indeed, in Britain, Howard’s work laid the foundations for the formation of the Soil Association in 1946, which remains today the main association, campaigning body, and certification agency for organic farmers in the United Kingdom. For more on Howard, see Thomas F. Gieryn, *Cultural Boundaries of Science: Credibility on the Line* (Chicago: University of Chicago Press, 1999).
25. There is now a burgeoning literature on nonhuman agencies in agrarian settings. See Galvin, “Interspecies Relations and Agrarian Worlds.”
 26. Albert Howard and Gabrielle L. C. Howard, *The Development of Indian Agriculture* (Bombay: Oxford University Press, 1929), 58. See also Gieryn, *Cultural Boundaries of Science*.
 27. World Bank, Integrated Watershed Development (Hills) Project, February 7, 1990, <http://documents.worldbank.org/curated/en/931051468771662332/India-Integrated-Watershed-Development-Hills-Project>, accessed April 4, 2020.
 28. World Bank, “Project Information Document (PID) Appraisal Stage,” Uttaranchal Decentralized Watershed Development Project, Rep. AB217, 2004.
 29. World Bank, “Status Report, Prepared for World Bank Review Mission,” Diversified Agricultural Support Project (cr-31061 / Ln-4365), Uttaranchal (Washington, D.C.: World Bank, November 18–22, 2002). NADEP compost is named after Narayan Deorao Pandharipande, who is credited with its invention.
 30. Technology Transfer and Development Center, “TTDC Saras Compost: End of Project Report” (Dehradun: Rural Development Department, Forest and Rural Development Commissioner Branch, Government of Uttarakhand, n.d.), 4. For an extended discussion, see Emma Mawdsley, “A New Himalayan State in India: Popular Perceptions of Regionalism, Politics, and Development,” *Mountain Research and Development* 19, no. 2 (1999): 106–7.
 31. Technology Transfer and Development Center, “TTDC Saras Compost,” 6.
 32. *Ibid.*, 14.
 33. Uttarakhand Organic Commodity Board website, accessed August 4, 2010. Emphasis in original; link no longer active.
 34. The report, based on a survey of 468 households selected through multi-stage, stratified random sampling across four of Uttarakhand’s ten hill districts, found that synthetic fertilizer use was not uncommon in hill areas. Forty-three percent of households reported using urea, and 48 percent of

- households used diammonium phosphate (DAP). The authors observe that “urea is used in almost all range of crops cultivated in the region, whereas DAP is used widely in the vegetable growing region. The usage of urea increases in the rainfed areas if a good rainfall occurs. Also, a new trend is using urea in the field bunds or vacant land to promote growth of grass, which can be fed to the cattle.” Cash cropping and the availability of irrigation were found to be significant variables determining the level of fertilizer use, while distance from roads and markets was not found to have significant effect. Deepa Dasila Singh and Netra Pal Singh, *To Assess the Usage of Fertilizers in the Hill Districts of Uttarakhand* (Dehradun: Center for Organic Farming *Himothan Pariyojna* and Uttarakhand Organic Commodity Board, 2004). Department of Commerce, *National Programme for Organic Production* (New Delhi: Ministry of Commerce, 2005).
35. In certain cases, the length of this period can be reduced or extended at the discretion of the certifying agency, although it may be no shorter than twelve months.
 36. In this respect, the resurgence of agriculture that is “organic by default” in the wake of the Green Revolution and more recent agricultural biotechnologies is similar to the resurgence of craftwork and artisanal production vis-à-vis industrially produced goods and foods. Sarah Lyon, “Migratory Imaginations: The Commodification and Contradictions of Shade Grown Coffee,” *Social Anthropology* 14, no. 3 (2006): 377–90; Chaia Heller, “Post-Industrial ‘Quality Agricultural Discourse’: Techniques of Governance and Resistance in the French Debate over GM Crops,” *Social Anthropology* 14, no. 3 (2006): 319–34. The difference in Uttarakhand, and it is a significant one for those who draw on the phrase, is that organic agriculture did not emerge in a landscape that has already experienced industrialization—as is the case in North America, Europe, and New Zealand, where much of the literature on organic agriculture has been written. Rather, it has emerged in a region that has for the most part never been industrial. In Uttarakhand the phrase represents an effort to establish a niche distinct from these more familiar modernities, aligning itself closely with something resembling postindustrial nature. Kalyanakrishnan Sivaramakrishnan and Ismael Vaccaro, “Introduction. Post-Industrial Natures: Hyper-Mobility and Place Attachments,” *Social Anthropology* 14, no. 3 (2006): 301–17.
 37. See Linkenbach, “Nature and Politics.” In Madhya Pradesh, Amita Baviskar has examined the relation of *adivasi*, or tribal categories, to ideas of nature in several works. See Amita Baviskar, *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley* (New York: Oxford University Press, 1995); Amita Baviskar, “Tribal Politics and Discourses of Environmentalism,” *Contributions to Indian Sociology* 31, no. 2 (1997): 195–223.
 38. Krishi Vigyan Kendras are agricultural extension and training centers administered through the Indian Council of Agricultural Research. The Agri-

- cultural Technology Management Agency is a centrally sponsored scheme and part of the network of extension institutions at the district level; it focuses in particular on the dissemination of agricultural technology. Nyaya panchayats are institutions that resolve disputes and are part of Uttarakhand's panchayat system. In 2010 the government of Uttarakhand reported that 670 such panchayats existed across the state.
39. Arun Agrawal, "Environmentality: Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India," *Current Anthropology* 46, no. 2 (2005), 162.
 40. Karp, "Agency and Social Theory," 134.
 41. Though domestic ruminant animals are crucial for the practice of agriculture across the Himalayan region, these relations are far from being purely functional. In this respect, recent scholarship has yielded new insight into the affective and ethical dimensions of human-animal relations in the Uttarakhand Himalaya. See Radhika Govindrajan, "The Goat That Died for Family: Animal Sacrifice and Interspecies Kinship in India's Central Himalayas," *American Ethnologist* 42, no. 3 (2015): 504–19; Govindrajan, *Animal Intimacies*.
 42. Urea is a synthetic nitrogen fertilizer. For a discussion of the effects of synthetic fertilizers on soils in north India, see Gupta, *Postcolonial Developments*.
 43. Note that the label *cattle* includes cows and their calves, bullocks and bullock calves, and buffalo. My survey interviews did not further distinguish among members of the household—for example, between "productive members" capable of caring for livestock and dependents such as children or elderly parents. Such differentiation would possibly offer further insight into how livestock holdings vary with household demographics.
 44. Fields, of course, varied in size, and the amount of manure applied also depended on the needs of the crop.

