

THE SAW AND THE SEED:
JAPANESE FORESTRY IN COLONIAL KOREA,
1895-1945

A DISSERTATION
SUBMITTED TO THE DEPARTMENT OF HISTORY
AND THE COMMITTEE ON GRADUATE STUDIES
OF STANFORD UNIVERSITY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

DAVID ABRAHAM FEDMAN
JUNE 2015

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I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

Jun Uchida, Primary Adviser

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

Yumi Moon

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

Richard White

I certify that I have read this dissertation and that, in my opinion, it is fully adequate in scope and quality as a dissertation for the degree of Doctor of Philosophy.

Karen Wigen

Approved for the Stanford University Committee on Graduate Studies.

Patricia J. Gumpert, Vice Provost for Graduate Education

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Abstract

This dissertation examines Japanese efforts to understand, rehabilitate, exploit, modernize, and showcase Korea's forests during the period of colonial rule (1910-1945). As a source of natural resources, a space of habitation, and a repository of rural traditions, Korea's woodlands formed a dynamic and highly contentious site of colonial governance. And yet, save for Korean- and Japanese-language studies on forestry policy, Korea's mountains and forests, which comprise more than 70 percent of the peninsula, remain a historiographical hinterland.

Building on the growing body of comparative literature on the tangled roots of colonialism, scientific forestry, and conservationism, I argue that the forestry enterprise in colonial Korea was as concerned with the seed as it was with the saw: it placed afforestation and forest conservation at the heart of the colonial project to reform the Korean landscape and the ecological sensibilities of its inhabitants. Driven by utilitarian concerns about resource scarcity, a growing empire-wide demand for Korea's forest products, and fears of cascading environmental degradation, Japanese foresters set out in Korea to reclaim a peninsula routinely described as "a land of bald mountains and red earth." But forest reclamation in Korea was far from benevolent or benign: it siphoned off forestland to Japanese corporations and capitalists, cut off local communities from woodlands that had long sustained them, and placed vast tracts of commercially viable forests (especially those in the Yalu and Tumen River basins) under state control. Afforestation, in other words, was a process rife with conflict and fraught with contradiction. By chronicling the vicissitudes of this intensive, contested, and largely forgotten forestry project, I offer a case study in the promise and perils of natural

resource management as it took shape in Japan's empire.

Three principle lines of inquiry sustain my analysis. First, by surveying how, where, and when Korea's forests (and the range of resources therein) were utilized during the colonial period, I examine the materiality of modernization and the ecological implications of colonial rule.

Second, through an examination of the mechanics and implementation of forestry policy, I map the contours of the politics of sustainability: a term that connotes the often-conflicting interests inherent to forest management and the myriad forces shaping forestry reforms (including bureaucratic conflict, geopolitics, peasant protest, and global markets).

Third, by drawing attention to the interpenetration of forestry and everyday life, I explore the emergence in Korea of colonial ecological modernity: a concept that highlights how colonial forestry was not simply a process of modernization, but a far reaching and contested public campaign that touched the lives, values, and sensory experiences of residents across the peninsula.

DEDICATION

To my parents
for their patience and perspective

Acknowledgements

More and more, I have come to think of this research project much as I do the “green tunnel” of the Appalachian Trail—sometimes exhausting, often solitary, and always walled off from the world by trees. This research, however, was far from a solo trek. It is my great fortune to have received the warm support of countless individuals and institutions along the way, and it is my distinct pleasure to here acknowledge these debts of gratitude.

My first words of thanks go to my advisors at Stanford. Jun Uchida oversaw this project at every stage with her signature combination of energy, enthusiasm, and rigor. Her patient counsel, generous feedback, and meticulous historical thinking routinely saved me from myself, and offered a model of what it means to be a historian, a teacher, and a mentor to which I aspire. For her unstinting support, razor sharp pen, and contagious enthusiasm for “whats where and why it’s there,” I thank Kären Wigen, who mapped for me the pathway to a well-rounded scholarly life. Richard White generously offered his thoughts on how to situate Japanese and Korean forests in global history and challenged me to clarify the stakes of my arguments. That he was willing to endure months of talk about the intracies of the Korean stove is as true a testament as any to his exceptional curiousity as a scholar. My pivot towards Korean studies would not have been possible without warm encouragement and patient training of Yumi Moon. At critical stages, she offered conceptual advice and incisive criticisms that breathed new life into this project. My time at Stanford was also enriched immeasurably by conversations with Matt Sommer, Tom Mullaney, Dafna Zur, Dan Sneider, Mikael Wolfe, Margo Horn, and Martin Lewis.

Before my arrival to Stanford, a number of individuals inspired and supported my interests in history, environmental studies, and East Asia. For opening my eyes to the stories lodged in the landscape (and leading me into the Redwoods), I thank C.A. Pilling of Georgetown Day School and Shirley Spencer of the National Park Service. For firing my interests in Japanese history and introducing me to the joy of historical research, I thank Kerry Smith of Brown University. For helping me navigate both the forests of Hokkaido and Japanese traditions of environmental thought, I thank Maeda Kazushi of the Outdoor Life Program at Hokkaido University of Education.

My fieldwork in Japan and South Korea was supported by many friends and colleagues. Kase Kazutoshi of the Institute of Social Sciences of the University of Tokyo was a most gracious host during my time in Tokyo. Takemoto Tarō of the Forest Policy Institute of the University of Tokyo shared numerous sources and ideas that unlocked key components of this project. My intellectual debt to his own pioneering research is reflected throughout this study. Kimura Kenji of Shimonoseki City University offered advice on sources, research questions, and opened his personal library. For sharing their thoughts on sources and approaches I also thank Komeie Taisaku, Mizuno Shōko, and Yamato Tsuji.

Many a kind soul in libraries scattered throughout Japan and South Korea helped me to navigate the labyrinth of Japan's colonial forestry archives. I would like to thank the staff and archivists at the Japanese Forestry Association, the Library of the Department of Agriculture at the University of Tokyo, the National Library of Korea, the Korean National Archives, the Yūhō Bunko of Gakushūin University, and the Research Library of the Ministry of Agriculture, Forestry, and Fisheries for their kind assistance in

helping me track down sources. I am particularly indebted to Minowa Mitsuhiro and the entire staff at the Japan Forestry Association, whose encouragement and good cheer made this research both possible and fun.

My thinking on methods and inter-disciplinary approaches to environmental change benefitted greatly from the SSRC Ecological History Workshop run by Peter Purdue and Stevan Harell. For their feedback on specific sections, their sharing of sources, and their general advise, I should like to thank Todd Henry, Yukiko Koga, Aaron Skabelund, Robert Eskildsen, Aaron Stephen Moore, Mark Caprio, Tom Havens, Tak Watanabe, Cary Karacas, and David Tucker.

My graduate school days were enlivened and this project supported by countless friends and colleagues in Stanford, the Bay Area, and beyond. Words cannot adequately express my gratitude to Sayoko Sakakibara, who supported me every step of the way, even when it took her up the steepest hill in San Francisco. Philip Thai was a paragon of scholarly generosity and academic professionalism; Quinn Javers a pillar of support. For their critical input and much-needed diversions, I thank my co-inhabitants of the HKRR: Jon Felt, Yvon Wang, Wes Cheney, George Qiao, Gina Russo, Alex Statman, Hirata Koji, Joseph Seeley, Andrew Elmore, Russell Burge, and Hajin Jun. Conversations with friends in different institutions and disciplines were also deeply rewarding. I would like to thank Yan Slabodkin, Adrien Thieret, Andre Haag, Ti Ngo, Sakura Christmas, Holly Stephens, Andre Deckrow, Jenny Goldstein, Colin Jones, Ethan Bushelle, and Tim Johnson. A very special thanks goes to John Lee of Harvard University for sharing thoughts, criticisms, and sources, as well as a toasty *ondol* floor in Seoul.

Archival digs in South Korea and a year of fieldwork in Japan were supported by a Doctoral Dissertation Fellowship from the Japan Foundation, a Dissertation Proposal Development Fellowship from the Social Sciences Research Council, and a summer grant from Stanford University's Center for East Asian Studies. I thank all of these institutions and their administrators for their kind assistance and support. I would also like to thank the staff of Stanford's history department (especially Art Palmon, Monica Wheeler, and Shari Haun) for their tireless assistance.

My indebtedness to my family and my gratitude for their love and support is beyond words. My wife Lauren has been the best companion anyone could ever have. I am grateful for all that she does for reasons that could fill another dissertation. Anna, Matt, Emmy, Erik, and the bug make me smile like no one else can. And to my parents, who have never flinched in their support of my many questionale pursuits, I am forever grateful. This dissertation is dedicated to them.

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Note on Names, Measures, and Abbreviations

Following convention, Japanese and Korean names are provided with family name preceding personal name. Macrons have been omitted from commonly used place names such as Tokyo or Seoul.

Conversions for the original Japanese units of measurements referenced in this study are as follows:

1 *chō* (町) = 0.9917 hectares = 2.451 acres; or 109.09 meters

1 *chōbu* (町歩) = 0.9917 hectares = 2.451 acres

1 *shakujime* (尺咫) ≈ 12 cubic feet

1 *jō* (丈) = 3.030 meters = 9.942 feet

1 *kan* (貫) = 3.7 kilograms = 8.267 pounds

1 *tan* (段, 反) = .09917 hectares = 0.2451 acres

1 *koku* (石) = 180.4 liters = 47.65 gallons

1 *sun* (寸) = 0.030 meters = 0.099 feet

1 *ri* (里) = 3927 meters = 4295 yards

For regularly referenced sources and archival collections, I use the following abbreviations:

DRSK Doi Ringaku Shinkōkai, ed., *Chōsen hantō no sanrin: 20 seiki no zenhan no jyōkyō to bunken mokuroku* (Tokyo: Doi Ringaku Shinkōkai, 1974).

MRI Dai Nippon Sanrinkai, ed, *Meiji ringyō isshi* (Tokyo: Dai Nippon Sanrinkai, 1931).

CRI Chōsen Sanrinkai, ed., *Chōsen ringyō isshi* (Keijō: Chōsen Sanrinkai, 1933).

TYBK Miyata Setsuko and Yi U-yōn, eds., *Chōsen no sanrin seisaku* (Tōyō Bunka Kenkyūjo, Yūhō Bunko, 2009).

YB Yūhō Bunko, Tōyō Bunka Kenkyūjo, Gakushūin University, Tokyo, Japan.

JCAHR Kokuritsu Kōbunshokan, Ajia Rekishi Shiryō Sentaa (National Archives of Japan, Japan Center for Asian Historical Records), Tokyo, Japan.

HYCTS Han'guk Yōksa Chōngbo Tonghap Sisūtem (Korean History Data Integration System), Kuksa P'yōnch'an Wiwōnhoe, Kyōnggi-do, Kwach'on-si, South Korea.

Map 1. Topographical Map of the Korean Peninsula (2008)



Source: Wikimedia Commons.

Map 2. The Provinces of Korea (2001)



Source: Government of the Republic of Korea. Ministry of Foreign Affairs and Trade, 2001.
Courtesy of the Perry-Castañeda Library Map Collection, University of Texas, Austin. Note that the division of the peninsula is anachronistic.

Map 3. Japanese Empire – Political (1922)



Source: J.G. Bartholomew, 1922. Courtesy of the David Rumsey Collection.

Introduction

Seeding like a State

Colonial states increasingly found conservationism to their taste and economic advantage, particularly in ensuring sustainable timber and water supplies and in using the structures of forest protection to control their unruly marginal subjects....In a threatened garden, it appeared, an empirically and experimentally derived awareness of environmental risk could be transformed into a veritable tree of knowledge.¹

—Richard Grove, *Green Imperialism* (1995)

To put the issue directly, Japan today should be an impoverished, slum-ridden, peasant society subsisting on a barren, eroded moonscape characterized by bald mountains and debris-strewn lowlands. Instead, it is a highly industrialized society living in a luxuriantly green realm.²

—Conrad Totman, *The Green Archipelago* (1998)

“Land of bald mountains, land of red earth”—this is usually how people who have been to Korea describe it in their travel accounts. These descriptions, in other words, suggest its poverty and its degeneration. Seeing Korean farmers with long pipes in their mouths and working at a leisurely pace, they call the Koreans a lazy race.³

—Chang Hyök-chu, *Hell of the Starving* (1933)

When historians refer to the legacies of imperialism, seldom do they mean acacia. But in the mountains of Korea this legacy is hard to ignore. Hardy and quick to grow, *robinia psuedoacacia*, more commonly known as the black locust tree, can be found throughout South Korea—its often-fragrant white flowers are prevalent to the point of normalcy. But their pervasiveness in the peninsula is anything but natural. First planted extensively by the Japanese colonial state (and then again in the 1960s-70s by the Korea Forest Service), many of these trees stand as the material traces of an ambitious,

¹ Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism* (Cambridge: Cambridge University Press, 1996), 15.

² Conrad Totman, *The Green Archipelago: Forestry in Pre-Industrial Japan* (Athens: Ohio University Press, 1998), 1.

³ As cited in Samuel Perry, “Korean as Proletarian: Ethnicity and Identity in Chang Hyök-chu’s ‘Hell of the Starving,’” *positions: east asia cultures critique*, Vol. 14, No. 2 (2006), 279.

contentious, and largely forgotten campaign to rejuvenate a peninsula once known as a “land of bald mountains and red earth.”⁴

Acacia was but one of many trees enlisted into this effort. Birch, pine, poplar, oak: seeds, seedlings, and saplings of all sorts coursed throughout the colonial forestry enterprise. In 1913 alone, as few forestry officials would have failed to mention, 14,885,000 trees and 645 bushels of tree-seeds were distributed by the Government-General as part of its “greenification movement” (*ryokka undō*).⁵ Seeds and saplings were engineered in forestry experiment stations, cultivated in model forests, promoted through ceremonial plantings, and distributed by local governments. They were transplanted by engineers concerned with erosion control; guarded by forestry officials seeking sustainable yields; and sowed by teachers determined to inculcate conservationist ethics in school children. They formed, in essence, the lifeblood of an environmental reclamation campaign that, fueled by fears of environmental collapse, sought to take back the forests for the sake of the nation. Seeds, in short, became in Korea a metaphor for the colonial project; fledgling but latent with potential, their growth mirrored the growth of the nation.

And yet, by the early 1940s, the verdant landscapes and sustainable yields envisioned by these officials seemed a distant illusion. Confronted by the exigencies of industrialization and total war, many of the forest stands that had been scientifically

⁴ On the reforestation programs of the Korean Forest Service in the 1960s-70s, which, much like its Japanese predecessor, highly prioritized the plantation of acacia due to its fast growing properties see Don Koo Lee, et al, “Natural restoration of deforested woodlots in South Korea,” *Forest Ecology and Management*, Vol. 201 (2004), 23-32.

⁵ A broader overview of these activities can be found in Saitō Otosaku, “Chōsen no ryokka undō ni tsuite,” *Chōsen*, Vol. 179 (1930), 60-65. These figures are taken from E.W. Koons, “Afforestation in Korea,” *Transactions of the Korea Branch of the Royal Asiatic Society*, Vol 6., No. 1 (1915), 41.

reared, carefully guarded, and heralded “the lifeline of empire” were abruptly cut down. The rhetoric of forest conservation as a key to ensuring the “nation’s future in a hundred years’ time” yielded to calls for sacrifice to preserve the empire *now*.⁶ So it was that the afforestation project long held up as a centerpiece of colonial reforms and progress was outstripped by the state’s saw and the farmer’s axe.

That project and its demise are the subject of this dissertation. In the pages that follow, I explore Japanese efforts to understand, rehabilitate, exploit, modernize, and showcase Korea’s forests during the period of colonial rule (1910-1945). As a vital natural resource, a space of habitation, a repository of rural traditions, and a metric of modernity, Korea’s forests formed a dynamic—and highly contentious—site of colonial governance.

What, then, do we gain by examining the Japanese colonial project in Korea from the vantage point of its mountains and forests?⁷ How should we situate Japanese colonial forestry within a global discourse about conservation, scientific forestry, and national progress? If “forest dreams and forest nightmares” have been part and parcel of the modern state’s efforts to manage its forests, as Nancy Langston has suggested, what form did they take in colonial Korea?⁸ If, as Peter Duus would have it, the abacus and the

⁶ For rhetoric of this sort see, e.g., Uemura Kakisaburō, “Sanrin to kokka no shōchō,” *Chōsen sanrinkaihō*, Vol. 160 (1938), 9. Perhaps the grandest expression is Honda Seiroku, “Sekai ni okeru rinsō henka to kokuren no shōchō,” *Ringakkai zasshi*, Vol. 20 (1923), 59-76.

⁷ A similar question is posed by Tessa Morris-Suzuki about the empire *writ large* in her pioneering survey of Japanese colonial forestry, “The Nature of Empire: Forest Ecology, Colonialism and Survival Politics in Japan’s Imperial Order,” *Japanese Studies*, Vol. 33, No. 3 (2013), 226.

⁸ Nancy Langston, *Forest Dreams, Forest Nightmares: the Paradox of Old Growth in the Inland West*, (Seattle: University of Washington Press, 1995).

sword formed two sides of the same imperialistic token, what might we say about the saw and the seed?⁹

The Literature

As seen today, the forests and mountains of the Japanese archipelago and the Korean peninsula appear strikingly similar. Both are more than 70 percent mountainous, leaving just 11 percent of the archipelago and 20 percent of the peninsula arable. Both landscapes, moreover, share much of the same forest ecology and have been subject to a similar agricultural regimen. But to survey the long sweep of Japan and Korea's forest history in comparative perspective (as Conrad Totman has done) is to trace staggeringly divergent paths in the history of these landscapes.¹⁰ For while Japan's so-called green archipelago stands as "the hard-earned result of generations of human toil that have converted the archipelago into one great forest preserve," the red peninsula appears as its inverse: a case study in the failures of the state to proactively conserve its forests.¹¹

This line of analysis forms the starting point for much of the Korean-language literature on colonial forestry. Led by Yi U-yǒn of the Naksōngdae Research Institute, many Korea-based scholars have approached the colonial period and its forestry policy through the lens of Korea's dynastic decline. And while scholars continue to debate the

⁹ Peter Duus, *The Abacus and the Sword: The Japanese Penetration of Korea, 1895-1910*, (Berkeley: University of California Press, 1998).

¹⁰ See Conrad Totman, *Pre-industrial Korea and Japan in Environmental Perspective* (Leiden: Brill, 2004).

¹¹ Conrad Totman, *The Green Archipelago: Forestry in Pre-Industrial Japan* (Athens: Ohio University Press, 1998), 1.

causes and consequences of Korea's late 18th- and 19th-century forest predation, few question that it hastened the collapse of the Chosōn state (1392-1910).¹²

At stake in these assessments of Korea's pre-industrial deforestation is the question of the roots of modern forest management. In a manner similar to the debate over the "sprouts" (*maenga*) of Korea's indigenous capitalism, some scholars of Korea's forest history have stressed how the late Chosōn era was far from a forestry policy vacuum.¹³ As Pae Chae-su has shown, for instance, as early as the 1680s the Chosōn state instituted a pine policy to provide a sustainable timber supply, especially as related to naval construction and national defense.¹⁴ Where Korean scholars differ is over the scale of pre-modern forestry. Yi U-yōn, for one, has argued that while considerable evidence of local level conservation efforts and state regulatory policies exist, little in the way of a regenerative forestry program was implemented by the state.

It is in this sense that the colonial period casts a long shadow over Korea's forest history. For while Korean scholars have gone to great lengths to highlight the robust

¹² If a consensus has emerged from this scholarship it is that deforestation was but one of several forces in the 18th and 19th centuries (including a population boom, economic instability, and the destabilization of the central state) that led to the collapse of the ruling regime. For this perspective see, e.g., Yi U-yōn, *Hanguk ūi sallim soyujedo wa chōngch'aek ūi yōksa, 1600-1987*, (Seoul: Ilchogak, 2007); Pae Chae-su, "Chosōn hugi songjōn ūi ch'egye wa pyōnch'ōn kwajōng," *Sallim kyōngjae yōn'gu*, Vol. 10 (2002), 22-50; and Kim Hūng-sun, "Chosōn hugi sallim chōngch'aek mit sallim hwangp'yehwa: sijangjuijōk koch'al kwa kū e taehan pip'an," *Han'guk chiyōk kaebal hakhoeji*, Vol. 20, No. 2 (2008), 169-192.

¹³ See, e.g., Pae Chae-su and Yō Chang-yün, "Ilche kangjōmgi Chosōn esō ūi singminji sallim chōngch'aek kwa Ilbon chabon ūi ch'imt'u kwachōng," *Sallim kyōngje yōn'gu*, Vol. 2, No. 1 (1994), 1-37. Yet another strand of this literature has offered disputes over burial practices as evidence of a robust, if informal, set of customary forestland conservation. See, e.g., Kim Kyōng-suk, "Chosōn hugi sansong kwa sahoe kaldūng," Ph.D. Diss., Seoul National University, 2008. Kang Sōng-bok has similarly highlighted the activities of local pine associations as another form of informal, though limited, forest management. See Kang Sōng-bok, *Kūmsan ūi songgye* (Kūmsan: Kūmsan munhwawōn, 2001).

¹⁴ See, e.g., Pae Chae-su, "Chosōn hugi songjōng ch'egye wa pyōnch'ōn kwajōng," *Sallim kyōngje yōn'gu*, Vol. 10, No. 2 (2002), 22-50.

nature of pre-modern forestry, they often do so using the same indices of the colonial state. Perhaps the most salient feature of this debate is the fact that it is couched in terms of modernization (K: *kǔndaehwa*; J: *kindaika*).¹⁵ The limits and accomplishments of Chosōn forestry are measured against the modern institutions, practices, and reforms of the colonial period: the colonial state’s Forest Owners Associations are compared to Korea’s pine associations; its comprehensive set of forestry laws are compared to Korea’s limited forestry edicts; its tabulations of seeds planted for afforestation are compared to the pine policies of the Chosōn state. The metrics of modern forest management, in other words, become a means to place Korea’s forestry institutions along a path towards something called “modern” forestry.

So envisaged, the colonial period becomes an accounting of how the colonial state did what the Chosōn ruling elite could not: aggressively afforest, capitalize and control the timber industry, and enforce boundaries of forest ownership. If this scholarship is unified around the topic of modernization, it also shares a marked focus on the creation and role of central forestry institutions: the Bureau of Forestry; the Forest Management Bureau operating in the National Forests of the Yalu River Basin; forest owners associations (*shinrin kumiai*); and the various organs of the colonial government established to oversee the forestland redistribution process. (That a significant portion of this scholarship has been produced by Korean scholars trained in forest management who

¹⁵ Pae Chae-su and Yǒ Chang-yǔn, “Ilche kangjǒmgi chosōn esō ūi singminji sallim chǒngch’ae kwa ilbon chabon ui ch’imt’u kwachǒng,” *Sallim kyōngje yōn’gu*, Vol. 2, No. 1 (1994), 1-37; Yi U-yōn, “Sallim chawǒn yongik e kwanhan kongdongch’ejǒk kyubōm ūi hyōngsōng kwa kukka ūi yǒkhal: Chosōn hugi wa singminjigi,” *Munmyōng yōn’gu*, Vol. 4 (2011), 75-116; and Yi U-yōn, “Singminjigi imǒp ūi kǔndaehwa ch’aech’wi imǒp eso yuksōng imǒp ūro,” *Kyōngje sahak*, Vol. 38 (2005), 119-156.

maintain close ties to Korea's own Forest Service partly explains the focus on state institutions and forestry policy.)¹⁶

No single issue has garnered more attention from Korean scholars than the redistribution of forestland. As a means to shore up the tax base, outsource afforestation work to Japanese corporations, and regulate forest resource consumption, forestland ownership reform sat at the very foundation of Japan's forest management approach. It should come as little surprise, then, that the mechanics, aims, and outcomes of this process have been the subject of much debate.

The argument boils down to the question of enfranchisement: was the forestland survey commenced in 1918 fundamentally a means to expropriate land and capital, as some have argued, or were there more complex aims in play? For decades the former viewpoint prevailed. Kwon Ok-yōng perhaps set scholars down this path when he wrote in his pioneering 1965 article that insofar as the forestland survey became a vehicle for funneling land to capitalists under the pretext of afforestation, it was a form of colonial violence.¹⁷

In recent years, however, the weight of evidence has tipped the scales towards a more nuanced view. Drawing upon extensive local level data sets on land registers, land disputes, and the disposal of forestland to Korean claimants (J: *enkoshā*; K: *yōn'goja*), recent scholarship has re-cast the land survey process as a far more complex undertaking.

¹⁶ See, e.g., Ch'oe In-hwa, "Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū," *Hokkaidō Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 48, No. 1 (1991), 1-79; and Paek Úl-sun, "Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū," *Hokkaidō Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 47, No. 1 (1990), 1-70.

¹⁷ Kwon Ok-yōng, "Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku," *Rekishigaku kenkyū*, Vol. 297 (1965), 9.

Taking a long view of the nearly thirty-year process, these scholars have shown that the survey, while doubtless a vehicle for shifting land into the hands of Japanese corporations, also did much to recognize the interests of the Korean farmer. Motivated in part by the initial failures of their afforestation initiatives, Japanese officials recognized the importance of bringing these farmers into the conservationist fold, and they viewed land ownership as the backbone of that policy. As it emerges from these newer studies, the land-survey process was rife with contradiction, conflict, and bureaucratic complexity.¹⁸

Japanese scholars, meanwhile, have had less to say on the topic. Although they have spilled a great deal of ink on the modernization of forestry in Japan—especially as related to land reclamation and the limits of early Meiji forestry reforms—these histories often stop at the archipelago’s edge.¹⁹ Only three book-length treatments of colonial forestry in Korea exist in Japanese. Published in 1965, 1974, and 1976, respectively, all three share a tendency to uncritically recycle the statistics and rhetoric of the colonial

¹⁸ Yi U-yōn is the leading proponent of this outlook. See, e.g., Yi U-yōn, *Hanguk ūi sallim soyujedo wa chōngch’ae k ūi yōksa, 1600-1987*, (Seoul: Ilchogak, 2007); Yi U-yōn, “Singminji imya soyukwōn ūi chōngni: sallim nokhwa wa soyukwōn,” *Kyōngje sahak*, Vol. 40 (2006), 21-55; and Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” in Miyata Setsuko and Yi U-yōn, eds., *Chōsen no sanrin taisaku* (Tokyo: Tōyō Bunka Kenkyūjo. 2009), 237-285. Ch’oe P’yōg-t’ae has advocated a similar position, but stresses that the land survey also presented the colonial government with another vital source of tax revenue. Ch’oe P’yōg-t’ae, “Ilche ha imya chosa saōp ūi sihaeng mokchōk kwa sōngkyōk,” *Han’guk munhwa*, Vol. 47 (2006), 191-228. More recently, Yi Sōn-wōk has shown how the progress of the land survey was also shaped by concurrent policy debates about reforms to Korean burial practices. See, e.g., Yi Sōn-wōk, “Shokuminchi Chōsen ni okeru rinya shoyūken kakutei kotei to bochi mondai,” *Chōsenshi kenkyūkai ronbunshū*, No. 46, (2008), 155-184.

¹⁹ Although only peripherally interested in the case of Korea, the geographer Chiba Tokuji’s research into Japan’s long history of “bald mountains” (*hageyama*) and forest reclamation has done much to reveal the wellspring of tools, techniques, and experiences Japanese foresters could draw from as they set their sights on the reclamation of Korea’s bald mountains. See Chiba Tokuji, *Hageyama no kenkyū* (Tokyo: Nōrin kyōkai, 1956); and Chiba Tokuji, *Hageyama no bunka* (Tokyo: Gakuseisha, 1973).

state.²⁰ Tellingly, the most extended treatment was penned by a group of former forestry officials.²¹ Only recently have Japanese scholars begun to produce more critical accounts of colonial forestry in Korea.²² Much of this scholarship builds on the groundwork laid by Matsumoto Takenori, who, while focused principally on agriculture cooperatives and irrigation works, has raised important questions about land management, local society, and power relations in colonial Korea.²³ Apart from Matsumoto, however, few Japanese scholars draw upon Korean-language materials to offer a full account of the Korean experience of and perspective on colonial forestry reforms.²⁴

Taken together, the Japanese- and Korean-language scholarship offers a sweeping portrait of the material and policy changes wrought by colonial forestry. And yet, for all its empirical richness, this scholarship has been marked by a tendency to weigh the scales of colonial investment versus exploitation—to tabulate, much in the way of the forester, yields gained and lost, timber planted and exported, hectares bought and sold. Few

²⁰ Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shi ron* (Tokyo: Rin'ya Kōsaikai, 1965); and Miyake Masahisa, *Chōsen hantō no rin'ya kōhai no gen'in: shizen kankyō hozen to shinrin no rekishi* (Tōkyō: Nōrin shuppan, 1976).

²¹ Doi ringaku shinkōkai, ed., *Chōsen hantō no sanrin: 20 seiki no zenhan no jyōkyō to bunken mokuroku*, (Tokyo: Doi ringaku shinkōkai 1974).

²² Komeie Taisaku, “Kindai ringaku to kokudo no shokusei kanri: Honda Seiroku no ‘Nihon shinrin shokubutsutai ron’ o megutte,” *Kukan, shakai, chiri shisō*, Vol. 17 (2014), 3-18; Komeie Taisaku, “Colonial Environmentalism and Shifting Cultivation in Korea: Japanese Mapping, Research, and Representation,” *Geographical Review of Japan*, Vol. 79, No. 12 (2006), 664-679; and Takemoto Tarō, *Gakkōrin no kenkyū: Mori to kyōiku o meguru kyōdō kankei no kiseki* (Tokyo: Nōsangyoson bunka kyōkai, 2009).

²³ See, e.g., Matsumoto Takenori, *Shokuminchi kenryoku to Chōsen nōmin* (Tokyo: Shakai hyōronsha, 1998); and Matsumoto Takenori, *Shokuminchi Chōsen no suiri kumiai jigyō* (Tokyo: Miraisha, 1991).

²⁴ One noteworthy exception is the Japanese-language scholarship written by Korean scholars on the issue of swidden agriculture (*kaden*), a topic of critical importance to forestry reforms. See, e.g., Ko Pyōng-un, *Chōsen kaden (yakihata) min no rekishi* (Tokyo: Yūzankaku shuppan, 2001); and Sin Min-jöng, “Shokuminchiki Chōsen, Kōgen chiiki ni okeru kaden, kadenmin ni kansuru kenkyū: Tōa Nippō kiji no bunseki o chūshin ni,” *Nongōpsa yōn'gu*, Vol. 9 (2004), 1099-1123.

studies have synthesized the extant literature and the wealth of sources to offer a richer portrait of the forestry enterprise: not only the mechanics of its laws and policies, but the ways it shaped everyday life in Korea.²⁵

As a result, forestry and conservation is cast in these studies as something largely divorced from lived experience. The question of how forest management was embedded within changing ideas about science, culture, ecology, and modernity remains largely unaddressed. Nor have these studies done as much as they could to situate the case of colonial forestry in Korea within a comparative framework. Save for a few passing remarks, the field so far is largely inward looking, and has little to say about Japan and Korea's place within world environmental history.²⁶

The present study accordingly aims to develop a new approach to colonial forestry in Korea: one that taps into the wellspring of empirical data on forestry policy while also attending to "the complex relations of colonialism, modernity, nationalism, and identity formation."²⁷ How did Japanese forest management in Korea compare to other parts of the empire, and to other empires around the globe? How did forestry touch the lives and everyday experiences of both the colonizer and the colonized? What was the relationship between the forest, the nation, and the empire? Before attempting to answer

²⁵ Kwǒn Sōg-yōng's *ondol* research is an important exception. Perhaps more than any other scholar, Kwǒn has shed light on the cultural dimensions of forestry reform as they found expression in a wide range of sources including editorials, cartoons, advertisements, and popular ethnography. See Kwǒn Sōg-yōng, *Ondol ūi kǔndaesa: ondol ūl tullōssan Chosōnin ūi sam kwa yōksa* (Sōul: Ilchogak, 2010).

²⁶ One thoughtful, if brief, reflection is Matsumoto Takenori, "Kenkyūkai no matome ni kaete: shokuminchi Chōsen no shiten kara," in: Inoue Takako, ed., *Shinrin hakai no rekishi* (Tokyo: Akashi shoten, 2011), 185-194.

²⁷ Gi-Wook Shin and Michael Robinson, *Colonial Modernity in Korea*, (Cambridge: Harvard University Press, 1999), 17.

these questions, it is first necessary that we turn to the closely related concepts of colonial and ecological modernity.

Colonial Ecological Modernity

In a landmark study published well over a decade ago Gi-Wook Shin and Michael Robinson enjoined scholars of colonial Korea to provide “an ecological handling of historical traces”—one that “better reclaim[s] the land with a mind to restoring some of the density, richness, and complexity of the original ecosystem.”²⁸ This exhortation, in its original form, was metaphorical: Shin and Robinson sought simply to liberate the colonial period from facile nationalistic binaries and flattening teleological narratives. But while the field has long since embraced the complexity sought by these scholars, studies of the actual ecological history of colonial Korea—what might be called “an historical handling of ecological traces”—remain few and far between. Indeed, although recent English-language studies of Japanese rule in Korea have expanded the scope of research to topics as various as city planning, heavy industry, and settler colonialism, this body of work has surprisingly little to say about the physical environment.²⁹

When one considers the growing body of literature that lies at the intersection of colonial, environmental, and forestry studies, this interpretative gap becomes all the more glaring. Although not explicitly concerned with colonialism, Western-based

²⁸ Gi-Wook Shin and Michael Robinson, *Colonial Modernity in Korea*, (Cambridge: Harvard University Press, 1999), 5.

²⁹ See, e.g., Todd Henry, *Assimilating Seoul: Japanese Rule and the Politics of Space in Colonial Korea, 1910-1945*, (Berkeley: University of California Press, 2014); Soon-Won Park, *Colonial Industrialization and Labor in Korea*, (Cambridge: Harvard University Press, 1999); Carter Eckert, *Offspring of Empire: The Koch'chang Kims and the Colonial Origins of Korea Capitalism*, (Seattle: University of Washington Press, 1996); and Jun Uchida, *Brokers of Empire: Japanese Settler Colonialism in Korea, 1876-1945*, (Cambridge: Harvard University Asia Center, 2011).

environmental historians have been at the forefront of the effort to critically assess the methods, value, and efficacy of modern forestry. From reflections on the “second nature” of Wisconsin hardwoods to critiques of federal foresters in the Blue Mountains of the Pacific Northwest, the recent scholarship of environmental historians has raised penetrating questions about the control and commodification of forest landscapes that bear on the Korean colonial experience.³⁰ And they have increasingly done so using a transnational framework.³¹

This is especially true of the substantial body of literature on the global transmission of what many scholars call “scientific forestry”: a seemingly monolithic set of practices—quantification, sustainable-yields, planning horizons—that emerged in the late 19th and early 20th century as the prevailing paradigm of forest management.³² Of particular salience is the fact that the growth of scientific forestry, as numerous scholars have shown, was closely linked to colonialism.³³ Considerable debate over the extent to

³⁰ See, e.g., Nancy Langston, *Forest Dreams, Forest Nightmares: the Paradox of Old Growth in the Inland West* (Seattle: University of Washington Press, 1995); William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York: Norton and Company, 1992); Michael Williams, *Americans and Their Forests: A Historical Geography* (Cambridge: Cambridge University Press, 1992); and Stephen Pyne, *Fire in America: A Cultural History of Wildland and Rural Fire* (Seattle: University of Washington Press, 1997).

³¹ Perhaps the best example of transnational forest history (which has informed my own approach here) is Ian Tyrell, *The True Garden of the Gods, California-Australian Environmental Reform, 1860-1930* (Berkeley: University of California Press, 1999).

³² See, e.g., Franz-Josef Brüggemeier, Mark Cioc, and Thomas Zeller, eds., *How Green were the Nazis? Nature, Environment, and Nation in the Third Reich* (Athens: Ohio University Press, 2005); Michael Williams, *Deforesting the Earth: From Pre-history to Global Crisis* (Chicago: University of Chicago Press, 2003); Richard Grove, *Ecology, Climate and Empire: Colonialism and Global Environmental History* (Cambridge: The White Horse Press, 1997); and Gregory Barton and Brett Bennet, “There is a Pleasure in the Pathless Woods’: The Culture of Forestry in British India,” *British Scholar*, Vol. 3, No. 2 (2010), 219-234.

³³ Not only did colonial states increasingly turn to modern forestry as a means to rationalize the soil and unleash the productive power of the land, but the colonial context also provided a hothouse for the development of new techniques and the training of the next generation of

which scientific forestry can be described as a unified set of land management techniques notwithstanding,³⁴ these scholars have done much to highlight the resonances in forest governance as it figured into the administration of colonies across the globe: from the teak stands of Burma to the village forests of the Himalaya, from the copal reserves of Tanzania to the rubber plantations of Java.³⁵ Yet, for all its theoretical depth and geographical breadth, this literature has done little to draw out the connections between forestry as a fixture of Western imperialism and Japan's own colonial forestry project.

Concurrent with the emergence of scientific forestry as a sustained topic of scholarly inquiry has been a far more fragmented effort to describe the essential processes underlying what some have called “ecological modernity”: a term I use here to connote the techno-industrial fervor,³⁶ the rationalization of resource consumption,³⁷ the

professional foresters. The first to advance this argument was Richard Grove in his *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the Origins of Environmentalism* (Cambridge: Cambridge University Press, 1996). For more recent treatments and a critique of Grove's definition of environmentalism see Gregory Barton, *Empire Forestry and the Origins of Environmentalism* (Cambridge: Cambridge University Press, 2007). For a more institutionally focused study of the relationship between forestry and the British empire see S.R. Rajan, *Modernizing Nature: Forestry and Imperial Economic Development, 1800- 1950* (Oxford: Oxford University Press, 2006).

³⁴ My approach is informed in part by Vandengeest and Peluso's recent appeal that historians explore the “variation produced by the ways that professional forestry was created in different localities, influenced in part by the geographically and historically specific politics, economies, ecologies and practices of producing knowledge and models about forestry.” See Peter Vandengeest and Nancy Lee Peluso, “Empires of Forestry: Professional Forestry and State Power in Southeast Asia,” *Environment and History*, Vol. 12 (2006), 32.

³⁵ See, e.g., Ramachandra Guha, *The Unquiet Woods: Ecological Change and Peasant Resistance in the Himalaya* (Berkeley: University of California Press, 2000); Raymond L. Bryant “Romancing Colonial Forestry: The Discourse of Forestry as Progress in British Burma” *The Geographical Journal*, Vol. 162, No. 2 (1996), 169-178; Thaddeus Sunseri, *Wielding the Ax: Forestry and Social Conflict in Tanzania, 1820-2000* (Ohio: Ohio University Press, 2009); and Peter Vandengeest and Nancy Lee Peluso, “Empires of Forestry: Professional Forestry and State Power in Southeast Asia,” 31-64.

³⁶ Timothy Mitchell, *The Rule of Experts: Egypt, Techno-politics, Modernity*, (Berkeley and Los Angeles: University of California Press, 2002).

scientific confidence,³⁸ the entanglement of culture and ecology,³⁹ and the hybridization of nature and technology⁴⁰ that were defining features of the modern state's effort to reshape the natural world. Given the nebulous nature of the linguistic building blocks of the term—ecology and modernity—it should not be surprising that scholars continue to debate its precise meaning.⁴¹ But whatever the terminological quibbles, few scholars dispute that these forces were constitutive components of state-building and colonial projects across the globe.

Scholars of Japan, for their part, have been energetic contributors to this discussion.⁴² Julia Adeney Thomas, for instance, has shown how changing conceptions of nature formed a vital intellectual currency in debates over Japan's political transformation into a modern nation-state.⁴³ Brett Walker, too, has drawn attention to the dark shadows cast by Japan's modern industrial landscape by exploring the often-painful

³⁷ Samuel Hays, *Conservation and the Gospel of Efficiency: the Progressive Conservation Movement, 1890-1920* (University of Pittsburgh Press, 1999 reprint).

³⁸ James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 2001).

³⁹ Donald Worster, *Nature's Economy: A History of Ecological Ideas* (Cambridge: Cambridge University Press, 1994, Second edition).

⁴⁰ Richard White, *The Organic Machine: The Remaking of the Columbia River* (New York: Hill and Wang, 1996).

⁴¹ A concise summary of this debate can be found in Ian Miller, *The Nature of the Beasts: Empire and Exhibition at the Tokyo Imperial Zoo* (Berkeley: University of California Press, 2013), 239-240, footnote 2.

⁴² Although over a decade old, one of the best overviews of the debates surrounding the nationalistic notions of Japan's relationship with the natural world can be found in Tessa Morris Suzuki, *Re-Inventing Japan: Time, Space, Nation* (New York: M.E. Sharpe, 1998), chapter 2.

⁴³ Julia Adeney Thomas, *Reconfiguring Modernity: Concepts of Nature in Japanese Political Ideology* (Berkeley: University of California Press, 2001).

implications of Japan's breakneck industrialization for Japanese bodies.⁴⁴ Most recently, Ian Miller has shown (through a case study of the Ueno Zoo) how ecological modernity in Japan "marked itself off through the creation of a new lexicon, new social roles, new forms of specialized knowledge, and a host of new institutions."⁴⁵

Ecological modernity, as I conceive it, was shaped by a set of convictions: a faith in science; a confidence in the state's intervention in the natural world; a belief that one's place within a social hierarchy was determined in part by one's stewardship of the natural world. It was likewise exercised by a set of practices: the commodification of natural resources; the measuring, mapping, and bounding of the land; the "finishing" and engineering of the landscape. But a host of institutions, imperatives, and relationships particular to the colonial context gave ecological modernity a distinctive form in Korea. The re-fashioning and re-imagining of forest landscapes in colonial Korea presents a case study in the mediation of ecological modernity as it took shape around definitively colonial relationships: those between the metropole and the periphery, the colonial state and its subject, and the colonizer and the colonized.

Three principle features of colonialism in Korea indelibly shaped the processes of ecological modernity. The first was the interstitial position of the colonial state in Korea—the fact that the imperatives of environmental management were torn between the interests of Japanese settlers and Korean subjects, the metropolitan government in Tokyo and the frontier of Manchuria, local society and national welfare. These tensions were not easily reconciled, and they often had profound implications for Korea's

⁴⁴ Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2010), 7.

⁴⁵ Ian Miller, *The Nature of the Beasts: Empire and Exhibition at the Tokyo Imperial Zoo* (Berkeley: University of California Press, 2013), 4.

ecosystems and resource reserves. For one thing, the promotion of ecological modernity in Korea was sometimes a thinly veiled attempt to meet the exigencies of industrialization in mainland Japan. One cannot separate, for example, the Government-General's intensive promotion of agricultural improvement (and its attendant environmental values) in Korea from the fact that Japan imported large quantities of the rice produced in Korea for domestic consumption.⁴⁶ Ecological modernity in Korea was thus closely linked to the practical concerns of the colonial state as it strove to meet the needs not only of the assemblage of residents of Korea but also of the millions of subjects and citizens bound together by a swelling, if ill-defined, imperial sphere.

That Japanese officials tasked with the improvement of the Korean landscape had to navigate a political and social terrain fraught with the skepticism and resentment of Korean communities formed a second defining feature of colonial ecological modernity in Korea. Where in Japan officials could invoke national and imperial welfare and Japan's timeless forestry traditions, these exhortations often rang hollow in rural Korea, where Korean farmers were reluctant to work with local officials and actively resistant to the state's effort to cut them off from local resources. Communities in Japan voiced a similar opposition to the state's requisitioning of local resources, but these disputes were not colored by the ethnic, cultural, and racial rhetoric used to justify Japan's civilizing mission in Korea.

The arrival of Japanese capitalists, corporations, and settlers—the latter of which surpassed 900,000 by 1945—only amplified this antagonism by placing the peninsula and

⁴⁶ According to Gragert, "Korean rice shipments to Japan accounted for approximately 40 percent of Japan's total rice imports between 1914 and 1929." Edwin Gragert, *Landownership under Colonial Rule: Korea's Japanese Experience, 1900-1935* (Honolulu: University of Hawaii Press, 1994), 112.

its resources under new and intense ecological pressures. Especially contentious was the promotion of agricultural and forestry associations at the village level in Korea, as many Koreans were unwilling to simply swap out their own deep-rooted ways of seeing, experiencing, and valuing the natural world with the agricultural precepts intrinsic to Japan's family (or *ie*) system: a set of virtues (e.g., thrift, hard work, and the preservation of the family name) and practices (e.g., the extension of credit lines, technology sharing, by-employments) that Japanese officials tried to impress upon Korean farmers.⁴⁷ Efforts to change the landscape, as such, were closely tied to the contentious efforts to change the values of rural society and the rhythms of village life.

A third distinctive feature of colonial ecological modernity was its focus on everyday life. From the very outset of colonial rule in Korea, the despoliation of the landscape became in the eyes of many Japanese settlers and officials a signifier of the ignorance, self-interestedness, and distorted value system of Koreans. It did not take long for officials to reason that, if the colonial state was to enduringly improve the landscape and the environmental ethics of its inhabitants, it was imperative that the state and its agents actively bridge the cultural and ethnic fissures of the state. Bringing Koreans into the conservationist fold would not only reinforce modern ecological sensibilities, many reasoned, but also ensure long-term stewardship at the grassroots level.

It was recognized, in other words, that a central component of forestry work was the reformation of Koreans' environmental ethics, values, and sensibilities. In this way, ecological modernity in Korea was tightly braided with debates over cultural assimilation

⁴⁷ For a comparative analysis of the promotion of trade associations throughout the empire see Sakane Yoshihiro, "Nihon teikokuken ni okeru nōrin shigen kaihatsu soshiki: sangyō kumiai no hikaku kenkyū," in: Noda Kimio, ed., *Nihon teikokuken no nōrin shigen kaihatsu: "Shigenka" to sōryokusen taisei no higashi Ajia* (Kyōto: Kyoto Daigaku gakujutsu shuppankai, 2013), 23-71.

in Korea. It became a highly purposeful and paternalistic effort to mold the value systems and behaviors of Koreans into accordance with Japan's own notions of ecological propriety, which were to be modeled by Japanese settlers.

Front and center in this campaign was the promotion of *airin shisō* (愛林思想, forest love thought): an abstract notion of ecological modernity that, while encouraged in mainland Japan, found its most forceful articulation in colonial Korea. Mixing universalizing rhetoric about national resource conservation with essentializing notions of Japan's timeless forest culture, *airin shisō* formed the ideological core of the modern environmental sensibility championed by forestry officials in Korea. It yoked the actions of the individual not simply to the environment, but also to the fate of the nation and, in turn, the empire. In the view of one Japanese official, planting trees not only determined the fate of the state but allowed the integrity of the individual to grow with it: "a tree in the mountain, virtue in the individual."⁴⁸ Slogans such as these echoed throughout the colonial period as foresters launched a cultural campaign to reform the values of Korean subjects alongside the forests themselves.

Not surprisingly, proponents of forest love thought were as interested in prohibiting the old as they were in encouraging the new. Indeed, much of the rhetoric of colonial ecological modernity was predicated on what it was *not*. It was not slash-and-burn agriculture, the nomadic practitioners of which were identified by many Japanese as the chief culprits of Korea's environmental decline. Through land re-distribution, the creation of forestry associations, and the policing of the woodlands, the Japanese sought—and largely failed—to stamp out this customary practice. Nor did the values of

⁴⁸ Kada Naoji, "Airin undō no shakaika," *Chōsen sanrinkaihō*, Vol. 75 (1931), 27-28.

colonial ecological modernity accord with the geomantic beliefs long held by many Koreans regarding the forests as spiritual sites and burial grounds. These “superstitions,” too, were spotlighted early on by officials as a major hindrance to afforestation, and targeted throughout the colonial period as a corrupting influence. Especially *un-* ecologically modern was the burning of grass in the *ondol* stove conventional to Korean dwelling, which many officials identified early on as ground zero of deforestation.

In the eyes of many officials, the amelioration of these and other retrograde practices was not simply about restoring nature; it was also about preventing nature’s collapse. Lurking behind the roseate portraits painted by foresters of manicured forests and productive ecosystems were deep-seated fears of their fragility. In this, foresters joined a chorus of agronomists, local government officials, and colonial policy makers to invoke the specter of environmental disaster. Floods, drought, pestilence, erosion, timber famine, fuel scarcity: these and other calamities were routinely referenced by Japanese foresters as they made a case for the importance of their work. This was not simply a rural crisis; foresters routinely collapsed the distance between rural and urban to create a totalizing sense of environmental decline. They were lobbying not only for reforms to Korea’s forested areas, but for an overhaul to the productive power of the land—one in which healthy, productive forests formed the foundation upon which larger agricultural and industrial projects could take root. Cast in this light, reform of the forests was not simply a matter of ecology; it was vital to the economic and industrial development of the peninsula. It sought to return the forests to their natural order, and with them the rest of the soil.

Many newfangled scientific convictions buttressed this outlook, but none more so than forest succession theory: the belief that every ecosystem (or vegetative zone) was moving towards its climax, towards an ecological equilibrium in which each member of any given biological community sat in a delicate balance with one another. This notion perhaps found its clearest expression in colonial Korea in Japanese foresters' routine references to how proper forest management would return Korea's landscape to a "climatic harmony" (*kikō chōwa*). Succession theory provided these foresters with exactly the sort of intellectual scaffolding needed to justify intensive state intervention in the forest. It provided what William Cronon calls "an objective point of reference": "any actual community could be compared with the theoretical climax, and differences between them could usually be attributed to 'disturbance.'"⁴⁹ And while those disturbances took many forms, they were more often than not chalked up to the behaviors of humans. In this way, the condition of the forest became an expression of national characteristics and values. Well-managed forests became a marker of civilization and progress. They became a yardstick for the rise and fall of nations. A lack of forestry traditions placed one outside the currents of modernity. Forest decline was Korea's national decline—and successful reform meant the vitality of the whole of society.

What colonial ecological modernity offers is a more capacious framework through which to examine Japanese forestry not simply as a process of modernization, but as a far-reaching campaign that touched the lives, values, and everyday experiences

⁴⁹ William Cronon, *Changes in the Land: Indians, Colonists, and the Ecology of New England* (New York: Hill and Wang, 1983), 10.

of residents across the peninsula.⁵⁰ In the most basic sense, it provides a new lens through which to examine the crucial point, argued again by Shin and Robinson, that “colonial evolution was dynamic: it had to adapt to the responses of Korean society and, in so doing, reflected this experience back into the construction of Japanese identity and modernity.”⁵¹

The colonial ecological modernity framework also allows us to rethink the nature of state power, expertise, and bureaucratic rule. It is not hyperbole to state that scientific forestry has long been held up as a classic example of the state’s centralized efforts to oversee the management of local resources: what James Scott calls the “heroic simplification” of complex conditions practiced by state bureaucrats, physiocrats, and foresters alike.⁵² Yet, while much rings true to Scott’s far-reaching critique of high modernity, the history of 20th-century forestry could never be so simple. Involving a host of non-state actors (including transnational corporations, local guilds, and settlers) and considerable discord among government agents, state-sponsored forestry was far less coherent, effective, or monolithic than is often described. In the case of colonial Korea, transnational corporations and farming households often worked with as much as against government experts. I here accordingly seek to complicate theories of state power—and their underlying premise of scientific confidence—by highlighting the diverse visions and stakes involved in local and national debates about proper forest management in Korea.

⁵⁰ In tightening the bonds between nature, culture, and ideas of ecology I follow the lead of William Cronon and Donald Worster. See Cronon, “The Trouble with Wilderness: or, Getting Back to the Wrong Nature” in: William Cronon, ed., *Uncommon Ground: Rethinking the Human Place in Nature* (New York: Norton, 1996), 69-90; and Donald Worster, *Nature’s Economy: A History of Ecological Ideas* (Cambridge: Cambridge University Press, 1994, 2nd edition).

⁵¹ Shin and Robinson, *Colonial Modernity in Korea*, 5.

⁵² James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 2001), 8.

The Politics of Sustainability

If colonial ecological modernity was dynamic and adaptive, it was also highly contentious. At all levels of government, in villages throughout the peninsula, and in different regions of the empire, the effort to modernize Korea's forests spawned conflict. In some cases this conflict took violent forms, such as the peasant protests over land tenure reform and the levying of forestry association fees. In other cases, this contestation unfolded under the watchful eye of the public and the press, as in the timber tariff debate discussed in Chapter Four.