TWO

The Limits of Transparency and the Farming of Trust

1. Nathalie Joly, "Tracing Cows: Practical and Administrative Logics in Tension," in *The Anthropology of Writing: Understanding Textually Mediated Worlds*, ed. David Barton and Uta Papen (London: Bloomsbury, 2010), 90–108.
2. Michel Foucault, "Technologies of the Self," in *Technologies of the Self: A Seminar with Michel Foucault*, ed. Luther H. Martin, Huck Gutman, and Patrick H. Hutton (Amherst: University of Massachusetts Press, 1988), 30.
3. William E. Paden, "Theaters of Humility and Suspicion: Desert Saints and New England Puritans," in Martin, Gutman, and Hutton, *Technologies of the Self*, 70–71.
4. James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

5. Andrea S. Ballesterio, “Transparency in Triads,” *PoLAR* 35, no. 2 (November 2012): 160; Gregg Hetherington, *Guerrilla Auditors: The Politics of Transparency in Neoliberal Paraguay* (Durham, N.C.: Duke University Press, 2011), 7.
6. Goodman, “Agro-Food Studies in the ‘Age of Ecology;’” 32.
7. Tad Mutersbaugh, “Just-in-Space: Certified Rural Products, Labor of Quality, and Regulatory Spaces,” *Journal of Rural Studies* 21, no. 4 (October 2005): 397.
8. Marilyn Strathern, ed., *Audit Cultures: Anthropological Studies in Accountability, Ethics, and the Academy* (New York: Routledge, 2000).
9. Michael Power, *The Audit Explosion* (London: Demos, 1996), 21.
10. Research Institute of Organic Agriculture (FiBL) and International Federation of Organic Agriculture Movements (IFOAM), *The World of Organic Agriculture: Statistics and Emerging Trends, 2018* (Frick, Switzerland: FiBL; Bonn, Germany: IFOAM, 2018), 63.
11. Besky, *The Darjeeling Distinction*; Mark Moberg, “Certification and Neoliberal Governance: Moral Economies of Fair Trade in the Eastern Caribbean,” *American Anthropologist* 116, no. 1 (March 2014): 8–22.
12. Laura B. DeLind, “Transforming Organic Agriculture into Industrial Organic Products: Reconsidering National Organic Standards,” *Human Organization* 59, no. 2 (Summer 2000): 200.
13. Master trainers serve as important liaisons among the Organic Board, farmers, farmers’ federations, Hira Foods, and other buyers. In addition to providing agricultural extension advice, they also advise and assist farmers with certification processes.
14. Nayanika Mathur, *Paper Tiger: Law, Bureaucracy and the Developmental State in Himalayan India* (Delhi: Cambridge University Press, 2016); Nikhil Anand, “Leaky States: Water Audits, Ignorance, and the Politics of Infrastructure,” *Public Culture* 27, no. 2 (May 2015): 305–30; Matthew S. Hull, “Ruled by Records: The Expropriation of Land and the Misappropriation of Lists in Islamabad,” *American Ethnologist* 35, no. 4 (November 2008): 501–18; Andrew S. Mathews, “State Making, Knowledge, and Ignorance: Translation and Concealment in Mexican Forestry Institutions,” *American Anthropologist* 110, no. 4 (December 2008): 484–94.
15. The concept of equivalence is advocated by organizations such as International Federation of Organic Agriculture Movements (IFOAM), the Food and Agriculture Organization (FAO) of the United Nations, and the United Nations Conference on Trade and Development (UNCTAD). Two international frameworks for organic certification work to facilitate such equivalence. These are IFOAM’s organic guarantee system and the Codex Alimentarius Commission’s guidelines for the production, processing, labeling, and marketing of organically produced foods. (The Codex Alimentarius Commission is an intergovernmental body in the Joint Food Standards Program of the FAO and the World Health Organization.) The purpose of establishing a harmonized understanding about what it means to be certified organic has

- less to do with organic agriculture per se and more to do with facilitating a known “market identity” to ensure “reliable trade.” Significantly, India’s NPOP is administered by APEDA, which is housed within the Ministry of Commerce rather than the Ministry of Agriculture; this underscores the extent to which organic certification—for the government of India—is more about trade and commerce than about agriculture and food production.
16. Jillian R. Cavanaugh, “Documenting Subjects: Performativity and Audit Culture in Food Production in Northern Italy,” *American Ethnologist* 43, no. 4 (November 2016): 691–703.
 17. Michael F. Brown, “A Tale of Three Buildings: Certifying Virtue in the New Moral Economy,” *American Ethnologist* 37, no. 4 (November 2010): 746; Strathern, *Audit Cultures*, 7.
 18. Alberto Corsín Jiménez, “Trust in Anthropology,” *Anthropological Theory* 11, no. 2 (June 2011): 178.
 19. Freidberg, *French Beans and Food Scares*, 83–86; Michael Power, *The Audit Society: Rituals of Verification* (New York: Oxford University Press, 1997), 13.
 20. Keith Hart, “Kinship, Contract and Trust: Economic Organization of Migrants in an African Slum,” in *Trust: Making and Breaking Cooperative Relations*, ed. Diego Gambetta (Oxford: Blackwell, 1988), 176–93. Bronislaw Malinowski, *Argonauts of the Western Pacific: An Account of Native Enterprise and Adventure in the Archipelagoes of Melanesian New Guinea* (1922; repr., Long Grove, Ill.: Waveland, 1984). Marcel Mauss, *The Gift: The Form and Reason for Exchange in Archaic Societies*, trans. W. D. Halls (1925; repr., New York: Norton, 1990).
 21. Anthony Giddens, *The Consequences of Modernity* (Stanford: Stanford University Press, 1990); Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon and Schuster, 2000); Adam B. Seligman, *The Problem of Trust* (Princeton: Princeton University Press, 1997); Lucien Karpik, *Valuing the Unique: The Economics of Singularities*, trans. Nora Scott (Princeton: Princeton University Press, 2010).
 22. Sylvia Junko Yanagisako, *Producing Culture and Capital: Family Firms in Italy* (Princeton: Princeton University Press, 2002), 11
 23. The meanings of *viśvās* in Hindi, as of *trust* in English, are varied and nuanced and must therefore be grasped contextually. My interlocutors used both terms, depending on whether we conversed in Hindi or English. I attend to these nuanced meanings (in both languages) in this chapter, and though I preserve the term *viśvās*, I also use it interchangeably with *trust* when making links from my own ethnographic material to wider scholarly debates. This is not to suggest that the terms always mean the same thing in every context. That they share expansive, internally varied meanings, however, creates sufficient overlap to allow for such translation.
 24. Sudhir Kakar, *Shamans, Mystics and Doctors: A Psychological Inquiry into India and Its Healing Traditions* (New York: Knopf, 1982), 39.