But the lion's share of this conflict was much more mundane: it played out in the planning documents, policy proposals, and bulletins of the colonial state and its institutions. Buried beneath the technical language and bureaucratic jargon of these forester' reports lay conflicting visions of the future course of reform. This is especially true for foresters tasked with implementation of sustainable yield forestry, the mantra of scientific, state-led forest management. What made sense at the national level was often impossible at the provincial level; what was a virtue for the forestry official was a vice for the architect; what was in the interests of the Korean timber industry was often at odds with its Manchurian counterpart across the Yalu River. And it was not simply foresters who were entangled in these debates: resource conservation extended beyond the Japanese state and its agents to entangle a host of local actors with conflicting interests and visions of reform.

These sorts of entanglements sustained what I call the politics of sustainability: a term that connotes the often-contradictory interests inherent to natural resource management in general and state-led forestry in particular. While scholars have hitherto

appraised the manner in which the colonial government in Korea spurred industry and promoted agriculture, insufficient attention has been paid to the implications this held for the politics of resource management at various levels of the colonial state. Particularly scanty are considerations of the materiality of modernization: the fact that colonial Korea's railways, modern homes, telegraphs, and charcoal came from *somewhere*. That place was often the forest—a source not only of timber, but of pulp, turpentine, fodder, fibers, fertilizer and a host of other natural resources. But it was not Korea's forests *per se*. The resource flows created by Japan's imperial expansion meant that timber from Hokkaido was used to lay railways in Korea; Korea's coal fueled factories in Kyushu; and Karafuto's pulp was transmuted into newspapers read in Tokyo.

Informed by Daqing Yang's observation that “the material means of either building Japan's empire or holding it together are largely taken for granted rather than being thoroughly investigated,” this study makes a concerted effort to trace the exploitation, circulation, and utilization of Korea's forests as they were transfigured into the objects, materials, and commodities that vitalized Japan's empire.⁵³ In so doing, it follows the lead of Noda Kimio, whose recent edited volumes on “‘Resourcing’ and the Total War System in East Asia” have clarified both the mechanics and the geopolitical considerations behind the flow of agricultural and forestry resources throughout Japan's imperial sphere.⁵⁴ It likewise builds on Todd Henry's recent conceptualization of the

⁵³ Daqing Yang, *Technology of Empire: Telecommunications and Japanese Expansion in Asia, 1883-1945* (Cambridge: Harvard University Asia Center, 2011), 5.

⁵⁴ As Noda reminds us, from 1924 onwards “about half of [mainland Japan's] total imports were made up of agricultural and forestry produce” from the rest of the empire such that “the development of agricultural and forestry resources in the sphere of influence of Imperial Japan” was a paramount imperative of the wartime state. Noda Kimio, ed., *Nihon teikokuken no nōrin shigen kaihatsu: “Shigenka” to sōryokusen taisei no higashi Ajia* (Kyōto: Kyoto Daigaku

“material assimilation” of Korea’s colonial capital by showing how the development of urban and industrial sites was inextricably linked with that of their hinterlands, a point long propounded by environmental historians.⁵⁵ Such an approach not only provides for a more nuanced understanding of the relationship between Korea, metropolitan Japan, and the expanding boundaries of the Japanese empire, but also serves as an overdue corrective to the longstanding focus on discourse by scholars of colonial Korea.⁵⁶

In tracing the contours of debates over sustainability this study also reconsiders the long-assumed efficacy, authority, and solidarity of Japan’s colonial bureaucracies. While it may have once been possible to note that “one must give Japanese colonial administrators high marks as a group” and that the “competence and quality of the average Japanese colonial bureaucrat is remarkable when one considers that he had little of the professional tradition or experiences of his counterparts in the British or French colonial systems,” these generalizations do not hold up well against the story of Japanese

gakujutsu shuppankai, 2013), 424. Perhaps Noda’s greatest insight is that, while “resources” (*shigen*) were initially defined in Japan as “raw nature that is deemed to have some economic value,” that category was widened in the wartime years to include “human resources”: a shift that, he argues, “naturally resulted in a tremendous waste of natural resources and human beings.” Noda Kimio, ed., *Nōrin shigen kaihatsu no seiki: “Shigenka” to sōryokusen taisei no hikaku shi* (Kyōto: Kyoto Daigaku gakujutsu shuppankai, 2013), 483.

⁵⁵ Todd Henry, *Assimilating Seoul: Japanese Rule and the Politics of Public Space in Colonial Korea, 1910-1945* (Berkeley and Los Angeles: University of California Press, 2014), chapter 3. For the classic treatment of the linkages between the city and its hinterlands see William Cronon, *Nature’s Metropolis: Chicago and the Great West* (New York: Norton and Company, 1992).

⁵⁶ It is noteworthy that a majority of the scholarship on colonial Korea by American-based scholars over the last decade has taken an explicitly discourse-driven methodological approach. This wave of scholarship came in large part as a response to the preponderance of studies of central policy and state building, which left questions of discourse, culture, and modernity largely untouched. See, e.g., Andre Schmid, *Korea Between Empires, 1895-1919* (New York: Columbia University Press, 2002); Alexis Dudden, *Japan’s Colonization of Korea: Discourse and Power* (Honolulu: University of Hawaii Press, 2006); and E. Taylor Atkins, *Primitive Selves: Koreana and the Japanese Colonial Gaze, 1910-1945* (Berkeley: University of California Press, 2010).

forestry in Korea.⁵⁷ Rather, what is most remarkable about forestry bureaucrats in Korea was how they were time and again forced to turn back to their drawing boards as they reckoned with political, ecological, and social landscapes beyond their control. The point here is not to characterize forestry officials as incompetent or ineffective; many of the foresters that populate this account were brilliant administrators who made major contributions to forestry reforms in Korea. It is rather to draw attention to the larger matrix of forces that beset foresters and their reform agenda throughout their tenure in Korea.

This is not uncharted terrain. American environmental historians, for their part, have long probed the politics of conservationism and resource management. That one of the seminal works of environmental history took as its subject bureaucratic politics and the “gospel of efficiency” underscores the longstanding interest in this topic.⁵⁸ More recently, Karl Jacoby has examined the “hidden history of American conservation” by drawing attention to the fact that these conflicts were not simply bureaucratic: the establishment of new boundaries of wilderness and new laws on appropriate land utilization ensnared local communities into protracted disputes over customary land use.⁵⁹ Also instructive is the work of Timothy Mitchell, who has offered in his

⁵⁷ Mark Peattie, “Introduction,” in: Mark Peattie and Raymond Myers, eds., *The Japanese Colonial Empire, 1895-1945*, (Princeton: Princeton University Press, 1987), 26.

⁵⁸ See, e.g., Samuel Hays, *Conservation and the gospel of efficiency; the progressive conservation movement, 1890-1920* (University of Pittsburg Press, 1999 reprint); Brian Balogh, “Scientific Forestry and the Roots of the Modern American State: Gifford Pinchot’s Path to Progressive Reform,” *Environmental History*, Vol. 7, No. 2 (2002), 198–225; and Michael B. Smith, “The Value of a Tree: Public Debates of John Muir and Gifford Pinchot,” *Historian* Vol. 60, No. 4 (1998), 757–778.

⁵⁹ Karl Jacoby, *Crimes Against Nature: Squatters, Poachers, Thieves, and the Hidden History of American Conservation* (Berkeley: University of California Press, 2003).

conceptualization of techno-politics a new framework for probing the role and limitations of colonial expertise, especially as related to the re-engineering of the natural world.⁶⁰

Only recently have historians of Japan begun to cast a critical gaze upon Japan's own colonial bureaucracies and the experts in their ranks. Although earlier scholarship made major strides in this direction by showing, for instance, how the exigencies of Japan's rapid industrialization and total war re-shaped the natural world, it was only in the last few years that scholars have trained their analytical lenses squarely upon colonial bureaucrats.⁶¹ Taking as its subject the corps of idealistic engineers dispatched to Japan's colonies, Aaron Stephen Moore, for example, has recently shown how the blueprints of engineers and bureaucrats were shaped by a host of confounding variables, including "war campaigns, state mobilization plans, environmental forces, business interests, bureaucratic conflict, resistance by local residents, and technical limitations."⁶² So, too, does Moore, following Yang, make a conscious effort to inject material processes into the study of Japanese empire by highlighting how engineering projects whet the colonial state's appetite for natural resources.

⁶⁰ Mitchell makes three points in particular about the limits of expertise that inform my approach here: that the rule of experts "represented a concentration and reorganization of knowledge rather than an introduction of expertise where none had been in use before"; that "technical expertise did not work by bringing science and technology to develop natural resources": "It happened just as much the other way around, and in ways that tended to be incomplete or unrealizable"; and that "techno-science had to conceal its extra-scientific origins" by masking uncertainty behind the veneer of scientific precision. Timothy Mitchell, *The Rule of Experts: Egypt, Techno-politics, Modernity* (Berkeley and Los Angeles: University of California Press, 2002), 41-42.

⁶¹ Particularly instructive is Okamoto Makiko's exhaustive study of the politics of colonial bureaucrats in Taiwan and Korea, *Shokuminchi kanryō no seijishi: Chōsen, Taiwan Sōtokufu to teikoku Nihon* (Tokyo: Sangensha, 2008). See also Janis Mimura, *Planning for Empire: Reform Bureaucrats and the Japanese Wartime State* (Ithaca: Cornell University Press, 2011); and William Tsutsui "Landscapes in the Dark Valley: Toward an Environmental History of Wartime Japan," *Environmental History*, Vol. 8, No. 2 (2003), 294-311.

⁶² Aaron Stephen Moore, *Constructing East Asia*, 15-16.

My conceptualization of the politics of efficiency similarly stresses both the *material* and *mediated* processes of colonial rule, but it does so through the kaleidoscopic lens of a distinctive storehouse of natural resources, the forest. In contrast to Moore and others, who are chiefly concerned with the emergence of an empire-wide ideology, my study is rooted to Korea's forested ecosystems. It is likewise centered on a single bureaucratic office, the Government-General's Bureau of Forestry, which, despite numerous institutional iterations, oversaw Korea's forestry reforms from the arrival to Korea of the first forestry advisors in 1904 through the collapse of the empire in 1945.⁶³ Such an ecological and institutional focus offers both a more fine-grained account of the environmental changes brought about by colonialism and a manageable scale of analysis to trace the contours of debates over resource management.

At the heart of the politics of efficiency sat a fundamental tension between the market, the geopolitical considerations of imperial expansion, and the planning horizons of foresters. On the fact of it, the market was the engine of the timber industry: it stabilized costs, delivered resources to those who needed them, and plugged Korea into an imperial and global network of commodity flows. But the logic of the market was far less rational than many of colonial Korea's forestry officials cared to admit. Much to the chagrin of forestry officials, the market time and again re-fashioned the value of Korea's

⁶³ The Japanese forestry project in colonial Korea began with the invitation of advisors to the Korean government in 1904. A forestry section (*Sanrinka*) was soon established within Korea's Ministry of Agriculture, Industry, and Commerce. This section was in turn taken over by the colonial government after annexation in 1910 and eventually re-fashioned as its own freestanding bureau (*Sanrin kyoku*). With the re-structuring of the colonial bureaucracy to streamline the industrial push of the 1930s, the forestry section was absorbed by the Bureau of Agriculture and Forestry, and re-designated as a Forestry Office (*Sanrinbu*). A detailed overview of these and other institutional shifts can be found in Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” in Miyata Setsuko and Yi U-yōn, eds., *Chōsen no sanrin taisaku* (Tokyo: Tōyō bunka kenkyūjyo, 2009), 292-294.

forests. So, too, did the exigencies of total war, as Noda Kimio and others have shown. What was once designated a stand of timber for building purposes was later identified as a far more valuable source of pulp for the then-burgeoning synthetic fiber industry; what was once earmarked as a source of fuel for domestic consumption was later shipped off to the war front.

The problem, at one level, was one of time, and it was not peculiar to Japanese officials in Korea. “Foresters,” writes Hugh Raup, “have always had trouble with time because the human mind produces changes in the uses of wood several times faster than trees can grow.”⁶⁴ It follows that forestry officials often struggled to keep up with the vicissitudes of supply and demand. Although they routinely drew up planning horizons and twenty-year forestry plans with confidence and precision, they were time and again undercut by outside forces, be they war, economic depression, colonial politics, or the policy pivot prompted by the March First Movement. One need only peruse the Bulletin of the Korean Forestry Association (*Chōsen Sanrinkai*), the principal forum for forestry policy debates in Korea, to gain a sense of the dizzying array of forces shaping forestry policy: provincial seed shortages, the metropolitan demand for charcoal, fluctuations in the American northwestern cedar market, and so forth.

Few episodes throw the forces confounding forestry reforms into sharper relief than the decades-long debate surrounding the improvement of the *ondol*, the heated floor system found in homes across the peninsula. As I show in Chapter Seven, the politics of *ondol* improvement were closely entwined with concurrent debates about fuel replacement, home economics, hygiene, cultural assimilation, and architectural aesthetics

⁶⁴ Hugh Raup, “John Sanderson’s Farm: A Perspective for the Use of the Land,” *Forest History*, Vol. 10, No. 1 (1966), 11.

in colonial Korea. Thus while foresters were quick to identify the burning of grasses and forest resources in the *ondol* as ground zero of deforestation, they were unable to simply impose their will upon the Korean home and its residents. Rather, they negotiated their policy platform through a complex matrix of stakeholders, and ultimately were forced to rein in their ambitions by settling for basic retro-fits and ramped up local charcoal production—initiatives that assuaged, but did not altogether eliminate, foresters’ so-called “*ondol* problem.”

Finally, my conceptualization of the politics of sustainability also provides an opportunity to re-think afforestation as a singularly good thing. It is beyond dispute that, at least until 1937, the colonial state did much to improve the general condition of forests in many parts of Korea. But what merits closer scrutiny is the question of *how* they went about afforestation and at *what cost* to Korea’s rural communities. A closer inspection of the dynamics of afforestation in Korea—the legal architecture, regulatory enforcement, capitalist investment, and corporate involvement—in fact reveals a much more complicated story about the consequences of colonial conservationism. As I show in Part II, the state’s fixation on afforestation often ignored the short-term needs of many Koreans, who were left with little choice but to flaunt the law or fall back upon desperate swidden agricultural practices. This both marginalized Korean communities and undercut larger afforestation initiatives: a parcel wrested from Korean farmers and designated for afforestation often meant slash-and-burn agriculture somewhere else. The greening of Korea, in other words, was far from simple or benign. An analysis of the rhetoric and reality of what some scholars have come to call the Japanese colonial state’s “greenificationism” (*ryokkashugi*) in Korea thus adds further texture our understanding of

the relationship between colonialism and conservationism—what Richard Grove has famously described as “green imperialism.”⁶⁵

Sources, Methods, and Organization

Japanese foresters consumed more paper than they probably realized. The archive of the former Bureau of Forestry in Korea, a large portion of which now ages in the Tokyo University Department of Agriculture and its library, overflows with statistics, reports, policy proposals, and the myriad day-to-day documents that circulate throughout any bureaucratic enterprise. This is both a blessing and a curse for the historian. On the one hand, it provides for an empirically rich analysis of the implementation of forestry reforms. On the other, the stacks of statistics and dry policy proposals often obscure much of what makes forest history interesting: how forests touched the lives and shaped the thoughts of individuals.

Following Korea’s pioneering scholars, this study pays close attention to the central planning documents, policy memos, edicts, and other technical sources that elucidate how and why foresters pursued the reforms that they did. I am especially indebted to the data analysis and compilation already undertaken by Japanese and Korean scholars, who have in many ways erected the empirical legs upon which my arguments stand. But I also make an effort to put these policy memos and data sets in conversation with a more colorful array of sources: Japanese- and Korean-language newspaper accounts; the promotional materials of timber boosters; personal reflections of forestry bureaucrats; the travel writing of settlers; and a host of other materials that illuminate

⁶⁵ For critical discussions of the colonial state’s practice of “greenificationism” see, e.g., Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” 271; and Matsumoto Takenori, “Kenkyūkai no matome ni kaete: shokuminchi Chōsen no shiten kara,” 195-196.

how forests and forestry shaped everyday life in colonial Korea. I draw from the publications of the civic institutions surrounding forestry reform—The Korean Forestry Association and the Korean Agricultural Association—with particular regularity. Few sources offer a window into the concerns, puzzles, and goals of forestry reformers, both Korean and Japanese, quite like these bulletins.

As varied as the venues and forms of publication are the professions and backgrounds of the commentators themselves. Indeed, while a majority of the sources I examine are the handiwork of professional foresters, I also draw upon the work of botanists, ecologists, agronomists, and geographers dispatched to Korea who offered their view on the landscape in one way or another. I do so not only to highlight how the problems of forestry stretched well beyond the halls of the Bureau of Forestry but also to offer a sense of the disciplinary fault-lines that often shaped conflicting views on forestry matters.

The search for the Korean voice in the forest, to say nothing of the archive, is much more difficult.⁶⁶ This is especially true of the *hwajōnmin* (J: *kadenmin*): the slash-and-burn agriculturalists that bore the brunt of the Government-General's restrictive access policies. I have nevertheless made a concerted effort to weave into this account the perspectives of Koreans of all sorts, as can be gleaned from Korean-language newspapers, periodicals, postwar reflections, and the commentary of the Korean elite.

⁶⁶ The challenges inherent to incorporating the Korean voice into colonial period histories have long confounded scholars of colonial Korea. Informed in part by subaltern and post-colonial studies, more recent scholarship has done much to interrogate the limits and possibilities of the colonial archive. A thoughtful reflection on these and other issues is Hildi Kang, *Under the Black Umbrella: Voices from Colonial Korea, 1910-1945* (Ithaca and London: Cornell University Press, 2001), introduction.

The organization of chapters is designed to advance two chief objectives of this study. First, by shifting the vantage point of my analysis from chapter to chapter—from, say, the halls of the Bureau of Forestry to the timber processing factories of the Yalu Basin to the Korean home and its stove—this study strives to account for the full range of forestry-related activities in colonial Korea. Second, insofar as this nested, scalar approach to forestry reform offers a sense of the conflicting imperatives of resource management at different levels of the colonial state, it more clearly reveals the dynamics enlivening the politics of sustainability.

The account that follows is organized into three parts. Beginning with a history of the modernization of forestry in Japan, Part I, “Roots,” traces the emergence of new ways of seeing, measuring, and governing woodlands in Japan and its colonies. It first places Korea’s colonial forestry reforms in a deeper perspective by reviewing in Chapter One the professionalization of forestry in Japan: the institutions, personalities, and experiences that primed the approach to forestry brought to bear on the Korean landscape. Drawing upon the travel accounts and government-backed surveys of a wide range of travelers and officials, Chapter Two examines the emergence of a newfound geographical imagination regarding the peninsula: a bifurcated view of the landscape as predominantly red, barren mountains in dire need of state intervention save for the green, primeval pine forests awaiting timber industrialists in the Yalu River Basin of the north.

Shifting its focus to the first decades of colonial rule, Part II, “Reforms,” examines the Government-General’s forestry reform agenda as it unfolded in three different scales. Chapter Three takes up the *national* legal architecture that formed the centerpiece of the afforestation project: namely, the 1911 Forest Ordinance and the

subsequent waves of forestland surveys. Taking Sinŭiju, the hub of the Yalu River Basin timber industry, as its focus, Chapter Four traces the growth of a *regional* timber industry on newly designated national forestland (*kokuyūrin*), where a host of actors vied for access to Korea's forest resources. Chapter Five shifts its sights to forestry reforms related to privately owned forestland (*minyūrin*), where foresters sought to compel *local* communities, principally at the unit of the village, to become stewards of the land, practitioners of modern, agricultural forestry, and energetic contributors to the project of civic forestry.

Part III, “Campaigns,” surveys two public outreach crusades undertaken by forestry officials over the long sweep of the colonial period. Focusing on the *ondol* stove and the fuel burned therein, Chapter 6 explores the thorny politics surrounding the efforts to reform the heating of the Korean home and the patterns of fuel consumption: a decade’s long campaign that, perhaps more than any other, reveals the challenges hobbling forestry reforms. Chapter 7 shifts our attention to the ideological register of forestry reforms and the highly paternalistic effort to inculcate Korean subjects with *airin shisō* through a host of conservationist spectacles including ceremonial plantings, forestry lecture circuits, and forestry exhibitions. The dissertation concludes with a brief reflection on the mobilization of Korea’s forest resources and the emergence of a control economy during the wartime years.

PART I: ROOTS

CHAPTER 1

Imperializing Forestry

Of all the potential threats to Japan's national security at the turn of the 20th century, the “red pine army” was perhaps the least overtly threatening. And yet, according to Honda Seiroku (1866-1952), a professor of forestry writing in the pages of *Tōyō gakugei zasshi*, Japan's first popular science magazine, the accelerating “red pine advance” posed a grave threat to the nation:

Having captured Shikoku, Kyushu, and the southern half of the archipelago, the red pines will gather troops and quickly overtake the plains of Kantō. Now, the red pines are sweeping along the East and West coastlines and through the Rikū Kaidō to advance into the Ou region. Beech forest, the original landlord of the region, are not able to stave off the ruinous attack of the spearhead of the red pine army.¹

Seldom has forest succession theory been put more dramatically. In what was soon to become known as his “red pine ruination theory” (*akamatsu bōkokuron*), Honda mapped out for lay readers the process whereby human activities such as swidden agriculture and fertilizer consumption had stripped the forest floor of its nutrients, which in turn opened the gates for the red pine invaders—a pioneer species that was quick to plant roots on open forest floor. Once established, he argued, the red pines would monopolize access to light, water, and other resources, leaving little space or resources for the growth of other species and increasing the risk of pestilence.

Mixing cutting edge science with a powerful narrative of national decline, Honda linked the bonds between forest management and national welfare as never before. At the

¹ Honda Seiroku, “Wagakuni jiriki no suijyaku to akamatsu,” *Tōyō gakugei zasshi*, Vol. 230 (1900), 468. Rikū Kaidō is another name for the Ōshū Kaidō.

heart of his outlook was the conviction, based upon the prevailing scientific theories of his day, that forest ecosystems naturally progress towards a balance of nature.² He painted a portrait of Japan's forest in which each layer—or stage—was inextricably linked to the other forest layers. Any divergence from this natural vegetative succession could spell disaster for the forest's growth and productivity. This disruption, moreover, could lead in turn to cascading environmental decline: deforestation was but the prelude to an onslaught of environmental crises including erosion, drought, and floods. Unchecked deforestation, as such, spelled disaster—indeed potential ruin—for the nation. “The state of a nation’s forests,” he would later write, “is an expression of that country’s destiny.” This was not simply a matter of bureaucratic land management; in the eyes of Honda, it raised the specter of the “attrition of national strength.”³

If Honda’s outlook put forward a historical view of ecology—one that traced the evolution of Japan’s forest cover over both time and space—it was also an ecological view of history. In a manner not unlike George Perkins Marsh, whose *Man and Nature* was among the first texts to throw into focus the environmental consequences of untrammeled deforestation, Honda marshaled a wealth of historical evidence from the great powers of the past to underscore the gravity of deforestation. Greece, Sicily, ancient Babylon: the fall of these once-great states stood as chilling reminders for Honda of the

² Perhaps the best distillation of Honda’s pioneering ideas on Japan’s ecology can be found in his doctoral thesis, “On Japan’s Forest Vegetation Zones” (*Nihon shinrin shokubutsu tai ron*). For an explication of this text and his academic pedigree see Komeie Taisaku, “Kindai ringaku to kokudo no shokusei kanri: Honda Seiroku no ‘Nihon shinrin shokubutsutai ron’ o megutte,” *Kūkan, shakai, chiri shisō*, Vol. 17 (2014), 3-18.

³ Honda Seiroku, “Rinsō no henka to kokuren no shōchō,” *Chōsen nōkaihō*, Vol. 11, No. 7 (1916), 4.

ways in which forest management determines the “rise and fall of nations.”⁴ The upshot of his argument was that if the nation was to gain control of the red pine and return the forests to its proper balance, a strong state intervention was in order. It was imperative, he argued, that the nation, led by its enlightened foresters, actively manage Japan’s woodlands—that forest management, in other words, become a national undertaking.⁵

Coinciding as it did with a wave of Japanese nationalism, this was a rousing message for readers in 1900. And not surprisingly, his writings found a strong resonance with Japanese society. Honda soon found himself lecturing widely on the topic, which, despite resistance from the scientific community (with critics calling it “unscientific” and “overly political”), garnered tremendous academic and public interest.⁶ More than any other forester of his day, Honda made a public appeal for the value and necessity of state-led forest management. Thereafter, Honda began to rise through the ranks of academia and the forestry bureaucracy to become one of Japan’s most celebrated foresters as well as “the father of its parks,” a title he earned as a champion for green spaces in Japan and its colonies.⁷

It goes without saying that Honda’s outlook would have been scarcely familiar to the generation of officials, scholars, and agronomists that preceded him. Infused with technical jargon and newfangled ecological theories then emanating out of Europe and

⁴ Honda Seiroku, “Sekai ni okeru rinsō henka to kokuren no shōchō,” *Ringakkai zasshi*, Vol. 20 (1923), 59.

⁵ For an exposition on the need for state intervention see Honda Seiroku, “Sekai ni okeru rinsō henka to kokuren no shōchō,” *Ringakkai zasshi*, Vol. 20 (1923), 59-76.

⁶ Miyake Miyahisa, *Chōsen hantō no rinya kōhai no genin: shizen kankyō hozen to shinrin no rekishi* (Tokyo: Nōrin shuppan, 1976), 30.

⁷ For more on Honda see Chiba Tokuji, *Hageyama no bunka* (Tokyo: Gakuseisha, 1973), chapter 1.

the United States, Honda's approach to scientific forestry marked a clear departure from Japan's long-established forestry traditions. In particular, while the dire implications of deforestation were familiar to most Japanese (who had been among the globe's first societies to implement large-scale forest reclamation measures),⁸ the nationalistic intensity of Honda's rhetoric was new. To be sure, the rhetoric regarding the careful practice of erosion and flood control (*chisan chisui*) propounded by Kumazawa Banzan and others provided an ideological template for Meiji forestry officials. But whereas Tokugawa-era agricultural reformers such as Uesugi Yōzan and Kumazawa Banzan had advocated for forest management as a means to improve local finances and staunch environmental decline, Honda and his generation were promoting national forestry as a pillar of national commerce, industry, and military strength.⁹ Especially novel was the manner in which Honda re-cast Japan's forests as a building block of Japan's industrial strength. For Honda, as for many among the first generation of forestry officials, Japan's breakneck modernization—carried out under the banner of “the promotion of production and the encouragement of industry (*shokusan kōgyō*)”—demanded a new set of methods to unleash and sustain the productive power of the landscape.

Honda was but the public face of a rapidly growing institutional, interpersonal, and intellectual network taking shape around Japan's modern forestry enterprise.

⁸ On Korea's pre-modern forestry see Conrad Totman, *The Green Archipelago: Forestry in Preindustrial Japan* (Berkeley: University of California Press, 1989).

⁹ This is not to suggest a total rupture in conservationist thought. As Tessa Morris-Suzuki, among others, has argued, there was a burgeoning nationalistic register to the environmental writings of Tokugawa-era intellectuals, who placed mankind at the top “of a rich and benign natural order.” See Tessa Morris-Suzuki, *Re-inventing Japan: Time, Space, Nation* (New York: M.E. Sharpe, 1998), 53. For more on these pre-modern thinkers see, e.g., Kano Kiyoji, “Kumazawa Banzan: Kindai ringyō no senkakusha—sono isshō to gjitsuteki gyōseki,” *Ringyō gjitsu* Vol. 346 (1971), 22-25. On pre-modern forestry techniques and technologies see Wakino Hiroshi, *Nihon ringyō gjitsushi no kenkyū* (Osaka: Seibundō, 2006).

Although embellished, his views on the relationship between the state, the people, and forest resources present a window into the world of Meiji Japan's professional foresters—a network that would in due course expand into the forestry offices and woodlands of the Korean peninsula. Taking the first generation of professional forestry officials as its focus, this chapter traces the emergence of state-led forestry as a new scientific paradigm—and profession—in Japan. First and foremost, this chapter strives to contextualize the intellectual outlook, statist approach, and institutional knowledge that would eventually be brought to bear on the Korean landscape. Well before professional foresters were tasked with the implementation of forestry reforms in Korea they were taking notes in the lecture halls of the Tokyo Imperial University Department of Agriculture, testing theories in the Forestry Experiment Stations of Hokkaido, pioneering afforestation techniques in Seto, and navigating the pitfalls of colonial politics in Taiwan.

How, then, did the institutions, networks, and techniques of so-called scientific forestry take shape in Japan? What experiences, bodies of knowledge, and anxieties did these foresters bring with them to Korea? How, in short, might we position the Korean colonial forestry project within the larger landscape of modern Japanese forestry? To answer these questions this chapter will examine four different facets of the imperialization of forestry: the nationalization of forest ownership and management; the study of European techniques of scientific forestry; the rhetoric of forest conservation for the sake of the nation; and the acquisition of colonial territories and the forests therein.

Nationalizing the Forests

Many maps were re-drawn in the wake of the Meiji Restoration. From the administrative units of prefectoral governance to the cadasters of arable land holdings,

maps formed the canvas upon which the contours of a modern, industrial Japan would take shape.¹⁰ Given that so-called “woodlands and wastelands” (*sanrin gen’ya*) comprised as much as 80 percent of the Japanese landscape, it should come as no surprise that Japan’s forests were entangled in this process. Considered by many among the Meiji leadership to form a vital precondition to larger statist reforms—to say nothing of a desperately needed source of revenue for the financially distressed imperial seat—the redistribution of forestland holdings was vigorously pressed forward by the Meiji leadership.¹¹

This process, however, was hamstrung from the start. In contrast to the relatively swift resolution of issues related to the redistribution of arable land, the clarification of forest boundaries and the ascription of ownership taxed the resources and patience of foresters for many decades to come, as Conrad Totman has shown. Especially vexing was the distinction between public (*kan*) and privately owned (*min*) forests, which required officials to draw hard and fast boundaries when in fact ownership of the land was anything but clear cut.¹² The complexities of this process stemmed in large part from the fact that in the Tokugawa period there were four principal types of ownership

¹⁰ For a more detailed examination of this process see, e.g., Kären Wigen, *A Malleable Map: Geographies of Restoration in Central Japan, 1600-1912* (Berkeley: University of California Press, 2012); and Matsuo Masahito, *Haihan chiken no kenkyū* (Tokyo: Yoshikawa Kōbunkan, 2001).

¹¹ A major jolt to state-led forestry came in 1875 when the statesman Okubō Toshimichi submitted to Sanjō Santetomi a petition calling for “the promotion of forest preservation and tree cultivation” as a means to shore up regional finances. Kido Kōin followed suit, calling for the creation of Imperial forests. This set into motion the creation of the first comprehensive edicts regarding forest governance, including the creation of the Forestry Bureau. See Sakurai Tsutomu, “Naimushō sanrinkyoku sōshi no zengo,” in Dai Nippon Sanrinkai, ed., *Meiji ringyō isshi* [hereafter MRI], 1-2.

¹² Conrad Totman, *Japan’s imperial forest, Goryōrin, 1889-1946: with a supporting study of the Kan/Min division of woodland in early Meiji Japan, 1871-76* (Folkestone: Global Oriental, 2007), 11.

arrangements: forests under the management of the provinces (*han eirin*); forests under communal agricultural arrangements (*nōyō iriairin*); forests under private management (*shi eirin*); and forests subject to joint party profit sharing agreements (*buwakebayashi/bubunrin*).¹³ That many forests in the vicinity of hamlets and villages were subject to *iriai* arrangements—centuries-old usufruct communal land use traditions that often spanned entire villages, mountains, and regions—only compounded this complexity.¹⁴

No sooner had the 1871 abolition of the domains edict (*haihan chiken*) been issued than conflicts over communal forest rights arose. Much to the chagrin of local communities, the first wave of land reform edicts nullified traditional arrangements by provisionally ceding village-owned forestland to the state.¹⁵ Coming as it did in the midst of the largely rural-based people's freedom and rights movement (*jiyū minken undō*), this was a dangerous proposition in the eyes of many of the Meiji elite, whose political authority was still fragile. Meiji officials thus took steps to recognize the people's rights to access common forestlands while simultaneously placing, whenever possible, ambiguously defined forestland (especially sites of former *iriai* and *bubunrin* arrangements) under state control.¹⁶ Although a slew of edicts were passed in the first decade of the Meiji period to clarify forestland ownership rights (via, for instance, the

¹³ On this typology see Ringyō Hattatsu-shi Chōsakai, ed, *Nihon ringyō hattatsu shi* (Tokyo: Rinyachō, 1960), 3-29; and Nōrinshō Sanrin kyoku, *Tokugawa jidai ni okeru rin'ya seido no taiyō*, (Tokyo: Rin'ya kyōsaikai, 1954), chapter 3.

¹⁴ For a path-breaking English-language study of *iriai* see Margaret McKean, “Management of Traditional Common lands (Iriaichi) in Japan” in Daniel W. Bromley et al., ed., *Making the common work: theory, practice, and policy*, (Institute for Contemporary Studies, 1992), 63-98.

¹⁵ Endō Yasutarō, *Nihon sanrin shi: hogorin hen* (Tokyo: Nihon sanrinshi kankōkai, 1934).

¹⁶ Ushiomori Toshitaka, ed., *Nihon ringyō to sanson shakai* (Tokyo: Tokyo Daigaku Shuppankai, 1967), chapter 2.

issuance of land titles and edicts allowing the retention of temple control over forests), it was not until the passage in 1876 of the Revised Land Tax Regulations (*Chiso kaisei jōrei*) that the process whereby private forestland would be measured and registered with the state was initiated.¹⁷ The transfer of four forests formerly under the control of feudal lords—those in Gifu, Nagano, Akita, and Aomori—to the state in February 1878 marked the commencement of the nationalization of Japan’s woodlands.¹⁸

Thereafter, the skein of village, domain, and state land use traditions was untangled to form the hard and fast boundaries demanded by the new state and its administrators.¹⁹ It was one thing, however, to draw boundaries on a land register; it was another thing altogether to actually enforce these boundaries. Lacking the manpower and resources to assert their control, Japanese officials were largely unable to regulate access to the newly established “state forests” (*kan’yūrin*). This was a product as much of the financial insecurity of the Meiji state (which struggled to fund its bureaucratic offices, let alone police the woodlands) as it was local communities’ dependencies on woodlands. As a result, the forests were rapidly exploited. Desperate for the fuel and fertilizer that had long been essential to their livelihood, many local communities ignored these pronouncements and plundered the forests out of fear that their access would be limited.²⁰

¹⁷ These transfers are examined in Narita Masami, “Meiji kōki ni okeru chihō meibōka no daisanrin keiei,” *Tsukuba nōrin shakai kezaiken*, Vol. 26 (2010), 25-115.

¹⁸ Sakurai Tsutomu, “Namushō sanrinkyoku sōshi no zengo,” in Dai Nippon Sanrinkai, ed., *Meiji ringyō isshi*, 2.

¹⁹ This campaign also traced a particular geographical logic: high concentrations of state forests were established in the Tōhoku, Kōshin’etsu, and southern Kyūshū regions, while high concentrations of privately owned forests could be found in the Kinki and Tokyo regions. For a detailed explanation of this geographical logic see Kobayashi Mitsue, *Kokuyūchi iriaiken no kenkyū* (Tokyo: Tokyo daigaku shuppankai, 1968), chapter 4.

²⁰ See, e.g., Matsunami Hidezane, *Meiji ringyō shiyō*, 82-84, 126-129.

Limited though their resources were, new government bureaucracies evolved in tandem with these early forestland reform initiatives. The establishment in 1877 of a Forestry Section (*Sanrinka*) within the Geography Bureau (*Chiriryō*) of the Home Ministry (*Naimushō*) marked the commencement of state-led management of Japan's forests as a truly national resource. Soon thereafter, the Forestry Section was transferred to the Department of Agriculture and Commerce, where it was upgraded to its own bureau. It was here that the first generation of professional foresters—men like Honda trained in the tools and techniques of scientific forestry (*ringaku*)—set out to solve the problems of forest management.²¹

Surveying was a particularly pressing priority. One of the challenges of state-led forest governance was the newfound demand for a comprehensive portrait of Japan's forest composition, distribution, and potential yields of timber. Although forestry officials were most immediately concerned with those land surveys that would harden the boundaries of state control, they also sought an accurate accounting of Japan's forest ecology. So it was that Tanaka Jō (1858-1903) and Takashima Tokuzō (Hokkai, 1850-1931), two officials who oversaw Japan's early forestry reforms, commenced in 1879 a two-year survey of Japan's forest distribution.²² For Takashima, the need for this sort of information was felt acutely as he conducted extensive geological surveys of the archipelago for the Home Ministry. It was indeed only after he saw the impressive variety of forests and forest conditions across the long sweep of the archipelago—a view

²¹ Sakurai Tsutomu, “Namushō sanrinkyoku sōshi no zengo,” in MRI, 1-4; and Miyabe Fumiomi, “Meiji shoki no sanrin jimu enkaku,” in MRI, 4-5.

²² A fine-grained analysis of this survey can be found in Shimazu Toshiyuki, “Chirigakusha toshite no Takashima Hokkai,” *Kūkan, shakai, chiri shisō*, Vol. 15 (2012), 51-75.

afforded to few foresters before him—that Takashima’s interest in forest ecology took root.²³

Limitations and errors notwithstanding, Tanaka and Takashima’s efforts yielded a variety of insights into Japan’s forest composition and the first comprehensive map of Japan’s forest ecology. As they saw it, Japan’s forests were comprised of five distinct ecological zones stretching from the sub-tropical forests of Kagoshima to the temperate forests of Aomori. That their survey did not include Okinawa or Hokkaido is a testament to the fact that these lands remained on the fringes of the state, although the ample forests of Hokkaido would soon engross many foresters, as we will see.²⁴ Other surveys provided a more detailed portrait of the distribution of resources (coal, fuel, timber) in Japan’s largest nationalized forestlands, shored up the boundaries between state and private forests, and scouted out locations for the establishment of forestry experiment stations, school forests, and other sites of communal forestry.

Yet for all the progress of these and other surveys, actual forestry reforms were slow to be realized, due in no small part to the more pressing priorities of modernization and the fiscal crisis of the Meiji state. Save for the surveying and re-distribution of forestland—an initiative with immediate fiscal implications—little in the way of a robust forestry policy framework had taken shape. To the contrary, the first few decades of forest management in the Meiji period were devastating for the forests, as a 1910 Bureau of Forestry report makes clear:

²³ Takashima Tokuzō, “Shokubutsutai no kai,” *Dai Nippon sanrinkai hōkoku*, Vol. 10 (1882), 234-240. This survey is also examined in Komeie Taisaku, “Kindai ringaku to kokudo no shokusei kanri: Honda Seiroku no ‘Nihon shinrin shokubutsutai ron’ o megutte,” *Kūkan, shakai, chiri shisō*, Vol. 17 (2014), 3-18.

²⁴ These views are laid out in Tanaka Jō, *Kōsei Dai Nihon shokubutsutai chōsa hōkoku* (Tokyo: Sanrinyoiku, 1887).

The political revolution in the beginning of the Meiji Era produced a disastrous effect upon the preservation of the forests. The forests throughout the country were mercilessly cut down so that there appeared in all quarters of Japan hills and mountains deprived of trees. The consequence was that not only was the forests economy jeopardized but the economic order of the people at large was deranged, dealing heavy blows upon the productive industry of the people by giving rise to annual inundations which devastated many parts of the country.²⁵

Perhaps Takahashi Takuya best expressed the frustration of foresters when he described the immediate aftermath of the Meiji Restoration as “the total erosion of the institutions of forest protection,” which led to rampant felling and deforestation, and a number of forest related crimes.²⁶ Regarding the latter, timber banditry was a particularly pernicious problem, as foresters still largely lacked the resources to protect state forests from villagers seeking out the fuel, fertilizer, and fodder they needed for survival.²⁷

The passage in 1897 of the Forest Law (*Shinrin hō*), Japan’s first comprehensive legal framework for forestry, marked the capstone of the state’s effort to gain control over Japan’s woodlands.²⁸ Although the law would see substantial modifications, it established, among other things, a system of Reserved Forests (*hōanrin*), an ownership registration system, a penal code for forest-related infractions, and a complex web of

²⁵ Bureau of Forestry, ed., *Forestry of Japan* (Tokyo: Department of Agriculture and Commerce, 1910), 85.

²⁶ MRI, 62.

²⁷ Matsunami Hidezane, ed., *Meiji ringyō shiyō*, 321-323.

²⁸ As early as the 1870s Saigō Tsugumichi tried to push through a forestry bill, modeled off of French statutes, but he was not able to garner enough support. Realizations about the degradation of Korea’s forests, however, did much to change that. In the early 1890s officials in the Home Ministry issued a number of stringent regulations on the access to and ownership of forests, and it was not long thereafter that some forest officials began to agitate for the passage of a comprehensive law regulating forest access. Takayama Sanpei, *Nihon shinrinhō* (Tokyo: Hōsei jihōsha, 1922); and Takahashi Takaya, *Shinrin hō ron* (Tokyo: Meihōdō, 1898).

regulations of woodland usage—a legal framework not unlike that which would be later crafted in Korea.²⁹

Also noteworthy is the fact that Japan's forests had been rendered into the quantifiable, standardized, and comprehensive metrics required by forestry officials tasked with policy reforms. With increasing precision, hard data on forest yields, acreage, and boundaries filled the pages of the Bureau of Forestry's reports. There were by 1910 ten major forest reserves, each with its own branch office, and 211 minor forest divisions. A large network of officials had also asserted its authority across the nation: 10 forest managers, 22 forest commissioners; 35 forest experts; 1428 rangers. Perhaps most importantly, Japan's forests were now bounded and valued. As of 1910, there were 7,587,335 *chō* of state forests; 1,563,839 *chō* of imperial forests; and 6,394,008 *chō* of privately owned forests. Forestry officials could also recite statistics of annual timber yields with confidence: 3,189,036 *shakujime* of timber had been taken in 1910, while 1,126.7 *koku* of seeds were sown in state forestland.³⁰ Within forests, moreover, tree plantation had been placed on a rotation schedule: a planning horizon for sustainable yield that cycled through a sequence of exploitation, afforestation, and protection.³¹ This, however, was but one piece of the larger forestry enterprise. If these metrics were to be meaningful or lasting, they needed to be valued and actively supported by the people.

²⁹ After multiple revisions, it was updated to include provisions for the establishment of forestry associations (*shinrin kumiai*) in four different fields: afforestation, land control/engineering, protection, and operations. This more robust version of the Forest Law was promulgated in 1907, just a year before the promulgation of the Forest Law in Korea. Tsuzuki Nobuyuki, “Shinrin kumiai no shinrin, ringyō seisaku ni okeru yakuwari to jigyō tenkai,” *Kezai kagaku kenkyūjo*, Vol. 40 (2010), 121-123.

³⁰ These and other statistics can be found in Bureau of Forestry, *Forestry of Japan* (Tokyo: Department of Agriculture and Commerce, 1910), 85.

³¹ These plans are detailed in Yamanouchi Shizuo, *Nihon zōrin gyōseishi gaisetsu* (Tokyo: Nihon ringyō gijutsu kyōkai, 1949).

Raise Trees, Raise the Nation

The Meiji period offered numerous bruising lessons to foresters. Chief among them was that state-led forestry reforms could not simply be imposed from on high. To the contrary, many realized, the successful administration of forests was contingent upon close cooperation with the people. It was thus not long before a growing chorus of foresters began to call for the increased participation of the Japanese public in the cultivation and conservation of forests. If the Japanese state was to reclaim and properly manage the nation's forests, they reasoned, the people needed to be educated in the values of responsible forest management. Whatever Japan's deep-rooted history of village forestry, the forest plunder of the Meiji prompted many officials to call for the cultivation of a new conservationist spirit alongside the forest itself.

Front and center in this campaign was the Japanese Forestry Association (*Dai Nippon Sanrinkai*), a civic institution established in January 1882 for the purpose of stimulating the “mutual support of the government and the people” regarding forestry matters.³² Comprised of a wide range of intellectuals and reformers—from scientists to lawyers to educators—it rose to prominence as the premier institution for the wider dissemination and popularization of forest research, policy, and public outreach. What started as a group of 343 had by 1910 grown to over 4,000 members, many of whom would become vigorous contributors to forestry work in Korea through the Association’s affiliate group based in the peninsula.³³

³² MRI, 3.

³³ Bureau of Forestry, *Forestry of Japan* (Tokyo: Department of Agriculture and Commerce, 1910), 118.

That the conservationist agenda pursued by these reformers was heavily imbued with Japanese nationalism should come as no surprise. Stirred by the sensational writings of individuals like Honda Seiroku, many officials began to view the proper management of forests as a maker—and marker—of great nation status. Their participation in international exhibitions such as that held in Edinburgh in 1884 and study tours of European nations only strengthened their conviction that state-led forestry was a hallmark of the great powers of the world. This was especially true of Itō Hirobumi, who traveled throughout Europe in 1882 with the forestry official Nakamura Yaroku. For Itō, these experiences underscored the myriad virtues of forestry—tax revenue, industrial strength, land reclamation—which he would later champion in his position as the Resident-General of Korea.³⁴

While many Japanese took great pains to position Japan within this world of modern forestry practices, they also sought to carve out their own unique relationship with nature. One of the ways they did so was by invoking *airin shisō*, “forest love thought.” If “rich country, strong army” (*fukoku kyōhei*) was the slogan of state-building, *airin shisō* was the buzzword of national forestry. It connoted, among other things, thrift, duty, forward-thinking conservation, and a shared sense of the bond between nature’s bounty and the nation’s future. *Airin shisō* was at once universal and peculiarly Japanese. In essence, it reflected and promoted values that were closely aligned with other conservation movements: a love of the outdoors, a romanticization of the wilderness, conservation for the good of the nation, forests as the root of industry.

³⁴ The impact of these and other tours is taken up by Conrad Totman in *Japan's imperial forest, Goryōrin*, 18-23.

In some cases this language was borrowed directly from abroad. One treatise on *airin shisō* took as its starting point Theodore Roosevelt's statement that "a people without children would face a hopeless future; a country without trees is almost as helpless."³⁵ Yet just as often proponents of forest love thought also invoked Japan's seemingly timeless forest culture: its purported love of cherry blossoms, its long-standing afforestation traditions, its bamboo handicraft industry. Indeed, the same text that summoned the words of President Roosevelt was on the very next page plumbing the depths of the *Nihon shoki*, one of Japan's oldest written records, for evidence of its inherent love of the forest.³⁶ *Airin shisō*, in short, was both profoundly modern and rooted in antiquity. It allowed Japanese officials to cloak the practical imperatives of forestry in the rhetoric of universal progress while simultaneously nurturing a sense of distinctive national pride.

Ceremonial tree plantings assumed a special place in the public outreach campaign of these foresters. That the widespread promotion of Arbor Day came at the behest of an American, despite Japan's own centuries-long traditions of regenerative forestry, bespeaks the global inflections of the campaign. The initial catalyst for ceremonial tree plantings was the visit of the American minister Birdsey Grant Northrop (1817-1898) to Japan in 1893. A major proponent of Arbor Day in the United States, Northrop traveled to Japan to preach a message of afforestation, village improvement, and youth education—topics that he had championed during his time as a forestry advocate and educator in his native Connecticut. As a Protestant Minister, Northrop fused the holy gospel with the gospel of tree planting: he propounded a particular strand of

³⁵ Andō Tokio, *Tsūzoku kyōiku airin shisō* (Fukushima chō: Shōshiki Yōtatsu Shōkai, 1913), 1.

³⁶ Andō Tokio, *Tsūzoku kyōiku airin shisō*, 3.

Protestant environmental ethics that married the conservationist spirit with a deep-seated faith in the power of the lord.³⁷

These lectures caught the attention of Makino Nobuaki (1861-1949), then the Vice Minister of Education, who was himself a vocal proponent of forest management. Just a year before Northrop's visit Makino had opined that "forests are obviously vital to the national economy" such that the public must strengthen what he called "the spirit of loving the forest."³⁸ For Makino, as for other forestry officials, Northrop's message appealed on many levels: not only did it help to nurture a love of nation and a commitment to village improvement, it also reclaimed the landscape. It allowed common Japanese to express their love of nation by actively nurturing it, one seed at a time.³⁹

Northrop's message provided just the sort of framework for this initiative, and Makino soon began to lobby teacher's associations and other national institutions to set aside land for school forests and to implement ceremonial plantings as a means both to improve school finances and to mold the next generation of forest stewards. His appeal quickly gained traction. In 1895, the Meiji government began to allocate woodlands to schools for just this purpose; soon thereafter, local governments, with the backing of the Ministry of Education, began to implement a wide array of student-led afforestation activities.⁴⁰ As Takemoto Tarō has shown, this process grew over the coming years into the centerpiece of the effort to mold Japanese attitudes towards the management and

³⁷ Northrop's views on forestry can be found in Grant Birdsey Northrop, *Rural Improvement, 1880-* (Ithaca: University of Cornell Press, 2009 reprint).

³⁸ "Makino Nōshōmu daijin danwa," *Yomiuri shimbun*, July 20, 1892.

³⁹ Makino's views on forest plantations and school forests are outlined in Makino Nobuaki, *Kaikoroku* (Tokyo: Bungeishunjū, 1948).

⁴⁰ Okamoto Kikuko, "Meijiki Nihon bunkashi ni okeru kinen shokujyū no rinen to hōhō: Honda Seiroku 'Jusai zōrinhō' o chūshin ni," *Sōkadai bunka kagaku kenkyū*, Vol. 10 (2014), 69-97.

preservation of forest resources—a process that would in due course shape the trajectory of the forest love thought campaign pursued in colonial Korea.⁴¹

Makino soon enlisted none other than Honda Seiroku, a rising star in the world of forestry, to further preach the gospel of afforestation. In addition to writing *The Methods of Planting and Afforestation* (*Jusai zōrinhō*), a textbook that laid out the basics of school forestry, Honda undertook extensive fieldwork in one of Japan's first educational forests (*enshūrin*), woodlands set aside by the state for purposes of research, education, and training. He also encouraged teachers to take their students on excursions into the mountains and forests, where they would work together on afforestation projects and thereby nurture an enthusiasm for tree planting and the outdoors.

These developments marked yet another register of the nationalization of Japan's forests. While the national legal framework and re-drawn forest maps of the Meiji period were perhaps the most direct expressions of this process, the values inherent to forest love thought also marked significant shifts in the national consciousness regarding the relationship between the people, the state, and the forests. Cast in terms of the national good and a source of national pride, the conservation of forests became a civic duty and a form of service.⁴² At the same time, the manner in which Japan's professional foresters viewed their workplace—that is, their calculative instincts, scientific worldview, and

⁴¹ See Takemoto Tarō, *Gakkōrin no kenkyū: Mori to kyōiku o meguru kyōdō kankei no kiseki* (Tokyo: Nōsangyoson bunka kyōkai, 2009).

⁴² These developments are examined in greater detail in Nakashima Kōji, “Nationalism, colonialism, and the representation of nature: forest and country in the afforestation campaign in modern Japan,” in: *2nd International Critical Geography Conference*, ed., Korean Association of Spatial Environment Research (Daegu: Korean Association of Spatial Environment Research, 2000), 434-437.

managerial approach—also marked an important shift in forest administration, and it is to the academic pedigree and institutional networks of these foresters that we now turn.

Normalizing the Forests

The seedbeds of the Nishigahara nursery proved fertile soil for the growth of modern forestry practices in Japan. Established in 1878 on a small plot of land in the outskirts of Tokyo, Nishigahara was initially conceived as a space for the cultivation of foreign seeds and saplings to be used for the afforestation of the denuded regions of Japan. It was not long, however, before the space outgrew its initial purpose. By the early 1880s it had become one of Japan's first schools of forestry, where the tools and techniques of European silviculture were transplanted to Japanese soil.⁴³

At the helm of this institution was Matsuno Hazama (1846-1908), one of the earliest conveyors of the methods of German forest management in Japan. Matsuno was among the first cohort of Japanese to be sent abroad by the Meiji government to study European science. Upon completing his study at the Erbswalde Forestry Academy—one of the world's premier forestry schools—Matsuno returned to Japan where he was tasked by the Home Ministry with the establishment of the Nishigahara nursery. In this, he was joined by Nakamura Yaroku (1855-1929), who oversaw the instruction of a wide range of forest management topics and the dissemination of the German-style forestry he had learned during his studies at the University of Munich.

The institution grew alongside its saplings. In 1882 it became Japan's first forestry school (*Sanrin gakkō*) and was soon thereafter fused with the Komaba School of Agriculture, Japan's premier agricultural school, to become the Tokyo School of

⁴³ Uda Hanshirō, “Chūō ni okeru ringyō kyōiku kikan no enkaku,” in MRI, 232-236.

Agricultural Forestry (*Nōrin gakkō*). It was then absorbed by Tokyo Imperial University as Japan's first higher institution of forestry science and research.⁴⁴ The arrival in 1887 of Heinrich Mayr as a Professor of Forestry meant that the growing body of Japanese students of forestry no longer had to travel abroad to study under a German scholar of silviculture. Although his tenure in Tokyo was short, Mayr served as an important bridge to German ideas about forest management, vegetation, and ecology.⁴⁵ Germany, however, could not stake an exclusive claim as the fount of modern forestry practices; France also emerged as a regular destination for Japanese students of forestry, with Takashima Hokkai (1850-1931) studying at the Nancy School between 1885-1888—just one year before the arrival of Gifford Pinchot (who would go on to establish the United State's own Forest Service).⁴⁶

So it was that both at home and abroad the first generation of professional forestry bureaucrats was trained in the basics of forest management. While a wide range of subjects was taught in these institutions, they could be gathered under the intellectual umbrella of *rinseigaku*—the study of forest management—what one textbook called an academic technique to be used for “the forests and forestry as related to

⁴⁴ An inside look into this institution is offered by the following recollections: “Sanrin gakkō jidai yori Meiji 25-nen goro made,” *Meiji ringyō isshi: zoku-hen*, 1-70; and “Tokyo sanrin gakkō no omoide,” in MRI: *zoku-hen*, 261-291.

⁴⁵ Mayr himself was replaced by none other than Honda Seiroku, who joined the faculty upon his return from Germany, where he began his specialization in afforestation works. For a detailed analysis of his contributions and research agenda see Komeie Taisaku, “Kindai ringaku to kokudo no shokusei kanri: Honda Seiroku no ‘Nihon shinrin shokubutsutai ron’ o megutte,” *Kūkan, shakai, chiri shisō*, Vol. 17 (2014), 6-7.

⁴⁶ For biographical details see Shimazu Toshiyuki, “Chirigakusha toshite no Takashima Hokkai,” *Kūkan, shakai, chiri shisō*, Vol. 15 (2012), 51-75.

the nation and the enterprise of the people.”⁴⁷ Of central importance to this approach to forestry was the normal forest model: an outlook on forest management originating in Europe wherein each stand is measured and placed into rotation ages that ensure its regular and prolonged productivity. The normal forest model was precisely that: a model of how a forest could best be maintained to maximize sustainable yield. It was an ideal conception of woodlands wherein each parcel was situated within planning horizons that provided for consistent output. The task before the forester was thus not simply the protection and cultivation of forestland but the construction of a plan wherein each tree, parcel, and region could be reduced to a measurable whole.⁴⁸

Students traveled from various corners of the archipelago to Tokyo for immersion in this subject matter. The sixth child of a wealthy farming household, Honda Seiroku left his small farming community in the Sangamura region of Saitama prefecture to enroll in the forestry school in Tokyo largely due to the fact that when compared to other schools it was cheap. Although he had expressed interest in agricultural issues at a young age, Honda was scarcely familiar with forestry, and initially struggled to keep up with the basics, let alone the foreign language instruction.⁴⁹ Niijima Yoshinao’s path to the halls of the Tokyo Forestry School could hardly be more different. The first son of a direct retainer of the shogun, Niijima showed academic promise at an early age, and was enrolled in Nakamura Masanao’s prestigious Dōjinsha Academy, where he was groomed

⁴⁷ Honda Seiroku, *Rinseigaku: kokka to shinrin no kankei* (Tokyo: Honda Seiroku, 1894), 5.

⁴⁸ For a broad overview of this approach see Nakayama Tetsunosuke, *Nihon rinseiron: kisoteki kōsatsu* (Tokyo: Nihon Ringyō Chōsakai, 1974), chapter 1.

⁴⁹ Tōyama Susumu, *Honda Seiroku: Nihon no shinrin o sodateta hito* (Tokyo: Jitsugyō no nihon sha, 2006), 16.

to enter the ranks of the government bureaucracy. It was only after he entered the Department of Agriculture in 1888 that his interest in forestry took hold.⁵⁰

As diverse as the motivations behind their entrance into Tokyo Imperial University's forestry program were the area of specializations pursued by these pioneering foresters. Shirasawa Yasuyoshi, the son of a doctor, traveled to Tokyo in 1880 from Meiseimura in Nagano Prefecture, where he began to study new methods of tree cultivation, afforestation, and forest aesthetics (*shinrin bigaku*).⁵¹ Hongō Takanori, for his part, immersed himself in issues related to urban planning and green spaces. Together with Honda Seiroku, he drew up plans for what would soon become Hibiya Park.⁵² Erosion control (*sabōgaku*), forest protection (*shinrin hogogaku*), agricultural forestry (*nōringaku*): these and other specialization were pursued with increasing energy by foresters who sought to tackle the manifold challenges presented by Japan's landscape. In the process, many of these pioneering academic foresters spent time abroad at institutions in France and Germany.

This was much in the manner envisioned by officials in the Home Ministry, who viewed these institutions as breeding grounds for the next generation of forestry bureaucrats. Just as the Yale School of Forestry provided Gifford Pinchot with a vast majority of the foresters who would fill the ranks of the American Forestry Service, so the forestry school of Tokyo Imperial University began to churn out Japan's first

⁵⁰ Biographical details on Niijima can be found in Koseki Takayoshi, "Hokkaido ringyō to hokudai," *Hokudai hyakunenshi, Tsūsetsu* (1982), 790-794.

⁵¹ Shirasawa's biography is covered in Ōba Hideaki, ed., *Shokubutsu bunka jinbutusu jiten: Edo kara kin, gendai shokubutsu ni hagaserareta hitibito* (Tokyo: Nichigai Asoshieetsu, 2007), 66-70.

⁵² Hongō Takanori, "Zōengaku ni kokorozashi goro," *Teien to fūkei*, Vol. 17 No 2 (1935), 22-23; and Shinada Yutaka, *Toshi no shizenshi: ningen to shizen no kakawariai*, (Tokyo: Chūō kōron shinsha, 1974).

generation of government administrators—for posts at home *and* in the colonies.

Although many went on to fill the ranks of higher education, with Honda and Niijima assuming important teaching positions, a large contingent assumed positions in government ministries and local forestry institutions.

Perhaps no one embodied the ideal forestry official more than Saitō Otosaku (1866-1936). Born in 1866 in the Sekikawa region of Niigata Prefecture, Saitō entered the forestry school at Nishigahara in 1885. There he met Honda Seiroku, Kawase Zentarō, and other aspiring foresters who would become close friends and collaborators over the course of his career. Saitō’s connection with colonial forestry began in 1895 when, upon his graduation from Tokyo Imperial University, he was dispatched to the front lines of the Sino-Japanese War (then being waged in and around Korea forests) to survey woodlands for military purposes. Saitō spent the next decade crisscrossing the Japanese empire and its forestry institutions as an official for the Forestry Bureau of the Department of Agriculture and Commerce. In addition to conducting extensive research on domestic flood control, he spent a short stint in Taiwan, where he undertook surveys deep in the mountains of the island. Recalled to Japan, he continued to conduct research, especially as related to afforestation. In 1906, he was sent to Hokkaido to oversee forestry works and conduct research on forest regeneration. There he became close with Niijima Yoshinao, who had only recently assumed his post as Hokkaido Imperial University’s first professor of forestry. Before long, Saitō had earned a reputation as a versatile and

dedicated forester—one that he would bring with him to Korea, when he crossed to the peninsula in 1909 to take up a high-ranking post in the Bureau of Forestry.⁵³

Saitō was also a devout Christian. Baptized at the age of 25, he was a teetotaler and active member of his church. In this he was not alone. Niijima Yoshinao, too, found the church at a young age (through the proselytizing efforts of the Scottish missionary Hugh Wadell), and placed his religious beliefs at the heart of his outlook on forestry. Fusing religious fervor with a utilitarian outlook, both men viewed the conservation of the natural world as a mission infused as much with Christian ethics as with national pride. Saitō made no bones about his preference to hire religious men into the ranks of forestry service and actively sought out believers in Christ to staff the ranks of the Forest Management stations. While this was certainly not the case of the majority of foresters, something resembling a Protestant conservation ethic had emerged in Japan.⁵⁴

So, too, had an extensive network of professional foresters. By 1910 there were as many as 47 schools specializing in forestry, with two university programs offering graduate training in forestry science and administration. Prefecture-level schools also began to train local officials in the basics of forest management, offering training tailored to the particular challenges of each region of Japan. Forestry education also grew more specialized as the linkages between forestry and other modernizing initiatives such as

⁵³ This biographical information is derived from Takemoto Tarō, *Gakkōrin no kenkyū: Mori to kyōiku o meguru kyōdō kansei no kiseki* (Tokyo: Nōsangyoson bunka kyōkai, 2009), 160-191; Saitō Otosaku, “Arisan no shinrin no hakken,” MRI, 458-477; Saitō Otosaku, “Mine-ken chisui iken,” (Tokyo: Nōshōmushō, 1894); and “Sumiyaki ni tsuki mokuzai no kansou oyobi kaze no hōkō,” Dai Nippon Sanrinkai (1894); and Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” in *Chōsen ringyō isshi* [hereafter CRI], (Keijō: Chōsen Sanrinkai, 1933), 39-82; and Saitō Otosaku, *Ringaku kōwa hikki* (Tokyo: Naitō Onkodo, 1899).

⁵⁴ As quoted in Takemoto Tarō, “Shokuminchi ni okeru ryōkka undō seisaku no igi: Saitō Otosaku no ashi ato kara,” paper delivered at Kankyō seisakushi kenkyūkai (2012).

railroad construction, riparian projects, and erosion control were tightened.⁵⁵ Overtime, foresters began to concern themselves not simply with the basic mechanics of forest management but also with wider issues related to the development and exploitation of the soil: from forest ecology to lumber supply, from flood control to erosion control. Forestry, as a result, became the vehicle for much larger changes to the land.

Bald Mountain Expertise

Of all the specializations pursued by foresters, few were studied as enthusiastically as erosion control (*sabō jigyō*). Spurred in part by the growing calls from engineers and officials to leverage the insights of scientific forestry in riparian improvement projects, many foresters began to probe the relationship between regenerative forestry, land reclamation, and the improvement of water flow. While many worked within the expanding network of research stations, laboratories, and model forests, others began to be dispatched out to the field, where they worked in tandem with experts—many of them hired foreigners—versed in erosion and flood control techniques.

Although numerous small-scale local efforts to control erosion well predate the Meiji period, the first major stimulus to the scientific study and implementation of erosion control techniques came in 1873, when a group of Dutch civil engineers arrived in Osaka (at the invitation of the Meiji government's Department of Public Works) to draw up plans for the construction of a modernized harbor.⁵⁶ In the course of their

⁵⁵ Uda Hanshirō, “Chūō ni okeru ringyō kyōiku kikan no enkaku,” in MRI, 232-236.

⁵⁶ As far back as the 17th century provincial lords were erecting sand retaining dams using stone techniques and in 1863 the Tokugawa Shogunate issued a series of edicts that sought to tighten forest consumption and spur afforestation along the Yodo River. See also Roderick Wilson, “The Engineering of Japan’s Modern River Regime, 1600-1920, Ph.D. Diss., Stanford University, 2011; and Kensetsu-shō kinki chihō kensetsu kyōku, ed, *Yodogawa hyakunen shi* (Osaka: Kensetsu-shō kinki chihō kensetsu kyōku, 1974).

surveys the engineers grew increasingly concerned with the shallowness of Osaka Bay, and soon began to investigate its causes by tracing the rivers upstream. The denuded hillsides they subsequently encountered in the upper reaches of the Yodo River provided a new target for their engineering projects.

Soon thereafter, a team of engineers, led by Johannis De Rijke, began to experiment with a variety of retaining walls and plantation techniques designed to stabilize the soil. The crux of this approach was the construction of levees to redirect the flow of the rivers as well as the laborious creation of an entirely new river channel. It also, critically, called for the plantation of trees and other roots in the area as a means to pack in soil.⁵⁷ The plan commenced in 1887 and would not be concluded until 1912. While it cost the Meiji government no less than 9,740,000 yen, it was considered a resounding success. In addition to reducing the incidence of floods, the project increased arable land and improved agricultural productivity. Eager to replicate these results, the government passed in 1897 a comprehensive erosion control law, which established a national fund for erosion control works.⁵⁸

The success of the Kiso Reclamation project piqued the interest of many local government officials, including those in Aichi, Okayama, and Shiga Prefectures. It was there, according to Chiba Tokuji, that the greatest concentration of bald mountains and denuded hillsides in Meiji-era Japan could be found.⁵⁹ So dire was denudation in the

⁵⁷ For a detailed account of this project see Doboku gakkai, ed., *Nihon doboku shi: Meiji izen* (Tokyo: Iwanami Shoten, 1936).

⁵⁸ Doboku kenkyū shiryō hensankai, ed., *Nihon shisui shi* (Tokyo: Doboku kenkyū shiryō hensankan, 1918), 30-45.

⁵⁹ Chiba Tokuji, *Hageyama no kenkyū*, 148-173.

region that local government officials in Seto City reached out to the Tokyo Imperial University's Department of Agriculture for help.

This request nearly coincided with the arrival to Tokyo Imperial University's Department of Agriculture of Amerigo Hoffman, an Austrian forester with ample erosion control experience in his native Alps. After drawing up a plan per the local government's request, he traveled to the region in 1905 with some of his students, where they began to survey. As helpful as the lessons learned in Kiso may have been, they could not be simply transposed to Okayama and Shiga, where treeless mountains dominated the landscape. The level of denudation required a more aggressive approach, and, after selecting the Higashiinzcho district in the city of Seto (in Aichi Prefecture), Hoffman and his students set to work in constructing a new erosion control technique, what would soon be known as "the Hoffman method."

Based upon precedents in the Austrian Alps, Hoffman and his team began to construct a system of terraced steps along the region's mountain streams. In contrast to other methods, Hoffman did not focus principally on the plantation of trees, which was costly and time consuming. Instead, he built a complex graded system of dikes that served to even out the slope of hillsides and provided better conditions for plants to naturally take root and grow. His was a heavily engineered intervention—it brought concrete and modern engineering methods into the toolkit of foresters. And while this approach was not replicated in full, it came as a lesson to many officials that forestry and engineering were two sides of the same coin.⁶⁰

⁶⁰ For detailed descriptions see Ogawa Kiichirō, et al, "Rekishiteki sabō shisetsu no hozon katsuyō ni kansuru kisoteki kenkyū," *Dobokushi kenkyū*, Vol. 23 (2003), 229; and Doboku

Few forestry projects suggested a sense of the human control over nature quite like these erosion control undertakings. Involving massive amounts of money, labor, and building materials, these projects brought the state's considerable resources to bear on the landscape. In a basic sense, they represented the state's effort to mold the landscape in accordance with its own views of a productive ecosystem. These experiences left a deep impression upon many foresters dispatched to Korea, where the bald mountains discussed in the next chapter awaited the forester-engineer.

New Forests, New Puzzles

Hokkaido

As a laboratory for forest science, a large-scale experiment in land redistribution, and a routine assignment for forestry bureaucrats, the vast forests of Hokkaido in many ways formed a nursery for colonial forestry practices.⁶¹ Hokkaido was in a sense a widowed landscape: a frontier region whose forests had largely regenerated from the impact of the indigenous Ainu population, which had long been in decline.⁶² Described variously by government officials as a landscape “entirely of mountains and forests,”⁶³ of “untouched primeval forest,”⁶⁴ and, more recently, “a blank slate”⁶⁵ upon which forestry plans could be drawn, the vast stretches of remote wilderness presented unique

kenkyū shiryō hensankai, ed., *Nihon shisui shi* (Tokyo: Doboku kenkyū shiryō hensankan, 1918), 30-45.

⁶¹ For a broad overview of forestry policies in Hokkaido, with a focus on land redistribution and commercial felling see Koseki Takayoshi, “Hokkaidō ringyō no hatten katei,” *Hokkaidō Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 22, No. 1 (1962), 25-94.

⁶² Brett Walker, *The Conquest of Ainu Lands: Ecology and Culture in Japanese Expansion, 1590-1800* (Berkeley: University of California Press, 2006), chapter 3.

⁶³ Kaitakushi jigyō hōkoku henshū kyoku hen, *Katakushi jigyō hōkoku* (Sapporo: Kaitakushi jigyō hōkoku henshū kyoku hen, 1885).

⁶⁴ Hayashi Komanosuke, “Hokkaido no shinrin keiei,” in MRI, 383.

⁶⁵ Koseki Takayoshi, “Hokkaido no ringyō hatten katei,” 26.

challenges and opportunities to Japan's foresters. Although one should remain wary of comments from foresters that wrote the indigenous Ainu populations out of the landscape, there is no denying that the administrative challenges of forestry reforms were unlike the rest of Japan.

It was not simply its colder climate and distinctive ecology that set Hokkaido apart from the rest of Japan. The lack of longstanding land-use traditions and ownership claims was an equally distinctive feature of the forest landscape. In contrast to the rest of the Japanese archipelago (and in a similar manner to Korea, as we will see), Hokkaido was without a clear-cut system of land ownership, usufruct traditions, or land registration. Although the Ainu themselves had complex arrangements regarding land use, and had long exploited the landscape for fuel, shelter, and clothing, their exploitation of the forests was comparatively minimal and contained (and increasingly so with the spread of disease that hastened their decline). As a result, large swathes of woodlands were without the competing claims of ownership rights and communal use traditions that had long beleaguered foresters seeking to re-draw the maps of woodland ownership on the densely populated islands to the south.

As officials would come to learn over the coming decades, the relative absence of these forestry traditions was both a blessing and a curse. On the one hand, the absence of competing claims enabled foresters to pursue a much larger range of policy measures to develop, exploit, and reclaim forestland. On the other, it quickly became clear to forestry officials that the large-scale development of the land was contingent upon the labor of Japanese settlers and the investment of Japanese corporations. While enthusiasm for the

ample forest resources of Hokkaido's frontier was high, the resources of the still fledgling forestry service were inadequate to the task.⁶⁶

It was thus in Hokkaido that foresters were first confronted by some of the more vexing puzzles of modern, industrial forestry. How might foresters work in concert with corporations to develop forestry? What policies could be implemented to entice settlers, corporations, and capitalists to mold the landscape per their designs? How might they incentivize not only the development of the land but also the improvement of the forest? Questions such as these weighed heavily on the minds of the small cadre of foresters embedded with the Hokkaido Development Agency, the office at the helm of the early development of forestry in Japan's northern frontier. Established in 1869, the Development Agency first set out to promote immigration and land exploitation as a means to populate Hokkaido so as to fend off foreign claims to the contested frontier. The development of forestry, as such, was a secondary consideration to immigration and agriculture, the buzzwords of Hokkaido's development.⁶⁷

If the work of the Hokkaido Development Agency was closely entangled with immigration and settlement, it was also inextricably linked to the Sapporo Agricultural College: an educational institution established in 1875 in order to train officials and settlers in the modern agricultural techniques needed to develop the island. Although its curriculum was concerned principally with agriculture, many began to call for the development of forestry education as a necessary arena of additional training. Chief among these early advocates was William S. Clark (1826-1886), the American educator,

⁶⁶ Hokkaidō ringyō keiei kyōgikai, ed., *Hokkaidō sanrin shi. senzen hen* (Sapporo: Hokkaidō Ringyō Kaikan, 1983), chapter 3.

⁶⁷ For an overview of the creation of the Hokkaido Development Agency see Hokkaidōchō takushokubu, ed., *Hokkaidō ringyō shi* (Sapporo: Hokkaidōchō takushokubu, 1913), 1-11.

chemist, and agricultural expert who was hired by the Japanese government to oversee the establishment of the school and its faculty. Clark saw forestry as deeply connected with the College's mission of agricultural and frontier development—a lesson he had learned during his own graduate training in chemistry in Germany, where he came face to face with German forestry science. So determined was Clark to promote forestry education that he submitted to the Hokkaido Development Agency a proposal for the development of forest management in Hokkaido that called for, among other things, the promotion of forestry education at the Sapporo Agricultural College.⁶⁸

At first, officials sought to incentivize the immigration of farmers and soldiers from elsewhere in Japan to develop the land. In 1871, shortly after Hokkaido was placed under the oversight of the Development Agency, provisions were made for the transfer of arable land ownership to anyone who established permanent residence in Hokkaido. These were followed in 1872 with the passage of regulations on the buying and selling of land, which placed an upper limit of 100,000 *chōbu* of land per individual.⁶⁹ In the years until 1886, private ownership was extremely sparse, with just about 2,694 *chōbu* registered as privately owned forest, much of this on a fixed term lease. The first wave of exploitation was decidedly small scale. Carried out principally by farmers and soldiers (whom the Development Agency saw as the lifeblood of Hokkaido), the first decades witnessed but a slight uptick in forestry related activities. The earliest activities were in

⁶⁸ Although a formal forestry school would not be founded until 1907 (which was placed under the supervision of Niijima Yoshinao), it quickly began to churn out students who filled the ranks of the growing agencies responsible for forestry on the island. This letter can be found in Hokkaido sanrinshi, 106-108.

⁶⁹ Koseki Takayoshi, "Hokkaido ringyō to hokudai," *Hokudai hyakunenshi, Tsūsetsu* (Sapporo: Hokkaido University Press, 1982), 789-800.

fact the felling and clearing of large tracts of forestland for agricultural development. In the words of one forest historian, “the forests were an impediment to development.”⁷⁰

Although the appetite for Hokkaido’s timber products was growing in mainland Japan (especially for rail ties and other staple materials of Meiji modernization), large-scale, intensive forestry operations were slow to develop.⁷¹ The real impediment was infrastructure. While capital and able bodies had begun to make their way to Hokkaido, little in the way of roads and rails had materialized, making it difficult not only to exploit Hokkaido’s ample resources but also to entice the capitalists needed to finance such an undertaking. This is perhaps best evidenced by the flow of timber from Hokkaido to mainland Japan: in 1882 the total value of forestry products shipped out of Hokkaido was only 2,209 yen—a slight figure compared to the estimated value of available timber stock.⁷²

Before long, forestry officials began to call for an overhaul of forestry policy in Hokkaido. Due to these and other official concerns, the Hokkaido Development Agency’s forestry policies pivoted in the 1890s from the promotion of settlement to the enticement of capital. The passage of the 1897 Law on the Disposal of Wastelands in Hokkaido’s National Forests (*Hokkaido kokuyū mikaichi shobunhō*) marked a decisive watershed. The content of the law was groundbreaking: it made the reclamation of different forms of wastelands highly enticing to capitalists, who had the funds to enter into land lease agreements. In addition to entitling cooperatives and companies to twice

⁷⁰ As cited in Koseki Takayoshi, “Hokkaido ringyō to hokudai,” *Hokudai hyakunenshi, Tsūsetsu* (1982), 789.

⁷¹ *Hokkaidō ringyō keiei kyōgikai*, ed., *Hokkaidō sanrin shi. senzen hen*, 445-450.

⁷² Takayoshi Koseki, *Hokkaido no ringyō hatten katei*, 60.

as much land as individuals, it allowed a party to lease land free of charge for ten years with a guaranteed sale of one yen per 1,000 *chōbu* should the terms of the lease be met. The law also made special provisions for “large-scale projects” that sweetened the deal for big corporations.⁷³

And come they did. The arrival of corporate-backed surveyors and prospectors in the late 1890s anticipated the growth of large-scale private timber operations. Much to the delight of forestry officials, small corporations like the Kushiro Kōgyō Kaisha soon gave way to large corporations and conglomerates like Mitsui Holdings, Ōji Paper, and Fuji Paper. Enticed by favorable laws, preferential treatment, and the boom in demand that accompanied the Russo-Japanese War, these corporations assumed control over vast tracts of Hokkaido’s woodlands. In essence, the laws ensured that their reclamation of the land would entitle them to all future resources it could yield. Hastened by this land rush, Hokkaido’s state-owned forestland quickly diminished: where in 1886 there was 6,740,000 *chōbu* of state forestland, by 1912 this figure had been reduced to 3,670,000 *chōbu*.⁷⁴

Alongside the privatization of forest ownership was a series of land endowments. Of particular importance was the establishment in 1890 of imperial forests in Hokkaido: forestland placed under the oversight of the imperial household as a source of income. Another type of national forestland transfer came in the form of model forests (*enshūrin*), the first of which was granted in 1899 to the University of Tokyo, which used it as a

⁷³ Hokkaidō ringyō keiei kyōgikai, *Hokkaidō sanrin shi. senzen hen*, 89-91.

⁷⁴ Hokkaidō ringyō keiei kyōgikai, ed., *Hokkaidō sanrin-shi. senzen hen* (Sapporo: Hokkaidō ringyō kaikan, 1983), 230.

laboratory for a wide range of research activities. Hokkaido Imperial University was likewise granted its own model forest in 1901.

So it was that by 1905, around the time that Korea became a protectorate of Japan, a complex and highly innovative legal and bureaucratic architecture for forestland redistribution had been established in Hokkaido. Large-scale exploitation of forests was underway thanks in large part to the enticement of large corporations. Forestland ownership had also been cast into a system of bounded land parcels: state, private, and imperial forestland that resembled the rest of the archipelago.

Although far more complex than described here, some of these lessons and approaches shaped the forest management approach pursued in Korea. The land redistribution and settlement innovations in particular became important touchstones for Korea's forestry policies. That foresters such as Saitō would turn to them as a template for forestry reforms in Hokkaido underscores the formative nature of Hokkaido forestry. Perhaps the most enduring lesson of Hokkaido forestry was the realization that forestland reclamation could be outsourced to capitalists and corporate entities. Yet while many came away pleased with the growth of the private forestry industry in Hokkaido, the development of forestry in Taiwan offered a different set of lessons and a humbling reminder of the limits of the colonial state.

Taiwan

Acquired as a spoil of the Sino-Japanese War in 1895, Taiwan presented foresters with both ample forestland to survey and administer as well as a host of new policy questions. Japanese foresters wasted no time in setting up shop in Japan's first colony,

which many viewed as a new opportunity to display the merits of modern forestry.⁷⁵ In essence, the earliest phase of forestry in Taiwan rested on three principles: revenue generation, the involvement of non-state actors, and the political control of contested space.

From the outset of colonial rule, the forests of Taiwan were placed at the center of the effort to stabilize colonial finances. Finance, after all, was a major tenet of the lessons of colonial forestry, and many saw in Taiwan an opportunity to stabilize the colony and its coffers. Abundant in natural resources but largely undeveloped by previous ruling regimes, Taiwan's forests provided these foresters with an opportunity to showcase their skills in generating revenue and modernizing nature.⁷⁶ What is more, they sought to do so without the corrupting influence of Japanese capitalists and corporations. As Kuang-Chi Hung has shown, the colonial government eventually "issued a law from its highest court protecting Taiwan's forests from the destructive forces of 'capitalist entrepreneurs' from Japan."⁷⁷

If such was the dream of colonial foresters in Taiwan, it proved elusive. As would be the case time and again, the idealism of forestry in books and laboratories quickly ceded to the reality on the ground.⁷⁸ Initial financial and administrative setbacks forced the temporary closing of the Forestry Section. Eventually, forestry officials began to

⁷⁵ . Together with other officials, four forestry officials boarded the *Shibata Maru* on February 12, 1895 bound for the new colonial capital. See Hachinohe Micho, "Taiwan no ringyō," in MRI, 444.

⁷⁶ Hachinohe Micho, "Taiwan no ringyō," in MRI, 447.

⁷⁷ Kuang-Chi Hung, "When the Green Archipelago Encountered Formosa: The Making of Modern Forestry in Taiwan under Japan's Colonial Rule," in Bruce Batten and Philip Brown, ed., *Environment and Society in the Japanese Islands: from Prehistory to the Present* (Oregon State University Press), 175

⁷⁸ "Sanrin gakkō kara Taiwan zaishoku made," in MRI zokuhēn, 291-293.

reconsider their stance towards capitalists. After much deliberation and despite the ambivalence of some forestry officials, they began to source out much of the work of forest management to Japanese entrepreneurs.

The initial round of forest surveys conducted in Taiwan also threw into sharp relief the challenges that lay before them. Not only were many of the forests in a poor state, but the terrain was also less than inviting: malaria-ridden and inhabited by the so-called “uncooked barbarians” known for their contempt for colonial officials.⁷⁹ It follows that the colonial government struggled to assert its control over the forests. Forestry officials were at the center of this struggle. While trekking through Taiwan’s mountainous regions, a surveying party including Saitō Otosaku, for instance, was involved in a violent clash with an indigenous tribe. The subsequent pacification campaign launched by the colonial government offered to many officials their first taste of the staunch resistance by colonial subjects to the re-drawing of forest ownership boundaries that would take place across the empire.

The discovery of the forests of Ari Mountain (Alishan) in 1900 brought all of these issues to the foreground. Composed principally of large stands of cypress, the forests around Ari Mountain quickly captured the attention of colonial officials, who saw in the region an opportunity for a highly profitable forestry operation and a showcase for their methods.⁸⁰ It was thus at Ari Mountain where colonial forestry methods, capital, and the state were most conspicuously entangled. And disasterously so: according to Hung,

⁷⁹ For an account of these and other surveys see, e.g., Kada Naoji, “Taiwan no ringyō,” in MRI, 426-429.

⁸⁰ Saitō Otosaku, “Arizan shinrin no hakken,” in MRI, 458-477.

the Alishan forestry project soon became “the shame of Taiwan.”⁸¹ After years of investment and laborious installation of timber railways, the project was declared bankrupt in 1915, leading some commentators to question the value of state-led forestry.

Colonial forestry in Taiwan shaped the course of forestry reforms in a number of ways. Of particular importance is the fact that many among Japan’s first generation of forestry bureaucrats spent short stints in Taiwan, where many officials first wrestled with questions about pacification, land redistribution, colonial finances, and the promise and perils of corporate involvement in forestry reforms. Furthermore, whereas officials actively courted the participation of corporations in Hokkaido, many of those dispatched to Taiwan initially viewed corporate actors as a corrupting influence. In this sense, the case of forestry in colonial Taiwan highlights the diversity of opinions regarding forest management and the contingent nature of forest governance. The approaches to forestry honed in Japan and abroad were not universal or hegemonic. Rather, they were shaped by the environmental conditions, governing structures, and resource management imperatives found in each colony.

Karafuto

At the same time that forestry was taking off in the tropical forests of Japan’s first colony, a growing number of officials were calling for a renewed effort to tap into the northerly forests of Karafuto. Initially a small fishing outpost, Karafuto was viewed by many as Japan’s northern treasure house: what Tessa Morris-Suzuki calls “a place of

⁸¹ Kuang-Chi Hung, “When the Green Archipelago Encountered Formosa: The Making of Modern Forestry in Taiwan under Japan’s Colonial Rule,” 182-184.

almost boundless, if ill defined resources.”⁸² Undoubtedly, timber was among them.

Growing demand for timber resources and the natural expansion of operations in Hokkaido prompted a wave of surveys in Karafuto, with the first comprehensive survey conducted between 1906 to 1908, almost exactly the same time that surveyors were dispatched to Korea.⁸³

It was not in fact until 1909 that large-scale forestry was commenced, with Mitsui Bussan the first to set up shop. While the timber industry grew considerably over the coming years, it would undergo a rapid transformation in the late 1910s when both government- and corporate-backed researchers determined that Karafuto’s forests were of great utility for the then rapidly growing paper and pulp industry. Naturally endowed with tree species ideal for pulp production—namely, white fir and spruce—Karafuto became the resource reserve of the then burgeoning industry. A number of corporations vying for an edge in the growing pulp market (including Ōji Paper and Fuji Paper) hastened to set up shop in Karafuto.⁸⁴

Thus, what began as a conventional felling operation became the site of an innovative new application of forestry. Harnessing new techniques in chemical production and new technologies for timber processing, these companies began to ramp up the production of pulp. And as exploitation of Karafuto’s forests increased, so too did the demand for afforestation projects, which began in 1906 with the establishment of a nursery in Odomaricho. One of the major challenges was how to afforest in the

⁸² Tessa Morris Suzuki, “Northern Lights: The Making and Unmaking of Karafuto Identity,” *The Journal of Asian Studies*, Vol. 60, No. 3 (2001), 648.

⁸³ The surveyors placed the initial estimate of forest coverage on the island around 3,000,000 chō. Karafuto ringyō-shi hensankai, Karafuto ringyō shi (Tokyo: Ozorosha, 2005 reprint), chapter 1.

⁸⁴ Katafuto sanrin kyoku, ed., *Karafuto rinsei 30-nen shi*, (Karafuto sanrin kyoku, 1936).

northernmost climatic extremes of the empire—an issue that would be taken up by foresters in northern Korea as well.⁸⁵

The most salient feature of forestry in Karafuto for our purposes, however, was the rise of the Ōji Paper Company, which steadily gained control over the pulp industry, and with it the forest resources of Karafuto. Two aspects of Ōji Paper merit consideration here. The first is the highly innovative nature of their forestry practices in Karafuto. Using cutting-edge chemical engineering and a novel production model, Ōji emerged as a corporate pioneer of industrial forestry. Not only did it harvest trees; it processed pulp, rayon, and other chemical products that fueled the industrialization of other regions of the empire.⁸⁶ The second feature is Ōji Paper's growth into a trans-imperial corporation, whose control over and appetite for forest resources stretched beyond Karafuto into Korea and Manchuria as well. Using strategic tactics such as mergers and cartel behaviors, Ōji not only aggrandized its market position, but also absorbed processing plants, factories, and supply chains whose forestry operations grew in tandem with the empire.⁸⁷

In Karafuto and Ōji, then, we see the emergence of Japan's transnational forestry operations: those that would emerge as vital pipelines for the empire-wide circulation of natural resources. In Karafuto, forestry was not simply a matter of sustainable yields and forestry policy. Rather, it was closely entwined with the vicissitudes of transnational industrial production and the growing demand for the chemical products that would

⁸⁵ Andō Kazuji, "Karafuto no ringyō gaiyō," in MRI, 484.

⁸⁶ Ōji Seishi Kabushiki Kaisha, ed., *Ōji Seishi shashi* (Tōkyō: Ōji Seishi Kabushiki Kaisha, 2001).

⁸⁷ A detailed economic history of the pulp and paper industry is Shinomiya Toshiyuki, *Kindai nihon seishigyō no kyōsō to kyōchō: Ōji seishi, Fuji seishi, Karafuto kōgyō no seichō to karutera katsudō no hensen* (Tokyo: Nihon keizai hyōronsha, 1997).

increasingly be extracted from Japan's colonial forests. Once viewed as sources of timber and fuel, Karafuto's forests were re-cast as reserves of pulp and, later, other chemical components that corporations could harness through innovative forestry practices and processing procedures. Karafuto thus offered many foresters a hard look at the changing demands of the market and the relationship between science, technology, and forest management.

Conclusion

By the time of the establishment of a protectorate over Korea in 1905, the forests under the control of the Japanese empire stretched from the tropical Taiwan in the South to the temperate Karafuto in the north. As this chapter has shown, these forests were not simply ecologically diverse; each presented Japanese foresters with a unique set of policy challenges, environmental considerations, potential partners, and political constraints. Where capitalists were viewed as close collaborators in Hokkaido, they were skeptically tolerated in Taiwan, and powerful actors in Karafuto. And where in Hokkaido the opening of land for agriculture was the initial imperative of forestry, in Taiwan it was the stabilization of colonial finances, and in Karafuto the extraction of resources for industrial purposes.

And yet, for all the peculiarities of each forested region and each colonial bureau, a number of forces bound these territories into a common framework. The first and most obvious was the market itself. With the acquisition of new colonial territories, forest resources were channeled into the growing network of resource flows—and transported on the roads, shipping routes, and railways—that sustained Japan's empire. Different resource reserves in different corners of the empire were wired into the industrial

circuitry of the empire: Karafuto pulp, Hokkaido timber, Taiwanese camphor, Korean pine.

Also binding these disparate forestry projects together was the common language of professional forestry—the cameralist approach to forest management emanating out of the forestry schools of Europe and taught diligently in the growing institutions of forestry education in Japan. Increasingly, too, forestry was cloaked in the mantle of national progress, and its inverse: national decline. Forestry was cast as a hallmark of national progress and forest resources considered the foundation of industry and development. And while it was incumbent upon the forester to maximize yields and preserve a balance of nature so as to prevent national decline, it was also accepted that forest management was only as good as the society around it. This rhetoric was only amplified in Korea, where deforestation was widespread. It became both a means to justify Japan's civilizing mission in the colonies and a way to signal Japan's place among the first rank nations of the world.

A final potent force shaping what might be called the professional outlook of Japan's forestry bureaucrats was the fact that these officials were actively in conversation one another. Bound together by academic and governmental institutions, these foresters routinely shared their experiences and debated the proper course of forest management. Many of these conversations happened in private, through letters, meetings, and conferences. But these experiences were also often shared through the trade publications and research bulletins that took shape around the forestry enterprise. It was in the pages of these bulletins that foresters debated how best to tailor their experiences to meet the

demands of Korea's landscape. And it is to images of that landscape—both real and imagined—that we now turn.

CHAPTER 2

Korea, Green and Red

As the principal treaty port and trading post of Korea, Pusan formed for many among the first wave of diplomats, traders, and settlers their first window upon the Korean landscape. And while many different facets of life in the coastal city captured the attention of these travelers, almost all of them took note of the extensive denudation of the mountains surrounding the area. One did not even have to set foot on Korean soil to gain a sense of the deforestation that dominated the landscape. “The scenery of Korea as witnessed from the deck of a steamer,” wrote the American missionary Homer Hulbert, “is very uninviting, and it is this which has sent so many travellers home to assert that this country is a barren, treeless waste.”¹ And the Reverend E.W. Koons:

The traveller who coasts, as many of us have done, along the shores of this Peninsula, and finds only desolate, rain scarred hill-sides, will decide even before he has set foot on the land, that he can dismiss “Forestry” from his note-book with the single entry, reminiscent of the well known chapter on “Snakes in Ireland,” “There is no Forestry in Korea.”²

Perhaps Percivall Lowell best captured this line of thinking when he noted from the deck of his ship that, “One’s first idea of Korea is as of the spirit of desolation made visible.”³

This desolation was no less visible to Japanese observers. Among the first to relate the deforestation surrounding Pusan to Japanese readers was the geographer Masanaga Yazu, who encountered in the early 1890s “bald mountains as far as the eye can see”—the result, he wrote, of the “absence of a forest protection system and the

¹ Homer B. Hulbert, *The Passing of Korea* (New York: Doubleday, 1906), 12.

² E.W. Koons, “Afforestation in Korea,” 36.

³ Percival Lowell, *Chosön: Land of the Morning Calm, A Sketch of Korea* (Boston: Ticknor and Company, 1886), 35.

overcutting of forests.”⁴ Yongdusan, the site of a centuries-old crown forest just outside Pusan, presented evidence to contrary. But for most travelers this verdant swatch only sharpened the contrast. In the words of Shiozaki Yūichirō it offered in its rows of “old and rich evergreen pines a pleasant sight for eyes that have grown accustomed to the dreary landscape of the bald mountains of Korea.”⁵

The portrait beyond the treaty port was if anything bleaker. Indeed, to travel on the railway connecting Pusan to Seoul was to pass through what George Trumbull Ladd called “repetitious” terrain:

Each mile, while in itself interesting and possessed of a certain beauty due to the rich coloring of the denuded rock of the mountains and of the sand of the valleys, which are deprived of their natural green covering by the neglect to bar out the summer floods, was very like every other of the nearly three hundred miles between Fusen and Seoul. Here, as everywhere in Korea, there was an almost complete absence of any special interests, either natural or human, such as crowd the hills and valleys of Japan.⁶

To Ladd, the most notable feature of the landscape was not so much brown denudation as it was the red topsoil: a distinctive coloration of the soil brought about by Korea’s geological composition and the intensive erosion that followed torrential floods. Countless other travelers would have a similar impression as they gazed upon the landscape through the window of this railway, the principal artery of the nation’s still-limited transportation infrastructure. Even Terauchi Masatake (1852-1919), the Governor-General himself, was saddened by the “chains of bald mountain peaks” he saw streaking by the train window when he first traveled from Pusan to the capital to assume his duties in 1910. He later identified this “scenery of degradation” as “a source of

⁴ Masanaga Yazu, *Chōsen shiberia kikō* (Tokyo: Maruzen, 1894), 11.

⁵ Shiozaki Yūichirō, *Saishin no Kan hantō* (Osaka: Aoki Sūzandō, 1906), 9.

⁶ George Trumbull Ladd, *In Korea with Marquis Ito* (New York: C. Scribners Sons, 1908), 19.

Korea's withering (*suikoku no in*).⁷ As the forestry official Watanabe Toyohiko would later put it, "bald mountains are a feature of Korea, you could even call them Korea's famous feature (*meibutsu*)."⁸

In the eyes of Japanese travelers, Korea's bald mountains were both less and more than mountains. As Ide Shōichi put it, "It has been said that there are no mountains in Korea. Perhaps you cannot say that Korea is without mountains, but mountains truly resembling mountains are lacking."⁹ The larger ecological implications of deforestation underscored this point: "Looking out the train window to see in all directions to see treeless, bald mountains and washed out and destroyed fields," wrote Arakawa Gorō, "would give anyone the impression that Korea was a land without mountains or rivers."¹⁰

At the same time, Korea's bald mountains were more than mountains in the sense that they stood as windows into Korean customs, values, and environmental ethics. As one *Handbook to the Colonies* stated, "since long ago the people of the peninsula have had no knowledge of afforestation...their historical custom was to cut the tree, burn it in cold months as fuel in the *ondol*, and build a tomb for the departed where the trees once stood."¹¹ Nor, in the eyes of some, were Korea's mountains a passive backdrop. Ishida Shintarō, for one, maintained that the Korean temperament was "unconsciously influenced by the mountains rivers, and natural features": "You could say that the forests wield an especially potent influence [over Koreans], but currently the mountains have

⁷ This episode is related in Gotō Fusaji, "Chōsen no ringyō," in MRI, 505.

⁸ "Sanrin gyōsei," in Mizuta Naomasa, ed., *Watanabe Toyohiko kōgyōtsu, Chōsen sōtokufu kaikodan* (Tokyo: Yūhō Kyōkai, 1984), 39.

⁹ Ide Shōichi, *Chōsen no jitsujō* (Tokyo: Kōyūsha, 1910), 60.

¹⁰ Arakawa Gorō, *Saikin chōsen jijō*, 32.

¹¹ Zenkoku shinbun rengōsha, ed., *Nihon shokumichi yōran* (Tokyo: Nihon keizai shinshisha, 1922), 31

been stripped of their elegance down to bald mountains and tracts of barren land can found in each region.”¹² It was thus imperative, he argued, that the influence of Japanese settlers and their enlightened practices run alongside the influence of nature. He called upon the settler community to serve as leaders in the effort to restore Korea’s mountains and rivers to what they once were.

Undergirding this environmental determinism was the belief that conservationism was part and parcel of “civilization and enlightenment” (*bunmei kaika*)—the slogan of Japan’s modernization project. If, as Peter Duus has argued, “the Japanese constructed images of the Koreans that denied them parity with the Japanese through asymmetrical comparisons measuring Korean backwardness against Japanese modernity,” their relationship with the natural world proved a critical point of comparison.¹³

That Japan was a country abounding in forests only threw Korea’s deforestation into sharper relief. Korea became in the eyes of many travelers an ecological foil to the green archipelago: “The peninsula,” wrote Homer Hulbert, with its “bare hill-tops, which appear everywhere,” formed an “unwelcome contrast to the foliage-smothered hills of Japan.”¹⁴ Nothing in fact served to render this contrast in starker—or more public—terms than the poetry of the Korean Crown Prince, Yi ȏn, who, upon completion of his high-profile 1907 tour of Japan, opened a commemorative poem with the following line: “The mountains of Japan are green, but the mountains of Korea are red.” Had it been penned by anyone else (or even just a few years earlier), it would have likely fallen into

¹² Ishida Shintarō, “Dōkasaku yori mitaru Taiwanjin to Chōsenjin,” in *Chōsen oyobi Manshū no kenkyū* (Keijō: Chōsen zasshisha, 1914), 89.

¹³ Peter Duus, *The Abacus and the Sword*, 399.

¹⁴ Hulmert, *The Passing of Korea*, 11.

obscurity. But because it came on the heels of his highly publicized tour of Japan, where he was paraded around by Japanese officials as a symbol of Korea's submission to Japan, the press seized on the verse. Over the years to come it was routinely offered by Japanese officials as evidence of the long history of the Korean government's failure to curb deforestation.¹⁵

It was not colors alone that alerted the traveler to the dire state of Korea's deforestation. The smell of the smoke hanging over Korea's large cities also threw into focus the human behaviors that had achieved such a despoiled landscape. "All day long," wrote the British adventurer Isabella Bird Bishop, "bulls laden with brushwood to a great height are entering the city, and at six o'clock this pine brush, preparing to do the cooking and warming for the population, fills every lane in Seoul with aromatic smoke, which hangs over it with remarkable punctuality."¹⁶ In this way, observed another traveler, "the Korean populace, to the number of thousands of old men, women, and boys, with hundreds of bullocks and ponies, are engaged in exterminating the future forests in order to provide themselves with fuel, of which they will not be persuaded to make economical use, and which they cannot dispense with so long as their present tastes and contrivances for heating themselves and cooking their food are not changed."¹⁷ By highlighting the actions of Koreans—from the farmer collecting the fuel to the urban elite burning it—

¹⁵ See, for instance, OKG (penname), "Chōsen no shinrin wa sakebu," *Chōsen*, Vol. 176 (1930), 39-30; and Andō Tokio, *Tsūzoku kyōiku airin shisō* (Fukushima chō: Shōshiki Yōtatsu Shōkai, 1913).

¹⁶ Isabella Bird Bishop, *Korea and Her Neighbors: A Narrative of Travel, With an Account of the Recent Vicissitudes and Present Position of the Country* (New York: Fleming H. Revell Co., 1898), 41.

¹⁷ George Trumbell Ladd, *In Korea with Marquis Ito*, 306-307.

comments of this sort served to harden the perception that Koreans of all stripes were the drivers of their own ecological demise.

Yet, for the adventurous few who traveled beyond the confines of the port towns and capital city, the red barren soil often gave way to a strikingly verdant landscape. The thick forests straddling the Yalu River were particularly arresting. “The commercial possibilities of the region,” wrote Angus Hamilton,

which lies between the Ta-dong River and the water-shed of the Yalu, are in the earliest stages of development. Much might be predicted of the returns which these new fields would yield to intelligent exploitation. Its groves of pines and firs, and acres of woods, recall the time when Northern Korea was one vast forest.¹⁸

Based on cursory assessments Korea’s northern forests were cast as seemingly bottomless. One British diplomat described them as “of almost unlimited extent, [with] pine trees rivaling those on the banks of the Amur and on the opposite coast of the Pacific.”¹⁹ Taki Kumejirō—who would in due course acquire large tracts of forestland in Korea through his fertilizer company—was shocked to see (again, through a train window) “an inexhaustible supply” of “rich stands of forest in Northern Korea” that were promising as much for their fertilizer as their timber.²⁰ As they penetrated further inland, Japanese travelers began to speak of Korea’s *daishinrin* or great forests—a term long reserved in Japan for the remote woodlands of Akita and Aomori.²¹ As one guidebook put it, “In Korea, any mountain truly resembling a mountain, mountains with trees atop

¹⁸ Angus Hamilton, *Korea: Its History, Its People, and Its Commerce* (Boston: J.B. Millet Company, 1910), 186.

¹⁹ William Richard Carles, *Life in Corea* (Boston: Macmillan, 1894, reprint), 110.

²⁰ Taki Kumejirō denki hensankai, ed., *Taki Kumejirō* (Tokyo: Taki Kumejirō denki hensankai, 1958), 226-228.

²¹ For a description of these peaks as *daishinrin* see Ide Shōichi, *Chōsen no jitsujō*, 164.

them, the place that makes Korea a true mountain country, all are to be seen in the north of Korea.”²²

Perhaps no one captured both the promise and the peril of Korea’s forest landscapes better than Isabella Bird Bishop, who wrote in 1889 that

The denudation of the hills in the neighborhood of Seoul, the coasts, the treaty ports, and the main roads, is impressive, and helps to give a very unfavorable idea of the country. It is to the dead alone that the preservation of anything deserving the name of timber in much of southern Korea is owing. But in the mountains of the northern and eastern provinces, and specially among those which enclose the sources of the Tu-men, the Am-nok, the Tai-dong, and the Han, there are very considerable forests, on which up to this time the wood-cutter has made little apparent impression, though a good deal of timber is annually rafted down these rivers.²³

The above passage in many ways distills the Janus-faced portrait of Korea’s landscape that would emerge over the coming decades: Korea as a land of squandered bald mountains yet with vast primeval stands in the north. For visionary officials, the bounty of the north stood as a reminder of what Korea’s forests once were—and what in some places they could become.

It was the latter concern that weighed heavily on the minds of the first cadre of foresters dispatched to Korea at the turn of the century to survey its forests. While for many of the travelers mentioned above the denudation was a mere aesthetic blemish, for these foresters it was a pressing political, economic, and ecological problem. Where previous accounts offered passing references about the state of the forests and Korean nature, these surveyors set out to fashion the Korean landscape into the quantifiable metrics of forest management.

²² Zenkoku shinbun rengōsha, ed., *Nihon shokumichi yōran*, 89.

²³ Isabella Bird Bishop, *Korea and Her Neighbors*, 17.

Surveys were not simply an expression of the calculative instincts of the scientific forester. They were also a strategy on the part of the Japanese government to gain a foothold in the then hotly contested hinterlands of Korea. For while the Japanese had a genuine interest in gaining access to these ample natural resources, the unveiling of Korea's wilderness was concomitant with a scramble for timber concessions in the region. In the Yalu River basin, a heated battle unfolded between the Russians, Chinese, and Japanese for control of Korea's timber resources—and with them hegemony of affairs in Korea. This scramble for felling rights brought a wide range of actors into Korea's woodlands for the first time: lumbermen, military advisors, and petty laborers, in addition to professional foresters. It was against the backdrop of imperial rivalry that concrete images of the peninsula and its forests first took shape.

Well before an image of Korean forests unfolded on the planning documents, maps, and ledgers of colonial foresters, it took shape in the dispatches of travelers, diplomats, and government surveyors. This chapter traces the emergence of ideas about Korean nature that informed such writings throughout the colonial period—both in Korea and in Japan. It does so in two principal ways: first, by means of a detailed examination of the government-backed surveys; and second, through a reading of newspapers, ethnographies, travel guides, booster publications, and a wide array of materials meant for the general public.

Timber Wars

On the eastern bank of the Taedong River in the outskirts of P'yōngyang one can see many large willows that have been shot through by cannon and gunfire. On the roadside one can also see that mulberry is planted. In an area resembling a small hill north of P'yōngyang Castle there is a growing stand of beautiful Red Pine, which amounts to 2-3 *chōbu* in size. This is probably rarely seen in this region. Within the Kwansō administrative office of P'yōngyang, it is rare to see fir of a height of three *jō*. Sometimes, north of P'yōngyang up to Anju, you can

see mountain forests that stretch to up to more than 1,000 *shaku*. The further north you get the less damage you see. In an area around Sukch'ón and Anju, the hills and mountains are in a state of collapse. These red pine forests can be spotted but there is no use for them.²⁴

Written in 1895 from the front lines of the Sino-Japanese War, the above description of Korea's woodlands marked a significant departure from previous accounts. In stark contrast to the casual commentary of the itinerant traveler, this account was infused with detailed observations and precise calculations about Korea's forest composition. This was in keeping with the training that its author, Saitō Otosaku, had received at Japan's premier forestry school. It was also consistent with the expectations of readers of the Bulletin of the Japan Forestry Association, Japan's flagship forestry journal, who received through this dispatch "the first ever sketch of Korea's forests" written by a professional forester.²⁵

Saitō's dispatch cast a wide net in order to understand the past and present condition of Korea's forests: from the construction of the home to Korean-style axes, from forest composition to the effects of war on the landscape. Saitō effectively presented Korea's wilderness as a repository of forest resources. Given that he was writing in his official capacity as a Second Lieutenant embedded with the Japanese Army, this should come as no surprise: his principal responsibility was to investigate the provisioning of the Japanese military with timber and fuel.