25. Stefan Ecks, *Eating Drugs: Psychopharmaceutical Pluralism in India* (New York: New York University Press, 2013), 56; Kakar, *Shamans, Mystics and Doctors*; Sarah Pinto, “Development without Institutions: Ersatz Medicine and the Politics of Everyday Life in Rural North India,” *Cultural Anthropology* 19, no. 3 (August 2004): 343.
26. Kakar, *Shamans, Mystics and Doctors*, 39.
27. Lawrence Cohen, “M’s Book,” in *Muslim Portraits: Everyday Lives in India*, ed. Mukulika Banerjee (Bloomington: Indiana University Press, 2010), 11–20; Amit Desai, “A Matter of Affection: Ritualized Friendship in Central India,” in *The Ways of Friendship: Anthropological Perspectives*, ed. Amit Desai and Evan Killick (New York: Berghahn, 2010), 114–32.
28. Diego Gambetta, “Can We Trust Trust?,” in Gambetta, *Trust*, 218.
29. Parker MacDonald Shipton, *The Nature of Entrustment: Intimacy, Exchange, and the Sacred in Africa* (New Haven: Yale University Press, 2007), 34.
30. Brian T. Pentland, “Getting Comfortable with the Numbers: Auditing and the Micro-production of Macro-order,” *Accounting, Organizations and Society* 18, no. 7–8 (October–November 1993): 611; Power, *The Audit Society*.
31. Veena Das, “The Signature of the State: The Paradox of Illegibility,” in *Anthropology in the Margins of the State*, ed. Veena Das and Deborah Poole (Santa Fe: School of American Research Press, 2004), 225–52; Matthew S. Hull, “The File: Agency, Authority, and Autography in an Islamabad Bureaucracy,” *Language and Communication* 23, no. 3–4 (July–October 2003): 287–314; Hull, “Ruled by Records”; Andrew S. Mathews, “Power/Knowledge, Power/Ignorance: Forest Fires and the State in Mexico,” *Human Ecology* 33, no. 6 (December 2005): 795–820; Mathews, “State Making, Knowledge, and Ignorance.”
32. Scott, *Seeing Like a State*.
33. Richard Saumarez Smith, “Rule-by-Records and Rule-by-Reports: Complementary Aspects of the British Imperial Rule of Law,” *Contributions to Indian Sociology* 19, no. 1 (January 1985): 153–76.
34. Brian Street, *Social Literacies: Critical Approaches to Literacy in Development, Ethnography, and Education* (London: Longman, 1995); Brian Street and Niko Besnier, “Aspects of Literacy,” in *Companion Encyclopedia of Anthropology: Humanity, Culture, and Social Life*, ed. Tim Ingold (London: Routledge, 1994), 527–62.
35. See Michael L. Cepek, “Foucault in the Forest: Questioning Environmental-ity in Amazonia,” *American Ethnologist* 38, no. 3 (August 2011): 501–15.
36. Dilip conducted his interviews with farmers in Hindi, but many of our own conversations—including the one quoted here—took place in English.
37. In Uttarakhand, a development block (or simply block) is an administrative unit immediately below the district level. Farmers are able to purchase subsidized agricultural inputs, including seeds and fertilizers, through the block office.

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38. Cavanaugh, “Documenting Subjects,” 698.
39. *Ibid.*, 696.
40. The way in which organic certification provides a framework for assessing moral conduct resonates with arguments that standards and grading act as measures not only of the “goodness of things” but also of the “goodness of people.” Busch and Tanaka, “Rites of Passage.”
41. Elizabeth Dunn, “*Escherichia Coli*, Corporate Discipline and the Failure of the Sewer State,” *Space and Polity* 11, no. 1 (2007): 49.
42. Classic studies of moral economy include James C. Scott, *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia* (New Haven: Yale University Press, 1976); and E. P. Thompson, “The Moral Economy of the English Crowd in the Eighteenth Century,” *Past & Present* 50 (1971): 76–136.
43. Georg Simmel, *The Sociology of Georg Simmel*, trans. Kurt H. Wolff (New York: Free Press, 1950), 318n1; Georg Simmel, *The Philosophy of Money*, 2nd ed., trans. Tom Bottomore and David Frisby (London: Routledge, 1990), 178.
44. Guido Möllering, “The Nature of Trust: From Georg Simmel to a Theory of Expectation, Interpretation and Suspension,” *Sociology* 35, no. 2 (May 2001): 403–20.
45. Cavanaugh, “Documenting Subjects.”
46. Simmel, *Sociology*, 318.
47. Möllering, “The Nature of Trust,” 414.
48. Shipton, *The Nature of Entrustment*, 34.
49. Dunn, “*Escherichia Coli*, Corporate Discipline and the Failure of the Sewer State”; Ferguson, *The Anti-politics Machine*; Annelise Riles, “Real Time: Unwinding Technocratic and Anthropological Knowledge,” *American Ethnologist* 31, no. 3 (August 2004): 392–405.
50. Cris Shore and Susan Wright, “Coercive Accountability: The Rise of Audit Culture in Higher Education,” in Strathern, *Audit Cultures*, 57–89.

THREE

Becoming Basmati

1. H. G. Walton, *Gazetteer of Debra Dun* (1911; repr., Dehradun: Natraj, 1995), 75.
2. Tellingly, both signs also advertised “Doon Tea Company,” “Garden Fresh Tea,” and “Dehradun Tea,” signaling much earlier—and ultimately failed—efforts to establish tea gardens in the Doon Valley in the nineteenth and early twentieth centuries.
3. IMO, or the Institute for Marketecology, is a Switzerland-based global certification agency with offices in over eighty countries, including India.
4. Tensions between locality, on the one hand, and organic status, on the other,

- are expressed in slightly different terms in recent debates about sustainable food more broadly defined. These tensions emerge from critiques of organic agriculture that highlight its increasingly industrialized character and the long distances over which food is transported. These debates are ongoing in British and American contexts and have been examined in the press, trade books, and academic publications. See, for example, Alex Renton, “Will the Organic Dream Turn Sour?” *Observer*, October 1, 2006, 22; Elisabeth Rosenthal and David Agren, “Organic Agriculture May Be Outgrowing Ideals,” *New York Times*, December 31, 2011, 1; Pollan, “Mass Natural”; Laura B. DeLind, “Are Local Food and the Local Food Movement Taking Us Where We Want to Go? Or Are We Hitching Our Wagons to the Wrong Stars?” *Agriculture and Human Values* 28, no. 2 (2011): 273–83.
5. Besky, *The Darjeeling Distinction*; Anne Meneley, “Like an Extra Virgin,” *American Anthropologist* 109, no. 4 (2007): 678–87; Rory Hill, “Animating Terroir in the French Alps,” in *Reanimating Regions: Culture, Politics, and Performance*, ed. James Riding and Martin Jones (New York: Routledge, 2017); Laurence Bérard and Philippe Marchenay, *Les produits de terroir: Entre cultures et règlements* (Paris: CNRS, 2004).
 6. See World Trade Organization, “TRIPS: Geographical Indications: Background and the Current Situation,” https://www.wto.org/English/tratop_e/trips_e/gi_background_e.htm, accessed May 25, 2018.
 7. Heather Paxson, “Locating Value in Artisan Cheese: Reverse Engineering Terroir for New-World Landscapes,” *American Anthropologist* 112, no. 3 (2010): 444–57; Paxson, *The Life of Cheese*; Weiss, “Making Pigs Local”; Brad Weiss, *Real Pigs: Shifting Values in the Field of Local Pork* (Durham, N.C.: Duke University Press, 2016).
 8. Paxson, “Locating Value in Artisan Cheese.”
 9. Y. L. Nene, “Basmati Rice: A Distinct Variety (Cultivar) of the Indian Subcontinent,” in *A Treatise on the Scented Rices of India*, ed. R. K. Singh and U. S. Singh (Ludhiana: Kalyani, 2003), 8.
 10. On quality in agro-food systems, see Murdoch, Marsden, and Banks, “Quality, Nature, and Embeddedness.” In economic sociology, a much broader literature has emerged on the relation of quality and economic markets. See Michel Callon, *The Laws of the Markets* (Malden, Mass.: Blackwell, 1998); Callon, Méadel, and Rabeharisoa, “The Economy of Qualities”; S. Ponte and P. Gibbon, “Quality Standards, Conventions and the Governance of Global Value Chains,” *Economy and Society* 34 (2005): 1–31; Lucien Karpik, *Valuing the Unique*; Beckert and Musselin, *Constructing Quality*.
 11. See, for example, Igor Kopytoff, who elaborated processes of commoditization and singularization as “polar and ideal types” in “The Cultural Biography of Things: Commoditization as Process,” in *The Social Life of Things: Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1986), 64–91. In the introduction to the same volume,