Saitō was not alone in his effort to appraise Korea's forest resources. From Russian merchants to American diplomats, a large group of foreigners had their eyes

²⁴ Saitō Otosaku, "Zai Chōsen ringakushi Saitō Otosaku-shi no shodan," *Dai nippon sanrinkaihō*, Vol. 146 (1895), 68-69.

²⁵ Joung Ha-Hyun and Nagata Shin, "Kindai Kankoku rinya seido ni okeru kokuyū, minyū kubun no keisei katei," *Ringyō keizai kenkyū*, No. 127 (1994), 156.

fixed squarely on Korea's northern timber reserves. The turn of the 20th century in Korea were indeed marked by a complex and contentious negotiation of timber rights between foreign interests in the region.²⁶ Although prior to 1876 Korea's timber resources had been closely guarded by the Chosŏn state, the provisions forcibly established by the Kanghwa Treaty opened the gates for international commerce—including lumbering operations. Enticed by new business opportunities and the prospect of new resource reserves, foreign merchants and governments quickly began to jockey for concessions and trade agreements from the Korean government. Together with mining and railroad concessions, timber-felling rights formed a focal point of this commercial diplomacy.²⁷

The scramble for timber concessions was touched off in April 1884, when two American traders, James R. Morse and Walter D. Townsend, sought and received rights to harvest lumber from Ullüng Island, a well-wooded island about 120 kilometers east of the peninsula that had long been coveted for its rich hardwoods and favorable location for continental trade. They did so through Kim Ok-kyun (1851-1894), a Korean official and pro-Western reformer then visiting Tokyo to secure a loan from the Japanese government. Like many other foreign on-the-spot businessmen, Morse and Townsend hoped to seize upon the newly opened markets and commercial opportunities in Korea.²⁸

²⁶ For a broader assessment of concession diplomacy and a brief discussion of these timber disputes see Peter Duus, *The Abacus and the Sword*, 104, 181-182.

²⁷ For a detailed discussion of this diplomatic back and forth see Park Bella, "Russia's Policy Towards Korea during the Russo-Japanese War," *International Journal of Korean History*, Vol. 7 (2005), 29-52; and Asakawa Kan'ichi, *The Russo-Japanese Conflict: Its Causes and Issues*, (Boston: Houghton Mifflin, 1904), 46-47.

²⁸ Based in Yokohama, Morse was eyeing the Japanese market for hardwoods, and found a good source in Korea. A detailed account of this transaction can be found in Harold Cook, "Walter D. Townsend: Pioneer American Businessman in Korea," *Transactions of the Korea Branch of the Royal Asiatic Society*, Vol. 48 (1973): 74-103.

But their rights to the island, it turns out, were not exclusive. Shortly after Morse inked his deal with Kim, it came to light that a British trader, J.F. Mitchell, also had a contract to fell timber on the island. Takasu Kenzō, president of the Osaka-based Kyōdō Shōkai trading company, soon followed suit, leading to a protracted legal suit that eventually entangled diplomatic officials from each country involved.²⁹ An agreement was eventually reached whereby each party was allowed to fell and sell enough timber to cover the expenses incurred and a small commission, but bitter feelings persisted.³⁰ For the foreign powers, this episode augured the diplomatic conflict and imperial rivalry that was to take shape in and around Korea's forests. And for Korean government officials, this was but the first of many waves of anxiety that were stirred up by timber diplomacy. It was only a prelude to the timber conflicts to come.³¹

Diplomatic negotiations regarding timber concessions resurfaced in 1896, when King Kojong, then in hiding in the Russian Legation, received Iulii Ivanovich Briner, a Russian merchant based in Vladivostok. Eager to tap into the timber reserves around the Yalu and Tumen River Basins, Briner pressed for exclusive rights for a timber operation in the north, as well as on Ullüng Island. His efforts proved fruitful. He received from the Korean government (under "extremely favorable terms") exclusive rights to fell timber on the Korean side of the Yalu and Tumen River basins as well as Ullüng Island for

²⁹ These negotiations are detailed in Pak Sōng-jun, "1880-nyöndae Chosön ūi Ullüngdo pölmok kyeyak ch'egyöl kwa pölmokkwon ūl tullössan kakkuk kwa ūi kaltüng," *Tongbuga yoksa nonch'ong*, Vol. 43 (2014), 117-148.

³⁰ In the meantime, Japanese timber bandits conducted illegal felling operations that stripped the island of much of its coveted timber. See "Ururundo no zakki," in CRI, 247-250.

³¹ Harold Cook, "Walter D. Townsend: Pioneer American Businessman in Korea," 86; "Ul-leung Do" *Korea Review*, Vol. 6 (August 1906), 281-285.

twenty years, provided that the Korean Government, then eager to create new revenue streams, retain ownership of one fourth of the company and reap one forth of its profits.³²

Briner's business acumen, however, outstripped his resources. Unable to raise the capital needed to implement the terms of his agreement with the Korean government, he had little choice but to sell off his concession, which was soon placed under the oversight of a small group of Russian speculators and businessmen, Aleksandr Bezobrazov chief among them.³³ This group in turn received the financial backing of the Russian Government itself, which saw in the endeavor an opportunity to further assert its interests in Korea. To facilitate the effort, the Russian government established in 1901 (using funds allocated personally from Tsar Nicholas II) its East Asia Development Company. Envisioned from the outset as "Russia's East India Company," the East Asia Development Company formed the principal vehicle for the Russian penetration of the Yalu River region. Under the banner of the East Asia Company, the Russians set out to push the boundaries of their sphere of influence in the East.³⁴

³² For a detailed analysis of these negotiations see Kang Yǒng-sim, "1905-1910-yǒn ilche ūi taehan samlim chōngch'aek hyōngsōng kwa samlim ch'imt'al," *Ehwa sahak yǒn'gu*, Vol. 23 (1997), 141-144. English-language translations of memorandum regarding Russian timber policies in Korea can be found in the appendix of Aleksey Kuropatkin, (A.B Lindsay, trans.), *The Russian Army and the Japanese War*, (New York: P. Dutton and Company, 1909), 306-313.

³³ A useful summary of these negotiations from the American perspective can be found in "Northern Timber Concessions and Increasing Tensions, April 24, 1903," Dispatch No. 604-605; and "Cable No 612, May 26, 1903, Horace Allen to Sec. of State" in George McAfee McCune, ed., *Korean-American relations, Vol. 3, The period of diminishing influence, 1896-1905* (Honolulu: University of Hawaii Press, 1989), 102-114.

³⁴ Bezaobrazov and his colleagues soon began to seek timber concessions for themselves, as Russia further penetrated the region in the wake of Boxer Rebellion by securing concessions from the Chinese government on the other side of the Yalu River. Although the Russians conceded to international demand not to seek a monopoly on timber rights along the Yalu, they doubled down on their resolve to use the Yalu River Timber Company as an instrument of political influence in the region, especially as a bulwark against the growing Japanese threat. See, e.g., J.A. White, *The Diplomacy of the Russo-Japanese War* (Princeton: Princeton University Press, 1964).

Felling operations of the Yalu River Timber Company began in earnest in May 1903. The nerve center of this operation was Yongamp'o—a site that, while far from the actual site of timber operations, was of tremendous strategic importance as a shipping location. In effect, the Yalu River Timber Company erected in Yongamp'o an enclave from which it could project power and assert interests over the region and its resources. Although much of the labor was performed by Chinese contract workers, some of the laborers were actually Russian soldiers in disguise, who began to buy up land and further aggrandized their position in this highly contested region. The Russians were also aggressively surveying the region, seeking detailed information about Korea's forest composition, potential railway routes, and the location of other foreign parties. In due course, they began to erect telegraph poles between Yongamp'o and Ŭiju—all without the consent of the Korean government.³⁵

It goes without saying that Japanese officials, to say nothing of Japanese merchants, were less than pleased with actions of Russians along the Yalu. In addition to filing formal protests with the Korean government, the Japanese government began to dispatch their own agents into the field to counteract the growing influence of the Russians. Timber merchants like Musashi Kumatarō were among them. Working through the Ministry of Foreign Affairs, the Japanese government began to underwrite logging operations in Korea, which were deemed by Foreign Ministry officials to be the vital

³⁵ Detailed accounts of this process can be found in Ōryokkō saibōki kōshi, ed., *Ōryokkō shinrin oyobi ringyō*, (Tokyo: Ōryokkō saibōki kōshi, 1915), 20-31; and Nishida Mataji and Nakamuta Gōrō, *Ōryokkō ryūiku shinrin sagyō chōsa fukumeisho* (Tokyo: Nōshōmushō sanrinkyoku, 1905), 3-8.

interests of the state and critical to national security.³⁶ The driving force behind these measures were the joint Japanese-Korean forestry companies that bought up the rights for felling from local Korean and Chinese merchants and landowners. As Nagai Risa has shown, these included the Seoul-based Nisshin Yoshimori Kōshi and the Tōa Mokuzai Kabushiki Kaisha, both of which formed proxies for Japanese interests.³⁷ The inking of a joint timber enterprise with the Chinese in 1903 came in part at the behest of the Foreign Ministry, which saw the venture as an opportunity to counter Russian influence in the region. The Japanese acquisition of rights to construct the Seoul-Üiju Railway—the principal artery between the capital and the northern region—only amplified the strategic imperative underlying the northern region of Korea.³⁸

Before long, reporters and diplomats alike were writing of a “Yalu River Crisis”: a simmering antagonism between Japanese and Russian proxies over their assertion of rights in and expansion into the Yalu River basin and its forests.³⁹ Their position bolstered by the Anglo-Japanese Alliance, Japanese officials, led by foreign minister Hayashi Gonsuke, began to press for the opening of the ports in Üiju and those along the Yalu River. They threatened, moreover, to send troops to the region so as “to preserve the

³⁶ See, e.g., Gaimushō, ed, “Nihon gaikō bunsho,” Vol 36, No 1. (Nihon kokusai sōgō kyōkai kan, 1956), Nos. 668, 679, 680. A detailed analysis of the Foreign Ministry’s role in backing forestry operations, as gleaned from Imperial Diet meetings regarding the conclusion of a forestry agreement with the Korean government in 1907, can be found in Rinyachō, eds, “Kokuyū rinya jigyō no tokubetsu kaikei hōritsu hōshi,” *Ringyō keiei kenkyūjo kenkyū hōkoku*, Vol. 3 (1965), 77-82. For critical analysis of these diplomatic exchanges see Cho Jae-gon, “Pürinerū samlim ikwǒn kwa Ilbon ūi taeǔng,” *Yoksa wa hyonsil*, Vol. 88 (2013), 303-338; and Kim Won-su, “Amnokkang wigī wa Ro-II chōnjaeng,” *Sōyang sahak yōn’gu*, Vol. 23 (2010), 115-141.

³⁷ See Nagai Risa, “Taiga no shōshitsu,” 54; and Ōzaki Mito, *Ōryokkō Man-Kan kokkyō jijō* (Tokyo: Maruzen, 1910), 228-240.

³⁸ These policies were discussed in fine detail at an imperial diet meeting held on January 27, 1911, the minutes of which can be found in “Kokuyūrinya jigyō no tokubetsu kaikei hōritsu hōshi,” 210-211.

³⁹ See, e.g., “Chōsen appaku seraru,” *Tokyo Asahi Shimbun*, May 8, 1903.

territorial integrity” of Korea. This rivalry came to a head in when Russians authorities in Yongamp’o refused to concede to international demands that they withdraw troops beyond the Yalu. Although the “Russian refusal to abandon the settlement at Yongamp’o” was, by one assessment, “the match which lighted the great conflagration” that was the Russo-Japanese War, timber conflicts fanned the flames.⁴⁰

The swelling of the Yalu due to heavy rains in the summer of 1903 compounded these tensions. As a result of the deluge, unmarked logs that had been stockpiled by various parties upstream were swept into the river’s currents, mixing the timber of different groups. This touched off a dispute over which logs belonged to which parties when they arrived downstream. Russian merchants soon began to plant Russian flags on knots of timber. Convinced that their competitors were claiming more than their share, Japanese merchants followed suit.⁴¹ In planting their flags on the timber, they were staking claim to much more than the value of its wood.

Silva Incognita

It was against the backdrop of this geostrategic rivalry in northeast Asia that Japan’s first official surveys of Korea’s forests unfolded. Although the Japanese had by the turn of the century a basic sense of the composition and distribution of Korea’s forests in a few select areas of strategic importance (such as the port towns to which settlers and traders were largely confined), Japanese officials lacked a comprehensive

⁴⁰ E.W. Koons, “Afforestation in Korea,” 35.

⁴¹ According to Yumi Moon, “When tens of thousands of cubic feet of timber drifted down the river in June, 1903 from Chasong to Ŭiju, where Yongamp’o was located, Russians planted Russian flags on the floating timber on the riverside of Yongamp’o. In response, Musashi placed Japanese flags on the timber that the Russians had not flagged.” See Yumi Moon, *Populist Collaborators: the Ilchinhoe and the Japanese Colonization of Korea, 1896-1910* (Ithaca: Cornell University Press, 2013), 83-85.

portrait of the peninsula as a whole. Detailed information regarding the highly contested and coveted timber-rich areas of the north—the “great forests of the Yalu River Basin”—was especially scarce.

For these and other reasons, Japan’s Ministry of Agriculture and Commerce commissioned in 1902 the first ever silvical survey of Korea: a first-hand account, based upon several months of fieldwork, of the conditions, physiognomy, and distribution of forests across the entire peninsula. To carry this out they tapped Tanaka Kiyoji, a seasoned forester who worked within both Japan’s Bureau of Forestry and the Ministry of Agriculture and Commerce. Tanaka had considerable experience as a forest surveyor in Japan’s largest state forests—experience that, as Fujita Yoshihisa has pointed out, was instrumental in shaping his own view of Korea’s forests and their history.⁴²

Tanaka departed for Korea on May 5, 1902. On arriving in Pusan he was joined by Miyajima Takio, a high-ranking bureaucrat in Japan’s Bureau of Forestry. Together, the two men set out for Seoul. For Tanaka, this marked the beginning of a long and meandering journey through the Korean peninsula; for Miyajima, it was but one leg of a longer journey to northern China, where he intended to carry out research into the Chinese timber market.

The going was rough from the outset. Equipped with only meager geographical intelligence and hobbled by Korea’s limited infrastructure, they made slow progress to the Korean capital. This, however, gave Tanaka ample time to soak in his surroundings. The area surrounding Taegu, he noted, was heavily deforested, while the Ch’ungju region

⁴² A fine-grained analysis of this survey that retraces Tanaka’s route and critically interprets his findings is Fujita Yoshihisa, “Kyū kankoku jidai no chōsen ni okeru shinrin shigen to rinya riyō: ‘Kankoku shinrin fukumeisho’ kara no fukugen,” *Aichi daigaku kokusai mondai kenkyūjo*, Vol. 84 (1988), 1-33.

was one of “denuded mountains and red hills.”⁴³ But whereas previous travelers had offered mere impressions of these bald mountains, Tanaka recorded along his journey detailed descriptions of tree species, distribution, and quality. Particularly striking to Tanaka during this early stage of his trip was the preponderance of red pine (*akamatsu*)—a tree species that (thanks to Honda) was then notorious as a symbol, if not vehicle, of environmental collapse.⁴⁴

Tanaka and Miyajima parted ways in Seoul, with plans to rendezvous in Ŭiju after Tanaka had completed his survey of the northern provinces and Miyajima his more detailed survey of the Yalu River Basin and Pyong’ān Province. Together with an interpreter, Tanaka proceeded to cut an easterly path through the center of the peninsula towards Wōnsan. Along the way he discovered impressive stands of Korean pine. But he also came face to face with another defining feature of some of Korea’s forested landscapes: the burnt-out aftermath of swidden (or slash-and-burn) agriculture. While trekking through the mountainous outskirts of Hoeyang County in Kangwōn Province he discovered large tracts of scorched earth: the aftereffects of the slash-and-burn traditions of Korea’s *hwajōnmin* (J: kadenmin), migrant cultivators who burned, cut, and tilled their way through large stands of remote woodlands. The concern expressed by Tanaka over the deleterious practices of these communities would be echoed and amplified over the decades to come.⁴⁵

⁴³ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho* (Tokyo: Nōshōmushō sanrin kyoku, 1903), 5.

⁴⁴ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 2.

⁴⁵ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 9-10.

As Tanaka boarded a ship in Wǒnson a few days later that would deliver him northward along the coast to Sōngjin, he was surely curious to see how a land so depleted of its forests could transform into the ample forestland known to take shape along the Yalu River. The answer, however, would have to wait. Shortly after departing from Sōngjin, Tanaka was thrown from his horse and broke his arm, forcing him to return to Wǒnson, where he recuperated for several weeks. His hopes of exploring the great forests of the north dashed, he reigned in his ambition and traversed an easier route to P'yōngyang. But even as he made his way north, bald mountains and the aftermath of slash-and-burn agriculture remained pervasive.⁴⁶ That deforestation was so pronounced even in the northern regions of Korea slightly deflated his expectations. But he remained confident that the more remote regions assigned to Miyajima were spared of this denudation.⁴⁷ He was also quick to take note of the presence of Chinese timber merchants, headquartered just across the Yalu River, who had established a strong foothold in the region and a tight grasp on its timber markets.⁴⁸ This claim was strongly corroborated by Miyajima's own report on the timber market, which underscored the vital role played by the booming timber trade centered in Andong on the Manchurian side of the Yalu.⁴⁹

Tanaka quickly wrote up and submitted to his superiors in the Ministry of Agriculture and Commerce a summary report of his findings, which was duly published

⁴⁶ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 22.

⁴⁷ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 101.

⁴⁸ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 71-72.

⁴⁹ Miyajima Takio, *Shinkan ryōkoku shinrin shisatsu fukumeisho* (Tokyo: Nōshōmushō sanrinkyoku, 1905), 348-352. Miyajima, for his part, also offered his assessment of Korea's forests, but his interests were principally in the market dynamics of China, the study of which comprised a vast majority of his report.

in 1903. His account went well beyond a simple technical profile of the forest; it touched up Korea's geology, hydrology, demography, urbanization, and many other forces shaping the past and present condition of forest vegetation in Korea. Despite its limitations and Tanaka's own biases, it stands as a landmark account of Korea's natural history and a revealing window on the interests and impressions of the professional forester in a foreign landscape.

His account was above all else an exegesis on Korea's deforestation—the current status, history, and larger ramifications of Korea's denudation. Particularly noteworthy is the fact that Tanaka took great pains to highlight the cascading ecological and economic effects of Korea's deforestation. As he saw it, deforestation spelled disaster not simply for the forests, but for the waterways, agricultural fields, fisheries, and industries of the nation. To Tanaka, the erratic nature of Korea's waterways was perhaps the most acute problem raised by deforestation; the incidence of flood and drought and the challenge of irrigation management formed a grave threat to national development.⁵⁰

Although Tanaka identified many drivers of deforestation, he placed particular emphasis on the drain of forests resources to Korea's urban areas—the grass, thickets, and branches that hovered above the city in smoke. According to Tanaka, it was the pressure placed on the landscape by the dense population of the south, above all else, that explained the prevalence of bald mountains in the region.⁵¹ Slash-and-burn agriculture was likewise identified as pernicious problem that required immediate reform.

If, according to Tanaka, the actions of Korean farmers drove deforestation, the inaction of Korean government officials allowed this sort of behavior to run rampant. But

⁵⁰ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 94-95.

⁵¹ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 90.

while Tanaka emphasized the negligence of Korea's officialdom, he, unlike many, did not simply write off forestry as non-existent in Korea. To the contrary, he offered a comprehensive categorization of forest administration, which he reduced to five types: "commercial, military, household, official, and temple."⁵² Tanaka drew an especially sharp distinction between Official Forests ("those which has been designated for official use") and Private Forests ("areas of forest that are under the ownership of individuals"). It was in this crude bifurcation of forestland that Tanaka erred most significantly in his assessment of Korea's woodlands. As Fujita Yoshihisa has argued, Tanaka was essentially projecting onto the Korean landscape the conventions of Japan's own national forest administration. His conflation of public forests with national forests obscured the traditions of village-level communal rights and the considerable diversity of forestland use arrangements. Like any surveyor, Tanaka viewed the landscape through the lens of his own experience and institutional knowledge.⁵³

So, too, did Tanaka overestimate the extent of deforestation across the peninsula. After estimating that Korea contained roughly 15,000,000 *chōbu* of forestland, Tanaka asserted that "one third of Korea's forests contains trees, but the other two thirds are bald mountains."⁵⁴ Tanaka went on to observe that "the five provinces of Kyōngsang, Chōlla, Ch'ungch'ōng, Kyōnggi, and Hwanghae are largely bald mountains and grass patches; in the three provinces of Kangwōn, Hamgyōng, and P'yōng'an there are still many stands of

⁵² Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 40.

⁵³ See Fujita Yoshihisa, "Kyū kankoku jidai no chōsen ni okeru shinrin shigen to rinya riyō: 'Kankoku shinrin fukumeisho' kara no fukugen," *Aichi daigaku kokusai mondai kenkyūjyo*, Vol. 84 (1988), 1-33.

⁵⁴ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 31.

trees.”⁵⁵ Sketchy though it was, Tanaka’s account further enhanced perceptions of Korea’s landscape as one of barren, denuded wastelands but for a few rich, remote stands of timber.

That he remained so sanguine about the potential of the timber industry in the north without having seen much of it with his own eyes further highlights the speculative nature of his account. True to his training as a professional forester, Tanaka waxed enthusiastic about the potential for the growth of the industry and the positive benefits it would bring not only to Korea but also to Japan. He supported this position with a number of optimistic conclusions: that great profits could be reaped from timbering ventures; that little capital was necessary; that there was a strong market for timber in northern China; and that the establishment of institutions for sale was relatively simple.⁵⁶ Although Tanaka’s findings were meant principally for his higher-ups in Tokyo, these points would soon become kindling used by colonial boosters and bureaucrats to ignite interest in Korea’s timber industry.

This was but one of a number of ways that Tanaka’s survey prefigured the principal frames through which Japanese commentators and foresters would approach Korea’s forestlands for many decades to come. His broad distinction between the north and the south, his fascination (and frustration) with the prevalence of red pine, and his comments on the perils of common lands would all be recycled innumerable times over the coming years as Japanese set out to reform the conditions and reconfigure the administration of Korea’s woodlands.

Silvics, North and South

⁵⁵ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 31-32.

⁵⁶ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 74.

Carried out in 1902, shortly before the tensions between Japan and Russia boiled over into all-out war, Tanaka's survey did much to illuminate both the opportunities and challenges presented by Korea's mountains and forests. But the outbreak of the Russo-Japanese War in 1904 necessitated new and more detailed knowledge of Korea's forest composition. With the armies coming into conflict throughout the northern peninsula, Korea's woodlands took on newfound strategic importance—as diplomatic concessions, as military provisions, and as battlefields.

In addition to spurring the construction of strategic maps of Korea's interior for military planning purposes (*ryakuzu*), the Russo-Japanese War prompted the Japanese military to begin extensively exploiting Korean timber for its own purposes.⁵⁷ It likewise proved a boon to knowledge production about Korea's forests. More and better-trained surveyors were deployed into still more distant regions of the peninsula, especially into the rugged areas of the northwest. Surveyors systematically worked their way through the entire peninsula, paying special attention to the Yalu and Tumen river areas—forested lands that were not only resource rich but also strategic fault lines in the rapidly intensifying skirmishes between Russian and Japanese troops.

The war also raised the prospect that Japan, should it prevail, might in due course assume responsibility for the administration of Korea's forests—a prospect that increasingly seemed a reality as Japan struck successive blows against the Russian military. It was thus not long before the Ministry of Agriculture and Commerce set into motion a more comprehensive surveying campaign in Korea, one that would not only fill

⁵⁷ For a detailed discussion of the larger map-making enterprise in this period see Kobayashi Shigeru, ed., *Kindai Nihon no chizu sakusei to taiheiyo chiiki: gaihōzu e no apurōchi* (Osaka: Osaka Daigaku Shuppankai, 2009), 131-181.

the gaps of the surveys of Tanaka and Miyajima but also lay the groundwork for the future takeover of forest management in the region.

Given the sensitive nature of their work, the four foresters tasked with this second round of surveys received their official orders through word of mouth only. They crossed to Korea where, in the summer of 1905 they split into three units. Dōke Atsuyuki, a seasoned forestry official, was dispatched to the south of Korea, where he surveyed beginning in July 1905 the six southernmost provinces of the peninsula (including Cheju island). Nagakura Junichirō, a forest manager and government official, was tasked with a survey of the northern region of Korea, which he conducted from Kyōnggi to Kangwŏn Provinces. Aiming to fill in the gaps of knowledge of the Yalu and Tumen River Basins, Nagata Shōkichi (then a superintendent of one of Japan's state forests) and Nishida Mataji (a high ranking forester in the Bureau of Forestry) were both dispatched to the Chinese borderland, where they would try to penetrate the remote, mountainous regions to see green Korea for themselves.⁵⁸

Their findings in many respects confirmed what Tanaka had already suggested: that the extreme denudation of the south presented a host of environmental problems. Their conclusions surely underscored for many officials back in Tokyo the gravity of the management challenges that awaited them. But it was Nishida and Nagata's assessment of the forests of the Yalu that was of greatest interest. After traveling from Pusan to Seoul, the two men boarded a ship in Inch'ōn and headed to the mouth of the river. Their

⁵⁸ On the progress of this multi-pronged survey effort see Fujita Yoshihisa, “Kyū Kankoku jidai matsu no chōsen ni okeru shinrin shigen no hyōka to keiei kanri puran: ‘Kankoku shinrin chōsasho’ ni arawareta nihongawa kara no bunseki,” *Aichi Daigaku kokusai mondai kenkyūjo*, Vol. 87 (1989), 1-40; and Fujita Yoshihisa, “Kyū Kankoku jidai makki no Hokkan chihō ni okeru shinrin shigen no bunpu to mokuzai seisan puran: Hokkan Shinrin Chōsasho ni yoru bunpu,” *Aichi Daigaku kokusai mondai kenkyūjo*, Vol. 9 (1993), 1-44.

progress up the Yalu basin pushed them further and further away from areas under Japanese control.⁵⁹ Under the protection of Japanese military escorts, they eventually made their way deep into the forests at the foot of Mt. Paektu, some of which were under the control of mountain bandits (*bazoku*). But they, too, were in for disappointment: in the remote Samsu and Kapsan counties they discovered not dense forest but vast swatches of burnt out forest floor. Although healthy stands could be seen in more inaccessible regions, the scars of slash-and-burn agriculture—amplified as the war displaced more and more farmers—were widespread. In some areas, the great forests of the Yalu had been reduced to stumps.⁶⁰

The findings of these surveys were published in multiple forms.⁶¹ Most concise was the initial *Summary Report of the Korean Forest Survey*, submitted to the Ministry of Agriculture and Commerce in December 1905.⁶² This in turn was published for public consumption the following year in two separate editions with the addition of numerous photographs, providing pictorial evidence of the denuded state of Korea's forests. The report on the southern forests also included a map of forest distribution, the first ever attempted.

Not surprisingly, this survey yielded a far more nuanced portrait of Korea's forests. Although the surveyors were once again struck by the prevalence of bald

⁵⁹ Nishida Mataji and Nagata Shōkichi, *Hokkan shinrin chōsasho* (Tokyo: Nōshōmushō sanrinkyoku, 1906), 4-8.

⁶⁰ Nishida Mataji and Nagata Shōkichi, *Hokkan shinrin chōsasho*, 5.

⁶¹ Their findings were published in two separate reports: Dōke and Nagakura's *Nankan shinshirin chōsasho* (1906) and Nishida and Nagata's *Hokkan shinrin chōsasho* (1906). These were consolidated and republished as the *Kankoku shinrin chōsasho* (Tokyo: Nōshōmushō sanrinkyoku, 1906).

⁶² Nōshōmushō sanrinkyoku, ed., *Kankoku shinrin chōsasho tekiyō* (Tokyo: Nōshōmushō sanrinkyoku, 1905).

mountains, they also demarcated a number of substantial stands of timber outside of the Yalu and Tumen basins, including those on the island of Cheju and around Mt. Chiri, a mountainous area long placed under the protection of the crown. Dōke and Nagakura went further to provide a breakdown of different types and categories of denudation. According to their final report, Korea's forest areas—which they estimated amounted to seven million *chōbu*—could be sorted into four principal types: established stands (which amounted to 10 percent); forests in the midst of regeneration and requiring protection (60 percent); bushes and brush in need of artificial reforestation (20 percent); and totally denuded lands where afforestation will prove difficult (10 percent).⁶³ When compared to Tanaka's rough calculation that as much as two-thirds of the landscape was comprised of bald mountains, this more detailed assessment was a significant improvement, and points up foresters' immediate concern with afforestation works. The authors also elaborated on Korea's traditions of swidden agriculture by highlighting how Korea's population growth and mountains slopes facilitated the burning off of forests.

On the whole, however, the second wave of surveys reinforced many of Tanaka's key findings. Like Tanaka, the surveyors of 1904-1905 cast their gaze well beyond the realm of the forests themselves to appraise the deleterious effects of deforestation on fisheries, the supply of charcoal and fuel, military defense, mining, and drinking water. Deforestation, the authors noted, contributed to the debasing of Korea's climate, which caused floods and dried up water sources, leading in turn to water scarcity, timber shortages, an undersupply of fuel, and an assortment of related problems. Not surprisingly, the surveyors placed particular emphasis on the lack of forest related

⁶³ Dōke and Nagakura, *Nankan shinrin chōsasho*, 17-18.

resources (especially timber and charcoal) for Japanese settlers. The authors expressed pointed concern that scarcity of wood for building residences and coal for heating the home would hobble the Japanese way of life in Korea.⁶⁴

The state of the north as appraised by Nishida and Nagakura was especially alarming. Based upon extensive surveys and on-site measurements, the report scaled down the extent of the Yalu forests. Rather than discovering the edenic forest that had been elevated in the Japanese imaginary, these foresters encountered many regions where the damage of slash-and-burn agriculture climbed high up the mountain slopes. To evidence this, the authors included numerous photographs of the scope of Korea's fire fields. Although they did find a number of "fine quality" stands of larch and birch around the base of Mt. Paektu, especially in Samsu, Chasōng, and Huch'ang counties (the heart of the future timber industry), the scope of the damage wrought by slash and burn came as a major disappointment.⁶⁵ The area around the Tumen River basin was damaged to the point where they encountered no significant stands other than those in Musan County.

In the updated versions of their reports, the surveyors offered a number of explanations for what had achieved such a despoiled landscape. Some of these harmful forces identified by these foresters (such as slash-and-burn and the damage of war) were etched into the landscape. But others (such as the failure of the Yi Dynasty to regulate common forestlands, the inadequacies of land ownership traditions, and issues related to everyday consumption) were less obvious.⁶⁶ Regarding the latter issue, these surveyors

⁶⁴ This point is explored in detail in Fujita Yoshihisa, "Kyū Kankoku jidai matsu no chōsen ni okeru shinrin shigen no hyōka to keiei kanri puran: 'Kankoku shinrin chōsasho' ni arawareta nihongawa kara no bunseki," *Aichi Daigaku kokusai mondai kenkyūjo*, Vol. 87 (1989), 1-40

⁶⁵ Dōke and Nagakura, *Hokkan shinrin chōsasho*, 9.

⁶⁶ Dōke and Nagakura, *Nankan shinrin chōsasho*, 20.

highlighted the condition of Korean farming communities and their burning practices, which they considered an important engine of deforestation. Although these surveyors offered little in the way of concrete evidence to support some of these conclusions, their judgments about the limits of Chosŏn period forestry, the flaws of village-level consumption patterns, and the bad habits of farming households nevertheless gained traction over the years to come.

These surveyors also offered a number of policy recommendations. They recommended that forestry in the north be better developed to supply timber elsewhere, and the attendant infrastructure be developed. The authors called for the establishment of “plantation forestry” in and around towns and cities to alleviate the burden placed on the mountains (especially in the areas around Seoul, P’yōngyang, Pusan, and Taegu).⁶⁷ They recommended importing resources from Japan to alleviate any short-term shortages. Finally, and perhaps most critically, they called for the nationalization of forestland and comprehensive reforms to forest management, much like those implemented in Japan. The idea was to initially create a monopoly on the forest resources of the Yalu through state management as a means to gain access to both Korea and Manchuria and eventually create a lumber industry connected with Japan. To do so, the authors routinely turned to the model in place for the Japanese industry in the homeland. The surveyors went so far as to offer concrete details—from pricing to distribution to labor supply—in order to put forward an actionable plan for state management of Korea’s forests.

⁶⁷ Dōke and Nagakura, *Nankan shinrin chōsasho*, 16.

In the wake of these ambitious national surveys came a slew of more focused inquiries: a study of the dynamics of the urban timber market in China and Korea⁶⁸; an investigation of the forest composition of the Paektu Range⁶⁹; an investigation of the labor force and mechanics of forestry along the Yalu River Basin.⁷⁰ Interest in the ecological conditions of the peninsula, of course, was not peculiar to foresters. From agronomists to engineers, the Japanese government also dispatched a wide range of experts to Korea to investigate its prospects for mining, fisheries, and other resource management projects.

Implicit in all of these reports was the belief that a strong state intervention was in order. Indeed, whatever the discrepancies in their accounts and data, all of these surveyors advocated for the assertion of state control over forest resources and the consolidation of forest management—precisely, some argued, what the Korean government had failed to do. As we will see, these reports in many ways influenced, if not presaged, the policies pursued by foresters as Japan gained further control over markets, politics, and woodlands in Korea.

Popular Perceptions

At the same time that these surveys were underway, Korea's forests were beginning to assume a larger place in the Japanese geographical imagination. Fueled by the growing settler community, swelling Japanese nationalism, an expanding timber industry, and a vibrant print culture, popular commentary on Korea's landscape in

⁶⁸ Nōshōmushō Sanrin Syoku, ed., *Shinkan ryōkoku oyobi Taiwan kakuchi shijō mokuzai shōkyō chōsasho* (Tokyo: Nōshōmushō Sanrin Kyoku, 1909)

⁶⁹ Imagawa Tadaichi, *Hakutō sanmyaku rinkyō chōsa fukumeisho* (Tokyo: Nōshōmushō Sanrin Kyoku, 1905).

⁷⁰ Nōshōmushō Sanrin Kyoku, ed., *Ōryokkō ryūiki shinrin sagyō chōsa fukumeisho* (Tokyo: Nōshōmushō Sanrin Kyoku, 1905).

general and forests in particular proliferated. Increasingly, too, the information collected by the government spilled beyond bureaucratic reports to shape popular perceptions of the nature of Korea as well as the nature of Koreans.

Newspapers, magazines, and periodicals formed a vital conduit for the circulation of information about Korea's forests. Both in the homeland and in the colonies, the rapidly expanding popular press offered a wide range of information about the promise and perils of the Korean landscape. As a space for boosters to spread the gospel of the Korean timber industry, colonial officials to inform the public of impending reforms, and settlers to convey their experiences to the broader public, the pages of newspapers offered a window on the lay of the land in Korea.

Thanks in large part to the Yalu River Crisis, the great forests of northern Korea appeared early and prominently in the Japanese popular press. Although these reports offered but a sketch of the ecological conditions of the region, they drew attention to the fact that northern Korea was endowed with the ample reserves of timber—so much so that nations were coming to blows over them.⁷¹ Other articles drew attention to the first efforts to afforest in Korea, going so far as to suggest that, despite the challenges of getting trees to take root in eroded granite rock, it is “an effective and profitable undertaking” and a worthy individual pursuit.⁷² By and large, though, for readers based in Japan, these sorts of descriptions were few and far between.

⁷¹ See, e.g., “Shinrin saibatsu mondai no kōhō,” *Asahi Shimbun*, May 1, 1903; “Shinrin bassai mondai no yurai,” *Asahi Shimbun*, April 29, 1903; and “Kankoku shinrin tokubetsu kaikei hōan,” *Asahi Shimbun*, January 21, 1907.

⁷² “Kankoku no ringyō,” *Asahi Shimbun*, August 31, 1907.

Such was not the case for the community of Japanese settlers to Korea, which had grown from around 15,000 in 1900 to over 170,000 by 1910.⁷³ The Japanese vernacular press grew in tandem with this community. Initially confined to the treaty ports, settler papers grew into bona fide dailies that touched upon a wide range of issues that figured in the everyday lives of settler communities. Although subject to close censorship by the Government-General, they nevertheless offered readers the latest on local politics, including those related to forestry.

The *Keijō Nippō*, one of the largest Japanese-language dailies, ran a wide range of coverage on forest policy: from the progress of forest surveys⁷⁴ to announcements for lectures on forestry⁷⁵ to the latest on the timber market.⁷⁶ Less descriptions of Korea's forests than explanations of forestry policy, the accounts in these and other papers offered settlers a sense of the coming shifts in forestry administration. More than anything else, they conveyed to Japanese settlers hard data on forest composition that reinforced with scientific precision perceptions of environmental decline.⁷⁷

As new policies and publication platforms emerged, dry policy descriptions gave way to more pointed criticisms. Especially after the passage of the ill-fated Forestry Law in 1908, which touched off a set of sweeping reforms, newspapers and magazines became a platform for debate. The Wando Affair, for example—a highly public scandal over the duplicitous dealings of forestry officials, journalists, and metropolitan businessmen

⁷³ These statistics are derived from Jun Uchida, *Brokers of Empire: Japanese Settler Colonialism in Korea*, 65.

⁷⁴ “Rinseki chōsa no chakushu,” *Keijō nippō*, March 10, 1910.

⁷⁵ “Sanrin sōkai to chōsen,” *Keijō nippō*, April 5, 1911.

⁷⁶ “Nikkan mokuzai kyōsō,” *Keijō nippō*, April 8, 1910.

⁷⁷ See, e.g., “Rinsei konpon hōshin,” *Keijō nippō*, February 17-24 (serialized).

(discussed in the next chapter)—prompted an outcry from the settler community, who often viewed the cozy ties between colonial officials and Japanese capitalists as undermining their commercial interests.⁷⁸

Some Korean scholars and reformist elites also emerged as energetic commentators on forestry matters. Champions of Korea's pursuit of *munmyōng kaehwa* (“civilization and enlightenment”) and often members of study groups such as the Korean Society for the Advancement of Learning (*Taehan hūnghakhoe*), these reformers took to the pages of a various Korean-language journals, magazines, and bulletins to call for a new era of modern forestry.⁷⁹ Yi Chong-il, for instance, a member of the reformist Taehan Hyōhoe, anticipated the rhetoric of later colonial officials when he wrote that “the management of forest resources is a source of national strength.” He called upon Koreans to immerse themselves in the study of forest management and to take advantage of the resources provided by the Japanese.⁸⁰ Ok Tong-gyu struck a similar tone, underscoring the foundational nature of the forest for Korea’s welfare and progress: woodlands provided not only of timber, fuel, fodder, and fertilizer, but also a stable climate and hygiene. As Ok saw it, it was imperative that Koreans master forestry and forest management—something, he noted, already advanced by the “enlightened countries” of

⁷⁸ “Wando mondai no shinsō,” *Chōsen*, Vol. 6 (1909), 2-7; and “Wando shinrin mondai,” *Asahi shimbun*, December 12, 1908.

⁷⁹ In this sense, it may be said that they were concerned with the material register of the discourse on civilization and enlightenment examined by Andre Schmid in *Korea Between Empires, 1895-1919* (New York: Columbia University Press, 2002), chapter 1.

⁸⁰ Yi Chong-il, “Imōp ūi p’iryo,” *Taehan Chaganghoe wōlbo*, Vol. 3 (1906), 13.

the world.⁸¹ Both Yi and Ok lamented the state of Korea's bald mountains and warned of the ecological and economic perils of untrammeled deforestation.

Korea's need to actively study the methods and science of forest management was among the most prominent tropes in Korean-language commentary. Kim Chin-ch'o, for instance, wrote of the dire need for Koreans to immerse themselves in the academic study of afforestation (*cholimhak*)—what he considered the key to ensuring the supply of timber products and crucial to national welfare.⁸² Yang Chae-ha similarly appealed for investment in research into forestry matters, but stressed the impacts it would have on agricultural improvement. Yang made no bones about the fact that while the advanced counties of the world had done much to conserve their forests, Korea remained a land of bald mountains.⁸³

On occasion, Korean-language journals also included translations of Japanese-language commentary on Korea's forested landscape. One publication created by Koreans sent to study abroad during this period ran a lengthy article in translation by the Japanese legal scholar Ume Kenjirō that crudely offered Korea's bald mountains and denuded landscape as evidence that Koreans were categorically an indolent people. According to Ume, bad governance and bad forestry practices had percolated into Korea's national values and everyday behaviors.⁸⁴ Although it is difficult to determine what, exactly, Koreans made of statements such as these, there is little doubt that they contributed to the perception among Korea's elite that forestry was not only a pressing

⁸¹ Ok Tong-gyu, Imōp ūi p'iryo," *Sōu*, Vol. 1 (1908), 30-32.

⁸² Kim Chin-ch'o "Chorimhak ūi p'iryo," *T'aegük hakpo*, Vol. 1 (1909), 36-38.

⁸³ Yang Chae-ha "Sallim ui yǒn'gu," *Taehan hǔnghakpo*, Vol. 11 (1910), 25-27.

⁸⁴ Ume Kenjirō, *Taehan yuhaksaeng hakpo*, Vol. 1 (1907), 85-87

arena of reform but a visible metric of modernity and national progress. Although writing nearly a decade later, Yi Kwang-su perhaps most evocatively articulated the frustrations of some Korean elite reformers and intellectuals with the state of Korea's mountains through the following verse:

How miserable a sight
How could a mountain be so pathetic
That pitiable appearance
That shape so bare from base to peak
Who has done this?
Whoever until now was keeper of the mountain
Your blood will flow as you too are made bare⁸⁵

Still more difficult to ascertain is what the larger Korean public thought about their forests and reforms thereof. For many Koreans their only exposure to forestry matters came through Korean-language daily newspapers. Particularly vigorous in its coverage was the *Maeil sinbo*, which, in coordination with the colonial government, offered its readers basic coverage on a wide array of forest policy issues and oftentimes simply echoed official policy.⁸⁶ But even these papers had a limited, largely urban readership such that many rural-based Koreans remained well removed from these early discussions of the Korean landscape and forestry reforms.

In Japan, meanwhile, some colonial boosters drew a markedly different portrait of Korea's landscape. At the very same time that forestry officials were reckoning with the dire assessments offered by their surveyors, other Japanese charged with the promotion of migration and investment were waxing enthusiastic about the bounty of the Korean landscape. Although Korea's forests and mountains (especially in the north) figured

⁸⁵ Yi Kwang-su, *Yi Kwang-su chōnjip* (Sōul: Nuri midiō, 2011), 493. Many thanks to Joseph Seeley for drawing my attention to this passage and sharing his translation.

⁸⁶ See, e.g., "Sayu sallim ūi kaesu," *Maeil sinbo*, January 28, 1911; and "Missūi ūi sallim kyōngkwan," *Maeil sinbo*, December 19, 1911

prominently in this promotional writing, it was arable soil—cheap, fertile, and abundant—that was front and center in these accounts. As the lyrics to the Settler Song proclaimed, “In Korea where the Diamond Mountains soar/uncultivated fertile fields await us all.”⁸⁷

No organization was more active in the erection of this facade than the Oriental Development Company (ODC), a quasi-governmental entity created in 1908 to promote immigration to Korea. At nearly every turn, ODC officials sought to entice Japanese farmers with the promise of cheap, fertile land, large parcels of which the company was acquiring through close connections with the state. But it was not simply arable land that caught the ODC’s attention. Korea’s forests, too, became a central part of the ODC’s enterprise in Korea.

Seizing upon the opportunities for land ownership established in the 1911 Forest Ordinance, ODC officials entered into agreements with the colonial state wherein the company would assume responsibility for the reclamation of forestland in return for the eventual transfer of its ownership rights. This was appealing to ODC officials on many levels: in addition to enlarging its land holdings, it provided another potential source of revenue, and contributed to the overall improvement of the land (through irrigation and erosion control). The ODC thus began in 1911 to hammer out a forestry strategy and opened a forestry section in light of these opportunities.⁸⁸ Other companies soon followed.

⁸⁷ As cited in Hyung Gu Lynn, “Malthusian Dreams, Colonial Imaginary: The Oriental Development Company and Japanese Emigration to Korea,” in Caroline Elkins and Susan Pedersen, *Settler Colonialism in the Twentieth Century*, (New York: Routledge 2005), 29.

⁸⁸ See Tōyō takushoku kabushiki gaisha, ed., *Tōtaku 10-nen shi* (Tokyo: Tanseisha, 2001, reprint), 82-87; and Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 68-70.

Sumitomo, Mitsui, and Nomura Forestry, among others, began to buy up denuded forests throughout the country, much in the manner envisioned by colonial officials.

In this way, the rhetoric of red Korea was turned on its head: denuded lands became a source of quick, easy profit. No sooner had the Government-General's stamp dried on the 1911 Forest Ordinance than forestry officials and industry boosters took to forestry trade publications, research bulletins, and popular journals to apprise readers of "good prospects of afforestation in Korea."⁸⁹ Some, such as Takahashi Kasanosuke, targeted readers in Korea whom he assured "that ten years from the founding of [an afforestation] company you will see considerable profits."⁹⁰ Others projected this enthusiasm back towards the metropole. Kikuchi Takekazu, then Chief of the Government-General's Bureau of Agriculture and Forestry, for instance, wrote to readers in Kansai that "while much of Korea's [ample mountains] are bald mountains, afforestation over ten and twenty years will not only reap large profits but also provide for better irrigation and drinking water."⁹¹ Kikuchi proceeded to note that while even "a glimpse of mountains" leaves Japanese with a sense of gloom and the impossibility of reform, the Government-General was with extensive afforestation projects.⁹² When coupled with the often-inflated accounts of the prospects for Korea's timber industry in the north—"untouched forests on the banks of the Yalu" that could yield as much as

⁸⁹ "Chōsen shokurin yūbō," *Kōbe yūshin nippō*, June 27, 1915.

⁹⁰ "Chōsen ni ichidai shokurin kaisha," *Chōsen kōron*, Vol. 2, No. 1 (1914), 41.

⁹¹ "Chōsen no kaihatsu," *Kōbe shimbun*, August 25, 1912.

⁹² "Chōsen no kaihatsu," *Kōbe shimbun*, August 25, 1912.

1,000,000 yen worth of timber—these statements contributed to a growing sense that there was great opportunity awaiting in the forests of the peninsula, denuded or not.⁹³

The bulletin of Japan Forestry Association became a central vehicle for the dissemination of information about Korea's forests and the opportunities therein. The Korea-based forestry official Kakeba Sadakichi, for instance, published in a 1917 issue of the bulletin a detailed “introduction to the afforestation project in Korea.” If his description of the merits of this project piqued the curiosity of readers, his mention of prevailing prices—forestland being leased for as little as 5 *sen* per *chō*—opened their pocketbooks.⁹⁴ The Japan Forestry Association in fact provided more than a discussion forum; it also coordinated a number of study tours to Korea, where Japanese industrialists, prefectural assemblymen, chamber of commerce members, and any interested parties could see for themselves what Korea's forests had to offer.

Some prefectoral agricultural institutions did the same. The Gunma Agricultural Association, led by Taki Kumejirō, organized a two-week tour of Korea in 1915, in order to “inspect the state of affairs regarding agriculture, animal husbandry, forestry, sericulture, migration, and agricultural exports and imports.”⁹⁵ Taki would have been the first to sing the praises of the afforestation project: by 1916 he had leased as much as 15,000 *chōbu* of forests from the colonial state.

Private corporations such as the Yellow Sea Company (*Kōkaisha*), a Keijō-based holding company (founded in 1918 by Maruyama Tsunejirō) also worked to draw

⁹³ “Kankoku no ringyō,” *Asahi shimbun*, August 30, 1907.

⁹⁴ Kakeba Sadakichi, “Chōsen ni okeru zōrin jigyō o shōkai su,” *Dai Nippon Sanrinkaihō*, Vol. 416 (1917), 52-60.

⁹⁵ “Dai 17-kai Gunma-ken nōkai nenpyō,” *Gunma-ken Nōkaihō*, (1916), 37. This visit is analyzed in detail in Kim Hyun, “Shokuminchi Chōsen to Taki Kumejirō: Chōsen ni okeru jigyō kiban to sanseiken mondai,” *Kaikō toshi kenkyū*, Vol. 4 (2000), 77-95.

attention to the condition of Korea's forests and the investment opportunities therein. One of many companies that would venture into forestry works in Korea, the Yellow Sea Company sought to position itself at the center of the forestland brokering process by tapping into the network of connections with the colonial government.⁹⁶ These connections came largely through Saitō Otosaku, who left his position as chief of the forest management stations in northern Korea in 1920 to establish a forestry section within the company. In this capacity he was effectively the chief brokering agent for forestland and afforestation work in Korea. Using various platforms including lecture circuits, newspapers, and trade publications, Saitō sang the gospel of afforestation. In one such pamphlet entitled *The Profits of Afforestation Work in Korea*, Saitō offered readers a lengthy list of virtues: that afforestation in Korea was significantly cheaper than in mainland Japan; that it was easy to purchase the materials for afforestation; that the government had taken measures to clarify ownership and monitors the forests; and that the growth of infrastructure would make forestry and the movement of goods easier.⁹⁷

For many other Japanese, however, Korea's forests were less interesting than the Koreans who had despoiled them. Commentary on Korea's forests indeed paled in comparison to the proliferation of literature about Koreans and their way of life.⁹⁸ Forests, however, were inextricably linked to this lifestyle, and thus often figured prominently into the accounts of the travelers, ethnographers, and journalists who sought to throw light on life in Japan's colony. In the most basic sense, these accounts served to fortify

⁹⁶ Details on the establishment of the company and Maruyama's role can be found at HYCTS: http://db.history.go.kr/item/level.do?levelId=im_215_01014 [Accessed April 20, 2015]

⁹⁷ Saitō Otosaku, *Chōsen shokurin jigyō no yūbō: fu seishū zaisan to shokurin jigyō* (Keijō: Kōkaisha ringyōbu, 1920), 8-9.

⁹⁸ For a broad overview of this travel writing and ethnography see Sonia Ryang, "Japanese Travelers' Accounts of Korea," *East Asian History*, Vol. 13/14 (1997), 133-152.

the bond between Korean customs and national environmental decline. Deforestation became yet another yardstick for the assessment of what many Japanese commentators called their “low cultural level.” Korea’s woodlands, in short, became a repository of its backwardness.

If anything united these accounts it was a their focus on Koreans’ everyday life: the burning of fuel, the washing of clothes, the building of the home. These ethnographies anticipated the writings of many foresters who were forced to pay closer attention to the activities and habits of farming households as they set out to regulate and rationalize consumption of forest resources, especially fuel. Using no uncertain terms, many of these writers relayed the sloth, filth, and ignorance of rural Koreans. “The living conditions in the interior of their homes,” wrote Okita Kinjō, perhaps the crassest of these commentators, “where one can hardly move about freely, help us understand why the Koreans are so gloomy, and why they have fallen behind the progress of the world and remain so indifferent to social activity.”⁹⁹

Revealingly, while forestry officials often cast the forests and mountains of the north in a positive light, some ethnographers portrayed these same forests as the refuge of choice for Korean bandits and the last bastion of swidden agriculture—what many considered to be the most uncivilized lifestyle found in the peninsula. When these writers did have anything complimentary to say about the landscape, it was usually turned around on the Korean farmer. That Korea was a land depleted of its forests despite its fine soil conditions, ample natural resources, and extensive mountains confirmed that Koreans were incapable of managing the land. In the eyes of Samura Hachirō,

⁹⁹ As cited in Peter Duus, *The Abacus and the Sword*, 402.

deforestation was evidence above all else of the problems of Koreans themselves and of Korea's status as "a poor country" (*hinjyaku koku*). As he saw it, it was a question not simply of the development of the land, but of its people.¹⁰⁰ Some ethnographers went further to draw attention to folk beliefs and behaviors that they saw as drivers of deforestation. Arakawa Gorō, for instance, noted how Koreans' long-harbored fear of the tigers that once prowled the forests had prompted in some areas a clear cutting of village forests as a defense against attacks. Many others highlighted how Koreans' tended solely to the maintenance of forests around burial sites at the expense of the rest of the forest.