- however, Appadurai queried this position. For a more recent discussion of such debates framed within debates on quality and valuation, see Beckert and Musselin, *Constructing Quality*.
12. See Karpik, *Valuing the Unique*, and Beckert and Musselin, *Constructing Quality*.
 13. Callon, Méadel, and Rabeharisoa, “The Economy of Qualities.”
 14. See, for example, Robert J. Foster, “The Work of the New Economy: Consumers, Brands, and Value Creation,” *Cultural Anthropology* 22, no. 4 (2007): 707–31.
 15. Callon, Méadel, and Rabeharisoa, “The Economy of Qualities.”
 16. Luc Boltanski and Arnaud Esquerre, *Enrichissement: Une critique de la marchandise* (Paris: Gallimard, 2017).
 17. Nene, “Basmati Rice,” 14.
 18. *Ibid.*, 12.
 19. Uma Ahuja, S. C. Ahuja, Rashmi Thakrar, and N. Shobha Rani, “Scented Rices of India,” *Asian Agri-History* 12, no. 4 (2008): 275; U. S. Singh, Neelam Singh, and R. K. Singh, “Rediscovering Tapovan Basmati,” *Asian Agri-History* 10, no. 2 (2006): 153.
 20. Muzaffar Alam, “Trade, State Policy and Regional Change: Aspects of Mughal-Uzbek Commercial Relations, c. 1550–1750,” *Journal of the Economic and Social History of the Orient* 37, no. 3 (1994): 202–27; Chetan Singh, *Region and Empire: Panjab in the Seventeenth Century* (Delhi: Oxford University Press, 1991).
 21. B. R. Grover, “An Integrated Pattern of Commercial Life in Rural Society of North India during the Seventeenth and Eighteenth Centuries,” in *Money and the Market in India, 1100–1700*, ed. S. Subrahmanyam (Delhi: Oxford University Press, 1994), 222–23; John F. Richards, “The Seventeenth-Century Crisis in South Asia,” *Modern Asian Studies* 24, no. 4 (1990): 627.
 22. Atkinson, *The Himalayan Gazetteer*, 687.
 23. Maheshwar P. Joshi and C. W. Brown, “Some Dynamics of Indo-Tibetan Trade through Uttarakhand (Kumaon-Garhwal), India,” *Journal of the Economic and Social History of the Orient* 30, no. 3 (1987): 315–16.
 24. George Watt, *Dictionary of the Economic Products of India*, vol. 5 (London: W. H. Allen, 1891), 602.
 25. Denis Vidal, “In Search of Basmathistan: Agro-nationalism and Globalization,” in *Globalizing India: Perspectives from Below*, ed. Jackie Assayag and Chris J. Fuller (London: Anthem, 2005), 47–64.
 26. E. A. Siddiq, “Breeding for Quality Improvement in Rice—Present State and Strategy for the Future,” in *Rice in West Bengal*, ed. D. K. Mukherji (West Bengal: Directorate of Agriculture, 1982), 73–95.
 27. APEDA, “Analytical Trade Profile of Basmati Rice,” http://agriexchange.apeda.gov.in/indexp/Product_description_32headChart.aspx?gcode=0601, accessed July 14, 2020.
 28. N. Shobha Rani and R. K. Singh, “Efforts on Aromatic Rice Improvement in India,” in Singh and Singh, *A Treatise on the Scented Rices of India*, 35.

29. Siddiq, “Breeding for Quality Improvement in Rice.”
30. Food Standards Agency, “Survey on Basmati Rice,” Food Surveillance Information Sheet 47/04 (London: Food Standards Agency, 2004); Prabha Jaganathan, “Basmati Export Adulteration Leaves Bad Taste in Mouth,” *Economic Times*, July 6, 2007.
31. Ministry of Commerce, Government of India, Notification no. 67 (E), 2003.
32. Codex Alimentarius Commission, “Codex Standard for Rice, CODEXSTAN 198-1995” (Rome: Food and Agriculture Organization, 1995).
33. Rice Association, British Rice Millers Association, and British Retail Consortium, “Code of Practice on Basmati Rice,” 2005, 2.
34. *Ibid.*, 3.
35. See, for example, Muriel Lightbourne, “Of Rice and Men,” *Journal of World Intellectual Property* 6, no. 6 (2003): 875–94.
36. D. W. Gade, “Tradition, Territory, and Terroir in French Viniculture: Cassis, France, and Appellation Contrôlée,” *Annals of the Association of American Geographers* 94, no. 4 (2004): 848–67.
37. Mōta basmati, it turned out, was just one of several now-dwindling local cultivars unique to the Dehradun environs. Despite the rapid rise of branded basmati rice, these cultivars remain endowed with considerable renown among longtime residents of the valley.
38. Paxson, “Locating Value in Artisan Cheese,” 444. See also Amy B. Trubek, *The Taste of Place: A Cultural Journey into Terroir* (Berkeley: University of California Press, 2008); Amy B. Trubek and Sarah Bowen, “Creating the Taste of Place in the United States: Can We Learn from the French?” *GeoJournal* 73, no. 1 (2008): 23–30; Elizabeth Barham, “Translating Terroir: The Global Challenge of French AOC Labeling,” *Journal of Rural Studies* 19, no. 1 (2003): 127–38.
39. The qualities of place are also the subject of scientific research, an effort that appears to have intensified as part of the work to establish a geographical indication for basmati. This research draws on field trials and farmer surveys and confirms a link between environmental characteristics and some of the signature qualities of basmati. Interestingly, rice scientists mentioned the characteristics of the soil more often than farmers as a factor important in influencing the distinctiveness of basmati. More often, farmers attributed its distinctiveness to the qualities of water that flowed from the Himalaya and sometimes specifically to the special qualities of water from the Ganges and Yamuna rivers.

While lacking in the precision and detail of Chauhanji’s reflection on place and basmati cultivation, this scientific research found that aroma retention and grain elongation were, for example, stronger in regions with cooler temperatures during the period of grain maturity, as is the case in the Doon Valley (temperatures of 25 degrees C [77 degrees F] during the day and 21 degrees C [70 degrees F] at night are optimal). This finding corroborates the

- observations of Doon Valley farmers that the aroma of basmati has declined with the tremendous expansion of Dehradun, where roads, bus terminals, and new commercial and residential real estate have transformed locales such as Majra that were historically famous for basmati. The resulting proliferation of cement and concrete infrastructure is said to have caused a warming of the valley, which has altered the climate of those lands still cultivated with basmati. Formal scientific research also substantiates the farmers' comments that alkaline soil (which may be caused by lime) and nitrogen fertilizers may negatively affect basmati quality, including its aroma, the softness of the grain, and its color and glossiness. V. P. Singh, "The Basmati Rice of India," in *Aromatic Rices*, ed. R. K. Singh, U. S. Singh, and G. S. Khush (Enfield, N.H.: Science Publishers, 2000): 135–54; G. S. Khush, "Taxonomy and Origin of Rice," in Singh, Singh, and Khush, *Aromatic Rices*, 5–14.
40. H. N. Singh, U. S. Singh, R. K. Singh, V. K. Singh, S. P. Singh, and S. C. Mani, "Adoption Pattern and Constraints Analysis of Basmati Rice: Implications for Enhancing Adoption and Stabilizing Productivity in Uttaranchal, India," *Indian Journal of Crop Science* 1, no. 1–2 (2006): 106–8.
41. Nene, "Basmati Rice," 20; E. Siddiq, L. Vemireddy, and J. Nagaraju, "Basmati Rices: Genetics, Breeding and Trade," *Agricultural Research* 1 (2012): 25–36. That a semidwarf hybrid variety, emerging from a public-sector breeding program, could be considered traditional by its cultivators upends many assumptions about the characteristics often assumed to inhere in, as well as the differences between, varieties deemed traditional and modern.
42. World Bank, *Implementation Completion Report (PPFI-P9750 IDA-31060 SCL-43650) on a Credit in the Amount of SDR 37.2 Million (Originally US\$50 Million Equivalent) and a Loan in the Amount of US\$79.9 Million to India for the Diversified Agricultural Support Project (DASP)* (Washington, D.C.: World Bank, 2004); World Bank, "Status Report, Prepared for World Bank Review Mission," iii–iv.
43. Centre for Organic Farming and Uttaranchal Organic Commodity Board, *Annual Report, 2003–2004* (Dehradun: Uttaranchal Organic Commodity Board, 2004); Uttarakhand Organic Commodity Board, *Annual Report, 2006–2007* (Dehradun: Uttarakhand Organic Commodity Board, 2007).
44. In India the concept of the self-help group is closely linked to microfinance initiatives designed to enhance access to credit for the rural poor and, in many cases, women. SHGs are also closely associated with participatory approaches to development. See Thomas Fisher, M. S. Sriram, and Malcolm Harper, *Beyond Micro-Credit: Putting Development Back into Micro-Finance* (New Delhi: Vistaar, 2002); D. Rajasekhar, "Impact of Microfinance Programs on Poverty and Gender Equality: Some Evidence from Indian NGOs," in *Shifting Burdens: Gender and Agrarian Change under Neoliberalism*, ed. Shahrashoub Razavi (London: Bloomfield, 2002), 151–96; Sharma, *Logics of Empowerment*; World Bank, "Status Report, Prepared for World Bank Review Mission," 82–90.

45. Anup Kumar Singh, “Basmati Rice and Kohinoor Foods Limited,” in *Inclusive Value Chains: A Pathway out of Poverty*, ed. Malcolm Harper (Singapore: Stallion, 2010), 115–32; Bart Minten, Anneleen Vadeplas, and Johann Swinnen, “The Broken Broker System? Transacting on Horticulture Wholesale Markets in Uttarakhand,” paper presented at the International Association of Agricultural Economists Conference, Beijing, August 2009; Piya Baptista, “Linking Small Farmers to Markets: Case Study on the Himalayan Action Research Centre, Uttaranchal, India” (World Bank, 2007).
46. “Uttarakhand’s APMC Act to Promote Private Investments, Markets,” *Business Standard*, March 24, 2011, www.business-standard.com/india/news/uttarakhand-apmc-act-to-promote-private-investments-markets/429571/; Shishir Prashant, “Uttarakhand Cabinet Approves APMC Act,” *Business Standard*, January 6, 2011, www.business-standard.com/india/news/uttarakhand-cabinet-approves-apmc-act/420815/; Shishir Prashant, “APMC Act Comes into Effect in Uttarakhand,” *Business Standard*, April 21, 2011, www.business-standard.com/india/news/apmc-act-comes-into-effect-in-uttarakhand/432982/; Singh, “Basmati Rice and Kohinoor Foods Limited.”

To some extent, the formation of farmers’ federations builds on a tradition of rural cooperatives in India. The first cooperatives formed in western India, a region that has since acquired fame for its successful cooperative activity, and the passage of the Cooperative Societies Act in 1904, on the recommendation of the 1901 Famine Commission, enabled their further development. In their early years these cooperatives mainly provided credit to farmers in rural areas, but they soon expanded into marketing societies for storage, the sale of produce, and the supply of inputs such as seeds and manures.

The OBEP’s farmers’ federations share some of the structural characteristics and functions of other cooperatives and marketing societies, but in other respects they differ substantially. The federations are not themselves vertically integrated production units undertaking in-house post-harvest processing, nor are they directly engaged in marketing. Moreover, they are governed by a different regulatory framework, the Societies Registration Act of 1860 rather than the Multi-State Cooperative Societies Act of 2002. The former, Yashavantha Dongre and Shanthi Gopalan note, provides only a “skeletal framework,” whereas the latter more tightly regulates issues of governance and financial management. The “wide scope and generic nature” of the Societies Registration Act underpins the incorporation of everything from caste associations to professional organizations and NGOs. It is perhaps precisely the Societies Registration Act’s very loose criteria for incorporation that enables the flexible institutional maneuvering of farmers’ federations to facilitate contract farming. Yashavantha Dongre and Shanthi Gopalan, “Third Sector Governance in India,” in *Comparative Third Sector Governance in Asia*:

- Structure, Process, and Political Economy*, ed. Samiul Hasan and Jenny Onyx (New York: Springer, 2008), 230.
47. In India, one quintal is equal to 100 kilograms, or 220 pounds.
 48. I draw notions of the “social life” and “career” of things from Appadurai, *The Social Life of Things*.
 49. There is now a substantial literature on contract farming. A foundational early work is Peter D. Little and Michael Watts, *Living under Contract: Contract Farming and Agrarian Transformation in Sub-Saharan Africa* (Madison: University of Wisconsin Press, 1994).
 50. Roger A. Clapp, “The Moral Economy of the Contract,” in Little and Watts, *Living under Contract*, 81.
 51. See, for example, Michael Watts, “Life under Contract: Contract Farming, Agrarian Restructuring, and Flexible Accumulation,” in Little and Watts, *Living under Contract*, 45; Freidberg, *French Beans and Food Scares*, 84.
 52. Watts, “Life under Contract.”
 53. Hébert, “In Pursuit of Singular Salmon.”
 54. Callon, Méadel, and Rabeharisoa, “The Economy of Qualities”; Foster, “The Work of the New Economy.”
 55. Boltanski and Esquerre, *Enrichissement*.