Some Japanese commentators even used Korea's deforestation as a way to place Korea and Koreans behind Japan in the trajectory of modernization and national progress. Arakawa, for instance, argued that while Japan once "overcut its forests" leading to many bald mountains of its own, Japanese had long since realized the costs of deforestation and made concerted efforts to regenerate their forests. No such realization had occurred among Koreans, however, which meant (at least to Arakawa) that Koreans resembled the Japanese of the past.¹⁰¹ To Enjōji Kiyoshi, Korean history was a likewise "a history without *rinsei*," or forest management. Statements such as these thus served to roll back time: they placed the state of Korea's forests, and with it Korean society, somewhere in Japan's pre-modern past. Japanese colonial rhetoric on forestry thus perpetuated what Se-Mi Oh has called "a linear scheme of history in which the sense of progress pointed to

¹⁰⁰ Samura Hachirō, *Tokan no susume* (Tokyo: Rakuseisha, 1910), 18.

¹⁰¹ Arakawa Gorō, *Saikin Chōsen jijō*, 36.

utopian ideals of modernity simultaneous with a temporal lag defining colonial hierarchy.”¹⁰²

And yet, what is perhaps most striking about these accounts is how they seamlessly moved between the rhetoric of environmental collapse and bullish assessments of the country’s future. For Arakawa, as many others, it was simply a matter of modernizing nature. “Should Japan,” he wrote, “use its powers to manage Korea’s mountains and rivers, its fields can be cultivated and prosperity will follow.”¹⁰³ But the chain of events did not stop there: “as a result, the village will thrive and so will the home such that the country will prosper and Korea will be established. If this is done, it means that Korea will be crafted by Japan, and thus belong to it.”¹⁰⁴ Yoking together home, village, and country, this imagery would soon become a standard rallying cry of foresters as they sought to enlist all Koreans into the project of revitalizing the land.

Conclusion

Many different portraits of the Korean landscape emerged from the rich mosaic of commentary put forward by travelers, surveyors, and colonial officials in the first two decades of the twentieth century. Undoubtedly, the most common image of Korea was one of despoliation—of a landscape where forests had ceded to fire fields, where farmers overcut and over-collected grasses, and where the central state did little to assert control over local forestry practices. Implicit in this view of the landscape was the belief that Korea’s denudation and purportedly feeble forest administration posed a serious

¹⁰² Se-Mi Oh, “Consuming the Modern: The Everyday in Colonial Seoul, 1915-1937,” (Ph.D. Diss., Columbia University, 2008), 30.

¹⁰³ Arakawa Gorō, *Saikin Chōsen jijō*, 36.

¹⁰⁴ Arakawa Gorō, *Saikin Chōsen jijō*, 36-37.

impediment to the growth and development of its industry and agriculture. Korea's forests, in other words, came to symbolize many of the problems identified by Japanese officials as they tried to justify their colonial rule in Korea.

But the peninsula was also presented as a landscape rich in potential. In the north, this potential was materially manifest; the remote stands of purportedly primeval timber that stood at the base of Mt. Paektu caught the attention of many prospective industrialists. But Korea's denuded landscape was also reimagined as something of a *carte blanche* for forestry operations: parcels of woodlands that, once properly management, promised productivity and profit. If anything, these surveys confirmed that Korea, however denuded, was a tried and true *yamaguni*: a mountain country, whose forests stretched over seventy percent of its landmass. What emerged from these accounts was a landscape begging for state-intervention: a once heavily forested country in need of a strong bureaucracy. Put another way, in these imaginings and scientific renderings of Korea's mountains and forests, all roads led back to the doorstep of the Government-General and its Bureau of Forestry.

PART II: REFORMS

Chapter 3 Righting the Woodlands

We started with the Forest Registration Survey. If you ask why it was done, it's because we knew nothing. There were no land registers in Korea. Furthermore, there were no other types of diagrams, and no sketch maps. This survey was carried out because there was nothing to work with. We figured that we would start here and then do a fine job drawing up various plans.¹

The deed, the register, the map: such were the tools wielded by the first wave of foresters to arrive to Korea. Newcomers to an unfamiliar administrative landscape, they sought an unambiguous legal system of land tenure that would enable them to proceed with the land transfers, afforestation projects, and protection measures instrumental to their forest reform agenda. But before acting on their larger ambitions of reclamation, regulation, and capitalization, they needed to create a standardized set of maps. So it was that in March 1910 a small group of foresters and surveyors geared up for the first comprehensive survey of Korea's forests—a project that would, through multiple iterations, preoccupy and bewilder forestry officials for decades to come.

The Forest Registration Survey (*rinseki chōsa*) was not the first survey of Korea's woodlands. Beginning in the late nineteenth century, small groups of Japanese foresters traveled across the peninsula to appraise the conditions of Korea's mountains and forests through an assortment of military, agricultural, and travel surveys. But the aims and approach of the Forest Registration Survey initiated in 1910 (and the multiple waves of surveys to follow in its wake) were unmistakably different. This time, the government sought above all to inscribe a legal system of land ownership upon the patchwork of

¹ TYBK, 305.

customary communal arrangements and legal statutes governing access to and management of Korea's mountainous terrain. Whereas the impressionistic travel surveys and first-hand accounts offered by individual experts aimed to describe the overall distribution and condition of Korea's woodlands, the Forest Surveys that followed Japan's annexation of Korea in August 1910 strove to delineate hard and fast boundary lines. Thus, where Tanaka, Dōke, and the other forest surveyors discussed in the previous chapter saw Korea's mountains and forests as principally as resource reserves, the surveyors described below viewed these same landscapes as registers, deeds, and parcels of property. They sought, in other words, to impose a capitalistic system of land ownership upon an ostensibly untamed legal landscape.

In this sense, the Forest Surveys should be viewed within the larger context of the cadastral survey enterprise (*tochi chōsa jigyō*) carried out by the Government-General from 1910-1918.² Frustrated by the irregularity of land ownership traditions in Korea, colonial officials viewed the cadastral survey as a means to clarify landholding patterns in Korea so as to strengthen the rule of law, improve market conditions, boost tax revenue, and spur agricultural production. Similarly high hopes were held for woodland ownership reform:

Concerned with the forestlands that were excluded from the cadastral survey and other types of land found within forests, the forestland survey, like the cadastral survey, will establish hitherto lacking lot numbers that are needed for real estate

² Given the highly controversial nature of this enterprise it is not surprising that literature on this subject is prodigious in extent. See, e.g., Yi Kyōng-sik, *Chosŏn chōn'gi t'oji chedo yōn'gu: t'oji pun'gūpche wa nongmin chibae* (Sōul: T'ükpyölsi, 1986); Han'guk Yōksa Yōn'guhoe, *Taehan Cheguk ūi t'oji chedo wa kündae* Sōul: Hyean; 2010); Kim Hong-sik, *Chosŏn t'oji chosa saōp ūi yōn'gu*, (Sōul: Minūmsa, 1997); Wada Ichirō, *Chōsen tochi chizei seido chōsa hōkokusho* (Tokyo: Sōkō Shobō, 1967 reprint); and Miyajima Hiroshi, *Chōsen tochi chōsa jigyōshi no kenkyū*. (Tokyo: Kyūko Shoin, 1991). For a pioneering English-language analysis see Edwin Gragert, *Landownership Under Colonial Rule: Korea's Japanese Experience, 1900-1935* (Honolulu: University of Hawaii Press, 1994).

transactions related to the lifestyle of the people and general economic transactions. It will diagrammatically render the location and of these plots and clarify their boundaries. Furthermore, it will resolve the rights to forestland ownership that have not been clearly entrusted, which has undercut forest management and left forestlands extremely degraded, and altogether resolve longstanding chaotic disputes related to forestland rights. In so doing, it will establish a legal system of ownership, and together with the cadastral survey create a comprehensive system of landownership that will contribute to the welfare of the greater public as well as yield the foundational documents of forest management in Korea (*rinsei shohan no kihon shiryō*).³

In the eyes of many forestry officials, reforming land tenure was the most urgent business of forest management in Korea.⁴

Pressing though it was, forestland tenure reform was no easy task. As this chapter will show, Japanese foresters trod a meandering path through multiple governing strategies, legal instruments, and registration procedures to craft an approach to forest management that balanced the dueling imperatives of exploitation, reclamation, and conservationism. At the heart of this balancing act were a host of difficult questions about the pace, scale, and sequence of reform. How might foresters best clarify ownership while simultaneously promoting the swift reclamation of Korea's denuded commons? How might they outsource the work of forest reclamation to Japanese corporations capable of large-scale projects while also incorporating Korean communities into the fold of conservation? How, in other words, should they best bring rationality to Korea's woodlands in a way that also advanced their aims for forest reclamation and utilization?

These questions had no simple answers. But the fact that they were posed by colonial foresters is significant. Rather than indiscriminately applying the tools and techniques of scientific forestry, Japanese officials during the first two decades of colonial forestry demonstrated a flexibility and creativity that was rooted in Japan's own

³ Chōsen sōtokufu, ed., *Chōsen rinya chōsa hōkokusho* (Keijō, Chōsen sōtokufu, 1924), 1-2.

⁴ Saitō Otosaku, "Kankoku seifu jidai no rinseki chōsa jigyō," in CRI, 40.

forest management traditions and responsive to the particular challenges and conditions presented by Korea's landscape. Put simply, the reform of forestland tenure in Korea was more than the imposition of a modern, colonial Japanese order upon a pre-modern Korean landscape. From the start, it involved a vigorous debate among forestry officials, bureaucrats, and Japanese and Korean landowners over how land reform fit within the larger scheme of long-term conservation and sustainable forestry. This debate in turn animated a number of policy innovations that were central to the colonial state's "greenificationism" (*ryokkashugi*), a defining feature of forestry policy in colonial Korea.⁵

Korea's Commons

Of all the sources of deforestation in Korea, few vexed Japanese forestry officials like the abundant "un-owned public mountains" (無主公山 J: *mushūkōzan*; K: *mujukongsan*) bequeathed by the Chosŏn state: the vast stretches of mountain and forest that had for centuries been communally shared—and collectively exploited—by rural communities without any formally delineated system of land ownership. To many officials, these commons lent themselves to the shortsighted exploitation of forests described so vividly by Tanaka Kiyoji and others. As numerous reports stated, unclaimed woodlands were an environmental nuisance, and stood as compelling evidence of the necessity for sweeping reforms to land tenure.⁶ After noting that since old times "unclaimed public mountains" subject to unregulated individual usage had formed a

⁵ For a detailed examination of the relationship between land ownership rights and afforestation activities see Yi U-yōn, "Chōsen sōtokufu no rinya shoyūken seiri to rinsei," in TYBK, 270-271; and Matsumoto Takenori, "Kenkyūkai no matome ni kaete: shokuminchi chōsen no shiten kara," in *Shinrin hakai no rekishi*, 185-194.

⁶ See, for example, Fukutome Gensuke, "Hantō sanrin kōhai no genin to chisan jigyō," *Chōsen Nōkaihō*, No. 3, 1924.

majority of Korea's mountain and forest areas, one study rattled off a litany of related problems: timber shortages, diffused responsibility for afforestation, forest fire, and pestilence.⁷

Perhaps no one examined these common woodlands in more detail than Matsumoto Iiori, who, in the preface to one study of the forestland tenure system in Korea, identified its “unrefined” land tenure system as the source of “hundreds of years of disorder.”⁸ If, as Matsumoto suggested, the civility of a society was proportionate to the sophistication of its land ownership system, then these un-claimed public mountains formed a major impediment to Korea’s development. Any self-interested party could freely enter such a forest to cut down trees or collect brush for fuel, but no one was clearly responsible for the larger regulation, afforestation, and conservation of these resource pools. What Matsumoto proposed was, in essence, a tragedy of the late Chosŏn commons.⁹

While these experts often fingered the Korean farmer as the chief agent of deforestation, the weakness and maladministration of the Korean monarchy was also blamed. Not only had central government officials and *yangban* elite irresponsibly siphoned off forest resources to meet their lavish standards of architecture; they had also failed to implement an adequate regulatory regime of the forest resources, leaving large

⁷ Chōsen sanrinkai, ed., *Shinrin hogo kōenshū* (Keijō: Chōsen Sanrinkai, 1933), 4.

⁸ Matsumoto Iori, “Chōsen no rinya seido,” *Chōsen*, No. 123 (1925), 45.

⁹ Although these foresters never used the term, the conditions they described closely resembled the notion of “tragedy of the commons” popularized by Garrett Hardin. See Garrett Hardin, “The Tragedy of the Commons,” *Science* Vol. 162 (1968): 1243-1248.

tracts of forestland subject to the imprudent interests of rural Koreans.¹⁰ Of particular importance was the fact that the Chosōn state had for centuries essentially prohibited the private ownership of forestlands. The forestry official Hirokuma Tomoaki's determination that nationwide only 34 individuals who were not part of the royal household held plots of forestland over 100 *chō* underscored for many officials the misuse and poor allocation of Korea's forest resources.¹¹ While it was widely acknowledged that the Chosōn government took proactive steps to establish Reserve Forests (*pongsan*) and Restricted Forests (*kümsan*), as was stipulated in edicts like the Great Code of National Governance (*Gyongguk Daejon*), the failure of the central government to assert its authority over local communities and impose restrictions on everyday exploitation stood as a signal failure of the Chosōn government.¹² As one account put it:

In Korea since long ago the mountains and forest have not seen the enthusiastic promotion of tree plantation, but rather a system of tomb, restricted, and other forests, wherein the felling of timber was prohibited and power was exerted principally towards only protective efforts. Regular forest areas were subject to the "three great prohibitions of the state," which strictly forbade the felling of pine, sake brewing, and the working to death of cattle. Commoners meanwhile established pine associations (*songgye*), guilds that undertook the planting and protection of pine trees. But as a result of their focus only on pine trees, broadleaf trees were aggressively felled.¹³

¹⁰ See, e.g., Chōsen sōtokufu, ed., *Chōsen shinrin sanya shoyūken ni kansuru hōshin* (Keijō: Chōsen sōtokufu, 1914), 1-11. As will be discussed in detail in Chapter Five, the Japanese in fact undertook detailed investigations into the history of forest policy in Korea at both the national and local levels. Perhaps the most impressive study is Shioda Tadahiro, ed., *Chōsen sanrin shiryō* (Keijō: Chōsen sanrinkai, 1934).

¹¹ As cited in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsushi ron*, 64-65.

¹² For this line of reasoning see Suematsu Kumahiko, "Riōka shinrin keiei no gaiyō," *Chōsen*, No 179 (1930), 53-56.

¹³ "Keishō Nandō ni okeru jinkō zōrin no yōran," in CRI, 321.

Similar criticisms were leveled against the military and local magistrates, who remained fixated on the planting and protection of pine to the detriment of the rest of Korea's forest ecology.

Yet some Japanese painted a far more nuanced portrait of informal communal arrangements and collective management at the local level. Although here, too, officials tended to emphasize the battered state of the forests, much ink was spilled trying to make sense of the assemblage of local level customs and communal regulations.¹⁴ The 1913 *Survey Report on Historical Customs*, for instance, described the patterns of use in a forest on the outskirts of Pusan that had been historically shared between the three hamlets of Tangni, Hadan, and Koejöng:

In the past it was tradition that only the villagers of these three hamlets could collect grasses, branches, and fallen leaves [from the shared mountain]. Therefore the designated area (*nyūsan kuiki*) was almost even. But in actuality they did not respect these boundaries. As a result, the trees could not be cut down as desired. Only in the event that the need for projects such as road repair, bridge building, or when a government tax was imposed that is difficult to pay, a committee of village heads and leaders formed a council to determine the course of exploitation.¹⁵

A host of other case studies by government-backed researchers examined village associations, institutional networks, and informal edicts regulating access in different regions of the peninsula. Although scattered, accounts such as these challenged the simplistic descriptions of pre-modern Korea as a land devoid of conservation measures.

More and more, Japanese officials came to think of these village-level arrangements in terms of Japan's own traditions of *iriai*: what Margaret McKean calls the “institution[s] or customary arrangements under which residents of a specific locality,

¹⁴ See, e.g., Chōsen sōtokufu, *Chōsen rinsei ni kansuru setsumeisho* (Keijō: Chōsen sōtokufu, 1940).

¹⁵ As cited in Kwon Ok-yöng, “Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku,” *Rekishigaku kenkyū*, Vol. 297 (1965), 2.

such as a hamlet, jointly managed a certain expanse of land (i.e., forests, bushes, or a pasture).¹⁶ For while officials took pains to highlight the differences in conservationist traditions in both countries, they saw in Korea's denuded common woodlands a portal into Japan's own past—and in Japanese practices, they likewise identified a roadmap for Korea's future.¹⁷ *Iriai* was more than a linguistic touchstone for these commentators; it presented a paradigm of local level governance and communal forestry. The notion that Korea's local level forestry could be reconfigured in the same ways that Meiji Japan had recently dealt with its own *iriai* institutions was a persistent one, and deeply influenced the policies pursued by forestry officials.¹⁸

Yet, as Yi U-yǒn reminds us, the rhetoric of these foresters did not entirely square with the reality of Korea's pre-modern forest customs, especially as related to the management of the commons.¹⁹ Japanese critiques of Chosǒn-era forestry often failed to account for a number of institutions that were central to forest management in Korea. Their conflation of *iriai* with Korea's common forestlands obscured a more complex institutional network of regulation and governance that did not neatly map onto Japanese *iriai* practices or forestry experiences.

¹⁶ For a path-breaking study of *iriai* in Japan see Margaret McKean, "Management of Traditional Common lands (*Iriaichi*) in Japan" in Daniel W. Bromley et al., ed., *Making the common work: theory, practice, and policy*, (Institute for Contemporary Studies, 1992), 63-98; for a more recent study of the related custom of *warichi* see Phillip Brown, *Cultivating the Commons: Joint Ownership of Arable Land in Modern Japan*, (Honolulu: University of Hawaii Press, 2012).

¹⁷ Inoue Ichirō, for instance, a professor at Korea's premier agricultural school at Suwǒn, was quick to project the concept of *iriai* upon the Korean landscape in the history of common-use forestlands and the reformation thereof See Inoue Ichirō, "Chōsen ni okeru rinya *iriai* ni kansuru ichi kōsatsu," *Nihon ringakkai shi*, Vol 17, No 6 (1935), 452-456.

¹⁸ This point is elaborated in Yi U-yǒn, "Sallim chawǒn yong'ik e kwanhan kongdong ch'ejōk kyubōm ūi hyǒngsōng kwa kukka yokhal: Chosǒn hugi wa singminjigi," *Munmyǒng yǒn'gu*, Vol. 4 (2010), 75-116.

¹⁹ See Yi U-yǒn, *Han'guk ūi sallim soyu chedo wa chǒngch'aek ūi yǒksa, 1600-1987* (Sǒul: Ilchogak, 2010), chapter 3.

No aspect of Korea's pre-modern forest history was more important in this regard than burial practices. Rooted in the Confucian belief that one's ancestors should be interred in geomantically propitious sites within hillsides, mountains, and forests, Koreans had long laid their ancestors to rest on small swatches of forestland where they erected and meticulously maintained burial mounds. "There is no need here to describe how Korea's forests since long ago were damaged by reckless felling leading to bald mountains and bare hills," wrote Yi Hang-jun in his detailed study of the relationship between burial and forestry reforms, "...but one cannot forget that there are also localized patches of dense beautiful forest."²⁰ A traditional belief of the Korean people that was "rooted in the principals of Feng Shui," burial practice and tomb maintenance had long required Koreans to tend to the forests of their ancestors.²¹

It follows that the Chosōn period saw a remarkable amount of legal disputation over burial sites in forestland as particular families or clans sought to protect the integrity of their relatives' burial mounds against countering claims of communal property. As Kim Kyōng-suk has shown, these lawsuits took many different forms—from the prosecution of timber banditry to transactional disputes—but the extant records confirm that a majority of this disputation involved the protection and strict demarcation of tomb mountains. These conflicts only escalated as the population boom of the late Chosōn period placed a greater strain on the land available for such sites.²²

²⁰ Yi Hang-jyun, "Chōsen no yama to funbo," *Chōsen sanrinkaihō*, No. 74 (1931), 13.

²¹ Yi Hang-jyun, "Chōsen no yama to funbo," *Chōsen sanrinkaihō*, No. 73 (1931), 32.

²² For an exhaustive treatment of these disputes see Kim Kyōng-suk, *Chosōn hugi sansong kwa sahoe kaldūng*, Ph.D. Diss., Seoul National University, 2008

While geographically limited and largely class-based (with elite scholar-officials most active in these disputes), restricting access to forestland for the purpose of protecting burial sites amounted to a *de facto* system of regulation—one that prompted the court itself to weigh in on issues related to forest access.²³ The late Chosŏn period has accordingly been dubbed the “age of mountain lawsuits (K: *sansong sidae*).” Legal archives teem with references to burial conflicts—a documentary legacy that would resurface during the colonial period as Koreans vied for status as “claimants” (J: *enkoshsha*; K: *yōn’goja*) in the eyes of the colonial government.

The activities of pine associations (*songgye*) were another defining feature of Chosŏn-era village forestry. Essentially village-level guilds, these associations worked in concert with temples and other institutions to regulate forest resources at the community and village level. Although scattered in their coverage and often inconsistent in their activities, pine associations proved a vital source of forest protection in many areas. As one association vowed in its bylaws, “we plan to keep pine-trees growing in the forest in order that they may be used hereafter. Any one who cuts down a large pine tree shall be brought to the Magistrate and punished.”²⁴ While *songgye* focused their energies on the preservation of pine—the most coveted forest commodity in pre-industrial Korea—they often served to protect forest resources more generally, and their very existence serves to further confound the notion propounded by some Japanese officials that Korea’s forests were devoid of regulation. In fact, some Japanese foresters were deeply impressed by the

²³ See, e.g., Chōn Kyōng-mok, “Chosŏn hugi sansong yōn’gu,” Ph.D. Diss., Chōnbuk University, 1996); and Yi Sōn-wōk, “Shokuminchi chōsen ni okeru rinya shoyūken kakutei katei to bochi mondai,” *Chōsenshi kenkyūkai ronbunshū*, No. 46, (2008), 155-184.

²⁴ As cited in Conrad Totman, *Japan and Korea in Comparative Environmental Perspective*, 158.

pine associations, and sought to co-opt them into the conservationist project whenever possible, especially as Forest Owners Associations.²⁵

Whatever the nature of land usage and forest access in pre-modern Korea, Japanese observers agreed that it was insufficient. While foresters might debate the precise merits and shortcomings of Korea's pre-modern forest administration, few disputed the notion that a comprehensive overhaul of Korea's forest ownership was due. Foresters need only to point to the bald mountains stretching across the horizon as evidence of the necessity of their reform agenda. And it was not simply foresters who sought comprehensive reforms regarding forest management in Korea. Financial officials, agricultural planners, and bureaucrats all envisaged land tenure reform as the first step in the reconfiguration of state-society relations and the shift towards a modern, capitalist society where land in general and forest products could be bought and sold as commodities nation-wide. Particularly emphatic were those calling for forestry reforms as a means to shore up local- and province-level finances. That Megata Tanetarō, a financial advisor charged with the re-vitalization of the Korean government's coffers, was one of the first to request that forestry advisors be sent to Korea bespeaks the perception that forestry was closely entwined with financial improvement.²⁶ It was in the context of these larger debates about the revitalization of Korea's economy, welfare, and land system that Japanese debates about forest policy first took shape.

The Forest Law

²⁵ TYBK, 245. An exhaustive study of these cooperatives can be found in Chōsen sōtokufu, ed., *Nōsangyoson ni okeru kei* (Keijō: Chōsen sōtokufu, 1938).

²⁶ According to Dōke, "Megata Tanetarō reached out to the head of the Forestry Section who traveled with Yanagita Yūzo in April of that year to meet with the Korean head of Forestry." Dōke Atsuyuki, "Kankoku jidai no ringyō ni kansuru omoidebanashi," in CRI, 4-5.

No sooner had a Forestry Section been established within the Korean Government's Bureau of Agriculture, Commerce, and Industry (*Nongsangkongbu*) in 1907 than the first cadre of forestry experts in Korea set to work to craft a comprehensive legal framework regulating forest ownership and usage. At the helm of this effort were Oka Eiji and Dōke Atsuyuki, who, together with Yanagita Yūzo, Ueki Homiki, and Suzuki Sotojirō, joined the Korean Forestry Section between 1906-1907 at the invitation of the Korean government.²⁷

Working in concert with Japanese and Korean officials including Okakichi Shichirō (1868-1947), Kiuchi Jūshirō (1866-1925), Song Pyōng-jun (1857-1925), and Ch'oe Sang-don, Dōke studied Japan's own set of forest laws, promulgated in 1897 and revised in 1907, and began to tailor a legal framework to meet the conditions of Korea. While Dōke and his colleagues identified afforestation works and erosion control as the most pressing business of forest policy (and quickly initiated a large-scale reforestation project on the outskirts of Seoul), they saw the creation of a sweeping set of forest laws as the heart of reform. After receiving the approval of Suzuki, the head of the Forest Management Section, their proposal was taken to the Cabinet of the Residency-General and the Legislative Branch, which reviewed its contents and swiftly approved its passage. That Dōke found a close ally in Itō Hirobumi (then Resident-General of Korea and a longtime advocate of forestry in his former capacity as Home Minister) and Sone

²⁷ Although they hastened to conduct research into legal reform, their first major task was to draft an official budget. The budget for the first year of forestry was placed at roughly 56,126 yen, which foresters had to stretch thin to cover the expenses as various as salaries, afforestation projects, nurseries, and seedlings. The establishment of the budget can be found in "Zadankai," in CRI, 503-506.

Arasuke (then Deputy Resident General and a former Minister of Agriculture and Commerce) surely streamlined the process.²⁸

The subsequent promulgation of the Forest Law (*Shinrin hō*) in 1908 marked what many have called the advent of modern forest management in Korea. Its multi-pronged approach to modernizing Korea's landholding traditions and forest management policies would guide the course of reform over the long sweep of the colonial period.²⁹ In addition to establishing a penal code related to forest usage, the law granted the Bureau of Agriculture, Commerce, and Industry sweeping authority to appropriate any forest area in need of protection as a Reserve Forest (*hōanrin*)—a legal architecture similar to that established in Japan just a year before.

The Forest Law also made provisions for a system of multi-party or “shared yield” forest management (*bubunrin seido*) that sought to incorporate non-government agents into the reclamation of Korea’s forests. Based in part upon a Japanese approach to forest management dating back into the Tokugawa period, this system enabled individuals, corporations, and partnerships to assume control over the day-to-day operations of national forest land through a profit-sharing agreement.³⁰ Any party that

²⁸ Dōke Atsuyuki and Okakichi Shichirō spearheaded the effort to draft Korea’s Forest Laws after receiving word from the higher echelons of the Ministry of Agriculture, Commerce, and Industry that such a law was desirable. They did so in consultation with a wide range of experts, especially Song Pyōng-jun (Minister of Agriculture, founder of the Ilchinhoe, with close ties to the Government-General) and Kiuchi Jyūshirō (1866-1925), then head of the Forestry Section. See Dōke Atsuyuki, “Kankoku jidai no ringyō ni kansuru omoidebanashi,” in CRI, 12-14.

²⁹ The Forest Law is re-printed in full in DRSK, 18-20.

³⁰ According to Conrad Totman, “The term *buwakabayashi*, or shared-yield forest, refers to a parcel of *ohayashi* or other woodland (including village and household land) that a government leased to an entrepreneurial peasant or village. The lessee planted timber trees on the parcel, nurtured the stand, and shared the harvest with the government (and any third-party land-holder) in accordance with the terms of the lease. In one form or another the practice spread widely

entered into such an agreement with the state was entitled to a pre-determined share of any income generated through the enterprise, but the state would retain ownership. Such an approach was to many Japanese officials a simple, time-tested way to outsource forestry works to capital-rich firms and corporations capable of large-scale reclamation projects.³¹

The first to seize this opportunity was the Pusan-based merchant Hazama Fusatarō (1860-1933). In 1908 Hazama acquired the rights to undertake forestry work on Yǒngdo Island, just off the coast of Pusan, in partnership with ten investors, both Korean and Japanese.³² Enterprising Koreans followed suit. For example, the same year Yi Ha-yǒng, Yi Kyu-hwan, and Yi Chong co-founded the Great Korean Forest Society (*Taehan sallim hyōphoe*), pooling the resources of its members to take advantage of the new opportunities for joint forestry operations.³³

Article 19 of the Forest Law arguably had the most far-reaching implications, however. In keeping with the tripartite classification of forestland—Imperial, National Forests, and Private Forests—established in Article One, this provision mandated a

through Japan during the eighteenth century, appearing under various rubrics in *han* from Tsugaru to Satsuma.” Conrad Totman, *The Green Archipelago*, 163.

³¹ So eager was Dōke to draw from the lessons learned in Japan that he began researching the implementation of the multi-party forest management in secret before he had undertaken a concerted investigation of Korea’s own forest management traditions. This is taken up briefly in Yi Sǒn-wǒk, “Shokuminchi Chōsen ni okeru rinya shoyūken kakutei kotei to bochi mondai,” *Chōsenshi kenkyūkai ronbunshū*, No. 46, (2008), 155-184. For this line of critique see and Pae Chae-su, “Samlimpōp (1908) ūi chijōk sin’go chedo ka ilche ūi singminji imji chōngch’ae k mich’in yōnhyang e kwanhan yōn’gu,” *Han’guk imhakhoe chi*, Vol. 90, No. 3 (2001), 398-412.

³² According to Kobayashi Motokichi, Hazama gained ownership of the land in 1908 and soon began to plant saplings shipped in from Japan. This reclamation project proved difficult, however, prompting Hazama to tap into the new investment opportunities enabled by the Forest Law. Using the *buwakebayashi* provision, Hazama brought ten investors into the project, with whom he oversaw the development of 400 *chōbu* of forestland. See Kobayashi “Chōsen ni okeru buwakebayashi no hajimari,” in CRI, 238-239.

³³ A detailed profile of this organization including its founding charter can be found in “Taehan sallim hyōphoe sollip,” *Taehan hyōphoe hoebo*, Vol. 1, No. 9 (1908), 47-50.

forestland ownership registration process wherein “All forestland owners must submit within three years of the day of the passage of this law a land register, land area calculation, and sketch map to the Ministry of Agriculture, Commerce and Industry.”³⁴ Land that was not registered within the allotted time, the law continued, “will automatically be designated National Forest.” The language was simple but the ramifications profound: any party that sought to stake a claim to the exclusive ownership of private forestland—be it a tenant farmer, high-ranking *yangban* official, or anyone in between—had to furnish documentation.

This was a tall order. Although the promulgation of the Forest Laws was followed by a coordinated public relations campaign to inform Korean communities of the content, aims, and requirements of the law—with Dōke himself taking to the pages of the *Hwangson sinmun* to explain its contents in a week-long series of articles—many Koreans lacked the required documentation or were simply unaware of the specific land registration provision.³⁵ As with the cadastral survey, moreover, others mistakenly thought the process was part of a new land tax to be levied on forestland and thus avoided it altogether.

Even among Koreans who were fully aware of the registration requirements, few had the financial wherewithal to survey their own land in order to meet the Government-General’s standards of documentation. As Pae Chae-su has shown, the survey could cost as much as 300-400 *yen* for large parcels of forestland, often three or four times as much

³⁴ See Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 11.

³⁵ Revealingly, this serialized exegesis placed a strong emphasis on the importance of the *buwakebayashi* provision of the law, which many foresters saw as the vital force in spurring investment. See *Hwangson sinmun*, June 16-25, 1908.

as the productive value of the land itself.³⁶ For tenant farmers, and especially the large communities of itinerant swidden agriculturalists, surveying was simply out of the question. Deep in the mountains where they eked out their living, these legal reforms seemed a world apart.

The amount of land actually claimed through the stipulated registration process was indeed small. All told, by the end of the three-year registration period only about thirteen percent of Korea's forestland had been registered. "We expected for Koreans to submit their documentation per the regulation," remembered the forestry official Gōtō Hisaaki, "but because many commoners were accustomed to the system of unclaimed public mountains they knew nothing of ownership rights. After two years had passed we had received only a small amount of claims so our office ordered local officials to work to remedy the issue... through the good graces of Korean experts, finally around the time of the annexation of Korea registers began to arrive in clusters."³⁷ The Bureau of Forestry's statistics more or less corroborate this account. In 1909, the first year of the registration process, only 674 individuals registered forestland; by the end of the second year of the registration process, this figure had jumped to around 100,000. The following year saw a flurry of activity to register forestland by the stated deadline: by 1911 a total of 520,000 registers were filed. According to Pae, the last five months of the process saw nearly 3.7 times more registers filed than the first two-and-a-half years of the process.³⁸

³⁶ Pae Chae-su, "Samlimpōp (1908) ūi chijōk sin'go chedo ka ilche ūi singminji imji chōngch'aek e mich'in yōnghyang e kwanhan yōn'gu," *Han'guk imhakhoe chi*, Vol. 90, No. 3 (2001), 405.

³⁷ As cited in Hagino Toshio, *Chōsen, Manshū, Taiwan no ringyō hattatsu shiron*, 5.

³⁸ Pae Chae-su, "Samlimpōp (1908) ūi chijōk sin'go chedo ka ilche ūi singminji imji chōngch'aek e mich'in yōnghyang e kwanhan yōn'gu," 403.

The results, unsurprisingly, were skewed both geographically and demographically. The highest concentration of reported land ownership was in North Kyōngsang Province (in the southeast of Korea) while the lowest was in North Hamgyōng Province (the northeastern corner of the peninsula). This reflected the disproportionate registration of forestland in southern Korea, where the higher concentration of population had nurtured a stronger sense of ownership rights. But far more alarming to officials was the fact that an inordinate number of those Koreans who did register forestland were large landowners, local elites, and their relatives. By the end of the three-year registration period it had become patently clear to forestry officials that the process had failed to empower small-scale farmers and rural communities more generally—the very parties that foresters viewed as key stakeholders in a modern system of land ownership, reclamation, and resource conservation. If anything, they had stirred up the indignation of the vast majority of Koreans who felt a wedge being driven between their communities and the forests to which they had long enjoyed access. One 1908 editorial in the Korean-language *Kyōngsōng sinmun* under the headline “Open your eyes and clear out your ears!” warned readers of the coming deterioration of ownership rights.³⁹ As the Korean agronomist Hoon K. Lee would later recall, “To the many Koreans who failed to register their land [through the Forest Law] the Government is nothing but a hateful go-between who has deprived them of their property and given it to Japanese or Korean leaseholders.”⁴⁰

³⁹ “Nun rūl ttūgo kwi rūl palk’ida,” *Kyōngsōng sinmun*, June 19, 1908.

⁴⁰ Hoon K. Lee, *Land Utilization and Rural Economy in Korea*, (Chicago: The University of Chicago Press, 1936), 183.

The rollout of the Forest Law, in short, threw into sharp relief the limits of the state's reach. By 1910 it was clear that the skewed registration process was more than just a public relations problem or a technical legal issue; it required a fundamental re-thinking of the process through which ownership boundaries would be drawn. Foresters could not simply impose their vision on the landscape if they wanted to see woodlands reclaimed and protected in perpetuity, as they claimed. Rather, they would have to reckon with the customs and expectations of those Koreans who were most deeply connected to these woodlands: the slash-and-burn agriculturalists, rural hamlets, and small farmers who had long depended upon common forestland for fuel, pasturage, and timber. The false start of the registration process came as a major blow to many within the Bureau of Forestry, who were eager to proceed with land-reclamation projects and a host of technical reforms. But these setbacks paled in comparison to the controversy that would soon take shape around the forests of Wando island (J: Kantō)—a public scandal that Dōke and others would remember as the great “failure story” of their time in Korea.⁴¹

The Wando Affair

Few events thrust the world of forestry into the public eye quite like the Wando Affair. Bringing together the worlds of the forestry bureaucracy, settler politics, and the popular press, the events surrounding Wando brought Korea’s forests to the fore of conversations in both Japan and Korea about the nature and intentions of Japanese rule. It merits scrutiny here both for the light it sheds on the conflicts inherent to the forestland redistribution process and for the way it brings into focus the broader political landscape navigated by forestry officials as they pressed forward with their reform agenda. The

⁴¹ Dōke Atsuyuki,” Kankoku jidai no ringyō ni kansuru omoidebanashi,” in CRI, 20-21.

Wando scandal stands, in a sense, as one of the earliest expressions of the politics of sustainability in Korea.

The origins of the controversy stretch back to 1906, when Katō Masao, a Japanese advisor to the Korean government, put forward a proposal to the cabinet to lease the forests of Wando—an island off the coast of South Chōlla Province—to a Japanese merchant in Inchōn. Almost instantly, this proposal drew the ire of members of the populist Ilchinhoe (Advance in Unity Society), especially the high-ranking cabinet member Song Pyōng-jun, who saw this as an ploy to undercut Korean interests. The proposal was swiftly retracted and Katō forced to resign—but not before a hasty survey of the island was undertaken and a valuation of its timber set at 1,000,000 yen. As one observer would later note, this episode would cast a shadow over the events to come.⁴²

It was not until three years later in the fall of 1908 that the Wando Affair began to unfurl. The catalyst this time was Etō Tsunesaku, a Tokyo-based businessman who, enticed by the siren song of boosters, sought to tap into new investment opportunities in Korea. He soon made his way to Seoul, where he made the acquaintance of Oka Kishichirō, then a high ranking official in the Ministry of Agriculture, Commerce, and Industry. Later, at a meeting at the private residence of Dōke Atsuyuki, Etō learned of the opportunities that awaited in the forests of Wando, which officials, then eager to invigorate the freshly promulgated land-lease laws, assured him would be his to lease. Oka, Dōke, and other officials thereafter worked to gain the approval of the Korean government, which mandated that another survey of the land be undertaken.⁴³

⁴² “Wando mondai no shinsō,” *Chōsen*, Vol. 6 (1909), 3.

⁴³ Dōke Atsuyuki,” Kankoku jidai no ringyō ni kansuru omoidebanashi,” in CRI, 24-25.

Negotiations, meanwhile, continued apace. And with the completion of the survey in December 1908, the lease application seemed on the brink of approval—until, that is, a journalist from the *Keijō Shimbun* (the precursor to the *Keijō Shinpō*) pulled the rug out from under the negotiations. Armed with inside information on the details of the agreement, the paper decried a glaring discrepancy in the valuation of the forests of Wando: woodlands that had once been given a million yen valuation were being sold off for a paltry 150,000 yen. The paper went further to level allegations of bribery of officials. Other papers followed with questions, speculations, and allegations of their own. Overnight, a scandal—the so-called *Kantō mondai*—was born.⁴⁴

In the eyes of Dōke Atsuyuki, who sat squarely at the center of the scandal, the so-called “newspaper faction” turned a routine bureaucratic process “into a clamorous event.”⁴⁵ But in the eyes of the press and many members of the public, this was evidence of insidious corruption. The *Taehan maeil sinbo*, the most out-spoken Korean paper on the issue, blasted the “theft of Korea’s forests” and the “trickery of the Japanese.”⁴⁶ Periodicals in Korea and Japan alike ran serialized stories on the affair. Some questioned the moral integrity of forestry bureaucrats, especially Oka, who was pilloried in the press. Others saw Wando as further evidence that the Forest Law and its land-lease provisions were essentially a mechanism for the expropriation of Korean woodland—including

⁴⁴ “Iwayuru Kantō mondai,” handwritten letter (February 1, 1909), from Yoshimura Tenchū to Editor-and-Chief of the Tokyo Nichinichi Shimbun, Yūhō Bunko [hereafter YB], reference code: 221.07/4; “Kantō mondai no shinsō,” *Chōsen*, Vol. 6 (1909), 2-7; and “Kantō shinrin mondai,” *Asahi shimbun*, December 12, 1908.

⁴⁵ Dōke Atsuyuki,” Kankoku jidai no ringyō ni kansuru omoidebanashi,” in CRI, 21.

⁴⁶ See, e.g., “Han’guk sallim ūi tojōk” *Taehan maeil sinbo*, December 22, 1908; and “Ilin ūi kan’gye,” *Taehan maeil sinbo*, December 23, 1908.

ancestral burial sites.⁴⁷ Japanese settlers also joined the chorus of condemnation, especially those based in Mokpo, who saw in the affair confirmation that corruption was undercutting their own economic standing in Korea.⁴⁸

With criticism mounting, the negotiations were called off. Korean officials swiftly called for the application to be thrown out and pressed for an investigation. A thorough follow-up survey yielded a valuation of 300,000 yen—a mere 30 percent of the initial figure, whose inflation officials chalked up to the desperate measures taken by residents to exploit resources before they were commandeered by the state.⁴⁹ Meanwhile, the discrepancy in the figure and scandalous details about home visitations, personal rivalries, and bribery fanned the flames of public anger. The story took a more dramatic turn when Katō Masao, the minister who had been earlier disgraced by his proposal to lease the island's forests, sat down with reporters from the *Asahi Shimbun* to recount his experience with the island.”⁵⁰

Before long, journalists were also put in the line of fire.⁵¹ Fueled in part by the sensationalistic dispatches of the settler leader Ōmura Tomonjō, whose coverage of the affair for the *Asahi Shimbun* caused a stir back in Japan, allegations were leveled against the Seoul-based journalist community that some had also accepted bribes in return for

⁴⁷ “Wando sallim munje,” *Hwangſōng sinmun*, December 15, 1908; and “Wandomin chōnghwang,” *Hwangſōng sinmun*, December 18, 1908.

⁴⁸ “Iwayuru Kantō mondai,” YB, 221.07/4.

⁴⁹ Dōke Atsuyuki,” Kankoku jidai no ringyō ni kansuru omoidebanashi,” in *Chōsen ringyō isshi*, 28-29.

⁵⁰ “Wando shinrin mondai, Katō senkankoku komondan,” *Asahi Shimbun*, December 20, 1908.

⁵¹ A detailed account of the volley of allegations between different press factions can be found in “Kantō mondai no shinsō,” *Chōsen*, Vol. 6 (1909), 3-5.

burying the story of the pending agreement.⁵² Ōmura went so far as to suggest that Yi Yong-gu, a cabinet member and prominent member of the pro-Japanese Ilchinhoe, had received a bribe during a visit to Tokyo, prompting the Ilchinhoe to publish a rebuttal.⁵³ Founded or not, these allegations caused a stir in Japan and prompted a volley of accusations between papers, especially the journalists from the *Taehan Maeil Ilbo* and the *Asahi Shinbun*.

Although public interest in Wando soon waned, the affair raised lingering questions about the nature of the land lease process and the character of forestry officialdom. It pitted different bureaucratic factions against one another—Oka (and the Bureau of Agricultural, Industry, and Commerce) did not see eye-to-eye with Kiuchi (and the Cabinet). It arrayed different newspapers and journalists against one another—the Seoul-based *Taehan Ilbo* crossed swords with the Tokyo-based *Asahi Shimbun*. And at the most basic level, it matched Etō, who came to personify the greed of metropolitan Japanese capitalists, against Koreans and local settlers. Few images capture these fault lines—and the simplified, sensationalistic way they were covered by the press—better than Figure 3.1, a political cartoon published in the popular magazine *Chōsen*.

⁵² Ōmura Tomonjō initially broke the story in the *Asahi Shimbun* as a three part series under the title, “Wando shinrin mondai,” December 18-20. He followed this up with a string of articles on cronyism in the ranks of the Government-General bureaucracy, which were serialized as “Keijō no kanki mondai,” *Asahi Shimbun*, January 7-12.

⁵³ “Isshinkai no benbaku,” *Asahi Shimbun*, December 29, 1908.

Figure 3.1. A political cartoon entitled “The Kantō Problem.”



Source: “Kantō mondai no shinsō,” *Chōsen*, Vol. 6 (1909), 5.

But the most lasting legacy of the Wando Affair was that it raised for many Koreans questions about the true intentions of the forestry enterprise. *Was afforestation just expropriation by another name?* Such doubts would ring in the ears of Koreans for

many years to come, and all the more so with the passage of the Forest Ordinance, the legal engine of the Government-General's afforestation campaign.

The Forest Registration Survey

It was in the midst of the Wando hullabaloo that Saitō Otosaku received word that officials in Korea were seeking someone to oversee the reclamation of Korea's forests and that he had been identified as the man for the job. Saitō at first balked at the invitation, citing his current duties as an administrator of Hokkaido's forests as an excuse. But letters from top-ranking officials exhorting him to cross to Korea did not stop.⁵⁴ And in 1909 he at last made his way to Korea, where he became what was in effect reclaimer-in-chief as a high-ranking official in the Forest Policy Division of the recently established Bureau of Forestry (*Sanrin kyoku*).

Almost immediately upon arriving in the peninsula (which he had first seen on the front lines of the Sino-Japanese War), Saitō was tasked with executing a new, comprehensive survey of its forests. The troubled rollout of the Forest Law had revealed the poverty of local-level information available to forestry experts and government officials. While these officials held firm to their commitment to refashion Korean forestland tenure into a modern land-holding system, the need for a more detailed portrait of the "boundaries between state and private forests, as well as the conditions and composition" of forests across the peninsula was felt acutely.⁵⁵

It is no accident that such a formidable task was put under the leadership of Saitō, who had already cut his teeth surveying forests and mountains in Taiwan and had

⁵⁴ As quoted in Takemoto Tarō, "Shokuminchi ni okeru ryōkka undō seisaku no igi: Saitō Otosaku no ashiato kara," Unpublished paper presented at the Kankyo seisaku shi kenkyūkai (2012).

⁵⁵ For a discussion of the forces prompting the survey see DRSK, 23-24.

experience working in the highly experimental administration of the state forests of Hokkaido. Saitō was given a shoestring budget and ordered to commence the survey as soon as was practicable. As Saitō himself would later recall, such a survey was a daunting task not only because of the budgetary constraints but also because of the scarcity of geographical intelligence regarding rural Korea and the difficulty of the often-mountainous terrain. He thus moved swiftly to collect maps and geographical information on Korea's hinterlands (including map sheets borrowed from the Japanese Army) and briefed his team of surveyors on the techniques necessary to produce the local level assessments and precise measurements desired by the Bureau. Also complicating the survey was a pervasive fear among the surveyors that they would be subject to reprisals by rural communities, especially those in the restive northern region. Saitō and his team accordingly took various safety precautions: incorporating at least one Korean in every unit, and requesting police escort in areas deemed particularly unsafe.⁵⁶

The chief objectives of the Forest Registration Survey were to “measure and map the distribution of forest area, quality, and type” for every parcel of forest in Korea. But, as the bylaws of the Forest Registration Survey reveal, the surveyors also ventured wherever possible to gather information about the customs and traditions of forest usage in each region. The full list of goals was as follows:

- 1) to demarcate the boundaries of reserved mountains (pungsan) and other official territories
- 2) to demarcate the boundaries of public mountains and temple forest lands
- 3) to demarcate forests
- 4) to demarcate areas of sapling growth
- 5) to demarcate areas of felled or exploited forest
- 6) to identify county borders
- 7) to mark shrines, gardens, mandalas, masoleums, imperial masoleums, and other landmarks

⁵⁶ Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” in CRI, 40.

- 8) to mark important species (and to distinguish between coniferous, pine, and broadleaf trees)
- 9) to demarcate sites of rampant slash and burn agriculture
- 10) to record the title, forest condition (such as forest type, age, number of standing trees) and previous status of major National Forestlands
- 11) to note customs related to forestry
- 12) to note the condition of fuel consumption
- 13) to note conditions related to the production and supply of timber and processed goods
- 14) to note any other information that may be of use regarding usage management.⁵⁷

With these objectives in mind, and with Japanese Imperial Army maps in hand, twenty-four surveyors fanned out across the peninsula between March and August 1910.

Their inquiry cast a wide net. From ecology to ethnography to the demarcation of political borders, the Forest Registration survey took a vacuum-like approach. In a manner similar to silvical surveys conducted elsewhere in the world, this survey sought to filter local complexity through a standardized system of data collection. But, importantly, this survey also made a conscious effort to record the local complexity of village forestry. It took in information on a wide range of customary usage arrangements, household and village fuel consumption patterns, and any other information that might be of use to foresters.⁵⁸

Errors, setbacks, and time limitations notwithstanding, the Forest Registration Survey yielded a nuanced portrait of local conditions and the national distribution of woodlands. Perhaps its signal achievement was the Korean Forestland Distribution Map (*Chōsen rinya bunpuzu*, Figure 1). Assembled by Saitō using the data compiled by surveyors, the map precisely plots the distribution of forests across the peninsula and

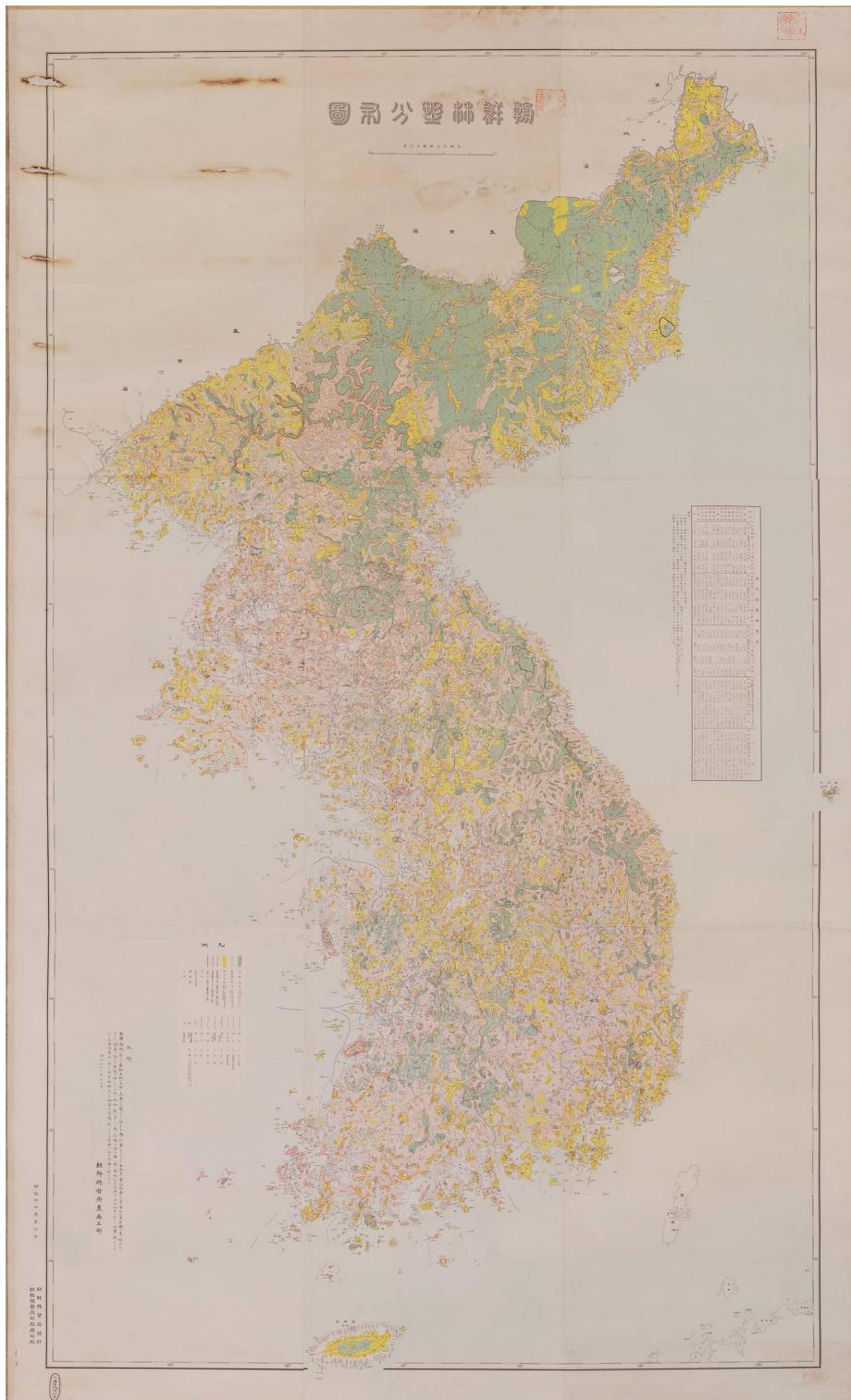
⁵⁷ A reprint of these guidelines and the detailed regulations can be found in DRSK, 24-26.