FOUR

Market Imaginaries and the Horizons of Aspiration

1. Richa Kumar, “Elusive Empowerment: Price Information and Disintermediation in Soybean Markets in Malwa, India,” *Development and Change* 45, no. 6 (2014): 1332–60.
2. In Maharashtra, Aniket Aga describes how intermediaries play a similarly critical role in affording farmers access to government market yards as well as to rural economic life more broadly. See Aniket Aga, “Merchants of Knowledge: Petty Retail and Differentiation without Consolidation among Farmers in Maharashtra, India,” *Journal of Agrarian Change* 18, no. 3 (2018): 658–76.
3. International Food Policy Research Institute, *High-Value Crops and Marketing: Strategic Options for Development in Uttarakhand* (New Delhi: Asian Development Bank, 2009), 75.
4. A pioneering study that illuminates how “forces of production” also encompass affect and sentiment is Yanagisako, *Producing Culture and Capital*.
5. Charles Taylor, “Modern Social Imaginaries,” *Public Culture* 14, no. 1 (2002): 106.
6. The first transformation in “theory and in social imaginary,” Taylor notes, occurred during the eighteenth century and involved “coming to see our so-

- ciety as an economy, an interlocking set of activities of production, exchange, and consumption.” Charles Taylor, *Modern Social Imaginaries* (Durham, N.C.: Duke University Press, 2004), 76.
7. Appadurai, *Modernity at Large*, 31.
 8. Arjun Appadurai. “The Capacity to Aspire: Culture and the Terms of Recognition,” in *Culture and Public Action*, ed. Vijayendra Rao and Michael Walton (Stanford: Stanford University Press), 67.
 9. Anand Pandian, “Devoted to Development: Moral Progress, Ethical Work, and Divine Favor in South India,” *Anthropological Theory* 8, no. 2 (2008): 159–79; Anand Pandian, “Pastoral Power in the Postcolony: On the Biopolitics of the Criminal Animal in South India,” *Cultural Anthropology* 23, no. 1 (2008): 85–117.
 10. Kaviraj, “On the Enchantment of the State,” 263.
 11. *Ibid.*, 293.
 12. See, for example, Megan Moodie, *We Were Adivasis: Aspiration in an Indian Scheduled Tribe* (Chicago: University of Chicago Press, 2015); Ritty A. Lukose, *Liberalization’s Children: Gender, Youth, and Consumer Citizenship in Globalizing India* (Durham, N.C.: Duke University Press, 2009); Purnima Mankekar, *Unsettling India: Affect, Temporality, Transnationality* (Durham, N.C.: Duke University Press, 2015); Amita Baviskar, “Consumer Citizenship: Instant Noodles in India,” *Gastronomica: Journal of Critical Food Studies* 18, no. 2 (2018): 1–10.
 13. Drawing on insights from science and technology studies, Michel Callon develops the idea of “calculative agency” fashioned through the nonhuman tools, technologies, and mechanisms that structure and animate the physical space of the market itself. He concludes that “*homo economicus* does exist, but is not an a-historical reality; he does not describe the hidden nature of the human being. He is the result of a process of configuration.” Callon, *The Laws of the Markets*, 22. In a subsequent publication Callon and Fabian Muniesa advance a concept of calculation that, as they put it, “oversteps the opposition of quantitative and qualitative aspects” (1230). Their notion of calculation affords some limited place to imagine courses of action. But their understanding of what constitutes economic agency hinges more profoundly on distributed agencies across human and nonhuman entities. See Michel Callon and Fabian Muniesa, “Peripheral Vision: Economic Markets as Calculative Collective Devices,” *Organization Studies* 26, no. 8 (2005): 1229–50. The configuration of calculative agents that make and shape market worlds is also the focus of several ethnographic studies; see Koray Çalişkan, “Making a Global Commodity: The Production of Markets and Cotton in Egypt, Turkey, and the United States” (Ph.D. diss., New York University, 2005); Donald McKenzie, *Material Markets: How Economic Agents Are Constructed* (Oxford: Oxford University Press, 2009).
 14. Master trainers and service providers worked at the block and district level,

- respectively, to conduct agricultural extension activities, coordinate certification, and procure organic crops.
15. Pierre Bourdieu, “Rethinking the State: Genesis and Structure in the Bureaucratic Field,” in *State/Culture: State Formation after the Cultural Turn*, ed. G. Steinmetz (Ithaca: Cornell University Press, 1999).
 16. James Ferguson and Akhil Gupta, “Spatializing States: Toward an Ethnography of Neoliberal Governmentality,” *American Ethnologist* 29, no. 4 (2002): 981–1002; Aradhana Sharma, “Crossbreeding Institutions, Breeding Struggle: Women’s Employment, Neoliberal Governmentality, and State (Re)Formation in India,” *Cultural Anthropology* 21, no. 1 (2006): 60–95; Sharma, *Logics of Empowerment*.
 17. Sonora Jha and Mara Adelman, “Looking for Love in All the White Places: A Study of Skin Color Preferences on Indian Matrimonial and Mate-Seeking Websites,” *Studies in South Asian Film & Media* 1, no. 1 (2009): 65–83; Shehzad Nadeem, “Fair and Anxious: On Mimicry and Skin-Lightening in India,” *Social Identities* 20, no. 2–3 (2014): 224–38.
 18. Uttarakhand Organic Commodity Board, “Expression of Interest for Setting Up, Operations, Maintenance and Management of a Green Restaurant” (Dehradun: Uttarakhand Organic Commodity Board, n.d.).
 19. Shishir Prashant, “Green Restaurants Proposed in Uttarakhand,” *Business Standard*, February 12, 2010.
 20. Michael Herzfeld, *The Social Production of Indifference: Exploring the Symbolic Roots of Western Bureaucracy* (Chicago: University of Chicago Press, 1992).
 21. Karl Polanyi, *The Great Transformation* (1944; repr., Boston: Beacon, 1957); Mark Granovetter, “Economic Action and Social Structure: The Problem of Embeddedness,” *American Journal of Sociology* 91, no. 3 (1985): 481–510; Karpik, *Valuing the Unique*; Callon, *The Laws of the Markets*.
 22. Herzfeld, *The Social Production of Indifference*, 56.
 23. Baptista, “Linking Small Farmers to Markets.”
 24. “E-auctions at Azadpur Mandi,” *Times of India*, January 12, 2003.
 25. It may be significant here that Jaunsar Bawar has historically stronger ties to the eastern Sirmour district of the neighboring state of Himachal Pradesh than to Garhwal in Uttarakhand. Before 1814, the region was in fact part of the princely state of Sirmour, but it was taken over by the British East India Company following the Gurkha war of 1816. Today, families in Nagthari continue to maintain strong connections to border communities across the two states through ongoing kinship ties.
 26. Stephen Gudeman, *The Demise of a Rural Economy: From Subsistence to Capitalism in a Latin American Village* (Boston: Routledge and K. Paul, 1978).
 27. Anand Yang has written persuasively, from a historical perspective, about the significance of agricultural marketing in rural Bihar, countering received notions about an entrenched system of subsistence agriculture that gave way only recently to commercial agriculture. See Yang, *Bazaar India: Markets*,

Society, and the Colonial State in Gangetic Bihar (Berkeley: University of California Press, 1998).