⁵⁸ In this sense, at least, Japan's approach to forest management in Korea complicates the notion that foresters and state-planners rendered local landscapes "legible" through the imposition of a centralized vision, as James Scott has argued. See James Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (Yale University Press: 1999), chapter 1.

categorizes Korea's forests into three types: mature stands, seedlings, and denuded forests. Upon the completion of the map, Saitō had 2,000 copies printed, which he then distributed to officials across Korea.⁵⁹

⁵⁹ Komeie Taisaku provides a fine-grained analysis of the *rinya bunpuzu* in “Colonial Environmentalism and Shifting Cultivation in Korea: Japanese Mapping, Research, and Representation,” *Geographical Review of Japan*, Vol. 79, No. 12 (2006), 664-679.

Map 3.1. Map of Forestland Distribution in Korea (Chōsen rinya bunpuzu). 1910.



Source: Wikimedia commons.

Surveyors also took pains to demarcate the extensive stands of red pine—the pioneer species that had long signified ecological decline—most of which had set roots in the wake of slash-and-burn agriculture. Concern with the prevalence of red pine in Korea was not particular to Japanese officials. Ernest Wilson, an English botanist who travelled to Korea in 1917 on a plant collecting expedition was also struck by the prevalence of red pine which, he observed, “is constantly advancing from the south, enters and ultimately forms pure forests beneath whose shade scarcely an herb or blade of grass can flourish. These types of forests, either in their complete form or in their different stages of development, may be seen by anyone travelling up and down Korea.”⁶⁰ The alarming spread of *pinus densiflora* served as further evidence that a major state intervention was in order. So wary were some officials of the dominance of red pine in Korea (which was considered to yield comparatively low quality timber) that they called for its swift exploitation so that other sources of timber and more diverse forest stocks could be planted in their place.⁶¹

The survey also generated the first set of comprehensive data on forest type and distribution: statistics that would be repeatedly cited by forest administrators in the decades to come. In all, it was calculated that approximately 73 percent of the peninsula was forested—slightly higher than the Japanese archipelago. Of this forestland, 47 percent was designated as privately owned and 46 percent as National Forest, as Table 3.1 makes clear. These statistics confirmed the view held by many experts that the

⁶⁰ Ernest H. Wilson, “The Vegetation of Korea,” *Transactions of the Korea Branch of the Royal Asiatic Society*, Vol. 9 (1918), 10.

⁶¹ See, e.g., Kakeba Sadakichi, “Chōsen ni oite shinzairin o shitatsuru ni wa ika naru jushu to tochi to o erabubeki ka,” *Chōsen nōkaihō*, Vol. 6, No. 5 (1911). Japanese foresters’ initial policies towards Korean red pine is explored in detail in Ch’oe P’yōg-t’aeck, “Ilche ha imya chosa saǒp ūi sihaeng mokchōk kwa sōngkyōk,” *Han’guk munhwa*, Vol. 47 (2006), 194-195.

forestland registration process mandated by the Forest Law—which saw the registration of only 13% of Korea’s forests—was deeply flawed. They also, however, buoyed the hopes of many foresters: in contrast to previous estimates that as much as 80-90 percent of Korea’s land cover was bare ground, this survey determined that only 25-26 percent was totally bare. “This is,” wrote Saitō, “quite an encouragement with regard to forest conservation.”⁶²

Table 3.1. Distribution of Forests Related to Ownership Institutions and Forest Condition

Forest Type	National Forestland Under Institutional Oversight	National Forestland without Institutional Oversight	Forestland Under Management of Temples	Privately Owned Forestland	Total
Standing Timber	626,840 (<i>chō</i>)	3,666,561	96,721	732,563	5,122,122
Early Growth	186,909	1,987,851	34,411	4,410,302	6,619,473
Denuded	221,624	1,613,589	34,270	2,237,978	4,107,461
Total	1,035,373	7,268,001	165,402	7,380,843	15,849,619

Source: Adapted from Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” in CRI, 53.

Upon completing the survey and examining the results, Saitō submitted in August 1910 two reports to the higher echelons of both the Korean Government and Japanese colonial authorities. Of particular importance was his report *Opinions Regarding the Management of Korea’s Forestlands* (*Kankoku rinya seiri ni kansuru ikensho*).⁶³ A lengthy treatise, this report both distilled the findings of the survey and articulated a mission statement for Japanese forest reforms in Korea. It found close readers within the

⁶² As cited in Komeie Taisaku, “Colonial Environmentalism and Shifting Cultivation in Korea: Japanese Mapping, Research, and Representation,” *Geographical Review of Japan*, Vol. 79, No. 12 (2006), 667.

⁶³ Both of these reports are re-printed in full in Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” in CRI, 56-81.

Bureau of Agriculture, Commerce, and Industry, who saw in this report the faint sketches of a new approach to forest management.

Saitō leveled two principal criticisms of the current course of forest policy. The first and most consequential criticism was directed at the aforementioned land registration process. Because so much forestland was unclaimed and subject to customary arrangements, he argued, to allow these registers to stand as the foundation of the forestland tenure system in Korea was deeply problematic.⁶⁴ Such a registration process could not possibly account for the complexities of local land use arrangements and the customary (and thus undocumented) rights of Korean farming communities. Nor would it coax rural Koreans into the ranks of the state's larger conservation and reclamation efforts or instill in them an enthusiasm for afforestation and conservation. Saitō went further to exhort officials to pay closer attention to the customs of the Korean rural communities and their relationship with the forest.⁶⁵ As many of his contemporaries would later recall, such a hands-on approach to forest management—one that sent foresters into these communities to observe, record, and see with their own eyes—was a hallmark of Saitō's leadership.⁶⁶

Saitō also expressed in this report a more general skepticism that the shared-yield approach to afforestation and forestry development (as stipulated in the Forest Law) was the most appropriate model for Korea.⁶⁷ Given the heavily denuded state of the peninsula,

⁶⁴ Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” 70.

⁶⁵ Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” 76-79.

⁶⁶ Kakeba Naokatsu, the brother of the top-ranking forestry official Kakeba Sadakichi, recalls having to wake up on Saturday mornings to go on study tours of local mountain conditions per the orders of Saitō. He provides a reflection of his service under Saitō in TYBK, 373.

⁶⁷ Saitō Otosaku, “Kankoku seifu jidai no rinseki chōsa jigyō,” 78.

he argued, a system whereby land was leased to single parties for afforestation and ownership was transferred upon successful reclamation might present a more expeditious means to reforest the peninsula. Although he only provided in this report the faintest suggestion as to how such a system would work, his opinions resonated with a broader desire to incentivize Japanese capitalists, settlers, and timber companies to undertake the heavy lifting of reclamation in Korea. And with his promotion to chief of the Forestry Bureau in late 1910, Saitō was soon able to act upon these suggestions.

The Forest Ordinance

Newly equipped with a wide range of information acquired through the Forest Registration Survey, officials commenced research into a substantive reform to the Forest Law beginning in August 1910. The reforms sought to reconcile a number of technical issues voiced by Saitō and appease a Korean public that was growing increasingly wary of “the large number of insufficient administrative policies established by the Forest Law.”⁶⁸ While it is easy to overstate the influence of Saitō on the complex legal reform process that spanned multiple departments and ministries, there is no denying that the reforms that were to follow bore a striking resemblance to the reform agenda laid out in his *Opinions* report.⁶⁹

The Forest Ordinance (*Shinrin rei*) was promulgated in June 1911, superseding the Forest Law as the governing instrument of forest policy in Korea. Much of the document retained the timbre and substance of the Forest Law. The penal code outlined in the Ordinance, for example, did not depart radically from the system established in the

⁶⁸ “Sallimryǒng palp’yogi,” *Maeil sinbo*, May 21, 1911.

⁶⁹ For a broader comparison of the Forest Law and Forest Ordinance see Yi Sōn-wōk, “Shokuminchi chōsen ni okeru rinya shoyūken kakutei kotei to bochi mondai,” *Chōsenshi kenkyūkai ronbunshū*, No. 46, (2008), 157.

previous law. Nor did the provisions endowing the Bureau of Agriculture, Commerce and Industry with broad powers to allocate any forestlands deemed in need of protection as Reserved Forests.⁷⁰

But the establishment of a system of forestland leasing for afforestation (*zōrin kashitsuke*) marked a major pivot in forest management policy. “In the interest of afforestation,” stated Article 7 of the Ordinance, “parties who lease national forest land and successfully reforest the land are hereby entitled to a transfer of the ownership rights of that forest.”⁷¹ Article 29 went further to establish that “Any National Forestland designated as protected in perpetuity prior to the enactment of this law is to be included in the land lease system outlined in Article 7.” Taken together, these provisions marked a new strategic approach to afforestation by enticing investors with the promise of the eventual acquisition of cheap land. Although the law made a number of substantive revisions (such as Article 9) that provided for the gradual, if limited, enfranchisement of local Korean communities, it was clearly in the best interests of Japanese settlers, corporations, and investors.⁷²

Under the terms laid out in the Ordinance (and the spate of subsequent related edicts and regulations), not only was forestland to be leased out at dirt-cheap prices, but successful reclamation also entitled the party to exclusive ownership rights of the land

⁷⁰ Significantly, the basic legal framework enshrined in this law would not be substantially reformed until 1961, with the passage of a new set of laws that were central to the Park regime’s village improvement initiative.

⁷¹ The Forest Ordinance is re-printed in full in DRSK, 20-22.

⁷² This process is examined in detail in Ch’oe Pyōng-t’ae, *Ilche ha Chosŏn imya chosa saōp kwa sallim chōngch’ae* (Sōul: P’urūn Yōksa, 2009); and Yi U-yōn, *Han’guk ūi sallim soyu chedo wa chōngch’ae ūi yōksa, 1600-1987* (Sōul: Ilchogak, 2010), chapter five.

and any timber resources therein.⁷³ In many cases, interested parties were able to select the land that they would lease, which allowed them to buy up land of use for a wide array of potential development projects. Obvious though it may sound, these were favorable terms for large-scale, capital-intensive timber companies able to cover the initial outlay of capital needed to undertake afforestation projects. As Japanese officials were quick to point out, land that was not heavily denuded could typically be transferred after only eight years of natural growth. All that was truly required of the investor was the protection of the land from the axe of timber bandits and the fire of Korea's *hwajōnmin*. Government officials wasted no time to extol these and other virtues of the forestland reclamation enterprise in a pamphlet entitled "Afforestation Land Lease Guidelines" (*Shakuchi zōrin tebiki*), which was distributed after the passage of the Forest Ordinance to local governments and corporations as a means to jumpstart the process.⁷⁴

One need only inspect the Government-General's statistics on land lease contracts to see that a newfound enthusiasm for reclamation work was felt almost immediately. Whereas the shared-yield forestry system established by the earlier Forest Law gave rise to reclamation work on only about 4,300 *chō* of forestland, by 1912 as much as 12,533 *chō* had been leased out, and by 1914 this amount had grown to as much as 269,934 *chō*.⁷⁵ It did not take long for large firms and conglomerates like Sumitomo, Nomura

⁷³ There was a prorated system of four classes of land leased out: 1) land with sapling and significant grass coverage (50-80 sen per *chō*); 2) Growing saplings and brush to be used (20-60 per *chō*); 3) without trees but with brush (10-40 per *chō*); 4) without trees and brush coverage (5-30 per *chō*). Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 16.

⁷⁴ A discussion of this pamphlet can be found in Chōsen sōtokufu, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu, 1928), 22.

⁷⁵ Using the annual report issued by the Government-General, Hagino Toshio has consolidated all available data into a useful chart, reproduced as Appendix III, in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 63.

Forestry, and Mitsui Holdings to gain control of large tracts of forestland, as a massive afforestation industry began to take root in Korea (see Table 3.2). Front and center in this land-lease process was the para-statal Oriental Development Company, which acquired as much as 50,000 *chō* of forestland through this process. As time passed, the ODC also bought up large tracts of forestland—including forests in Hwanghae, Kyōnggi, and Kangwŏn Provinces—amounting to as much as 116,000 *chō* by the end of the colonial period.⁷⁶ Although it would be decades before most of these projects would reap dividends, this afforestation program proved a key mechanism for the expansion of Japanese capital into Korean forestry operations and a springboard for other extractive enterprises.

Table 3.2. Lessees and Owners Holding over 10,000 *chō*.

Owner	Total Area		
	Area Leased	Area Transferred after reclamation	Total Area
Sumitomo Gōmeikaisha (GK)	47,778 (<i>chō</i>)	27,764	75,542
Oriental Development Company	27,304	21,971	50,275
Yamashita GK	18,459	7,083	35,542
Mitsui GK	11,582	23,359	34,977
KK Nakamura Gumi	16,013	15,846	31,859
Handa Zenshirō	17,228	3,515	20,742
Katakura Shokusan Kabushikigaisha (KK)	9,268	5,520	14,788

⁷⁶ For a path-breaking analysis (and indeed indictment) of the ODC forestry enterprise in Korea see Kwon Ok-yong, “Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku,” *Rekishigaku kenkyū*, Vol. 297 (1965), 1-17.

Nomura Ringyō KK	10,197	3,483	13,680
Taki Kumejirō	7,333	4,512	11,845
Kōga GK	10,254	--	10,254

Source: Data from “Nihon no ringyō”; compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 66.

Table 3.3. Japanese Forestland Owners, Institutions with Holdings over 5,000 *chōbu*.

Owner	Land Holdings	Area of Lease of National Forestland	Total
Itō Sangyō GK	2,445	7,583	10,028
Handa Nōrin GK	12,385	29,422	41,797
Hokusen Ringyō Kaisha	10,975	--	10,975
Tōyō Takushoku KK	82,674	33,013	115,975
Chōsen Kongō Ringyō KK	--	8,949	8,949
Ōdakara Nōrinbu	8,194	--	8,194
Katakura Shokusan Kaisha	13,853	1,818	15,711
Yoshimura Nōrinbu	10,857	--	10,857
Keisosha	--	10,807	10,807
Kōshi Fudōsan KK	34,473	2,772	37,245
Koga GK	15,024	2,619	17,643
Fumin Kyōkai	--	5,347	5,347
Asō Shōkai KK	5,662	--	5,662
Airinsha	5,371	2,891	8,252
Sanyō Nōrin KK	6,422	--	6,422
Senman Takushoku KK	4,816	1,392	6,208
Sumitomo GK	85,017	447	85,464
Owada Shōkichi	18,888	--	18,888
Takatori Kurō	9,890	--	9,890
Tashirō Sankichi (with 3 others)	7,024	--	7,024
Nakamura Tahei	2,319	3,871	6,190
Nakamura Jun	2,722	9,505	12,227
Yanagita Mataichi (with 2 others)	--	9,880	9,880
Matsuoka Shunzō (with 1 other)	--	10,511	10,511
Tezuka Yasuhiko	6,426	--	6,426
Taki Kumejirō	13,425	201	13,626

Nomura KK	15,426	10,196	25,622
Chōsen Nōkō KK	2,862	3,163	5,989
Mitsui Holdings	71,087	4,187	75,284
Total	448,597	158,574	607,171

Source: Data from *Chōsen sanrinkaihō*, Vol. 137; compiled in Pae Chae-su and Yun Yō-ch'ang, “Ilche kangjōmgi Chosŏn esō ūi singminji sallim chōngch'ae kwa Ilbon chabon ch'imt'u kwajōng,” *Sallim Kyōngje Yōn'gu*, Vol. 2, No. 1 (1994), 33.

Table 3.4. Korean Forestland Owners, Institutions with Holdings over 5,000 *chōbu*.

Owner	Land Holdings	Area of Lease of National Forestland	Total
Ch'angdökkung	37,174	--	37,174
Kyōnngi Provincial Forest*	23,469	--	23,469
North Ch'ungch'ōng	9,940	--	9,940
South Ch'ungch'ōng	5,567	--	5,567
North Chōlla	10,516	2,217	12,733
South Chōlla	10,430	--	10,430
North Kyōngsang	10,062	2,683	12,745
South Kyōngsang	17,432	--	17,432
Hwanghae	10,626	--	10,626
South P'yōng'an	16,722	--	16,722
North P'yōng'an	15,774	--	15,774
Kangwŏn	9,571	--	9,571
South Hamgyōng	15,048	--	15,048
North Hamgyōng	19,260	544	19,803
Tongsang Township (South Hamgyōng)	10,614	--	10,614
Wölchōng Temple (Kangwŏn)	7,581	--	7,581
Pohyōn Temple (North P'yōng'an)	31,179	--	31,179
Yujōm Temple (Kangwŏn)	12,172	--	12,172
Chosŏn kwijokhoe	9,653	--	9,653
Pae Sōk-hwan	6,441	--	6,441
Pak Yōng-hyo	--	5,798	5,798
Chōng Hoe-ch'an	--	5,939	5,939
Kim Ki-hwan	--	5,362	5,362
Sō Sūng-wŏn (with 3 others)	5,831	--	5,831
Total	295,062	22,543	327,605

Source: Data from *Chōsen sanrinkaihō*, Vol. 137; compiled in Pae Chae-su and Yun Yō-ch'ang, “Ilche kangjōmgi Chosōn esō ūi singminji sallim chōngch'ae kwa Ilbon chabon ch'imt'u kwajōng,” 33. *Although Provincial Forests were often placed under the oversight of colonial officials, they were comprised of private landholdings and have thus been designated by Pae and Yun as a Korean capital asset.

And yet, it was not just corporations that made their way to Korea. As Tables 5.3 and 5.4 suggest, a wide range of investors, institutions, and partnerships—both Japanese and Korean—tapped into the afforestation project. Take, for example, Shiozaki Chōjī, a settler based in Chongjin, who, together with four partners, leased in 1915 just over 124 *chōbu* of Non-Reserved National forest in Puryōng County (North Hamgyōng Province). Over an 11-year period Shiozaki and his partners planted over 100,000 saplings of pine on the steep hillsides that had long been denuded. Concerned with timber banditry and the threat of fire, he also hired an around-the-clock patrolman to police the forest. By 1926, Shiozaki, who was “intimately familiar with forestry works” due to his upbringing in the mountainous Kii peninsula, had nurtured “a beautiful forest” full of “high quality stands” in the eyes of government officials.⁷⁷

A somewhat smaller lease was made to Yi Yong-uk, an enterprising Korean from Asan County (South Ch'ungch'ōng Province) who acquired just over 106 *chō* of forest land in 1917. Planting red and black pine, Yi eventually turned the area into what government officials deemed “a dense, beautiful forest covering the entire mountain.”⁷⁸ More ambitious was the reclamation project of the Mokp'o School Association (*Mokuhō gakkō kumiai*), which gained control of the lease from the local Mokp'o Residents Association in 1915, and set to work on 203 *chō* of forestland in Muan County. After a

⁷⁷ Chōsen sōtokufu, Sanrinbu, ed., *Ringyō keieijō mohan to narubeki jiseki gaiyō* (Keijō: Chōsen sōtokufu, Sanrinbu, 1926), 113-115.

⁷⁸ Chōsen sōtokufu, Sanrinbu, ed., *Ringyō keieijō mohan to narubeki jiseki gaiyō*, 28.

few years and the plantation of some 2,600 trees, the forest had become a profitable undertaking, bringing revenue to the school finances and local residents.⁷⁹ Such, at least, was the assessment of the Government-General, which profiled the achievements and exemplary figures of afforestation projects in a host of promotional publications. Although these detailed accounts allow us to trace the progress of reclamation in many parcels of forest, one should not forget the biases of the colonial archive.

The Forest Ordinance was less generous to Korean farmers. Having failed to register their land and without the resources to stake a claim to their land, many farming households could only watch as former commonlands were placed under the control of the state, Japanese corporations, and other lesees. But it was not singularly exploitative. At the same time that it opened the gateway to Korea's forests for Japanese capital, the Ordinance laid the groundwork for a system whereby those who did not formally register their land could eventually acquire ownership by demonstrating an established precedent of or newfound commitment to forestland conservation. Should they be able to prove a longstanding connection with a parcel of forestland, these claimants—or *enkoshā*, to use the highly ambiguous Japanese term—were entitled to a retroactive transfer of ownership rights.

Particularly important in the letter of the law was the term *kinyō* 禁養 (K: *kǔmyang*): a compound traditionally used in Korea in connection with disputation over burial rights. An amalgamation of the terms for “to prohibit” and “to nurture,” *kinyō* connoted both the prohibition of felling and a commitment to cultivation on a given plot

⁷⁹ Chōsen sōtokufu, Sanrinbu, ed., *Ringyō keieijō mohan to narubeki jiseki gaiyō*, 46-48.

of forestland.⁸⁰ It had long been a deciding factor in the adjudication of disputes over ownership of forests surrounding burial ground, and thus became in the colonial period the principal measure of whether a party was entitled to eventual transfer of rights—whether historically or through a prolonged demonstration of their commitment to properly manage the land. Through the Ordinance and subsequent edicts, parties who did not register their land per Article 19 of the Forest Law but could prove a precedent of *kinyō* were entitled to a free lease of forestland, the ownership of which would eventually be transferred in perpetuity.⁸¹ The first decade after annexation was thus marked by a scramble among many Korean farming households to meet the qualifications for entitlements so as to retain access to communal forests. As one might expect, this process was as disputatious as it was drawn out. It was not until the actual Forestland Survey beginning in 1918 that these claims were to be settled, and disputes over boundaries and ownership rights continued well into the 1930s.

Predictably, the Government-General cloaked these legal innovations in the rhetoric of accommodation. In a phrase that would be recycled over the years to come, officials touted the shift to the Forest Ordinance as a step towards bringing forestry policy into closer alignment with “the sentiments of the people and the spirit of the age”—as evidence, in other words, of the colonial government’s benevolent management of the forests.⁸² They likewise emphasized the gravity of this undertaking. “The forests are the existence of the country,” proclaimed Saitō Otosaku in one of many editorials he would

⁸⁰ An etymological analysis of this term can be found in Matsumoto Takenori, “Kenkyūkai no matome ni kaete,” in: Inoue Takako, ed., *Shinrin hakai no rekishi* (Tokyo: Akashi shoten, 2011), 181.

⁸¹ These and other details were laid out in Chōsen sōtokufu, *Chōsen shinrin sanya shoyūken ni kansuru hōshin* (Keijō: Chōsen sōtokufu, 1913).

⁸² Chōsen sōtokufu, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu, 1928), 10.

pen in the months leading up to the promulgation of the Forest Law: “a country that neglects its forests, brings upon degradation and pays no attention to it is a perishing country.” Forestry reforms, he argued, were “the most pressing matter of Korea’s urgent business,” closely connected to industry, colonial settlement, flood control, and agriculture alike.⁸³ Invoking the very survival of the Korean state, Saitō cloaked his appeal for conservation in the rhetoric of the collective fate and brighter future of all Koreans—paternalistic tropes that would be repeated throughout the colonial period.

While the promulgation of the Forest Ordinance involved a pragmatic tailoring of Japanese forest management techniques to local customs, such an approach was not entirely peculiar to Korea. In fact, as contemporary forestry officials noted, the roots of the forestland management system implemented in Korea could be traced back in part to Hokkaido, where Japanese forestry officials first hashed out an experimental lease system to meet the unique challenges presented by the largely undeveloped region. Especially striking were the resonances with the 1897 Hokkaido National Land Development Disposal Law (*Hokkaido Kokuyū Mikaichi Shobun hō*), the legal instrument through which officials outsourced the development of the land to corporations seeking to tap into its ample forest resources.

These resonances can be overstated. For one thing, whereas the land lease provisions of the Forest Ordinance in Korea sought to incentivize the reclamation of forests that had been exploited by densely populated communities for many centuries, Hokkaido’s woodlands had long lain outside the reach of the indigenous Ainu population

⁸³ Saitō Otosaku, “Chōsen no sanrin ni tsuite,” *Chōsen oyobi Manshū*, Vol. 37 (February, 1911), 14. This was published as part of a serialized exegesis on the urgency of forestry reforms published over the first five months of 1911.

and the Matsumae domain. Hokkaido's forest management, moreover, was part of a larger land grab that was for the most part uncontested since the Ainu population had been decimated by disease.⁸⁴ But Hokkaido offered to colonial foresters a new template for forest management. Whereas the shared-yield system initially pursued by officials grew from the experiences of men like Dōke who cut their teeth on national forestlands in mainland Japan, the afforestation land lease system envisioned by Saitō evolved from the proto-colonial conditions of Japan's northern frontier.⁸⁵

Ascribing Ownership

For all the talk of the modernization of land tenure, by 1911 the actual ownership of forestland still remained largely unsettled. Although the Forestland Registration survey had mapped in broad strokes the conditions of Korea's ample forestlands, it did not definitively establish borders between national forests and privately owned woodlands. Nor did it ascribe ownership to individual land parcels in the interior of these woodlands—the central objective of the larger Cadastral Survey initiated in 1910. Especially vexing for forestry officials tasked with the implementation of the forestland lease system and the administration of national forests was the fact that the borders between Korea's national forests and privately owned woodlands were yet to be mapped.

As a result, the Bureau of Forestry commenced in 1911 yet another survey. The National Forest Distinction Survey (*Kokuyūrin kubun chōsa*), which strove to draw hard

⁸⁴ See, e.g., Brett Walker, *The Conquest of Ainu Lands: Ecology and Culture in Japanese Expansion (1590-1800)*, (Berkeley: University of California Press, 2006), chapter 3.

⁸⁵ One forester in fact went so far as to note that the land lease system was based closely off of the model of land development in Hokkaido. See Kurozukin (pen-name), "Shiseigo ni okeru rinsei mondai no hihan," in CRI, 436. This point is explored in detail in Yi Sōn-wök, "Shokuminchi chōsen ni okeru rinya shoyūken kakutei kotei to bochi mondai," *Chōsenshi kenkyūkai ronbunshū*, No. 46, (2008), 156-158.

boundaries between national, private, and claimant forests (*enkorin*). In particular, the Distinction Survey set its sights upon the tracts of National Forest placed under the administration of the newly established Forest Management Stations—the processing plants and timber development enterprise established by the colonial government to oversee the exploitation of timber, then concentrated in the densely wooded regions along the Yalu and Tumen River basins.

The Distinction Survey divided National Forests into two categories: “Reserved National Forest (*Kokuyū yōson rinya*)” and “Non-Reserved National Forestland” (*Kokuyū fuyōson rinya*). The distinction between these types of forests was not trivial; for many Korean farmers it determined their ability to stake a claim at eventual ownership. The Standard for the Designation of Reserved National Forests (*Yōsonchi yotei rinya sentei no hyōjun*), issued in 1912, designated the following sites as “retained national forestland,” that is, those that would remain under the control of the state:

- 1) Sites recognized as of utility for military purposes
- 2) Sites of utility for educational or scientific purposes
- 3) Sites such as Protected Forests or woodlands based on this category that are recognized as difficult to sufficiently manage without state participation
- 4) Pungsan (former protected forests) or other sites with special features, but only as needed
- 5) Sites deemed to be adequate for a single collaborative project of more than 2,000 *chōbu*.
- 6) Reserved Forest areas recognized to be convenient for state management.⁸⁶

Un-Reserved Forests, by contrast, were comprised of woodlands that were deemed suitable for the land lease system. A great deal of the land placed under this category fell within the “un-owned public forests” discussed above. Critically, “Non-Reserved Forests” were further divided into two types: those with claimants and those without. “Type One Non-Reserved” forests were in due course leased, sold, or transferred to a wide variety of companies, cooperatives, and individuals—both Japanese and Korean—who undertook

⁸⁶ This edict is re-printed in full in DRSK, 29.

reforestation and development projects in order to eventually gain ownership rights over the forestland. This category of forest was comprised primarily of heavily degraded forests in need of swift reclamation.

Table 3.5. Land Ownership Distribution as of 1924

National Forestland	
Reserved	
Forest Management Bureau	2,100,000 (<i>chōbu</i>)
Bureau of Forestry, Provincial Gov't	3,080,000
Training Forest	120,000
Non Reserved	
Type 1	1,090,000
Type 2	3,090,000
Total	9,490,000
Privately Owned Forestland	
Public Forests	868,000
Temple Forests	179,000
Privately Owned	5,343,000
Total	6,390,000

Source: Data from “Chōsen rinya chōsa jigyō hōkokusho”; Compiled in DRSK, 30-31.

“Type Two Non-Reserved Forest” described land that would be leased, free of charge, to any party recognized by the state as entitled to eventual ownership of it—regardless of whether or not they had registered the land through the Forest Law process. Not surprisingly, the definition and classification of entitlement forests was a complex and politically contentious process, and required a long string of subsequent edicts and memos that clarified eligibility for claimant status. A detailed examination of all of these edicts is beyond the scope of this study, but the most concrete definition of entitlement parties came in the form of the August 1912 Edict on the Special Disposal of Uncultivated National Forestland and Forestland Resources (*Chōsen kokyū shinrin mikonchi oyobi shinrin sanbutsu tokubetsu shobun rei*). The edict classified any of the following as legitimate claimants:

- 1) Any party connected to tombs, parks, gravesites, and other monuments in the forests and mountains
- 2) those temples whose connection with the forest and mountains is registered in old records or proven by history
- 3) any parties with a direct stake in Protected Forests (*hōanrin*)
- 4) any parties with a tradition of communal forestry (*iriai kankō*)
- 5) any party who failed to, per the previous Forest Law, submit land registers and whose land thus became national forests.
- 6) any lessees who seek to lease land to cultivate undeveloped forestland, stock farm, undertake afforestation or manufacture goods on forestland.
- 7) any party who had legally occupied forestlands prior to the previous law going into effect.
- 8) any party who retains rights to a portion of shared-yield leased forestland.⁸⁷

Also instrumental to the extension of ownership rights was the Forest and Uncultivated Land National and Private Ownership Distinction Standard (*Shinrin sanya oyobi mikonchi kokuyū shiyū kubun hyōjun*), which clarified the rules and procedures for proving ownership or demonstrating a precedent to forest conservation (ie, *kinyō*).⁸⁸

Claimant status did not mean the automatic transfer of ownership rights: it simply extended the *opportunity* for the transfer of ownership should these parties be able to prove a track record of afforestation (*ikurin jisseki*). According to the 1923 Edict Regarding Afforestation Qualification Criteria, to qualify for a transfer after successful reclamation one had to meet the following criteria: in the zones of natural regeneration the trees needed to be of 8 years of age or older; in zones of man-made or artificial afforestation two years or longer needed to have elapsed since transplantation; and in both types of zones trees needed to cover 70 percent of the landscape.⁸⁹ Those claimants who could demonstrate that they had practiced forest conservation that met or exceeded this standard were granted ownership rights; those who did not meet this standard were

⁸⁷ This edict is re-printed in full in TYBK, 255.

⁸⁸ See TYBK, 255-256.

⁸⁹ An explication of these requirements can be found in Chōsen sōtokufu, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu, 1928), 22-24.

still eligible for free leases, but their ownership rights to the land remained in limbo. The final arbitration was to be decided by the Forestland Survey (*Rinya chōsa*), which commenced in 1917.

In this and other ways, the passage of the Forest Ordinance touched off yet another registration process whereby Korea's forest landscape was carved into a patchwork of categories, standards, and conditions of oversight. While, with the onset of the Forestland Survey in 1917, Koreans were required to formally register their land in a manner not unlike the Forest Law, they were able to do so through a far more realistic process—one that was for the most part financially reasonable and technically comprehensible for the many Koreans who had previously avoided the registration process. Such an approach alleviated, but by no means resolved, the problem of customary use: it provided a pathway for local communities and individual households without formal legal documents to take ownership over the land to which they had long enjoyed access. It also realized the goal of the commodification of Korea's wilderness. Under this new system land could be transferred, bought, sold, and exchanged as property.

But while in the eyes of officials this policy innovation marked a major step forward in the management of forests, it remained deeply controversial for many Koreans. This is especially true of the large community of immiserated tenant farmers, who increasingly turned to slash-and-burn agricultural deep in the forests. While many forestry officials expected that the settlement of ownership would be completed in a matter of years once the Forest Survey commenced in 1917, such a swift resolution of forestland ownership proved elusive. The commencement of this survey marked but

another phase in the decades-long effort to cement the boundaries of ownership—and with it a new set of conflicts over the rights to the land.

Contestation and the Korean Voice

If the Forestland Survey brought rationality to the soil, it also brought conflict to the everyday lives of many Koreans. For many rural Koreans, re-distribution determined their access not only to the land upon which they eked out a living, but their ability to collect the fuel, fodder, fertilizer upon which they depended for survival. The nationalization of Korea's thus forests riled many rural communities, which had long lived outside the reach of central government forestry policy. These frustrations took many forms—from written protests to the conscious flaunting of the laws—and sometimes found violent expression. Not surprisingly, as embodiments of the state's effort to penetrate rural affairs and expropriate communal lands, the Bureau of Forestry's surveyors were sometimes targets as well.

The Pogil Island incident is a case in point. Although a scanty and biased historical record makes the events of October 1913 difficult to reconstruct, few dispute that the catalyst for the conflict was the arrival to Pogil—a small island off the southern tip of the peninsula (and just a short boat ride from Wando)—of a small party of government surveyors to map and measure forestland for potential leasing through the Forest Ordinance. As one member of the surveying party recalled, the antagonism between the local community and the Japanese surveyors was palpable from the moment they arrived. Just moments after explaining their intentions to the residents of the island, they were confronted by a village elder by the name of Kim, described as “the King of the island,” who passionately protested that “the mountains and forests of the island are

the sacred grave sites of the entire Kim lineage.” Kim refused to accept the nationalization of the island’s forests on the grounds that they “had been under the protection (*hogo kinyō*) of our lineage for many centuries.”⁹⁰ When the party attempted to proceed with the survey they were confronted by a small band of townspeople, led by the elder, who brandished weapons and threw rocks, forcing the survey party to take shelter in the district government headquarters, where they were encircled by a large group of islanders, who were “chanting war cries and death threats.” What had started as a small confrontation quickly escalated in an island wide protest. The surveying party remained trapped in the township office until a relief party of 30 police officers arrived to break up the mob.⁹¹

The Pogil Island incident was by no means a singular conflict. Similar protests unfolded all over the peninsula, with other notable confrontations taking place in Samch’ok County in Kangwŏn Province and Chinyōng County in South Kyōngsang Province. This antagonism only amplified after the March First movement erupted in 1919, which drove many of the more radical anti-Japanese elements into the remote regions in the north, where they orchestrated subversive acts in Korea. The best known of these conflicts unfolded in Changhŭng County (South Chōlla Province) and Ŭnniyul Country (Hwanghae Province). As a result of these and other protests, the Government-General scrapped its plans to create large imperial forest reserves in Korea, placed tighter

⁹⁰ Nankai (pen name), “Bokirudo jiken no omoide,” in CRI, 369-376.

⁹¹ A detailed analysis of this conflict can be found in Kang Yōng-sim, “1905-1910-yōn ilche ui taehan sallim chōngch’ae khyōngsōng kwa sallim ch’imt’al,” *Ihwa sahak yōn’gu*, Vol. 23, 161-163.

caps on the amount of land to be leased out to Japanese corporations, and began to debate policy measures that would address the growing discontent of rural Koreans.⁹²

But perhaps the most important legacy of the March First Movement was that it precipitated a loosening of media censorship, which in turn enabled a more vigorous critique of government forestry policy in the Korean-language press. It was not in fact until the early 1920s that Korean frustrations with and criticisms of this process found sustained expression in print. The *Tonga ilbo*, for its part, ran a steady stream of stories on the Forest Survey and Forest Codes, which often drew attention to the dark side of the government general's forestland re-distribution policies, from the formal protestations of forestland owners to the growing incidence of arrests and prosecutions for seemingly trivial forest related crimes. One article from June 1923, for example, described the growing instances of "unjust land transfers" through the land lease system, citing the recent example of forestland in Yongkang County of South Hamgyōng Province. The transfer of longstanding common lands to Japanese parties, it argued, was not only unjust and destabilizing, but also carried out with "complete disregard for the welfare of the Korean people," who had little say in the process.⁹³ Other articles struck a more macabre tone. Running under the headline "The Forest Ordinance is a murderer," another article from 1925 profiled the sad fate of a slash-and-burn agriculturalist driven to suicide by the Forest Ordinance and its draconian regulation of forest usage. Citing the needless death of this individual and the decline of his community in Kyōngsōng County (North Hamgyōng Province) as a cautionary tale, the article warns that the forestry codes made

⁹² These conflicts are taken up briefly in Kwōn Ok-yōng, "Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku," 1-17.

⁹³ "Yōngang ūi imya buchōn daebu sakōn," *Tonga ilbo*, June 25, 1923.

everyday life “unlivable.”⁹⁴ In this and other ways, the press Korean-language press drew attention to the fact that, for all its talk of incorporation and accommodation, the forestry policies pursued by the colonial state were far from benign.

The Forestland Survey

It was only in 1918—well over a decade after Japanese forestry officials began to lament the pernicious absence of woodland registers—that the Bureau of Forestry commenced the Forestland Survey (*Rinya chōsa jigyō*): the cumulative step towards the ascription of ownership of every parcel of woodland across the country. Coming as it did on the heels of the larger cadastral survey enterprise, which was winding down just as the Forestland Survey was gearing up, this process marked the last component of land ownership reform in Korea. In addition to generating a set of land titles, maps, and registers for the forestlands not covered by the cadastral survey, the forest survey would contribute to, as numerous Government-General publications heralded, “the improvement of the lifestyle of the people and their general economic conditions.”⁹⁵

When compared to the many hundreds of surveyors mobilized for the cadastral survey and the complex bureaucratic apparatus created for the administration of the land survey, the forestland survey appears a minor undertaking. But to many forestry bureaucrats it was the climax of the planning stage of forest policy and the starting point of the actual enactment and enforcement of reform. In total, only about 54 Japanese and 39 Koreans were initially tasked with the Forestland Survey, with many of the actual

⁹⁴ “Sallimryōng i sarin,” *Tonga ilbo*, June 1, 1925.

⁹⁵ DRSK, 31.

surveyors culled from the ranks of the recently completed cadastral survey.⁹⁶ These experienced surveyors teamed up with forestry experts, graduates of forestry and agricultural schools, and local officials to oversee the day-to-day operations of the survey.⁹⁷

Preparations for the survey began in 1916, and, after some administrative setbacks, the Forest Survey Edict (*Rinya chōsa rei*) was passed in May 1918. Echoing the language of Article 19 of the Forest Law, Article 3 dictated that “Owners of forestland should notify county or district authorities of their name, family register, and the area and location of forest areas within the time period designated by Provincial authorities.” County officials were tasked with the actual surveying and the creation of registers and maps, which were then reported to provincial officials, who reviewed the survey results and ruled on the final assessment.⁹⁸ The Forest Survey Edict also mandated that “All claimants eligible for the designation of lease through the Government-General should also notify authorities in this manner.” Together, these provisions initiated the onerous task of processing, surveying, and adjudicating the ownership of all parcels of forestland, including those placed under the provisional oversight of claimants.

The first eight-year phase of the survey was devoted principally to mapping the borders of privately owned forestland. Actual surveying began in and around Kyōnggi Province, and in its early years concentrated on the southern region of the peninsula,

⁹⁶ Another estimate puts the total number of initial employees involved at around 100. Overtime, as the office work increased, more and more employees were assigned to the survey such that at its peak there were about 4,670 employees (including those from the Forestry Bureau, the Forest Management Bureau, and provincial governments) on different aspects of the survey. See DRSK, 38.

⁹⁷ The mechanics of the survey process are described in fine detail in Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” 237-285.

⁹⁸ Chōsen sōtokufu, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu, 1928), 14.

where ownership rights to forestland were more clearly defined. As required by the Forest Survey Edict, any party who wanted to assert their rights over woodlands had to within a time designated by the provincial authorities “place stakes around their property to delimit the area of their forests and label it with their name and address.” They then had to designate a representative “to submit a register and address to local authorities.” Government surveyors would then carry out an inspection of the property in question and create a register (*daichō*) and forest area map (*rinyazu*), which, after a final inspection by provincial officials, were publically posted by the governor’s office. Significantly, per Article 4 of the Forestry Survey Edict, the cost of the survey was placed on the applicant—a fact that prompted many to band together to assert their claims.⁹⁹

A second phase of the land survey, from roughly 1918 to 1935, was devoted to settling disputes. The Government-General was inundated with appeals and complaints regarding the findings of the survey. A Forestland Survey Commission (*Rinya chōsa iinkai*), comprised of 25 members appointed from the ranks of the Government-General judicial system, was thus established to adjudicate any disputes stemming from the survey. Any party who sought to appeal was required to submit their objection to the Commission within 60 days of the posting of the survey results.¹⁰⁰ The Commission would then review the protest and, after deliberation by a sub-committee, hand down a decision.¹⁰¹ The findings of the Commission were final, although in controversial hearings a retrial appeal could be made within 3 years of the first decision. Over the

⁹⁹ Chōsen sōtokufu, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu, 1928), 11-16.

¹⁰⁰ Chōsen sōtokufu, ed., *Rinya chōsa iinkai jimu hōkoku* (Keijo: Rinya chōsa iinkai, 1936), 1-11.

¹⁰¹ A detailed account of the inner-workings of this committee can be found in, “Chōsen sōtoku rinya chōsa iinkai ni jigyō,” TYBK, 408-453.

course of more than fifteen years of work, the committee reviewed 111,377 disputes, and retried only 462 cases. These cases were the most administratively complex component of the survey work, and dragged out until 1935 (and retrials as late as 1938), well over a decade after the survey process had been completed.¹⁰² According to the final tabulations by the Commission, land ownership changed in about 40% of cases as a result of their findings.¹⁰³

According to Yi U-yōn, a little more than half of the disputes were between Koreans over land boundaries.¹⁰⁴ In many cases, the deciding factor was whether or not historical documents regarding the ownership of forestland sufficiently established ownership. Although the committee had to interpret a wide range of materials, they were inundated chiefly with centuries-old court records (often related to burial site disputes) that shed light, however faintly, on the previous ownership arrangements.¹⁰⁵

A province-level view of this process reveals a complex and contentious legal landscape. Take Hwanghae Province, for example. Of 773 disputes settled by the Commission in Hwanghae, 263 were over lands formerly under the control of the Royal Family. As Kwōn Ok-yōng has shown, conflicts over the re-distribution of former Royal Reserved Forests entailed the greatest amount of legal mediation, as many parties could lay claim to some sort of interest. Of the remaining 510 conflicts in the province, 388 were between individual private stakeholders and the colonial state. The other 122 disputes were between individual parties, with numerous Korean versus Korean disputes

¹⁰² Chōsen sōtokufu, ed., Chōsen no ringyō (Keijō: Chōsen sōtokufu, 1928), 16.

¹⁰³ Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” 266.

¹⁰⁴ Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” 262-267.

¹⁰⁵ The convoluted nature of evidence submitted to the committee is recounted in detail by Kageyama Norikage, “Chōsen sōtoku rinya chōsa iinkai ni jigyō,” in TYBK, 414-415.

as well as a few disputes between Korean parties and large Japanese corporations.¹⁰⁶

Using a much more substantial batch of recently released sources on these disputes from Kimhae County in South Kyōngsang Province, Yi U-yōn has gone further to show how a majority of the disputes between the Government-General and Koreans over ownership rights actually ruled in favor of the Koreans.¹⁰⁷ Thus, while we may view the adjudication of these disputes as an exercise of Japanese control over access to resources, they also suggest that forestry officials were genuine in their resolve to bring Koreans into the forest management project through the small-scale redistribution of woodlands.

By the early 1920s, nearly 35 percent of Korea's National Forests had been designated as claimant forests. But while the ownership rights to some of this forestland was eventually transferred directly to claimants, those who did not meet the standards for such a transfer were left in the awkward position of maintaining forestland that they did not own, and were thus less inclined to protect. This concerned many forestry officials, who sought the final resolution of ownership across the entire country—to leave these parcels in limbo could potentially undermine the progress made in surrounding areas. Still more unsettling was the fact that countless farming households owned no forestland and were presumably still dependent on former communal forestlands for fuel. The persistence in some regions of forestry related crimes corroborated this position. Thus, by the mid-1920s, a critical mass of forestry officials began to call for proactive measures to dispose of this claimant forestland, the borders of which had finally been definitively fixed by the conclusion of the Forestland Survey. "Leaving the land in its current state is not profitable for the stability of the people or forest policy," stated one Government-

¹⁰⁶ Kwōn Ok-yōng, "Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku," 11.

¹⁰⁷ Yi U-yōn, "Chōsen sōtokufu no rinya shoyūken seiri to rinsei," 265.

General forestry report, which recognized the “need to swiftly resolve the administration of these forests.”¹⁰⁸

Such were precisely the concerns that prompted the passage of the Special Disposal of Claimant Forest Ordinance (*Tokubetsu enko shinrin jōyo rei*). Issued in April 1926, the edict authorized the disposal of all remaining claimant forests to temples, individuals and the descendants thereof who failed to previously register woodlands. Such an action, it was remarked by one official, would not only advance forestry policy but also “have a great impact on popular sentiment,” which was considered a critical register of the conservationist effort.¹⁰⁹ Essentially a last-ditch effort to finalize ownership, especially among rural hamlets and villages, the lease system opened for one year only an application process for the transfer of claimant forests. Between February 1, 1927 and January 31, 1928 the Bureau of Forestry received 114,053 bids for the potential transfer of 3,416,433 *chōbu*. After reviewing the applications, the Bureau of Forestry transferred a total of 2,773,256 *chōbu*, denying transference to about fourteen percent of those who applied.¹¹⁰

This transfer marked a sharp break from the slow, piecemeal process prior to 1926. While it did, as some Korean scholars have argued, provide yet another opportunity for the state to seize forestland from local communities who were denied transference, the statistics suggest that only a small percentage of forestland transferred through this

¹⁰⁸ As cited in DRSK, 42.

¹⁰⁹ As cited in in DRSK, 43.

¹¹⁰ For more fine-grained analysis of these policies see Ch’oe P’yōg-t’ae, “Ilche ha imya chosa saōp ūi sihaeng mokchōk kwa sōngkyōk,” *Han’guk munhwa*, Vol. 47 (2006), 194-200; Yi U-yōn, *Hanguk ūi sallim soyujedo wa chōngch’ae k ūi yōksa, 1600-1987*, (Seoul: Ilchogak, 2007); and Yi U-yōn, “Singminji imya soyukwōn ūi chōngni: sallim nokhwa wa soyukwōn,” *Kyōngje sahak*, Vol. 40 (2006), 21-55.

process made its way into the hands of the state or Japanese settlers. To the contrary, as much as 89 percent of the land transferred through this edict were small parcels of 2-3 *chōbu* to individual Koreans, especially tenant farmers, with a small percent of the remaining forest transferred to schools, the government, and forestry cooperatives.¹¹¹ The remaining transfers went principally towards the establishment of municipal-level jointly management forests.

Table 3.6. Ownership Distribution as of December 1935

	National Forestland		Privately Owned Forests	Total
	Without Entitlement Parties	With Entitlement Parties		
Southern Korea	558,766 (<i>chōbu</i>)	1,113,449	3,684,576	5,356,791
Northern Korea	5,623,158	2,262,213	2,926,109	10,811,480
Total	6,181,924 (38.2 %)	3,375,662 (20.9%)	6,610,685 (40.9%)	16,168,271

Source: Data from *Chōsen rinya chōsa jigyō hōkoku*; Compiled in Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” TYBK, 264.

By 1934, actual forest surveying work had been completed, and while disputation over its findings stretched out the work of the Commission until 1938, a comprehensive system of land ownership had been established. As Table 3.5 makes clear, the survey designated a little under 41 percent of forests as privately owned, with a majority of privately owned forestland located in the south of the peninsula. The average forestland holding was 3.1 *chōbu*: an area that provided slightly over the 2-3 *chōbu* of forestland required to meet the average farming households demand of fuel, fodder, and fertilizer.

¹¹¹ Yi U-yōn, “Chōsen sōtokufu no rinya shoyūken seiri to rinsei,” 269.

When all was said and done in 1938, 10,820,328 *chōbu* had been designated as privately owned forestland, or about 66 percent of all of Korea's woodlands.¹¹²

The forestland redistribution process unfolded in fits and starts, but by the time it was winding down in the 1930s the vast majority of forestland owners were Korean farmers, who gained ownership of small areas of forestland through the claimant provisions and the reformed survey process. While some scholars have argued that even in this survey some Korean owners did not submit documents in time and were stripped of their ownership rights, the available documentation suggests that most Koreans, including small farming communities, were nevertheless able to gain eventual access to ownership rights (although they were often not immediately transferred).¹¹³

Table 3.7. Annual Breakdown of Afforestation Land Lease Disposals

Year	Transactions			Area (in <i>chō</i>)		
	Japanese	Korean	Total	Japanese	Korean	Total
1910	4	9	13	534	316	850
1911	14	36	50	483	526	1,009
1912	76	3,008	3,084	5,425	7,108	12,533
1913	232	7,838	8,070	42,847	27,087	69,934
1914	246	7,179	7,425	48,836	48,484	97,320
1915	190	8,822	9,012	10,762	37,297	48,059
1916	173	6,410	6,583	15,852	44,940	60,792
1917	109	2,664	2,773	23,929	50,602	74,531
1918	172	910	1,082	61,493	36,154	97,647
1919	189	691	880	52,560	34,518	87,078
1920	109	924	1,033	37,533	29,413	66,946
1921	127	996	1,123	29,855	34,082	63,937
1922	169	1,275	1,444	49,345	38,698	88,043
1923	117	1,191	1,308	31,486	13,651	45,137
1924	101	1,536	1,637	30,023	35,571	65,594
1925	71	1,200	1,271	20,965	10,340	31,305

¹¹² DRSK, 43.

¹¹³ See, e.g., Ch'oe Pyong-t'ae, "1930-yǒndae chōnban ilche ūi minyulim chōngch'aek 'chōnhwan' kwa imya seje toip ūi paegyōng mit ūimi," *Han'guksa yǒn'gu*, Vol. 138 (2007), 177-215.

1926	80	821	901	21,431	19,597	41,028
1927	45	296	341	17,479	34,489	51,968
1928	86	606	692	25,911	28,302	54,213
1929	29	211	240	11,550	9,684	21,234
1930	27	2,736	2,763	7,647	21,445	29,092
1931	18	5,502	5,520	33,540	32,802	66,342
1932	27	8,518	9,545	42,878	43,966	86,844
1933	16	8,691	8,707	30,437	52,137	82,574
1934	3	6,847	6,850	14,911	28,773	43,684
1935	--	--	255	--	--	23,660
1936	--	--	61	--	--	9,745
1937	--	--	230	--	--	36,740
1938	--	--	115	--	--	180,006
1939	--	--	14	--	--	61,248
1940	--	--	14	--	--	3,987
1941	--	--	25	--	--	79,101
Total	--	--	83,086	--	--	1,756,606

Source: Chōsen sōtokufu, *Chōsen no ringyō* (1923, 1934, 1936), Chōsen sanrinkaihō, Vol. 212; Compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 63.

This is not to suggest, however, that this process was equitable. Data on these lease transfers clearly shows that while Koreans vastly outnumbered Japanese who entered these lease agreements, Japanese gained control over significantly larger areas of land for the purpose of afforestation. As of 1934, 79,925 Korean individuals had entered into a land-lease agreement over an aggregate area of 720,001 *chō* of forestland (see Table 3.7). By contrast, only 2,448 Japanese had entered into these contracts by 1934, but these leases covered a total aggregate area of 642,118 *chō*. Put another way, Japanese comprised just three percent of the total parties entered into lease agreements but they gained control of approximately 47 percent of the total forestland leased through this system, as Hagino Toshio has shown.¹¹⁴ Moreover, as time went by, much bigger land plots were leased out to fewer and fewer companies. By far the biggest winner was the Korea Forestry Development Company, a government-backed conglomerate whose main

¹¹⁴ See Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsushi ron*, 63.

stakeholders included the Oriental Development Company, Mitsui Forestry, and Ōji Paper.¹¹⁵

Table 3.8. Breakdown of Private Ownership Distribution

Plot Area	Number of Owners	Percentage	Forest Area Coverage	Percentage	Area per landowner
Under 1 (in chō)	799,686	39.8	318,632 chō	3.2	0.4
1-5	795,042	39.6	1,994,154	20.4	2.5
5-20	342,584	17.0	3,267,266	33.5	9.5
20-50	57,133	2.8	1,657,454	17.0	29
50-100	10,522	0.5	703,725	7.2	66.9
100-300	3,634	0.2	579,551	5.9	159.5
Over 300	1,323	0.1	1,245,122	12.8	941.1
Total	2,009,924	100	9,765,904	100	4.9

Source: Data from Chōsen sanrinkaihō, Vol. 137; Compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 96.

Conclusion

In their pursuit of detailed information on local conditions and precise maps of bounded forests, Japanese forestry officials were not alone. Across the Pacific, American forestry officials such as George Cecil were contemporaneously calling for the production of silvical reports, which he envisioned as “a scientific monograph, a complete discussion of some single problem of live interest...based on intimate knowledge of local conditions.”¹¹⁶ Foresters in the colonial-era Indian Forestry Service also proved enthusiastic surveyors: “Accurate surveys and sufficiently good maps of forests,” wrote the forestry officer R.C. Milward, “are a *sine qua non* for successful administration and management [of forests].”¹¹⁷

¹¹⁵ Pae Chae-su, “Jolim daebu chedo ui kaebal kwajöng e kwanhan sajök koch’al,” *Han’guk imhakhoe chi*, Vol. 91, No. 1 (2002), 121.

¹¹⁶ As cited in Langston, 115.

¹¹⁷ R.C. Milward, “The Indian Forestry Service: Its origins and progress,” *The Empire Forestry Review*, Vol. 26, No. 2 (1947), 188.

That parallel surveys of forests were unfolding simultaneously should not be surprising: the filtering of complex forest landscapes into quantifiable metrics of forest management was the starting point of scientific forestry. But while such parallels suggest a global convergence, Japanese foresters' interest in and commitment to recording local conditions and land-use customs also indicated a heightened sensitivity to the particular conditions of the Korean landscape and its history. Together with the sketchier turn-of-the-century surveys discussed in the previous chapter, these efforts yielded a rich array of information on the quality and distribution of Korea's forest resources in addition to a deep concern with Koreans' traditional land use patterns. As a result, the pursuit of "sufficiently good maps" soon gave way to a far more complicated effort to establish precise land registers and unambiguous ownership rights.

But patterns of forest usage in Korea defied quick fixes. Initially, forestry officials moved to transplant Japan's own land use traditions (and legal architecture) in Korea so as to shore up ownership rights much as they had in the Meiji period. The Japanese concept of *iriai* formed a particularly pervasive concept for forestry officials, who hoped to recast Korea's un-owned public mountains traditions in the mold of Japan's time-tested and recently modernized *iriai* traditions. Rather quickly, however, forestry officials also realized that forestry reforms would flounder if they did not take into account Korea's own customary arrangements or extend ownership opportunities to Korea's agricultural communities. Such was certainly the impetus behind the shift from the Forest Law of 1908 to the Forest Ordinance of 1911—a legal framework that made provisions for claimants to register their forestland through the subsequent survey process which was not carried out until 1917.

But perhaps the signal feature of the Forest Ordinance was the provisions it made for the leasing (and *potential* disposal) of National Forestlands for afforestation works. As concerned with the state of deforestation as they were eager to outsource the heavy-lifting of afforestation, forestry officials made the Forest Ordinance the engine of reclamation. Many Japanese investors, corporations, and capitalists subsequently ventured into the afforestation business and, overtime, gained control over significant tracts of woodlands. Insofar as the Forest Ordinance nurtured the growth of colonial capitalism in Korea it facilitated the exploitation and empire-wide consumption of Korea's forest resources.

Koreans, too, gained ownership rights through these provisions. In some cases, Koreans were able to furnish the proper documents to register their woodlands in the eyes of the state. This was especially true of elite *yangban* families, which had access to a rich set of documentation that could support their ownership claims. But in a majority of other cases involving farming households, the extension of ownership involved the drawn-out negotiation of claimant rights via customary land use arrangements, burial disputes, or proof of precedent of protection and cultivation (as enshrined in the concept of *kinyō*).

Not surprisingly, many who have studied this process have highlighted its discriminatory and even deceitful nature. There is much merit to these criticisms. One need only compare the area of forestland brought under the control of Japanese corporations through the land lease process to gain a sense of the decided advantage enjoyed by Japanese capital in this process. That the leasing of national forestland for afforestation commenced prior to the implementation of the forestland survey and the negotiation of entitlements has prompted some scholars to label the survey as a vehicle

for colonial exploitation.¹¹⁸ Incidents such as the Wando Affair and the hardship for Korean farmers prompted by the forestland distribution process also point up the highly contentious nature of this process.

But realizing the need to enjoin the Korean masses into the work of afforestation and conservation, Japanese officials also made a concerted effort to redistribute nationalized forestland to communities who needed access to forestlands to sustain their livelihoods. Although they tried to dress the afforestation and entitlements process in the language of benevolent rule, the driving force behind these policy innovations was much more practical: the outlook that those without forestland could unravel the progress of afforestation. Indeed, underlying all of these efforts was the perception that afforestation activities would only be lasting if each household and community had access to their own resources. Although the actual material gains of these afforestation projects were sometimes marginal, forestry bureaucrats essentially made the afforestation land-lease system the linchpin of forest management policy in Korea.

Afforestation projects were not unique to Korea. But the distinctive set of policies and legal mechanisms deployed to facilitate afforestation grew out of the particular conditions of the Korean landscape and the administrative challenges it presented. What started as a seemingly simple effort to impose a modern system of land tenure upon Korea's forests proved a decades-long negotiation of land-use traditions, access rights, and the scientific principles of modern forest administration. The so-called greenificationism that emerged as a result of this negotiation was a defining feature of forestry policy in Korea. But the “greening” of the peninsula prompted more than the

¹¹⁸ See, e.g., Kwǒn Ok-yōng, “Chōsen ni okeru nihon teikokushugi no shokuminchiteki sanrin taisaku,” 5.

planting of trees. Afforestation works in Korea became a mechanism for re-organizing local society, invigorating private industry, and diffusing Japanese ideas about stewardship, land ownership, and ecological modernity.

CHAPTER 4

The Timber Undertaking

Described variously as “Korea’s world famous forests,”¹ “the Kingdom of the forest,”² and “a partial solution at least of the problem of the world’s future timber supply,”³ the woodlands of the Yalu River basin occupied a distinctive place in the sylvan imagination of Japanese, Koreans, and Westerners alike. To Koreans, these were the forests of Mt. Paektu: the birthplace of Tan’gun, the mythical founding father of the first Korean kingdom, that had for centuries enjoyed pride of place in Korean mythology and folklore. Stretching across the three northernmost provinces of the peninsula, these forests also demarcated what had long been considered a rugged frontier and cultural backwater, where smugglers operated with impunity, slash-and-burn farmers ran amok, and bandits sought safe haven. If, as Sun Joo Kim has argued, the northernmost provinces of Korea shared a “historical fate as a spatial object of political discrimination in the late Chosŏn period,” prevailing perceptions of the forests of Mt. Paektu as primordial, untamed wilderness surely colored these views.⁴

But by the onset of Japan’s colonial rule over Korea some of the defects of the region had actually become its virtues. Remoteness had provided sanctuary to its forests, while proximity to Manchuria—long considered a barbarian land—placed it on the front

¹ Antō Shōgyō Kaigisho, ed., *Ōryokkō mokuzai* (Antō: Antō Shōgyō Kaigisho, 1922), 40.

² “Sallim ūi wangguk,” *Maeil sinbo*, February 13, 1934.

³ “Manchurian Timber,” *The Timber Trades Journal and Saw-mill Advertiser*, Vol. 65 (1909), 894.

⁴ Sun Joo Kim, ed., *The Northern Region of Korea: History, Identity, and Culture* (Seattle: University of Washington Press, 2010), 8.

lines of Japan's penetration of northeastern China.⁵ Recast as a strategic reserve of forest resources in need of direct management by the state, the northerly forests of Korea—and especially the dense thickets (*mitsurin*) of the Yalu River basin—became the locus of a robust lumbering enterprise that turned the Yalu River Basin into the hub of a vigorous regional industry.

Many institutions grew around this enterprise, but none was more important than the Government-General's Forest Management Bureau (J: *eirinshō*; K: *yōnglimch'ang*): the network of field offices and processing stations created by the colonial state to oversee the direct management of National Forestlands (*kokuyūrin*).⁶ It was in and around these facilities that a dynamic management program was put into place to provision the state with much-needed raw material and revenue. It was thus fitting that the Government-General elected to call these outposts "Timber Undertakings Stations" in their annual progress reports for Western readers: "where proper exploitation with adequate capital should yield a considerable revenue to the Treasury."⁷ Spanning from Hyesan just downstream from the origin of the Yalu at Mt. Paektu to Sinŭiju near the river's confluence with the Yellow Sea, these undertaking stations formed intensive sites

⁵ For a treatment of Korean elite perceptions of this borderland area see Andre Schmid, "Rediscovering Manchuria: Sin Ch'ae-ho and the Politics of Territorial History in Korea," *The Journal of Asian Studies*, Vol. 56, No. 1 (1997), 26-46.

⁶ The official titles of these stations shifted overtime. Initially designated as *eirinshō* (營林廠) they were later re-branded as *eirinsho* (營林署) in 1926, as administrative reforms prompted the consolidation and expansion of the Bureau of Forestry's field stations across Korea.

⁷ Resident-General of Korea, ed., *Annual Report on Reforms and Progress in Chosen (Korea)* (Seoul: Tōkanfu, 1908), 81. The Government-General went to great lengths to profile the accomplishments of the Timber Undertaking Stations in its Annual Reports on Reforms and Progress, annual reports that offered a roseate portrait of the modernization agenda of the colonial state.

of exploitation and vital nodes in the circulation of material goods throughout the colonial state.

Informed by recent efforts to conceptualize Korean history in regional terms, this chapter uses the timber town of Sinŭiju and the colonial-era timber industry along the Yalu River as a window into the geographical, industrial, and ecological transformation of northern Korea during the colonial period.⁸ Whereas regional approaches have hitherto conceived of northern Korea principally in terms of its history of political discrimination, I frame my regional study in geophysical terms. Following the geographer Shannon McCune, who was among the first scholars to highlight the distinctive climatic, geomorphological, and ecological features of what he (following Hermann Laustensach)⁹ called Korea's "northern interior highlands," I set my sights principally upon the densely forested drainage basin of Mt. Paektu. Given that the timber undertaking, like the so-called "forests of the border" (*kokkyō no shinrin*),¹⁰ transcended the geopolitical boundaries of the empire, such an analysis also requires attending to the forestry project across the river in Manchuria—an enterprise that often mirrored and sometimes marred Korea's own forestry operations, as we will see.¹¹

⁸ See, e.g., Sun Joo Kim, ed., *The Northern Region of Korea: History, Identity, and Culture* (Seattle: University of Washington Press, 2010); and Kyung Moon Hwang, "From Dirt to Heaven: Northern Koreans in the Chosŏn and Early Modern Eras," *Harvard Journal of Asiatic Studies*, Vol. 62, No. 1 (2002), 135-178.

⁹ Hermann Lautensach (Eckart and Dege translators), *Korea: a geography based on the author's travels and literature* (Berline: Springer Verlag, 1988), 56.

¹⁰ For a revealing account of the fluid nature of these forests see Bōtenkō (pen name), "Kokkyō no daishinrin," *Chōsen oyobi Manshū*, Vol. 33 (1910), 34-37.

¹¹ See, e.g., Shannon McCune, "Geographic Regions in Korea," *Geographical Review*, Vol. 39, No. 4 (1949), 658-660; Shannon McCune, "Physical Basis for Korean Boundaries," *The Far Eastern Quarterly*, Vol. 5, No. 3 (1946), 274-275; and Shannon McCune, "Climatic Regions of Korea Their Economy," *Geographical Review*, Vol. 31, No. 1 (1941), 95-99.

In anchoring this study of the colonial-era timber industry to a geophysical region, I seek, first, to draw closer attention to how the lay of the land shaped the trajectory and geography of colonial development. A critical staple of industrialization, timber was exploited throughout the peninsula. But no site was targeted for development quite like the Yalu River basin. Where in the south of the peninsula the furtherance of afforestation on privately owned woodlands was the principal task of forest management, the Yalu became the focal point of intensive industrial forestry operations using cutting-edge tools and techniques. As a magnet for corporations, laborers, engineers, and foresters, the Yalu and its forests thus formed the showcase forestry project of the Government-General, where the state and Japanese capital worked hand in glove to turn the material engines of modernization. That the entanglement of capital, labor, and infrastructure inherent to this industrial forestry project primed the region for the Government-General's later efforts in the 1930s to transform northern Korea into a hub of heavy industry is a central argument of this chapter.

At another level, I seek to examine the politics of sustainability at a touch-point of Japan's empire. At once the physical demarcation of the political division between Manchuria and Korea and a coherent ecological zone, the Yalu and its forests formed both connective and contested tissue in the creation and sustenance of what some envisaged as a "Yalu River Economic Bloc" (*Ōryōkkō no keizaiken*).¹² The forestry enterprise along the Yalu River was accordingly marked not only by a porous mixing of peoples, but also by an intermingling of labor, capital, and colonial politics. It was along the banks of the Yalu—and especially at the sister cities of Sinŭiju and Andong—that, for

¹² Manshū Kōhō Kyōkai, ed., *Ōryōkkō* (Shinkyō: Manshūkoku Tsūshinsha, 1937), i.

better and for worse, colonial interests intersected. A focus on the Yalu River basin thus not only reveals the local and rapidly changing contours of industrial forestry but also further elucidates Aaron Moore's inquiry into how "colonial regimes with different views on industrial policy and economic planning" ultimately "undercut their proclamations of Korea-Manchukuo Unity."¹³ Put differently, a regional approach to the study of Yalu River forestry provides an opportunity to dwell on what might be called the *geo-politics* of sustainability.

If any single object links these disparate lines of analysis together it is, appropriately enough, the railway tie.¹⁴ More than any other material good, it etched into the continent a new circuitry for the movement of goods, peoples, and resources that shaped the course of imperial expansion, colonial politics, and resource management. As such, this chapter also seeks to situate the Yalu River timber industry within the changing spatial matrix of the continental empire, the swelling boundaries of which shaped the logic of forest management and the marketplace alike.¹⁵

Annexing the Yalu

¹³ Aaron S. Moore, "'The Yalu River Era of Developing Asia': Japanese Expertise, Colonial Power, and the Construction of Sup'ung Dam," *The Journal of Asian Studies*, Vol. 72, No. 1 (2013), 120.

¹⁴ See, e.g., Takahashi Yasutaka, *Nihon shokuminchi tetsudō shiron* (Tokyo: Nihon Keizai Hyōronsha, 1995); Ko Sōng-bong, *Shokuminchi no tetsudō* (Tokyo: Nihon Keizai Hyōronsha, 2006); and Jun Uchida, "'A Scramble for Freight': The Politics of Collaboration along and across the Railway Tracks of Korea under Japanese Rule," *Comparative Studies in Society and History* Vol. 51, No. 1 (2009), 117-150. Although principally focused on Manchuria, Tak Matsusaka's *The Making of Japanese Manchuria, 1904–1932* (Cambridge, Mass.: Harvard University Asia Center, 2003) is also instructive.

¹⁵ On the role of railways, space, and forest exploitation in the making of Manchuria see Yasutomi Ayumu and Fukao Yōko, eds, *'Manshū' no seiritsu: shinrin no shōjin to kindai kūkan no keisei* (Nagoya: Nagoya Daigaku Shuppankai, 2009).

To fully appreciate the Yalu basin enterprise one must begin not in 1907, when the first Forest Management Stations were established, but in 1677, with the promulgation of Nurhaci's Four Prohibitions: edicts handed down by the Jurchen chieftain banning timbering, hunting, mining, and pasturage in Manchuria. Chinese migration to the northern reaches of the Yalu, as a result, was severely curtailed, thereby sparing the forests of the region from sustained settlement and extensive exploitation.¹⁶ It was only after the Manchu grip on power was weakened in the 1830s that substantial settlement in the region commenced.¹⁷ The outbreak of the Opium War and various ecological problems in nearby Shandong precipitated a large wave of migration to the region.

Yet while the exploitation for fuel and building material proceeded swiftly—and indeed soon spilled across the Yalu River into Korea—most of the forests of the region remained out of the reach of these start-up forestry projects.¹⁸ The northern forests of Korea, meanwhile, remained lightly settled but for communities of slash-and-burn agriculturalists, who nevertheless “produced a very material change” as they rapidly

¹⁶ On the early origins of the regional timber industry see Karesue Tokuo, *Manshū ringyō gaishi: sanshō yobanashi, Manshū mokuzai suisōron* (Tokyo: Ozorosha, 2005 reprint). See also Mark Elliot, “The Limits of Tartary: Manchuria in Imperial and National Geographies,” *The Journal of Asian Studies*, Vol. 59, No. 3 (2000), 603-646.

¹⁷ A detailed analysis of the environmental forces shaping Han migration into the region can be found in Robert B. Marks, *China: Its Environment and History* (New York: Rowman & Littlefield, 2011), 256-259.

¹⁸ As a response to this Korean officials began to implement a hatchet tax in the region, as did Qing officials on the northern side of the Yalu who created in 1877 a Forest Tax Office, which stringently enforced entry into the forest and mountains of the region. See, e.g., Mansen Mokuzai Tsushinsha, ed., *Mansen ringyō gaiyō* (Shinkyō: Mansen Mokuzai Tsushinsha, 1939), 1-10. By the late 19th century the Yalu River had established a reputation as a major reserve of timber for northern China. Perhaps the best of evidence of this were the 20,000-30,000 *muba*, or Chinese lumberjacks, engaged in forestry related activities in the region. See Nagai Rise, “Taiga no shōshitsu,” 52-54.

reduced dense forests into the scorched earth spotlighted by the surveyors discussed in Chapter Two.¹⁹

But the defining feature of this region was its porousness. Chinese and Korean farmers, smugglers, hunters, and bandits routinely crisscrossed the frozen Yalu in search of resources, revenue, and refuge. Timber was a major draw. Local-level records from the northern provinces indeed abound with references to Chinese *mokpi* (timber bandits), who routinely conducted raids on Korean timber when the frozen river provided passage into the forests on its southern banks. And while local Korean magistrates went so far as to hire gunmen to combat these raids, they continued well into the colonial period—a testament to both the ruggedness of the terrain and the desperation of these communities.²⁰

Bureaucratic concerns over tax evasion and banditry soon gave way to more existential anxieties about imperial conquest, however. At the same time that Chinese and Korean officials were scrambling to regulate access to and exploitation of these woodlands, foreign powers were beginning to jockey for timber concessions from the government in Seoul. As discussed in Chapter Two, the diplomatic scramble for timber concessions and the eventual outbreak of war had profound implications for the exploitation of timber in the north of Korea. Viewed as both a strategic pretext for political expansion into Korean affairs and a vital resource for the provisioning of troops,

¹⁹ R.G. Mills, “Ecological Studies in the Tongnai River Basin,” *Transactions of the Korea Branch of the Royal Asiatic Society*, Vol. 12 (1921), 4.

²⁰ Yumi Moon, for instance, has found numerous accounts of conflicts over timber smuggling in provincial gazetteers such as the *Kaksa t'ügnok*. See Yumi Moon, “From Periphery to a Transnational Frontier: Popular Movements in the Northwestern Provinces, 1896-1904” in: Sun Joo Kim, ed., *The Northern Region of Korea: History, Identity, and Culture* (Seattle: University of Washington Press, 2010), 204-205.

Korea's northern forests were increasingly brought under the control of foreign powers, especially Russian and Japanese proxies.²¹ By early 1905, as the Japanese victory in its conflict with Russia was all but certain, Japanese authorities began to lay the groundwork for the systematic exploitation of timber to meet the growing demands of the expanding Japanese military presence in the Yalu region.²² To that end, the Japanese military established in 1905 a “military timber processing station” (*gunyō mokuzaihō*) in addition to a small network of lumberyards.²³

Such were the origins of colonial Korea’s network of timber undertaking stations, which remained under the supervision of military officials until professional foresters took over after annexation. Spurred initially by the strategic necessity of war and imperial rivalry, the Japanese had by the establishment of the protectorate already constructed a small but substantial network of processing sites, standardized and stabilized market prices, and employed a small but growing force of Korean and Chinese laborers to carry out the heavy lifting. Backed by the military, officials from Japan’s Bureau of Forestry,

²¹ On the interlinked origins of the Yalu River timber industry and geopolitical rivalries see Yungsan Su and Yoshiya Iwai, “Ōryokkō ryūiki ni okeru shinrin kaikatsu kōzō no tokushitsu,” *Kyōto Daigaku nōgakubu enshūrin hōkoku*, Vol. 64 (1992), 128-140.

²² The driving force behind these measures were the joint Japanese-Korean forestry companies that bought up the rights for felling from Korean and Chinese locals. These included the Nisshin Yoshimori Kōshi, based in Seoul. The Tōa Mokuzai Kabushiki Kaisha was also an important proxy for Japanese interests, and was engaged in often—fierce competition for rights over and access to the region’s forest resources. See, e.g., Ōzaki Mito, *Ōryokkō Man-Kan kokkyō jijō* (Tokyo: Maruzen, 1910), 228-240; and Nagai Risa, “Taiga no shōshitsu,” 54.

²³ Working in concert with officials from Japan’s Foreign Ministry, military officials also placed tight controls on the price of timber in an effort to stabilize costs. These actions have been highlighted by some Korean scholars as evidence that Japanese actions reveal not only a desire to provision troops with timber for the war, but also the intention of gaining monopolistic control over the timber market of the Yalu region. For this argument see, e.g., Paek Ěl-sun (Eul-Sun Baik), “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” *Hokkaidō Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 47, No 1 (1990), 10-12.

meanwhile, explored the region as never before.²⁴ Although some surveyors expressed surprise and dismay at the damage wrought by slash-and-burn agriculture in the region, these surveys for the most part confirmed perceptions of the Yalu River basin as a deep reserve of valuable timber. Whatever the prevalence of the fire fields of the region, they did little to alter the conclusion of Nishida and Nagamuta, who conducted in 1904-1905 one of the most exhaustive surveys of Mt. Paektu and its forests: “rights for the Yalu River timber industry and the felling of its forests have to date not been completely acquired by any party” such that “it is most urgently necessary that the Japanese empire should, as a matter of politics, take measures to seize these rights.”²⁵

By 1906 they had virtually done so. With the inking that year of the Joint Agreement Regarding Forest Management (*Shinrin keiei ni kansuru kyōdō yakkan*), large tracts of forestland in the northernmost stretches of Korea were placed under control of Japan’s Resident-General, while the Korean Government established a forestry station in the northwest of the peninsula to oversee timbering along the Tumen River basin.²⁶ To implement these new and ambitious plans, a special account and regulations were established in the 1907 Korean Forest Special Accounting Law (*Kankoku shinrin tokubetsu kaikei hō*), which allocated the finances necessary to jumpstart the industry.

²⁴ A comprehensive list of surveys of the region can be found in Nagai Risa, “Taiga no sōshitsu,” in: Yasutomi Ayumu and Fukao Yōko, eds, ‘Manshū’ no seiritsu: shinrin no shōjin to kindai kūkan no keisei, 28-29.

²⁵ Nishida and Nagamuta, *Ōryōkkō ryūiki shinrin sagyō chōsa fukumeisho* (Tokyo: Nōshōmusho Sanrin Kyoku, 1905), 40.

²⁶ A fine-grained analysis of the Foreign Ministry’s role in backing forestry operations, as gleaned from Imperial Diet meetings regarding the conclusion of a forestry agreement with the Korean government in 1907, can be found in Rinyachō, eds, “Kokuyūrinya jigyō no tokubetsu kaikei hōristsu hōshi,” *Ringyō keiei kenkyūjo kenkyū hōkoku*, Vol. 3 (1965), 77-82.

Japan's ambitions did not stop on the southern banks of the Yalu; the Japanese government also set out to gain control over the much larger potential market in the forests of Manchuria. Japanese officials accordingly undertook extensive surveys into the forests on the Manchurian side of the Yalu and pressed timber industry representatives to further extend operations.²⁷ Japanese officials met stiff opposition, however, from the large community of Chinese axe-men (often identified by their Chinese name, *muba*) who had already established a foothold in the region. Taking a different tack, the Japanese Government sought out a partnership with the Qing Government, which led in turn to the joint establishment in 1908 of the quasi-governmental Yalu River Timber Company headquartered in Andong.²⁸ Capitalized at three million yen split between both countries, the company was authorized to undertake timber operations in “60 *ri* of forest on the right bank of the [Yalu] River.”²⁹ And while the timber and its profits were in possession of the Company, it is not unreasonable to say that, insofar as it paved the way for future concessions and opened the gates for Japanese timber interests, the Japanese government successfully penetrated Manchurian timber markets through this venture.

Japan's annexation of Korea in 1910—and the subsequent passage of the Forest Management Station Control Regulations (*Eirinshō kansei*) in August of that year—

²⁷ For an analysis of the politics see, e.g., Ch'oe In-hwa, “Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū,” *Hokkaidō Daigaku nōgakubu enhūrin kenkyū hōkoku*, Vol. 48, No. 1 (1991), 7-10.

²⁸ The creation of this company fundamentally altered the conventions of the timber industry on the Chinese-side of the Yalu. For instance, while *muba* had typically been compensated for the number of the logs delivered, not the size, this shifted to a much more fine-grained system that tied compensation to gradation and measurement. The method of transport also changed: whereas *muba* typically constructed rafts and made one larger trip downstream, Japanese rafting methods allowed for a much more regular stream of smaller timber loads to make their way down the river. See Nagai Risa, “Taiga no shōshitsu,” 54-55.

²⁹ John Van Antwerp MacMurray, ed., *Treaties and Agreements with and Concerning China, 1894-1919, Volume 1* (Oxford: Oxford University Press, 1921), 731-734.

prompted a substantial expansion of the network of Forest Management Stations in northern Korea. Building upon the network of the military timber provisioning stations and equipped with a more detailed map of the boundaries of National Forestland established by the Forest Registration Survey, government-backed foresters and military officials oversaw the construction of a complex web of field offices, processing plants, and factories. By 1910, of the 5,300,000 *chōbu* designated National Forestland, 2,110,000 *chōbu*—or almost 40 percent of Korea’s total National Forestland—had been placed directly under the control of the Forest Management Stations.³⁰

Tasked with the felling, transportation, rafting, processing, sale, and shipment of timber, these stations became local motors for the utilization of forests and processing of forest products. They likewise became strategic outposts for Japan’s Foreign Ministry, which used these sites as staging grounds for the collection of a range of intelligence on the geopolitical developments in the region.³¹ While the number, function, and geography of these stations was to change over the years (see Table 4.1), especially after 1926 with the push towards the industrialization of northern Korea, the charge of this enterprise remained the same: to “rationally” exploit, protect, and regenerate the ample resources of the north per the design of forestry bureaucrats.³²

³⁰ The remaining national forestlands were placed under the Forestry Section of the Government-General and provincial authorities. The administration of national forestlands is examined in DRSK, 45-70.

³¹ These stations doubled as outposts for the collection of a wide array of information of interest to Japan’s Foreign Ministry and witnessed routine visits from Foreign Ministry Officials. The Foreign Ministry kept detailed records of the day-to-day operations of these outposts as related to foreign relations. See, e.g., “Ōryokkō eirinshō kankei zassan dai ikkan,” (Gaimushō, 1909), JCAHR, Reference Code: B04011183700.

³² In June 1926, with a major restructuring of the Bureau of Land Management, these stations were re-configured into a system of 36 Forestry Field Offices placed under the newly established Forest Bureau (Sanrinbu). Three years later these Stations were reduced to 19, as some of this

Table 4.1. Distribution and Jurisdiction of Forest Management Station (as of 1940)

Station Name	Administrative Region	Area	Protected Zones
Seoul Office	Kyōnggi Province, South Chōlla Province, Hwanghae Province, Kangwōn Province	461,126 (chōbu)	22
Nyōngwōn Office	South P'yōng'an Province	229,333	7
Sinūju Office	North P'yōng'an Province (Sinūju, Uiju, Ch'ōlsan, Ryongch'ōn, Sōnch'ōn, Chōngju, Pak'chōn, Kusōng, Sakju, Ch'angsōng, T'aech'ōn, Unsan, Nyōngbyōn)	123,046	5
Wiwōn Office	North P'yōng'an Province (Wiwōn, Ch'osan, Pyōktong)	162,872	5
Kanggye	North P'yōng'an Province (Kanggye, Hǔich'ōn)	409,925	12
Chunggangjin	North P'yōng'an Province (Chasōng)	114,077	5
Kimhyōng	North P'yōng'an (Kimhyōng)	208,621	8
Kangnūng	North Kyōngsang Province (Yōngyang, Ponghwa, Ullūng) and Kangwōn (Yangyang, Kangnūng, Samch'ōk, Chōngsōn, P'yōngch'ang, Yōngwōl)	339,915	15
Hamhūng	South Hamgyōng Province (Hamhūng, Wōnsan, Hamju, Chōngp'yōng, Kūmya, Kowōn, Munch'ōn, Anbyōn, Hongwōn, Pukch'ōng, Riwōn, Tanch'ōn, Sinhūng, Changjin,	524,016	21
Shinpoto	South Hamgyōng Province (Samsu, Changjin)	413,681	9
Hyesanjin	South Hamgyōng Province (Kapsan, Samsu, Bunsan)	433,802	16
Sōngchin	South Hamgyōng Province (Tanch'ōn) and North Hamgyōng Province (Kyōngsōng, Myōngch'ōn, Kilju, Sōngjin)	397,697	12
Musan	North Hamgyōng Province (Musan)	273,516	5
Hoeryōng	North Hamgyōng Province (Ch'ōngjin, Puryōng, Kyōnghūng, Hoeryōng, Kyōngwōn, Onsōng)	217,041	8
Total		4,308,668	150

Source: Adapted from DRSK, *Chōsen hantō no sanrin*, 48-49.

But perhaps the most noteworthy feature of the Forest Management Bureau was that its growth anticipated the wider geographical transformation of the region. From the

land was placed under Provincial control. The number of Stations would fluctuate over the 1930s but stabilized in 1937 at 14. It is also important to note that field stations were not confined to the Yalu or the north of Korea: government officials expanded provincial forestry stations throughout the country as well, especially after WWI as demand for Korean timber grew. For a general overview of the establishment and operations of these stations see, e.g., Chōsen sōtokufu eirinsho, ed., *Chōsen sōtokufu eirinsho yōran* (Keijō: Government-General of Korea, 1912); Itō Jyūjirō, “Eirinsho no enkaku to jigyō” in CRI, 287-289; and Kang Yōng-sim, “Ilche yōnglimch'ang ūi sallim sut'al e kwanhan yōn'gu,” *Ihwa Taehak sahak yōn'gu*, Vol. 22 (1995), 149-182.

very beginning of the development of the region, the network that took shape around the Forest Management Stations—the rails, roads, and routes that circulated timber throughout the empire—established the infrastructural skeleton of industrial development. In delivery timber to market, foresters not only provisioned the state with the raw material of modernization but also laid the groundwork for industrial growth.

Timber to Market

There are some who balk at the idea that Mt. Paektu has in past and present ruled over Korea, but the reality is that the mountain presides over Korea and Koreans. Considered from a historical geographical perspective, anthropologically, or politically, Korea and Mt. Paektu are deeply entwined.³³

Although hyperbolic, Sugi Bonan's paean to Mt. Paektu intimates the spiritual significance of the defining geological feature of the north. But it fails to convey the richness and remoteness of its forests. As the highest peak connecting the Paektutaegan and Changbai mountain ranges, the strato-volcano and its environs made an ideal refuge not only for anti-Japanese rebels and squatters, but also for timber. As the source of the Yalu and Tumen Rivers, moreover, the mountain enabled the delivery of timber to market, making it the geophysical fountainhead of the regional timber industry.

Of course, this was already well known by Japanese officials by the time of annexation in 1910. Survey after survey had confirmed the value of these forests, as a growing body of maps of the region's forests aided foresters and businessmen alike in their search for profitable stands.³⁴ Estimate offered by the Forest Management Bureau

³³ Sugi Bonan, *Chōhakusan yori mitaru Chōsen oyobi Chōsenjin* (Keijō: Dōshūkai, 1921), 3-4.

³⁴ One of the highest quality and most routinely reproduced maps of the region's forests can be found as an insert in Ōryokkō Saiboku Kōshi, ed., *Ōryokkō ringyō shi* (Antō: Ōryokkō Saimoku Kōshi, 1919).

put the total accumulation of timber in the region at 851,860,000 *shakujime*³⁵: a supply that would last, by another reckoning, for as long as 268 years.³⁶ And it was not just the volume that excited officials.³⁷ As a mixed sub-boreal and cool-temperate forest zone, the region presented large tracts of fir, spruce, larch, pine, and walnut—trees sought after as construction materials, railway ties, ply-board, and other raw materials of great utility to the Government-General's modernization agenda.³⁸ Especially coveted were the region's stands of Larch, which were, by one account, so extensive that “it is possible for one to ride on horseback for several consecutive days and see scarcely another tree but Larch.”³⁹

Before these trees became products and raw materials, however, they needed to make their way downstream. And this was no easy feat. To trace the flow of timber to market is to travel across both space and time. For not only did lumberjacks, foresters, and laborers negotiate a complex network of railways, logging roads, and skid-ways to deliver their loads great distances, but they were also at the mercy of Korea's seasons to propel logs over land and water. That is to say, without the hardened, icy soils of winter and the running rivers of spring and summer, the industry would have ground to a halt.

The boom of the axe and the grind of the saw announced the start of the season, which typically commenced between October and December. After felling and marking the timber, teams of ten to twenty laborers worked to transport the logs to a pre-

³⁵ DRSK, 50.

³⁶ As cited in OSSJ, 222.

³⁷ For rhetoric of this sort see, e.g., Murata Shiroyama, “Ōryokkō ryūiki no fugen,” *Chōsen oyobi Manshū*, Vol. 15 (1910), 37-40; and “Ōryokkō saiboku kōshi no jigyō” *Keijō Nippō*, December 21, 1915.

³⁸ A detailed analysis of the relative merits and demerits of these types of trees can be found in Chōsen shokusan ginkō chōsaka, ed., *Chōsen no mokuzai* (Keijō: Chōsen shokusan ginkō chōsaka, 1925).

³⁹ Ernest H. Wilson, “The Vegetation of Korea,” *Transactions of the Korea Branch of the Royal Asiatic Society*, Vol. 9 (1918), 8.

designated water source while the soil was still frozen. This process was often facilitated by the use of ox-driven sled or the Japanese-style *shura*, a centuries-old method used by Japanese lumberjacks to transport large trees to nearby riverbanks.⁴⁰ Performed as it was in the depths of the region's truly frigid winter—when temperatures could drop to as low as 40 degrees below zero—this was backbreaking, bone-chilling labor, which many described as suitable for only the hardiest of souls.⁴¹

Human- and animal-muscle, however, were often inadequate to move timber in close enough proximity to tributaries. Especially in the rugged upper-reaches of the Yalu River—what was sometimes described as “*sangaku shinrin*” or montane forest—laborers contended against steep, craggy terrain and dense undergrowth. For this and other reasons, Japanese officials were quick to commence the construction of a network of skidways, logging roads, and, later, cable delivery systems that would enable the exploitation of the high-quality timber long beyond the lumberjack’s reach. Although construction was often painstakingly slow, this rapidly expanding network of timber transport infrastructure penetrated deep into the mountains and formed a vehicle not only for the timber industry but for the exploitation of Korea’s natural resources more generally.⁴²

Seasonal though it was, the timber industry was an important source of employment in the region for Japanese, Koreans and Chinese alike. The timber industry,

⁴⁰ A detailed analysis of this labor can be found in Chōsen sōtokufu eirinshō, ed., *Chōsen sōtokufu eirinshō yōran* (Keijō: Government-General of Korea, 1912), 1-15.

⁴¹ Average winter temperatures were around 15 below zero, but could drop to as low as 40 degrees. See Ōryokkō saiboku kōshi, ed., *Ōryokkō ringyō shi* (Antō: Ōryokkō saiboku kōshi, 1919), 5.

⁴² A brief overview of the growth of this extractive infrastructure can be found in Itō Jūjirō, “Eirinsho no enkaku to jigyō” in CRI, 290.

as such, was characterized from its earliest years by a convergence of peoples and cultures—to say nothing of tools and techniques.⁴³ Perhaps no one captured this comingling better than Yi Sung-jun, a Korean lumberjack who, after ten seasons of lumbering in the Yalu, published a detailed examination of the inner-workings of this process. Equal parts trade manual and insider account, his treatment touches upon every aspect of lumbering in the upper reaches of the Yalu River basin: from felling to floatation, backcountry living to labor relations. But perhaps the most striking feature of his account is his scattered and subtle commentary on the social segregation of the industry. Koreans and Chinese, Yi notes, lived in separate camps, practiced different styles of lumbering, and earned significantly less than their Japanese counterparts, with many earning just enough to feed themselves day-to-day.⁴⁴ This is especially true of the Korean swidden farmers who, left with few crops to tend to during the winter months, were hired to perform the most grueling labor.⁴⁵

Behind every crew was a Japanese foreman, who directed the flow of labor and determined the scope of the felling operation. Often officials in the Forest Management Bureau, these foremen were well versed in the principles of forest management (*rinseigaku*). For them, the first step in the operation—well before any axe was wielded—was the surveying of forest stock, quality, and viability for exploitation. Based

⁴³ Many Japanese lumberjacks came from Yoshino and Kiso and brought their own tools like the Tosa saw (*Tosa ono*) and tosa saw (*Tosa nokogiri*). Over time, however, they adopted the cross cutting saw (K: *dokki*) conventionally used by Koreans. For a brief discussion of these technology transfers see Paek Ül-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kan suru shiteki kenkyū,” 13.

⁴⁴ Yi Sung-jun, *Ōryokkō jyōryū shinrin shakubatsu jigyō annai* (Hu’chang: Ōryokkō jyōryū shinrin shakubatsu jigyō annai hakkōsho, 1931), 5-10.

⁴⁵ The involvement of *kadenmin* labor is discussed in “Sanrin gyōsei,” in Mizuta Naomasa, ed., *Watanabe Toyohiko kōgyōtsu, Chōsen sōtokufu kaikodan* (Tokyo: Yūhō Kyōkai, 1984), 34.

upon this and other information, they would draw up plans for development, transport, regeneration, and protection—what often but not always promoted the practice of sustainable yield forestry. In many cases, the geography of exploitation was determined by forest ecology. In fact, no sooner did Japanese officials establish a foothold in the region than they began to conduct experiments on the quality and relative virtues of the timber in the region. The results of these studies led to the prioritization of the felling of a few particular types of trees: namely, Korean Pine (*Pinus koraensis*); Yezo Spruce (*Picea ajenensis*); and Japanese Larch (*Larix leptolepsis*).⁴⁶

It was not until the arrival of spring that the logs, often pre-assembled into rafts along the riverbanks, would begin their snaking path down the Yalu and its tributaries.⁴⁷ Often sealed in by the famously steep banks of the Yalu, rafters negotiated a variety of hazards including islets and white water currents in order to deliver the logs as much as 700 kilometers downstream to the lumberyards of Sinŭiju and Andong. There was also, it seems, no small measure of antagonism between Japanese and Chinese rafters over access to the river, as timber operations on both sides of the Yalu vied for access to the most tranquil routes of the Yalu. Much of the timber was collected at Hyesan, where it

⁴⁶ The standards and practices of regenerative forestry exercised by these stations were inconsistent. Until the middle of the 1910s only high quality wood was felled, but after demand spiked around the time of WWI with growth in mining and pulp industry and industrial capital more generally, there was a marked shift towards clear cutting. By the late 1930s clear and semi-clear cutting were widely adopted. Much of this clear cutting was of large tracts, larger than 10 to 100 hectares. Swelled by demand in Manchuria and liberated from damaging tariff policy, by the late 1930s the volume of timber processed increased by as much 150-200%. See, e.g., Kang Yǒng-sim, “Ilche ha Han’guk sallim sut’al kwa Han’gugin ūi chōhang,” Ph.D. Dissertation, Ehwa Womans University, 1998; and Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” *Hokkaidō Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 47, No. 1 (1990), 1-70.

⁴⁷ While the rafting process sometimes began as early as April, the peak season of timber rafting was June through September, when the river flow was more consistent and predictable.

was tabulated and consolidated before being floated in larger rafts down the calmer waters of the main river. En route, rafters passed a string of Forest Management Stations that lined the banks of the river at places like Chunggang, Manp'o, and Wiwōn. While in the earliest years the rafting of timber was typically carried out by professional Japanese lumberjacks who traveled to Korea from the famous logging regions of Kiso and Yoshino on seasonal contracts, Koreans were quick to learn the techniques of the trade, and overtime became a major contingent of this labor force.⁴⁸

While Sinŭiju and Andong were the principal destinations for the region's timber, the flow of timber was not unidirectional. Over time, lumberyards and processing facilities could also be found within a number of larger Forest Management Stations, especially around Hyesan. New roads and timber railways also meant that teams could bypass the Yalu entirely—an issue that would become increasingly important as the pursuit of hydropower transformed the utility of the river in the 1930s. This is to say nothing of the Tumen River Basin transportation network, which also emerged as a vital site for timber operations (with its forest products collected in Hoeryōng and Onsōng, from which they were delivered to markets across Korea and the Japanese archipelago).

Upon its arrival to the mouth of the Yalu, the timber was guided through a network of sluices into one of the many processing plants and lumberyards that lined the widening banks of the Yalu near its confluence with the Yellow Sea. The most frequent destination was the processing plant of the Forest Management Bureau, one of the largest and most active sawmills in Sinŭiju. But much of the timber also made its way into the

⁴⁸ Recruiting was done by a foreman, who sought out a team of about 10-20 rafters back in Japan. The foreman paid for their fares to Korea and gave them an advance on their salary. See Paek Ŭlsun, "Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kan suru shiteki kenkyū," 14.

lumberyards, saw mills, and pulp factories of the burgeoning private industry discussed below.

The fate of the log bundles upon their collection depended largely on market conditions, which were, as one forestry official noted, wrapped in “mutually entangled relations” with global supply and demand.⁴⁹ In some cases it was stockpiled, unprocessed, in lumberyards. In other cases it was graded and processed in the sawmills and plants of the Forest Management Bureau, which provisioned both the colonial state and private industries with a wide array of wood products (including plywood, lumber, poles, and woodchips). In still other cases, and especially after the 1920s, timber was channeled into the growing number of pulp mills and chemical plants, especially those of the Ōji Paper Company, which became the principal non-government procurer of forest resources.

Depending on the conditions of the global market, large quantities of this timber were also shipped abroad. Statistics on the shipment of lumber in and out of Sinūju indeed reveal a fluid portrait of supply and demand shaped by price speculation, shipping costs, and global market swings. The most common destination was the market of the colonial capital, where many lumber companies were headquartered.⁵⁰ As one trade publication put it, “if Sinūju is the processing center, Keijō is the demand center.”⁵¹ But

⁴⁹ Watanabe Toyohiko, “Mokuzakai no sūsei to Chōsenzai,” *Chōsen sanrinkaihō*, Vol. 71 (1931), 4.

⁵⁰ Another important determining factor was shipping costs. For instance it cost 1.170 yen for 1 *shakujime* of timber to ship from Sinūju to Pusan—a considerable sum given the aggregate volume then being shipped out of the region. For a comprehensive list of (often-fluctuating) timber freight rates see Ōryokkō saiboku kōshi, *Ōryokkō ringyō shi*, 82.

⁵¹ Chōsen shokusan ginkō chōsaka, ed., *Chōsen no mokuzai* (Keijō: Chōsen shokusan ginkō chōsaka, 1925), 31.

considerable volumes were also shipped to markets in Manchuria and mainland Japan, as

Table 4.2 makes clear.

Table 4.2. Annual Value of Lumber, Boards, and Railway Ties Exported from Korea

Year	Japan		Exports					Total	
	Amount (yen)	%	Chinese Continent Exports			Total			
			Kwantung	Manchukuo	Mainland China	Value	%		
1910	3,588	2.3	--	--	--	148,882	97.7	0	152,440
1911	2,931	2.0	--	--	--	142,857	98.0	0	145,788
1912	10,745	6.9	--	--	--	144,861	93.1	10	155,616
1913	1,379	1.1	--	--	--	155,333	98.9	2	157,074
1914	3,875	2.7	--	--	--	141,915	97.3	48	145,838
1915	2,022	1.2	--	--	--	173,008	98.8	21	175,051
1916	3,387	1.4	--	--	--	243,709	98.6	40	247,136
1917	13,772	4.8	--	--	--	270,388	95.2	0	284,160
1918	39,668	9.7	--	--	--	369,631	90.3	45	409,344
1919	51,530	6.8	--	--	--	704,975	93.2	80	756,385
1920	524,725	32.0	--	--	--	1,113,599	68.0	0	1,638,324
1921	2,594,592	72.3	--	--	--	994,898	27.7	27	3,589,517
1922	3,937,618	81.5	--	--	--	892,044	18.5	1,268	4,830,930
1923	674,851	45.5	--	--	--	808,327	54.5	209	1,483,387
1924	5,163,976	85.9	--	--	--	847,979	14.1	0	6,011,955
1925	1,903,096	50.6	--	--	--	1,855,853	49.4	346	3,758,295
1926	3,532,507	69.3	--	--	--	1,565,773	30.7	0	5,098,280
1927	1,219,440	38.6	--	--	--	1,941,796	61.4	0	3,161,236
1928	1,219,863	25.1	--	--	--	3,632,315	74.9	0	4,852,178
1929	991,932	24.0	--	--	--	3,145,977	76.0	0	4,137,909
1930	624,525	26.8	--	--	--	1,702,784	73.2	0	2,327,309
1931	1,213,678	54.4	109,198	883,590	26,159	1,018,947	45.6	0	2,232,625
1932	1,024,142	38.8	104,255	1,507,565	2,836	1,614,656	61.2	0	2,638,798
1933	696,601	12.1	318,110	4,698,778	44,865	5,061,753	87.8	0	5,766,354
1934	1,145,485	15.6	242,201	5,923,933	19,247	6,185,381	84.4	114	7,330,980
1935	2,506,221	30.9	305,873	5,212,550	97,344	5,615,767	69.1	0	8,121,988
1936	1,744,366	23.4	439,562	4,988,017	280,657	5,708,236	76.6	0	7,447,602

1937	2,161,965	23.0	408,706	6,440,323	379,000	7,228,029	77.0	0	9,389,994
1938	1,899,718	35.7	9,566	2,801,697	605,792	3,417,055	64.2	5,187	5,321,960
1939	2,223,013	19.0	220,451	8,368,120	895,123	9,483,694	80.9	18,011	11,724,718
1940	3,742,412	--	--	--	--	--	--	--	--
1941	2,152,434	--	--	--	--	--	--	--	--
1942	458,292	--	--	--	--	--	--	--	--
Tota l	43,488,682								

Source: Data from, Chōsen sōtokufu, Tōkei nenpō (each year); compiled in Pae Chae-su, “Ilcheha Chosŏn ūi mokchae suküp chōngch'ae kwanhan yǒn'gu,” 28.

Whatever the vicissitudes of the market and the ultimate destination of Korean timber, the trend of production, as Chae Pae-su has shown, was clearly *up*: the total amount of production figures increased 4.5 times from 1910 to 1940, with production peaking at 29,650,000 *koku* in 1944. The progressive expansion of the volume of timber processed and sold by the Forest Management Bureau mirrored the growth of the larger commercial industry: while in 1907, its first year of operations, the Forest Management Bureau felled only 20,000 *shakujime*, by 1910 the Forest Management Stations were processing as much as 174,991 *shakujime* worth an estimated 545,971.92 yen.⁵² By 1925, this figure had grown to 644,372 *shakujime* with over a million additional *shakujime* of timber felled (see Figure 4.3). And while the nature of disposal and circulation would fundamentally change in 1937 with the outbreak of war in China, the operations of the Forest Management Stations only expanded over the coming years, as foresters became less discerning and less equipped to undertake afforestation works.⁵³

⁵² Ōryokkō saimoku kōshi, ed., *Ōryokkō no shinrin oyobi ringyō* (Antō: Ōryokkō saimoku kōshi, 1915), 199.

⁵³ While some of this timber came from National Forestland in the south of Korea (especially that located around the base of Mt. Chiri and on Cheju Island), the aggregate date on timber production clearly underscores the centrality of the north to timber exploitation: at the same time that Korea's southern provinces decrease from 21.2 percent of production in 1930 to 13.3 percent

Figure 4.3. Annual Timber Exploitation by Forest Management Bureau

Year	Processed Timber (shakujime)	Felled Timber	Total
1907	232,625 (shakujime)	465,250	687,875
1914	245,920	491,840	736,760
1915	178,518	357,036	535,554
1916	344,947	689,894	1,034,841
1917	390,711	781,422	1,172,133
1918	282,853	565,706	848,559
1919	324,005	648,010	972,015
1920	233,887	467,774	701,661
1921	411,201	822,402	1,233,603
1922	457,098	914,196	1,371,294
1923	454,694	909,388	1,364,082
1924	494,691	989,382	1,484,073
1925	644,372	1,288,744	1,933,116
Total	5,531,112	11,062,224	16,593,336

Source: Data from Itō Jūjirō, in CRI, 295-296; and Chōsen sōtokufu eirinsho, *Eirinsho annai*, 1919; compiled in Kang Yōng-sim, “Ilche yōnglimch'ang ūi sallim sut'al e kwanhan yōn'gu,” 167.

Figure 4.4. Annual Timber Sales at Forest Management Stations

Year	Unprocessed Timber		Processed Timber		Sum	
	Volume (shakujime)	Value (yen)	Volume	Value	Volume	Value
1909	5,948	186,699	89,085	804,739	95,033	991,438
1910	47,807	151,332	120,557	992,028	168,364	1,145,360
1911	49,314	206,502	99,573	712,454	148,887	918,956
1912	70,810	345,956	100,849	924,887	191,659	1,270,843
1913	80,589	376,281	111,281	841,572	191,890	1,217,853
1914	58,117	268,959	82,881	582,936	140,998	85,895
1915	44,422	161,119	129,929	830,119	174,351	991,238
1916	136,486	420,538	157,763	1,032,158	294,249	1,452,696
1917	107,702	442,822	113,215	1,018,091	220,914	1,460,913
1918	81,668	478,001	146,679	1,745,671	228,347	2,223,672
1919	74,642	479,404	167,538	2,456,029	242,180	2,935,433
1920	45,344	348,720	123,861	2,287,491	169,205	2,836,211
1921	175,735	682,204	172,496	2,212,461	348,231	2,894,665

in 1941, the northern provinces (that is, P'yōng'an and Hamgyōng Provinces) climbed steadily, reaching as much as 80.7 percent production in 1931. Also noteworthy was the overwhelming focus on the exploitation of coniferous trees—pine in particular—which comprised 96.3 percent of production in 1930 and 92.7 percent in 1942. See Chae Pae-su (Jae Soo Bae), “Ilcheha Chosŏn ui mokchae suküp chōngch'ae kwanhan yōn'gu,” *Sallim kyōngje yōn'gu*, Vol. 6, No. 1 (1998), 25.

1922	112,854	448,791	176,256	2,090,684	289,110	2,539,475
1923	110,895	451,454	188,526	2,101,506	299,421	2,552,960
1924	146,760	668,857	184,353	2,304,802	331,113	2,973,699
1925	262,056	1,145,568	187,912	2,134,878	449,968	3,280,446
Total	1,631,149	7,263,247	2,252,751	25,074,506	3,983,900	32,337,753

Source: Data from *Ōryōkkō ringyō shi*; compiled in Kang Yōng-sim, “Ilche yōnglimch'ang ūi sallim sut'al e kwanhan yōn'gu,” 176.