28. This pattern revealed itself through conversations and interviews with village families.

FIVE

Exhibiting Organic Uttarakhand

1. Callon, Méadel, and Rabeharisoa, “The Economy of Qualities.”
2. Buyers who procure wholesale from farmers affiliated with the UOCB are not required to market their products under the Organic Uttarakhand brand, though the UOCB requests co-branding. Also, given that the UOCB is a state government agency, it is prohibited from selling organic commodities directly despite its marketing responsibilities. As a result, the UOCB often provides the venue or space, such as the exhibition at Virāsat, in which representatives of farmers’ groups may come to sell their produce.
3. An exception, of course, is Dehradun basmati, which has long been famous throughout India.
4. Bart Minten, Thomas Reardon, and Rajib Sutradhar, “Food Prices and Modern Retail: The Case of Delhi,” *World Development* 38, no. 12 (2010): 1775–87.
5. Vijay Kuma, Yogesh Patwari, and H. N. Ayush, “Organised Food Retailing: A Blessing or a Curse?” *Economic and Political Weekly* 43, no. 20 (2008): 67–75.
6. “A Long Way from the Supermarket,” *Economist*, October 18, 2014; Minten, Reardon, and Sutradhar, “Food Prices and Modern Retail.”
7. Adam Arvidsson, “Brands: A Critical Perspective,” *Journal of Consumer Culture* 5, no. 2 (2005): 238.
8. David Ogilvy, *Confessions of an Advertising Man* (New York: Atheneum, 1963) and *Ogilvy on Advertising* (New York: Crown, 1983).
9. Paul Manning, “The Semiotics of Brand,” *Annual Review of Anthropology* 39, no. 1 (2010): 33–49.
10. Arvidsson argues that brands today do much more than represent products. Using Erving Goffman’s formulation, he argues that they provide a “frame for action.” Giving the example of a Macintosh computer, he argues, “With a brand I can act, feel, and be in a particular way.” Adam Arvidsson, *Brands: Meaning and Value in Media Culture* (New York: Routledge, 2006), 8. See also Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience* (1974; repr., Boston: Northeastern University Press, 1986).
11. Paul Manning and A. Uplisashvili, “‘Our Beer’: Ethnographic Brands in Postsocialist Georgia,” *American Anthropologist* 109, no. 4 (2007): 639. See also Alexie Yurchak, *Everything Was Forever, Until It Was No More: The Last Soviet Generation* (Princeton: Princeton University Press, 2006).
12. Foster, “The Work of the New Economy.”

13. Manning and Uplisashvili, “Our Beer,” 628.
14. Jillian R. Cavanaugh and S. Shankar, “Producing Authenticity in Global Capitalism: Language, Materiality, and Value,” *American Anthropologist* 116, no. 1 (2014): 51–64; Trubek, *The Taste of Place*; Barham, “Translating Terroir”; Weiss, “Making Pigs Local” and *Real Pigs*; Meneley, “Like an Extra Virgin”; Besky, *The Darjeeling Distinction*.
15. A. Graan, “Counterfeiting the Nation? Skopje 2014 and the Politics of Nation Branding in Macedonia,” *Cultural Anthropology* 28, no. 1 (2013): 161–79; Constantine V. Nakassis, “Brand Neoliberalism: Introduction,” *Cultural Anthropology* 28, no. 1 (2013): 110, and “Brands and Their Surfeits,” *Cultural Anthropology* 28, no. 1 (2013): 111–26. John and Jean Comaroff have advanced a kindred term, “corporate nationhood,” to describe the efforts of contemporary states to formalize brand identities. Linking this closely with what they see as the quintessentially neoliberal “contemporary history of capital,” the Comaroffs view the development of corporate nationhood as signaling “an epoch in which government actually becomes business, in which the presumptive line between polity and economy is largely obliterated.” Peter van Ham, “The Rise of the Brand State: The Postmodern Politics of Image and Reputation,” *Foreign Affairs* 80, no. 5 (2001): 2–6; John L. Comaroff and Jean Comaroff, *Ethnicity, Inc.* (Chicago: University of Chicago Press, 2009).
16. Graan, “Counterfeiting the Nation?”
17. Dussehra is celebrated during the month of Ashvin (mid-September to mid-October) in the Hindu lunar calendar. Also known as Durga-Puja and Navratri, it is celebrated differently and has varying meanings in different parts of India.
18. Abigail S. McGowan, “All That Is Rare, Characteristic or Beautiful,” *Journal of Material Culture* 10, no. 3 (2005): 263–87.
19. Meaning “of one’s own country,” *swadeshi* became a movement for the production of Indian-made goods—particularly cloth—and the boycott of British goods that formed a key part of Gandhi’s anticolonial struggle in the early twentieth century.
20. McGowan, “All That Is Rare, Characteristic or Beautiful”; Paul Greenough, “Nation, Economy, and Tradition Displayed: The Indian Crafts Museum, New Delhi,” in *Consuming Modernity: Public Culture in a South Asian World*, ed. Carol A. Breckenridge (Minneapolis: University of Minnesota Press, 1995), 216–48; Srirupa Roy, *Beyond Belief: India and the Politics of Postcolonial Nationalism* (Durham, N.C.: Duke University Press, 2007); Richard Kurin, “Cultural Conservation through Representation: Festival of India Folklife Exhibitions at the Smithsonian Institution,” in *Exhibiting Culture: The Poetics and Politics of Museum Display*, ed. Ivan Karp and Steven Lavine (Washington, D.C.: Smithsonian Institution Press, 1991), 315–43. Bernard Cohn, in *Colonialism and Its Forms of Knowledge*, has examined in detail how clothing and

- cloth, as well as the ways in which they were worn, circulated, and exchanged, expressed particular relations of power and resistance in colonial India during the nineteenth and twentieth centuries.
21. Jocelyn Linnekin, “Cultural Invention and the Dilemma of Authenticity,” *American Anthropologist* 93, no. 2 (1991): 446.
 22. Greenough, “Nation, Economy, and Tradition Displayed,” 238.
 23. Kurin, “Cultural Conservation through Representation,” 327–28.
 24. Rural Entrepreneurship for Art and Cultural Heritage, “Virāsāt” (Dehradun: Rural Entrepreneurship for Art and Cultural Heritage, 2007).
 25. Ibid.
 26. Greenough, “Nation, Economy, and Tradition Displayed”; Carol A. Breckenridge, “The Aesthetics and Politics of Colonial Collecting: India at World Fairs,” *Comparative Studies in Society and History* 31, no. 2 (1989): 195–216; Kurin, “Cultural Conservation through Representation”; Roy, *Beyond Belief*.
 27. For a festival that seeks to provide an antidote to the ills of modern existence, such a location is, on the one hand, deeply ironic. On the other hand, however, it also suggests the complexity that characterizes projects that both critique modernity and express alternative visions of it.
 28. See, for example, Erik P. Eckholm, “The Deterioration of Mountain Environments,” *Science* 189, no. 4205 (September 5, 1975): 764–70.
 29. The links between place and product receive attention in the literature on the geography of commodity chains. See Justine Coulson, “Geographical Knowledge in the Ecuadorian Flower Industry,” in *Geographies of Commodity Chains*, ed. Alex Hughes and Suzanne Reimer (London: Routledge, 2004), 139–55; Kevin Morgan, Terry Marsden, and Jonathan Murdoch, *Worlds of Food: Place, Power, and Provenance in the Food Chain* (Oxford: Oxford University Press, 2006); C. Clare Hinrichs, “Consuming Images: Making and Marketing Vermont as Distinctive Rural Place,” in *Creating the Countryside: The Politics of Rural and Environmental Discourse*, ed. Melanie DuPuis and Peter Vandergeest (Philadelphia: Temple University Press, 1996), 259–78. In marketing literature, David Aaker cites place or origin as an effective means of establishing brand associations and identity; Aaker, *Building Strong Brands* (New York: Free Press, 1996).
 30. See Delhi Tourism and Transport Corporation, “Dilli Haat,” http://www.delhitourism.gov.in/delhitourism/tourist_place/dilli_haat_INA.jsp, accessed June 18, 2020.
 31. For more on the affective dimensions of branding, marketing, and consumption, see Foster, “The Work of the New Economy.”
 32. Including plugging leaking car radiators, which my husband learned about by chance when he ran into car problems while traveling from Nagthari to Dehradun with several Nagthari residents.
 33. Pierre Bourdieu, *Distinction: A Social Critique of the Judgement of Taste*, trans. Richard Nice (London: Routledge and Kegan Paul, 1984).

34. Cohn, *Colonialism and Its Forms of Knowledge*; Arjun Appadurai, “Gastro-Politics in Hindu South Asia,” *American Ethnologist* 8, no. 3 (1981): 494–511; Arjun Appadurai and Carol A. Breckenridge, “Museums Are Good to Think: Heritage on View in India,” in *Representing the Nation: A Reader, Histories, Heritage and Museums*, ed. David Boswell and Jessica Evans (New York: Routledge, 1999), 404–20; Greenough, “Nation, Economy, and Tradition Displayed.”
35. Ramachandra Guha writes famously of the Chipko movement and its place in the longer history of environmental change and peasant resistance in the Uttarakhand Himalaya. See Guha, *The Unquiet Woods*, 152–84.
36. For example, Navdanya, a nongovernmental organization founded by the renowned environmentalist Vandana Shiva, has its own permanent stall in the main Dilli Hāt bazaar.
37. This is also the marketing approach pursued by the well-known store FabIndia. FabIndia chooses not to sell little-known “traditional” food products such as finger millet flour, but it has developed a high-end organics line that includes processed commodities such as whole-wheat pasta, jams, fruit conserves, and salad dressings.
38. Greenough, “Nation, Economy, and Tradition Displayed,” 217.
39. India Trade Promotion Organisation, *Business Visitors’ Guide* (New Delhi: Archana, 2007).
40. Ibid.
41. Tony Bennett, “The Exhibitionary Complex,” in *Culture/Power/History: A Reader in Contemporary Social Theory*, ed. Nicholas Dirks, Geoff Eley, and Sherry B. Ortner (Princeton: Princeton University Press, 1994), 123–54.
42. Michel Foucault, *Society Must Be Defended: Lectures at the Collège de France, 1975–1976*, trans. David Macey (New York: Picador, 2003); Michel Foucault, *Discipline and Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Pantheon, 1977).
43. Bernard Cohn, “Representing Authority in Victorian India,” in *The Invention of Tradition*, ed. E. Hobsbawm and T. Ranger (Cambridge: Cambridge University Press, 1983); Cohn, *Colonialism and Its Forms of Knowledge*; Elizabeth A. Williams, “Art and Artifact at the Trocadero: Ars Americana and the Primitivist Revolution,” in *Objects and Others: Essays on Museums and Material Culture*, ed. George W. Stocking Jr. (Madison: University of Wisconsin Press, 1985), 146–66; Timothy Mitchell, *Colonising Egypt* (Cambridge: Cambridge University Press, 1988).
44. Gupta and Sivaramakrishnan, *The State in India after Liberalization*. See also Sinha, “An Institutional Perspective.”
45. India Trade Promotion Organisation, “Business Visitors’ Guide.” The extent of this competition was highlighted following the decision of Tata Motors in late 2008 to pull manufacturing of the Nano out of its factory in Singur, West Bengal, in the wake of violent protests about land acquisitions. Following

this decision, multiple state governments, Uttarakhand included, vied among each other, offering incentives to Tata in an effort to woo the Nano project to relocate to their states.

46. India Trade Promotion Organisation, “Business Visitors’ Guide.”
47. Uttarakhand Department of Horticulture, “Uttarakhand: The Floriculture State” (n.d. [2008]).
48. Linkenbach, “Nature and Politics,” 168.
49. Comaroff and Comaroff, *Ethnicity, Inc.*, 123, 126.

Epilogue

1. Carl Death, “Four Discourses of the Green Economy in the Global South,” *Third World Quarterly* 36, no. 12 (2015): 2209.
2. United Nations, “Green Economy: A Transformation to Address Multiple Crises,” June 25, 2009, <https://www.undp.org/content/undp/en/home/press-center/articles/2009/06/25/green-economy-a-transformation-to-address-multiple-crisis.html>, accessed October 24, 2019.
3. United Nations Environment Programme, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication: A Synthesis for Policy Makers* (Nairobi: UNEP, 2011), 1, 2, https://sustainabledevelopment.un.org/content/documents/126GER_synthesis_en.pdf, accessed October 16, 2018.
4. IFOAM et al., *Organic Agriculture: A Guide to Climate Change and Food Security* (2009), <http://www.louisbolck.org/downloads/2242.pdf>, accessed October 17, 2018.
5. Contrary to some assertions that accord but a marginal presence for the state in fashioning neoliberal markets, the state in Uttarakhand remains very much at the center of the green economy and produces, as Carl Death argues, “politically significant spheres of governable activity”; Death, “Four Discourses of the Green Economy in the Global South,” 2211.
6. Marc Edelman et al., “Introduction: Critical Perspectives on Food Sovereignty,” *Journal of Peasant Studies* 41, no. 6 (2014): 911–31; Philip McMichael, “Historicizing Food Sovereignty,” *Journal of Peasant Studies* 41, no. 6 (2014): 933–57.
7. Aistara, *Organic Sovereignities*, 24.
8. Questions surrounding the concept and administration of sovereignty have been articulated by Marc Edelman; see Edelman, “Food Sovereignty: Forgotten Genealogies and Future Regulatory Challenges,” *Journal of Peasant Studies* 41, no. 6 (2014): 959–78.
9. Donna Haraway, “Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin,” *Environmental Humanities* 6 (2015): 161.
10. P. J. Crutzen and E. F. Stoermer, “The Anthropocene,” *Global Change Newsletter* 41 (2000): 17–18.

11. There is, by now, a wealth of literature spanning a number of fields that addresses critically the concept of the Anthropocene. See, for example, Dipesh Chakrabarty, “The Climate of History: Four Theses,” *Critical Inquiry* 35, no. 2 (2009): 197–222; Paul Robbins and Sarah A. Moore, “Ecological Anxiety Disorder: Diagnosing the Politics of the Anthropocene,” *Cultural Geographies* 20, no. 1 (2013): 3–19; Bruno Latour, “Anthropology at the Time of the Anthropocene—A Personal View of What Is to Be Studied,” lecture delivered at the American Anthropological Association annual meeting, Washington, D.C., 2014; Tsing, *The Mushroom at the End of the World*; Jason W. Moore, “The Capitalocene, Part I: On the Nature and Origins of Our Ecological Crisis,” *Journal of Peasant Studies* 44, no. 3 (2017): 594–630.
12. Mintz, *Sweetness and Power*.

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Glossary

DEVBHUMI	abode of the gods
GOBAR KHĀD	cow manure
JAIVIK	organic
JAIVIK KHĀD	organic manure, or compost
JAIVIK KHETĪ	organic farming
KHĀD	manure, compost, fertilizer
KHARĪF	agricultural season in which crops are harvested in autumn
KHETĪ	cultivation, farming, agriculture
MELA	fair, festival
MANDĪ	wholesale market, marketing yard
MŌTA	fat, thick
PAHAR	hill, mountains
RABĪ	agricultural season in which crops are harvested in spring
RASAYANIK KHĀD	chemical fertilizer
VIŚVĀS	trust, faith

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