As one might expect from lumberyards and mills that began as military provisioning sites, these stations also formed vital conduits in the channeling of raw materials into the hands of the colonial state and its agents. In particular, these undertaking stations prioritized the production of three materials closely connected with the colonial state's larger modernizing prerogatives: utility poles for the growing electrical grid; construction materials (e.g., plywood, lumber, and cross-beams) for a wide range of engineering projects; and railway ties for the rapidly expanding network of Korean freight. The latter product formed an especially pressing priority for forestry enterprise, as the Government-General tried to meet the Railway Bureau's seemingly insatiable appetite for timber and rail ties. Insofar as the timber undertaking in the north both supplied rail ties and directed the flow of railways to new sites of exploitation, it was instrumental to the establishment of a new industrial geography in colonial Korea.⁵⁴

Figure 4.4. Annual Imports of Lumber, Boards, and Rail Ties into Korea

Year	Transported from Japan		Value of Imports				Total
	Value (yen)	%	China	%	Other	%	
1910	1,531,679	91.1	72,900	4.3	76,458	4.5	1,681,036
1911	1,670,700	85.7	169,892	8.7	102,254	5.2	1,948,846
1912	1,868,676	82.5	295,340	13.0	99,927	4.4	2,263,942
1913	870,793	66.0	287,292	21.8	161,102	12.2	1,319,187
1914	804,126	68.9	219,437	18.8	143,134	12.3	1,166,697

⁵⁴ This is an extension of the arguments of Yasutomi Ayumu to the case of Korea. See Yasutomi Ayumu, “Shinrin no shōjin to kindai kūkan no keisei: jyūjyō soshiki no shutsugen,” in: Yasutomi Ayumu and Fukao Yōko, eds, ‘Manshū’ no seiritsu: shinrin no shōjin to kindai kūkan no keisei (Nagoya: Nagoya Daigaku Shuppankai, 2009), 529–549.

1915	612,105	65.2	270,085	28.8	56,549	6.0	938,739
1916	533,173	52.0	422,008	41.1	70,611	6.9	1,025,792
1917	714,148	50.6	658,047	46.6	38,736	2.7	1,410,931
1918	953,577	45.1	1,101,483	52.1	58,031	2.7	2,113,091
1919	1,400,624	50.9	1,284,734	46.7	64,656	2.4	2,750,014
1920	1,240,950	48.9	1,215,542	47.9	83,291	3.3	2,539,783
1921	1,240,411	17.7	5,757,456	82.0	26,940	0.4	7,024,807
1922	1,374,054	11.9	9,932,766	85.9	255,252	2.2	11,562,072
1923	1,395,462	14.0	8,213,928	82.2	378,842	3.8	9,988,232
1924	1,719,964	20.2	6,385,278	74.8	428,959	5.0	8,534,201
1925	2,205,783	27.6	5,674,695	71.0	113,383	1.4	7,993,861
1926	3,344,648	34.5	6,082,740	62.7	278,025	2.9	9,705,413
1927	3,868,280	36.4	6,368,226	59.9	403,611	3.8	10,640,117
1928	3,799,683	35.0	5,949,501	54.8	1,103,162	10.2	10,852,346
1929	3,470,819	39.1	4,011,268	45.2	1,389,711	15.7	8,871,798
1930	2,573,547	44.8	2,287,157	39.8	884,049	15.4	5,744,753
1931	1,657,338	34.0	2,658,364	54.5	564,282	11.6	4,879,984
1932	2,063,427	50.4	1,201,031	29.3	832,536	20.3	4,096,994
1933	4,530,333	73.8	768,496	12.5	836,746	13.6	6,135,575
1934	7,756,699	79.1	1,639,775	16.7	405,282	4.1	9,801,206
1935	9,128,860	70.9	2,851,775	22.2	887,814	6.9	12,868,449
1936	21,135,641	77.8	2,804,285	18.0	653,548	4.2	15,571,397
1937	14,217,391	78.8	3,328,182	18.4	500,155	2.8	18,045,728
1938	21,536,771	85.9	2,477,382	9.9	1,048,805	4.2	25,062,958
1939	39,184,486	95.6	897,673	2.2	885,915	2.2	40,968,074
1940	45,136,999	--	--	--	--	--	--
1941	37,762,375	--	--	--	--	--	--
1942	34,277,883	--	--	--	--	--	--
Total	266,568,327						

Source: Data from Chōsen sōtokufu, Tōkei nenpō (each year); compiled in Pae Chae-su, “Ilcheha Chosŏn ūi mokchae sukŭp chōngch'ae kwanhan yǒn'gu,” 29.

The labor of forestry did not end with the arrival of timber to market; regenerative forestry was also a central component of forestry work in the region. Afforestation in the region took two principal forms. The first was the more conventional post-cut regeneration process, wherein foresters would allow for the natural regeneration of indigenous stocks and, where necessary, plant seeds and saplings. But foresters also pursued a more expeditious method known as “artificial afforestation” (*jinkō zōrin*): rearing saplings and seedlings in controlled environments (such as nurseries) and

eventually transplanting these already growing specimen into denuded areas in need of rapid regeneration. Based in part on the scientific research undertaken in forestry experiment stations, this type of intervention was reserved principally for the deforested swatches of woodlands that lingered from the pre-colonial period, as well as those areas of less-desirable species that were clear-cut early on by forestry officials. The afforestation initiative in the north began with the planting of saplings from Japan, mainly poplar and acacia.⁵⁵

But it was one thing to plant seeds and saplings; it was another thing altogether to ensure that they would be spared damage from the bandit's axe, the farmer's fire, or the caterpillar's appetite. Officials in the Forest Management Stations devoted considerable attention and resources to regulatory measures and police actions that many saw as vital to healthy regeneration. In this, foresters were joined by police officers, agronomists, and forest rangers trying to reinforce the boundaries of ownership, assert government authority over a rugged frontier region, combat smuggling, and regulate the behaviors of local communities that some thought posed a direct threat to the timber undertaking and the conservationist rhetoric of the state.⁵⁶

From start to finish, the timber enterprise along the Yalu was a laborious, dangerous affair. Involving Chinese, Korean, and Japanese bodies, as well as axe, oxen, rail, and ropeway, this enterprise held important implications for the geography and

⁵⁵ A detailed examination of the relative merits and demerits of natural versus artificial afforestation can be found in DRSK, 60-65.

⁵⁶ Even the most basic statistics on jurisdictional enforcement reveal the daunting task before regional foresters: whereas one forest management station back in Japan oversaw the management of 203,000 *chōbu*, in Korea one station was responsible for 277,000 *chōbu*, meaning that there was a greater burden in terms of enforcement, protection, and exploitation placed on each station in northern Korea. See DRSK, 51.

ecology of the region. It inscribed into the landscape new patterns of employment, settlement, and circulation at the same time that it transformed forest ecology. And while these ramifications could be felt across northern Korea, nowhere were they more pronounced than in Sinŭiju, a timber boomtown whose fate was inextricably linked—in good times and bad—to the industry and resource that put it on the map.

Timber Capital

If the Yalu River and its tributaries formed the arteries of the timber industry, the port towns of Andong and Sinŭiju were the opposing ventricles of its heart. It was here that the Forest Management Bureau and the lion's share of timber companies established the factories, processing plants, and lumberyards that rendered trees into the “building materials, warship construction materials, electricity poles, bridge construction materials, railway ties, matches, and small paper products” that made their way to market across the empire.⁵⁷ Timber, in short, was the lifeblood of Sinŭiju—so much so that it was quickly dubbed the “timber capital” of Korea.⁵⁸

Before the capital was the railway. Built in 1906, the Keijō-Sinŭiju Railway provided the *raison d'être* of the city itself; it shifted the center of industrial gravity on the Korean banks of the Yalu from Ŭiju downstream to Sinŭiju—*new* Ŭiju. This new railway held weighty implications for the regional timber industry. Where lumber once had to be painstakingly loaded onto ships in Ŭiju or Andong for transportation, it could now be lifted directly onto train cars bound for urban markets across Korea.

But it was the completion in 1911 of the so-called “Iron Bridge”—a rail- and road-bridge connecting Sinŭiju with its “sister city” across the river—that held more far-

⁵⁷ Ōryokkō saiboku kōshi, *Ōryokkō no shinrin oyobi ringyō*, 192.

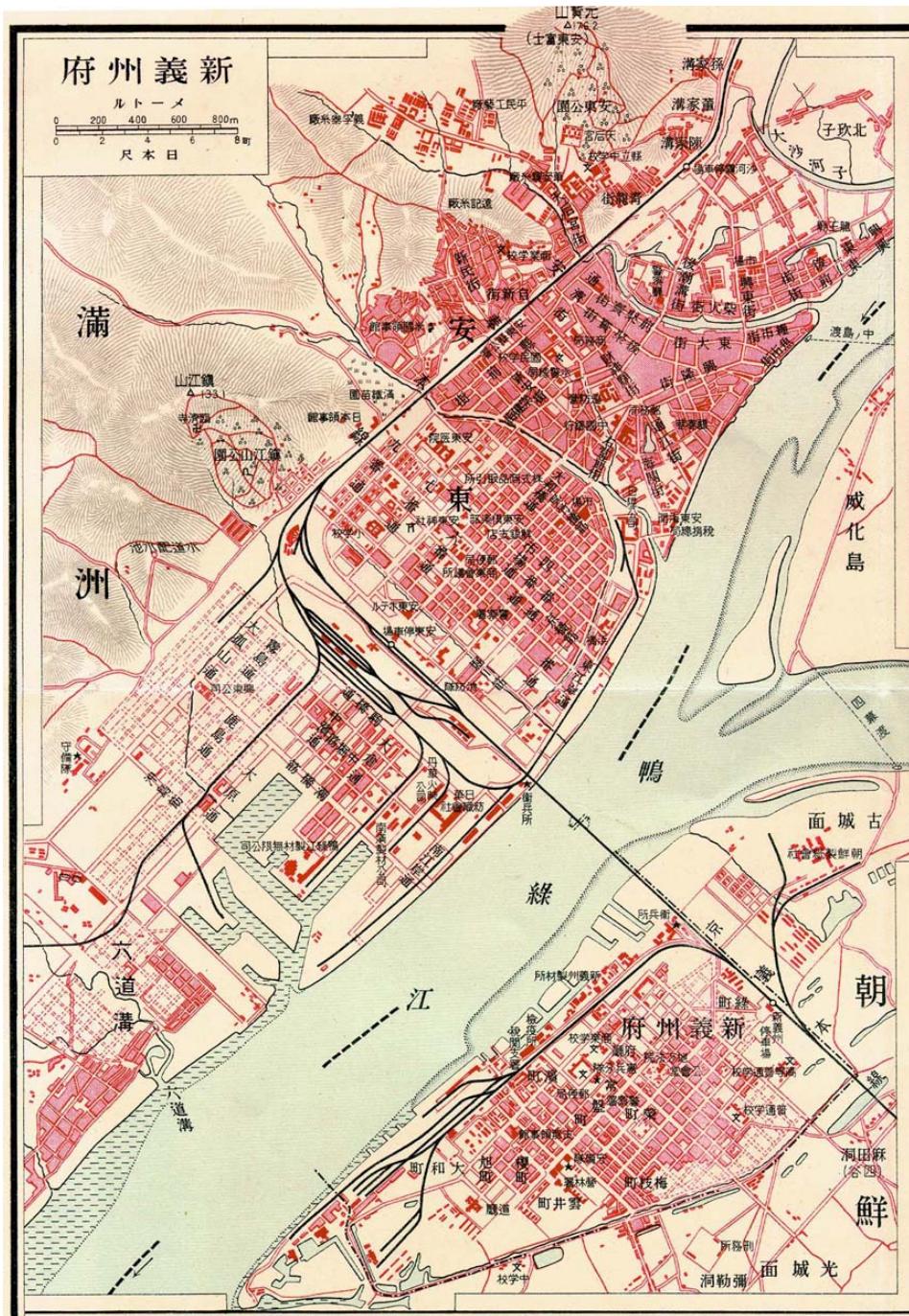
⁵⁸ See, e.g., Abe Kaoru, *Chōsen toyū taikan* (Keijō: Minshū Jironsha, 1937), 100.

reaching implications for the city and its hinterlands.⁵⁹ By connecting Korea's railways with the Southern Manchurian Railway Company's Ampo Line that would eventually stretch to Fentian (Hōten), it wove Korea and its resources ever more tightly into the Japanese penetration of Manchuria. Sinŭiju was, by one assessment, "a city of international importance regarding China"—critical to "politics, national defense, and military preparedness" alike.⁶⁰ It was not long before both cities were paired in maps (such as Map 4.1), timber industry booster publications, and travel guides, as a new and vibrant economic zone began to take shape.

⁵⁹ Abe Kaoru, *Chōsen toyū taikan*, 101.

⁶⁰ Wada Takashi, *Shingishū shi*, 3.

Map 4.1. Sinūiju and Andong (1921)



Source: Shingishūfu, Chōsen Testsudō Kyoku, 1920. Note that Sinūiju is on the bottom right of the map while Andong sits across the river in center of the map.

Yet, whatever their geographical proximity and infrastructural linkages, both towns were proxies for distinct colonial authorities. Important differences in economic

interests, policy postures, and industry regulations shaped the local contours of forestry policy on both sides of the river. For one thing, as Aaron Moore has noted, “whereas the Government-General historically adopted policies friendly to capital, in Manchukuo Guangdong Army officers proceeded to design a controlled economy self-sufficient in natural resources.”⁶¹ But surely the most distinctive feature of forestry works on the Korean side of the Yalu was the role played by the Forest Management Bureau. Where in Andong the timber enterprise was left to a jumble of interests, including Chinese merchants, the Southern Manchurian Railway Company, and the Guangdong Army, in Sinŭiju the Forest Management Bureau wielded authority over almost every aspect of forest management—from pricing to access, from labor relations to urban politics.

The true nerve center of day-to-day operations of the regional timber industry was the Forest Management Bureau’s headquarters on the banks of the Yalu. First acquired in 1909 from the Obayashi Corporation (then contracted to construct military railways in the region), the lumber mill quickly grew into an elaborate compound including sluices, lumberyards, sawmills, and shipping grounds.⁶² Perhaps more importantly, it functioned as something of an industry clubhouse for the growing number of timber companies setting up shop in the city. Although many of these firms undertook their own felling and floating of timber, they were often dependent on the Bureau of Forest Management as a source of cheap forestland and raw resources, which disposed of land, lumber, and other so-called “major products” (*jūyō bussan*) through the Special Edict on the Disposal of Forest Products issued in October 1917. To promote its products, the Bureau prepared

⁶¹ Aaron Moore, “The Yalu River Era of Developing Asia,” 120-121.

⁶² An official account of the establishment of this facility can be found in Chōsen sōtokufu eirinshō, ed., *Chōsen sōtokufu eirinshō yōran* (Keijō: Government-General of Korea, 1912).

“sample boxes containing specimens of the various varieties of timber, together with particulars as to price” for any prospective parties.⁶³

These disposal measures were designed to meet the interests of both the colonial state and private industry. The Government-General enjoyed a new and steady revenue stream while corporations were able to gain access to relatively cheap raw materials largely beyond their extractive capacities. But such policies also nurtured dependencies and spurred their fair share of antagonism between smaller timber dealers and the larger corporations (to say nothing of Korean farmers), which saw this preferential treatment as unfair and detrimental to the long-term growth of competitive industry. The Seoul-based timber merchant Matsumoto Toyosaku captured these frustrations:

Although there is probably nothing that can be done because it is official practice, at present the sale of timber to the general public is limited to but three companies: Mitsui Holdings, Kyōei Timber Company, and the Matsubara Chōtarō Store of Taegu. I would like to see an expansion of this [disposal]. If for some reason there is nothing that can be done, how about at least the Forest Management Bureau clearly publish timber prices?⁶⁴

Such frustrations were also echoed by some Korean businessmen, who harbored a general feeling of “mistrust” towards the Forest Management Bureau and sometimes felt actively bullied regarding the terms of sale.⁶⁵

These tensions, however, were papered over at the 21st annual convention of the National Timber Industry Federation, held in the Yalu River basin in August 1919. Bringing together over 200 industry representatives, forestry officials, and experts from across the empire, the Convention was organized in large part to “introduce” the border

⁶³ Great Britain Foreign Office, ed., *Diplomatic and Consular Reports, Annual Series, Issue 3982, Part 99* (London: Great Britain Foreign Office, 1908), 10.

⁶⁴ As cited in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 87.

⁶⁵ See, e.g., “Yōnglimch’ang ūi pulsin,” *Tonba ilbo*, December 1, 1923.

and its forests to the participants.⁶⁶ Local officials went to great lengths to play up the commercial and industrial potential of the region—not just its forests, but its transport infrastructure, market potential, and access to other raw materials.⁶⁷ Those in attendance shuffled back and forth across the Yalu, as they went on inspection tours of forests in Jilin, took factory tours in Sinŭiju, and rode boats up the Yalu. Participants convened in both Andong and Sinŭiju to hash out a set of policy proposals that would steer the industry towards an even brighter future: better port access and freight rates, tariff reforms, and the standardization of timber inspection practices.⁶⁸ In what amounted to a coming-out party for the Yalu River timber industry, the convention concluded with a lavish garden party held behind the Forest Management Bureau’s headquarters in Sinŭiju—a space that would grease the wheels of industry for years to come.⁶⁹

Its profile raised by events such as this one, Sinŭiju became the base of a host of timber ventures, both big and small. One of the first to set up shop in the region would quickly become the biggest: the Ōji Paper Company, whose “great factory” in Sinŭiju was one of the largest sinks for Yalu timber in Korea. But over time (and especially after the economic downturn of the 1920s), Sinŭiju witnessed the establishment of numerous smaller companies also connected with the timber industry: Hashiguchi Naokichi’s western furniture store; Kim Hyun-gun’s charcoal production facility; Sawai Shōichi’s carpentry company. Timber processing, however, was by the 1930s the “economic

⁶⁶ Over 1,800 industry officials, experts, and bureaucrats from each province of mainland Japan were extended an invitation to participate, although the rates of participation were significantly lower. See “Kokkyō shōkai kōki,” *Keijō nippō*, April 27, 1919.

⁶⁷ “Tai mokuzaigyō kibō,” *Keijō nippō*, August 11, 1919

⁶⁸ “Zenkoku zaimokugyō taikai,” *Keijō nippō*, August 5, 1919.

⁶⁹ “Tai mokuzaigyō kibō,” *Keijō nippō*, August 11, 1919.

“lifeline” of the city.⁷⁰ As of 1938, Sinūju was home to 31 different timber processing facilities, most of which were sawmills (see Table 4.6).

Table 4.6. The Sawmills of Sinūju (as of 1938)

Sawmill	Date of Establishment
Heian Mokuzai Kabushiki Kaisha (KK)	May 1928
Akita Shōkai Mokuzai KK	April 1931
Ōryōkkō Mokuzai KK	August 1925
Nakazawa Mokuzai Gōshi Kaisha	September 1929
Eida Seizaisho	June 1925
Gōshi Kaisha Marunaka Shōkai Seizaisho	September 1921
Gōshi Kaisha Asami Seizaisho	October 1929
Yoshimasa Seizaisho	May 1930
Gōshi Kaisha Shōwa Mokuzai Kaisha	August 1927
Murakami Yōkō Nakajima Seizaisho	September 1929
Nagayasu Seizaisho	May 1935
Nihei Seizaisho	June 1935
Asahi Mokuzai KK	June 1935
Gōshi Kaisha Kyōdō Seizaisho	May 1933
Takeuchi Seizaisho	February 1926
Daiji Shōkai Nakajima Kōjō	August 1932
Tōyō Seizaisho	May 1935
Nakamura Seizaisho	June 1935

Source: Shingishū Shōkō Kaigisho, *Shingishū shōkō annai* (Shingishū: Shingishū Shōkō Kaigisho, 1938), 85-86.

Instrumental to the growth of the timber industry was the small but growing community of Japanese settlers in the region, who often pooled resources to finance capital-intensive lumbering ventures. At the center of this financial network stood local settlers like Mitsumura Tahei (a well connected go-between for investors, banks, and businesses)⁷¹ and Masaki Seijirō (a “strongman” of the timber industry known for his connections not only with government foresters but with business interests on the other side of Yalu).⁷² Particularly influential in the world of timber was Nakagome Seiichi, a native of Yamanashi Prefecture, who first arrived to Sinūju in 1910 as a researcher for

⁷⁰ Shingishū Shōkō Kaigisho, *Shingishū shōkō annai*, 76.

⁷¹ A brief biographical profile can be found in Wada Takashi, *Shingishū shi*, 119.

⁷² Wada Takashi, *Shingishū shi*, 120.

the Forest Management Bureau. After working for years in private timber companies, Nakagome assumed leadership over the influential Sinūju Timber Industry Association (*Shingishū mokuzaihō kumiai*), earning a reputation as “a magnate of the timber world” (*mokuzaihō no kyotō*).⁷³ Often working through local timber industry associations (of which there were three), he and other settlers pooled capital, extended credit-lines, and arranged the profit-sharing agreements that were vital to the business of lumbering.⁷⁴

The true embodiment of the entrepreneurial spirit of Sinūju and its lumber industry, however, was Tada Eikichi, the unofficial “governor of the border” (J: *kokkyō sōtoku*). This title, it seems, was well deserved, for Tada, quite literally, helped to bridge the communities across the border: he first arrived to the region in 1906 as an engineer for the Obayashi Corporation to help construct the Iron Bridge. Like many others, Tada was initially drawn to the region mainly through happenstance and opportunity. But unlike most, he chose to plant roots in Sinūju, where he tried his hand at a variety of ventures including rice trading, automobile dealership, civil engineering works, and timber.⁷⁵ Tada first established his bone fides as a champion of the timber industry in the 1920s, when he negotiated the consolidation of nineteen timber companies in order to

⁷³ Nakagome’s first private business venture was in the Asami Seizai Kaisha, but in 1920 he went on to oversee the management of the Marunaka Sawmill. For a brief biographical sketch see Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi* (Shingishū: Shingishū Shōkō kaigisho, 1937), 96.

⁷⁴ The three principal timber industry trade associations were the Shingishū mokuzaihō kumiai (28 members); the Shingishū seizaigyō kumiai (18 members); and the Ōryokkō mokuzai sangyō kumiai (president was Tada had 43 members). See Shingishū Shōkō Kaigisho, *Shingishū shōkō annai*, 69-71

⁷⁵ For a detailed, if hagiographic, account of his trail-blazing contributions to the growth of Sinūju see “Ima ya onozukara ninzuru kokkyō sōtoku-san,” *Keijō Nippō*, October 18, 1935. Kim specialized in transportation issues in the region as well as mining. Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 102.

weather the economic hardship caused by the deteriorating economic climate of the period and the unfavorable trade conditions discussed below.

But perhaps Tada's greatest service to the community came in his capacity as an adviser to the Sinūju Chamber of Commerce, the most prominent advocate of the timber industry. Founded in 1918, the Sinūju Chamber of Commerce brought together hundreds of influential businessmen—both Japanese and Korean—to promote industrial growth and forward the interests of the city.⁷⁶ There, Tada was joined by other settlers like Katō Tetsujirō (a “pioneer” of Sinuiju, who also served on local and provincial assemblies),⁷⁷ Takahashi Tanejirō (an influential newspaperman and industry advocate), and Takagi Nobutō (a prominent timber merchant known as “the number one authority on the ins and outs of the world of timber”),⁷⁸ among many others.⁷⁹ For their part, Koreans were also among the more influential members, especially Kim Ŭi-myon (a graduate of Senshū University in Tokyo who, as a board member of the Borderland Commercial Affairs Company, was an authority on water transport in the region), Kim I-shin (a native of

⁷⁶ As of 1935, there were 242 Japanese 281 Korean members of the Chamber of Commerce (which was the 11th to be established in Korea). See Shingishū Shōkō Kaigisho, *Shingishū shōkō annai*, 86

⁷⁷ Katō was a native of Mine City, who first came to the region just after the time of the Russo-Japanese War. Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 96

⁷⁸ Takagi Nobutō was born in Kumamoto and came to Sinūju in 1915, where he began work as a timber merchant for the Ishizaki Shoten and the Ōkkō Mokuzai Kaisha. In 1927, he began to manage the Shōwa Mokuzai Gōshi Kaisha and eventually overtook the management of its factory. He served as the Vice President under Nagakome of the Mokuzaisho Kumiai. Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 99-100.

⁷⁹ Other prominent members with connections to the timber industry include Morimoto Teijirō (a native of Shiga) who came over in 1915; Nakayama Kōji (of Kagoshima Prefecture); and Kōndō Seiichi (of Yamaguchi Prefecture). See Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 102-103.

Ch'ōlsan County of North Pyongan who eventually served as its Vice President),⁸⁰ and Song Sil-chōl (also a native of Ch'ōlsan County who began his career in Sinŭiju working for the Yoshimasa Sawmill).⁸¹ Together, this group not only worked to boost investment in the local timber industry, but found themselves on numerous occasions on the front lines of battles over the industrial development of the region.⁸²

That the Chamber of Commerce worked to advance the interests of the local timber industry was plain to see. One need only examine the composition of the board of the Chamber of Commerce to gain a sense of the cozy ties between this body and the timber industry. Five of the twenty elected members were representatives of the timber industry (Omotani Sahei, Takagi Nobutō, Song Sil-chōl, Kim Ŭi-myon, and Kondō Seiichi), while many more had a vested stake.⁸³ Likewise, a cursory examination of the Chamber of Commerce proceedings (and its monthly publication) also reveals a consistent focus on issues connected with the timber industry: a meeting in August 1928, for instance, explored policy options for the reduction of timber freight fees in the region, while a meeting in February 1930 addressed the growing crisis of provisioning sawmills in the region.⁸⁴ This advocacy was not confined to local politics, however. The body also exerted considerable influence during the national congress of Chambers of Commerce,

⁸⁰ Kim first moved to Sinŭiju in 1916. Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 97.

⁸¹ Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 99

⁸² There were typically around 13 or 14 Japanese members, and just 3 or 4 Koreans. For a detailed breakdown of the composition of the Chamber and an overview of its first ten years of meetings see Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 20-22.

⁸³ Further details on the industrial composition of its board in 1935 can be found in *Shingishū shōkō annai*, 67-68.

⁸⁴ A brief summary of each meetings proceedings can be found in Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 30-34. Likewise, a list of policy missives (including topics like tax reform, Forest Management Bureau policies) issued by this body can be found in 36-40.

where it routinely put forward policy proposals for the timber industry. For example, at the second national meeting in June 1933, the Sinūiju delegation issued a plea for further regulation regarding Manchuria timber trade policy.⁸⁵

Alongside the Chamber of Commerce grew a host of civic societies concerned with issues such as hygiene improvement, education, and the beautification of the city. Drawing in part on the revenue generated by the timber industry, these groups transformed the city into a vibrant space, replete with schools, parks, and a much coveted hockey rink. While Sinūiju was never able to completely shake its reputation as a rough and tumble refuge of smugglers and ruffians, the growth of industry and urban settlement spelled a newfound prosperity for the town—and with it a semblance of civilized life and settlement. In the eyes of Wada Takashi, the development of Sinūiju was tantamount to “the diffusion of civilization.”⁸⁶ Roseate images of the newly prosperous town eventually circulated on commemorative postcards, which in turn fueled Sinūiju’s newfound popularity as a tourist destination—the “gateway to Manchuria.”⁸⁷

As the city’s profile rose, so did its population. Where in 1907 the resident population of the city was just 5,981, by 1935 it had climbed to 54,310, of which nearly 30,000 were Koreans, over 8,000 Japanese, and just over 7,000 Chinese.⁸⁸ But these

⁸⁵ This memo can be found in Shingishū Shōkō Kaigisho, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 48-49.

⁸⁶ Wada Takashi, *Shingishū shi*, 4.

⁸⁷ For a discussion of Sinūiju’s emergence as a tourist destination see Sunamoto Fumiko, “Nihon tōchika Chōsen hantō ni okeru kokusai kankōchi: rizōtochi kaihatsu ni kansuru kenkyū,” *Hōkan gakujyutsu kenkyūsha ronbunshū*, Vol. 9 (2007), 71-101.

⁸⁸ Manshū Kōhō Kyōkai, *Ōryōkkō* (Shinkyō: Manshūkoku Tsūshinsha, 1937), 3-4.

precise figures belie the defining feature of the city: its fluidity.⁸⁹ Sinŭiju's population, like the Yalu River itself, swelled in the spring and summer. Enticed by jobs, many contract workers made their way to the city in spring to seek out employment opportunities in mills. To facilitate hiring local officials established in 1928 an "employment introduction office," which was instrumental in channeling itinerant laborers into the factories, plants, and forests of the timber industry. By the arrival of fall, however, many departed, some bound for work back in the forest and others for more steady work opportunities on the other side of the Yalu.⁹⁰ This seasonal rhythm was especially pronounced among the substantial population of Chinese laborers, who faced considerable day-to-day discrimination and often-brutal working conditions, which spurred the organization of labor and regular strikes in the sawmills of the region.⁹¹

While timber assumed "the throne of industries" in Sinŭiju, a number of other commercial sectors were also quick to grow.⁹² Particularly robust was the burgeoning mining industry, which concentrated principally on the extraction of gold, iron, coal, and graphite—the "Four Great Minerals of Korea."⁹³ Insofar as the transport of timber products from the forest to market opened up a new extractive infrastructure for the

⁸⁹ Shingishū Shōkō Kaigisho, *Shingishū shōkō annai* (Shingishū: Shingishū Shōkō Kaigisho, 1938), 10.

⁹⁰ In 1934, as much as 222 men (13 Japanese and 208 Korean) and 668 women (5 Japanese and 663 Korean) found work through this office. See Shingishū shōkō kaigisho, ed., *Shingishū shōkō annai*, 35.

⁹¹ One of the largest strikes came in 1934, when Chinese workers walked out at the Government-General's Forest Management Stations. See "Eirinsho no meikyū tadachi ni kaishō," *Ōkkō nippō*, January 30, 1934. Casual discrimination as well as occasional violence was a reality for many Chinese residents in Sinŭiju in the 1920s. This discrimination in turn spurred the organization of labor organizations as well as vigorous efforts to petition the Government-General. See Yi Ŭn-ja and O Mi-il have shown "1920-1930-yŏndae kukkyōng tosi Sinŭiju ūi Hwakong kwa sahoejōk konggan," *Sach'ong*, Vol. 79 (2013), 319-358.

⁹² Abe Kaoru, *Chōsen toyū taikan*, 100.

⁹³ Hoon K. Lee, *Land Utilization in Korea*, 190.

circulation of material goods the mining industry benefitted from the early growth of the timber industry. Something similar could be said of the nascent chemical industry, which also found favorable business climate in the region due to its ability to buy up waste from pulp mills to process chemical components. But a variety of other products ranging from cornstarch production to wooden crafts (especially furniture) also sprouted in the region.⁹⁴

By the 1920s, in fact, some were beginning to talk of a “Greater Sinūju” (*Dai Shingishū*): an expanded area of commerce and industry that stretched from the city downstream to Tasado, where the Yalu River’s estuary could support shipping activities year-round.⁹⁵ At the forefront of this project were the region’s timber companies, led by Ōji Paper. Keen as always to cut down shipping costs and facilitate transport to new markets, these companies promoted (and later funded) the construction of a railway line connecting Sinūju with the port in the 1930s.⁹⁶

Projects like Tasado Port and railway signaled the realization of what some had begun to call the “Yalu River Economic Bloc”: a project of economic integration between Manchuria and northern Korea that by the 1930s stood at the forefront of the industrial imaginary of the empire.⁹⁷ Yet cooperation sometimes proved elusive. Beneath

⁹⁴ For a roundtable discussion of the larger industrial landscape in the city as well as efforts to promote industries beyond that of forestry see, e.g., “Kison kōgyō no jochō to daikōjō yūchi zadankai,” *Shingishū shōkōkaigijo geppō*, Vol. 106 (1937), 1-13.

⁹⁵ On visions for the growth of Greater Sinūju see, e.g., the serialized article “Tae-Sinūiju nūn öttonga,” *Tonga ilbo*, March 3, 1926; “Tasado ch’oltohoesa owol kyōgch’angnip ch’onghoe,” *Tonga ilbo*, February 21, 1935; and “Ōryōkkōzai naichi yushutsu to mokuzai yushutsuko,” *Keijō Nippō*, November 9, 1921.

⁹⁶ See, e.g., Minami Tetsudō Shomubu Chōsaka, ed., *Tashitō no kenkyū* (Dairen: Minami Manshū Tetsudō Kabushiki Kaisha, 1926).

⁹⁷ This point is elaborated in Aaron Moore, *Constructing East Asia: Technology, Ideology, and Empire in Japan’s Wartime Era, 1931-1945* (Stanford: Stanford University Press, 2013).

the veneer of solidarity were clashing visions of forest governance and policy in the region—a bitter truth laid bare by the timber tariff conflict of the 1920s. As a test case for regional cooperation, a knotty policy puzzle for politicians in the metropole, and an existential crisis for business interests in Sinŭiju, the protracted dispute over timber tariff regulations illuminated for many the challenges of balancing politics and profit in an expanding imperial sphere.

Political Logjams

It is a testament to the interconnectivity of the global timber market that the effects of timber scarcity prompted by World War I held profound implications for the timber industry of the Yalu River basin. Fueled in part by the realization that industrial modernity could not be sustained without forests—the enduring lesson of WWI for European foresters—fears of an impending timber famine grew such that “after 1920,” in the words of geographer Michael Williams, “forests everywhere in the world were coming under scrutiny and being assessed. What happened in one part of the world had repercussions in another part.”⁹⁸

The repercussions of the Great War for Japan’s empire and its forests were many and various. Most immediately, the prevailing sense of anxiety about Japan’s domestic supply of timber prompted some Japanese officials to rethink Japan’s longstanding tariffs on foreign timber. In 1920, Japanese officials pressed forward with tariff reforms that essentially reduced or removed altogether import duties on pine, cedar, and fir. As a consequence, Japan was inundated with American timber, especially that of the Pacific Northwest, which was cheap and abundant. By 1921, Japan was for the first time in its

⁹⁸ Michael Williams, *Deforesting the Earth: From Prehistory to Global Crisis* (Chicago and London: University of Chicago Press, 2002), 371.

time-honored forest history a net timber importer—a shift decried by many in the domestic timber industry.⁹⁹

What this meant for Korea's timber tariffs defies easy explanation. The first concerted effort to regulate the timber trade in Korea came in 1912 with the passage of the Korean Tariff Ordinance (*Chōsen kanzei rei*) and the Adjoining Nations Tariff Ordinance (*Chōsen rinsetsu kokkyō kanzei rei*) the next year. Both measures largely retained pre-existing timber tariff structures, especially regarding Manchurian timber.¹⁰⁰ There was, however, a rub: the ten-year tariff rates set out in the Korean Tariff Ordinance came with an expiration date—August 28, 1920. Thereafter, the Korean peninsula's tariff regulations shifted overnight into alignment with Japan's own domestic trade policy system.¹⁰¹

By the time of this shift in 1920 Korea's timber industry was rapidly expanding, but its productive capacities were still limited. Indeed, for all the talk of a push towards “self-sufficiency” (*jikyū jizoku*) in the domestic production of timber—what many considered an important benchmark of industrial development—Korea- and Sinuiju-based timber companies were still incapable of meeting the still rising demand for timber products. As a result, while other business interests in Korea were able to petition the

⁹⁹ On the policies and perceptions driving this shift during the interwar years see Fukushima Yasunori, “Mokuzai keizai no kokusaika, shizen hogo: awasete Shōwa rinsei o furikaeru,” *Sanrin*, Vol. 1262 (1989), 70-75.

¹⁰⁰ According to Hagino, prior to the colonial period timber tariffs were set at 7.5 percent for lumber and boards (after appraisal) and 5 percent for most construction materials, which were comparatively low. The most exhaustive treatment of timber tariff reform in Korea can be found in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 102-112.

¹⁰¹ States one account: “Japanese firms already in Korea protested that fledgling colonial companies needed subsidies to protect them from larger, well-financed competitors investing in Korea after 1920. This issue of subsidies was an explosive one, because Korean capitalists were demanding equal treatment.” Eckert, Lee, Lew, Robinson, Wagner, eds., *Korea Old and New: A History* (Seoul: Ilchokak, 1990), 285.

colonial government for the passage of a Special Edict that set special tariff rates for a variety of products (including salt, tobacco, and carbon fuel), the same edict removed all duties on the imported timber.¹⁰² In the eyes of officials in Korea, this was simply a stopgap measure meant to facilitate the flow of much-needed timber products into Korea from nearby Manchuria.¹⁰³ Korea's domestic timber industry, they reasoned, would continue to grow to the point where such tariff policies could soon be phased out.

No sooner were these new tariff rates announced than Manchurian merchants and companies began to flood Korean markets with timber. As Chae Pae-su has shown, timber imports increased by 277 percent in a single year, and has risen 455 percent by 1922. This was in fact an acceleration of a more gradual trend: whereas in 1910 over 90 percent of timber was imported from mainland Japan, by 1925 as much as 71 percent of timber imports came from China, primarily via merchants in Andong.¹⁰⁴

One need not strain to imagine the frustrations of timber entrepreneurs in Sinŭiju, many of whom had just opened their new businesses in the region only to see the market potential of their investment plummet. That the onslaught of Manchurian timber coincided with a rapid downturn in economic conditions and financial markets only compounded the hardship of many of these timber markets, leading to considerable retrenchment and consolidation. Some factories in Sinŭiju were forced to shutter their doors at the very time that Andong-based merchants just across the river were enjoying surging profits. And it was not just businessmen and investors who were upset with the

¹⁰² These politics are described in “Naisenkan kanzei tōitsu,” *Keijō Nippō*, May 27, 1919; and “Chōsen kanzei mondai,” *Manshū nichinichi shimbun*, May 28, 1919.

¹⁰³ A brief overview of these tariff exceptions can be found in “Chōsen kanzei teppai to tetsuzuki,” *Osaka Asahi shimbun*, August 27, 1929.

¹⁰⁴ Pae Chae-su, “Ilcheha Chosŏn ūi mokchae suküp chōngch'ae kwanhan yǒn'gu,” 30.

rapidly worsening market conditions. The Government-General's Forest Management Stations also took a major hit, with much of their timber losing value.

Complaints from Korea-based officials and merchants were soon drowned out, however, by the calls for emergency provisioning of timber in the wake of the September 1923 Great Kantō Earthquake (and conflagration), which destroyed much of the Greater Tokyo area. Almost immediately, Japanese officials in the Special Emergency Timber Relief Office began buying up timber from Hokkaido, Akita, and Aomori, as well as the United States. But it did not take them long to turn their sights to Korea and Manchuria.

In 1924, as a result, almost 86 percent of Korea's timber exports were bound for Japan.¹⁰⁵

But while the urgency of reconstruction in mainland Japan provided a temporary market for Korean timber, it did not address what some industry representatives saw as trade policies that were fundamentally skewed towards Manchuria. The chorus of condemnation thus gave way in the late 1920s to rally-calls for political action.¹⁰⁶ If the forestry enterprise was to flourish in Korea, many asserted, the peninsula and its forests could not be prisoner to ill-conceived metropolitan policies and unfavorable market conditions. This was not a simple matter of profit; in the eyes of some Sinūiju-based

¹⁰⁵ On the measures taken by the Bureau of Forestry in the wake of the disaster to obtain timber for re-construction see Nōshōmushō sanrin kyoku, ed., *Kantō daishinsai to mokuzai oyobi shintan* (Tokyo: Teikoku Shinrinkai, 1924). For a pioneering study of the more general relief efforts and the provisioning of reconstruction supplies see J. Charles Schencking, *The Great Kanto Earthquake and the Chimera of National Construction in Japan* (New York: Columbia University Press, 2013), chapter 2. A detailed examination of the vagaries of the Yalu River timber markets as related to the Great Kantō earthquake can be found in Itō Jūjirō, “Ōryokkōzai no genjō ni tsuite,” *Chōsen sanrinhāi*, Vol. 71 (1931), 9-10.

¹⁰⁶ The formation of political action committees is detailed in “Mokukanzei mondai tokurei teppai ikan Kantōgawa to Chōsen no kōsō iyooyo shinken o kuwaekuru,” *Manshū nichinichi shinbun*, October 23, 1928.

businessmen the “timber tariff problem” (*mokuzai kanzei mondai*) “governed the destiny of the timber capital.”¹⁰⁷

It was against this backdrop that forestry officials in Japan began to rethink Japan’s timber trade policies. Indeed, at the same time that Sinūju’s businesses interests were lamenting the volume of Manchurian imports, timber industry representatives back in mainland Japan were mounting a campaign to reinstate protections against foreign (especially North American) timber. With concern growing that the timber tariff revisions of 1920 were nurturing dependency on foreign supplies, representatives of the Japan Forestry Association and private industry began to lobby officials in the Ministry of Industry and Commerce to revise these rates once more. Given the volatility of the global timber market, they argued, some protections needed to be placed on Japan’s own domestic supply. So it was that in 1926 a comprehensive timber tariff revision was enacted that significantly raised import duties on an array of timber products.

Coinciding as it did with the passage of the Government General’s 1926 Korean Forest Management Plan (*Chōsen rinsei keikaku*)—a comprehensive ten-year plan that sought above all else to boost timber production and processing—this new set of domestic tariff revisions provided just the opportunity Korean officials needed to press for tariff revisions of their own. The late 1920s witnessed a flurry of political activism in this arena. The campaign began with a robust public relations effort to draw attention to the substantial growth of Korea’s productive capacities. Noting that since the passage of the special tariff rates there had been “a complete reversal in forest management” in Korea, Chief of the Forestry Bureau Enda Hiroshi rattled off a long list of the

¹⁰⁷ Shingishū Shōkō Kaigisho , ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 3.

accomplishments of the timber industry for readers of the *Keijō Nippō*: expanding production, the efflorescence of private industry, the clarification of forestland tenure, and so forth. As he saw it, tariff reform would free up Korea's markets to show their "full capacity," which would be realized through the implementation of the Korean Forest Management Plan. Such reform would also, he was quick to note, promote local industry, stabilize market conditions, and, ultimately, lead to a drop in prices—something in the interest of all residents of Korea.¹⁰⁸

Members of the Korean Forestry Association published similar appeals in their trade journal and other forums. They also went a step further, traveling to Tokyo in 1926 to make a case at the Imperial Diet for folding Korean tariff reforms into the proposed measure for domestic timber tariff reforms. They likewise lodged a formal petition with the Government-General in February 1927 requesting the repeal of the special tariff provision.¹⁰⁹ Thus was born a political action committee—the Alliance for the Repeal of the Special Tariff on Timber in Korea. United in their concern over the fate of the timber industry and their desire to advance their own business interests, representatives from the Korean Forestry Association, the Korean Industrial Commission, and the Sinūju Chamber of Commerce, among others, took the issue directly to the Japanese Diet. There, during the 52nd session of 1927, they put the case for the annulment of the Special Edict.

Across the Yalu, meanwhile, a counter-movement was mobilizing. Concerned that timber tariff reforms would not only undercut their business interests but also destabilize the larger project of expansion into the continent, a small group of Japanese merchants in Andong came together to voice their opposition to timber tariff revision.

¹⁰⁸ "Mokukan tokushi ni tsuite," *Keijō Nippō*, March 11, 1927.

¹⁰⁹ See Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 103-105.

Representatives of Korea's timber industry were quick to counter in February 1927 with a political pamphlet that lodged a point-by-point rebuttal of the arguments of their counterparts across the Yalu. Bringing together short statements by the presidents of both the Korean Forestry Association and the Japan Forestry Association, an influential professor of forest management, and an array of other concerned parties, this document sharpened what might have been a dull colonial policy debate into a regional face off.¹¹⁰ Among the more salient arguments put forward in this pamphlet were that the supply and demand situation had changed markedly since the formation of these special tariff rates; that Manchuria's use of the silver standard led to wild and often damaging price fluctuations; that the Korean timber industry could in fact maintain self-sufficiency; and that the status quo promoted dependence on American timber.¹¹¹ The latter point was a particularly powerful, as many timber industry officials in Japan were already wary of the onslaught of American lumber.

The dispute escalated with the formation in Andong that same month of a lobbying group (*chinjōdan*) of Manchurian timber industry representatives. Working in concert with high-ranking officials from the Kwantung Bureau and the Southern Manchurian Railway Company, the groupd pressed for political action. Leaders of the assembly (including Shikimura Shigeru, Ōtsu Takashi, and Arakawa Rokuhei) in February 1927 issued a written opinion on the matter, characterizing the repeal as a dangerous move that would harm both "continental policies and peninsular governance."

¹¹⁰ The contributors to this pamphlet were Ariga Mitsutoyo (President of the Korean Forestry Association), Kawase Zentarō (President of the Japan Forestry Association), Satō Gingorō (Professor of Forest Management), and Tada Eikichi.

¹¹¹ See Chōsen yunyū mokuzai kanzei tokurei haishi renmei, ed., *Chōsen yunyū mokuzai kanzei tokurei haishi ron* (Unknown: Chōsen yunyū mokuzai kanzei tokurei haishi renmei, 1927).

Would pinning Korea's tariff rates to the already-increasing timber duties of mainland Japan not disturb Korea's domestic timber markets? As they saw it, Manchurian and especially Andong timber occupied a special position in the marketplace, if for no other reason than it supported political and expansionist policies in the continent. As such, they argued, their interests should be protected.¹¹²

The conflict came to a head on February 26, 1927, when Korean and Manchurian officials "crossed swords" over a Diet measure on the Repeal of the Special Edict.¹¹³ For those seeking swift resolution, the Diet Session proved frustrating. It quickly became apparent that this was a complicated issue, raising thorny questions about imperial expansion, colonial politics, and domestic supply.¹¹⁴ While Diet members such as Yuasa Kurahei were quick to acknowledge that due to "the realization of improved forest management in Korea" unprocessed timber supply was growing sufficient and the processing capacities of Korea-based factories were quickly advancing, the most common refrain of the proceedings was a general wariness of undercutting "continental policies."¹¹⁵ Echoing foreign ministry officials, Mutō Kinkichi, for instance, noted that any manipulation of tariff rates threatened not only the 3,000 timber merchants in Manchuria and the million yen timber-industry in Andong, but also Japan's foothold in the "gateway of Manchuria."¹¹⁶

¹¹² "Waga tairiku seisaku to Chōsen no tōchi o ayamaru Chōsen mokuzai kanzei tokurei haishi hantai iken," JCAHR, Reference Code, A08072545200.

¹¹³ "Mokukanzei mondai tokurei teppai ikan Kantōgawa to Chōsen no kōsō iyoiyo shinken o kuwaekuru," *Manshū nichinichi shimbun*, October 23, 1928.

¹¹⁴ "Chōsen mokuzai kanzei kaiseian tekkai saruru ka" *Jiji shinpo*, February 25, 1927.

¹¹⁵ Proceedings of the 52nd Diet, February 27th, 1927, *Shūgiin giji sokkiroku*, Vol. 18, 353.

¹¹⁶ Proceedings of the 52nd Diet, February 27th, 1927, *Shūgiin giji sokkiroku*, Vol. 18, 353.

If Diet members' support of Manchurian interests weakened the Korean timber lobby's case, the opposition to this measure by some Korea-based businessmen dealt a further blow to their motion. Perhaps no one captured the fractious nature of the debate back in Korea more vividly than Kashiwada Tadakazu, who noted that in the lead-up to the proceedings he had received telegrams voicing opposition to tariff revision from industry leaders in the Korean Industrial Association, the Korean Society of Engineers, and Korean Timber Trade Association, all of which described any such measure as "premature."¹¹⁷ Thus while Kashiwada rightly noted that the current trade situation was undercutting efforts to afforest the peninsula by encouraging the plundering of forests for fuel and timber, the discordance of interests in Korea and the fear of damage to the delicate economic and geopolitical situation in Andong trumped such long-range concerns.¹¹⁸ As Miyoshi Kiyoyuki put it, "the development of Korea is imperative, but our economic policy on the Asian continent is a more pressing priority."¹¹⁹ Calling for more research, the Diet tabled the measure.

It was not until 1929—two years after the resolution was suspended—that the Diet revisited the issue. This time the terms of the debate had changed markedly. Where the 1927 Diet Session had focused squarely on continental policy and geopolitical expansion, the 1929 debate focused on the protection of Japan's domestic timber supply.

¹¹⁷ Proceedings of the 52nd Diet, February 27th, 1927, *Shūgiin giji sokkiroku*, Vol. 18, 355.

¹¹⁸ That Japan's Foreign Ministry weighed in on the matter, urging Diet members not to pass the measure until strategic issues were resolved, bespeaks the high stakes involved in this seemingly dry policy debate. One of the clearest articulations of the Foreign Ministry position on the resolution is "Kanzei hō no Chōsen ni okeru tokurei ni kan suru hōritsuan ni tsuki shōgi no ken," a policy memo that lays out the complex stakes in reforming tariff policy in the region. See Kanzeihō no Chōsen ni okeru tokurei ni kansuru hōritsuan ni tsuki shōgi no ken," Diplomatic Archives of the Ministry of Foreign Affairs, *Miscellanies Related to the Imperial Diet, Digital Archive, JCAHR*, Reference Code: B03041412400.

¹¹⁹ Proceedings of the 52nd Diet, February 27th, 1927, *Shūgiin giji sokkiroku*, Vol. 18, 357.

At stake for many Diet members were Japan's own timber markets, which were then subject to capricious shifts and rising prices due to protectionist policies that made Japan's timber prices among the highest in the world. The 1929 Diet debate was therefore concerned less with accommodating special interests in the peninsula or continent than with standardizing empire-wide timber tariff policy. Korea provided a partial solution to this problem: with successful afforestation and the further growth of industry, the heavily forested peninsula would help to bring down costs and facilitate the flow of timber resources throughout the empire. The roll out of the Forest Management Plan of 1926, which had already done much to bolster production, highlighted the growing potential of Korea's domestic timber industry.

But it was the findings of the Special Committee on Tariff Revision—a panel established by the 1927 Session to undertake further research into the measure—that shifted opinion clearly in favor of repealing the Special Edict. After conducting considerable research in the costs and benefits of tariff revision for all parties, the committee arrived at something of a compromise: should the Diet agree to phase in the tariff over a period of three years (with incremental annual increases), damage to Andong's timber industry would be minimized.¹²⁰ Such a proposal, he and others argued, would not only achieve the desired standardization of tariff policy but also grant timber industry officials on both sides of the Yalu time to adapt to the new trade landscape. This

¹²⁰ Proceedings of the 56th Diet Session, March 1, 1929 Shūgiin giji sokkiroku, Vol. 23, 465-466.

recommendation held. Just one month later, on March 30, 1929, the special edict was repealed as part of a larger package of tariff reforms.¹²¹

Any sense of celebration or relief among Korea's timber industry representatives proved short lived, however. Concerned that tariffs would jeopardize Manchuria's timber industry, authorities in the Kwantung Authority and the Southern Manchuria Railway Company quickly authorized a timber export subsidy for companies shipping timber to Korea. Shared equally between both companies, the subsidy effectively defrayed the cost of the newly imposed tariff. At the same time, officials in Manchuria also resisted efforts to reform Manchuria's own timber tariff rates, which were then set in alignment with the typically higher rates of China. Much to what one forester described as the "misfortune of Korean lumbermen," high volumes of Manchurian timber, as a result, continued to flow into Korea through the 1930s.¹²²

Following the Mukden Incident of 1931, however, imperial expansion and military provisioning in northern China became a strategic priority for the empire, making it a major sink for natural resources. Korean timber quickly began to flow to the rapidly growing capital city of Shinkyō and Manchukuo's frontier regions where it was used for railway construction and other projects (see Table 4.6). The surge of Korean timber into Manchuria was certainly in alignment the Kwantung Army's initial policy of

¹²¹ For an abridged transcript of the proceedings see "Kanseihō kanzei teiritsuhō hozei sōkohō oyobi kariokibahōtō no Chōsen ni okeru tokurei ni kan suru hōritsu angiji shōroku," Shōwa Financial Historical Materials, No. 4, Vol. 159, JCAHR Reference Code: A08072548100.

¹²² These and other frustrations are articulated in "Kokkyō seizaigyōsha no gonan," *Chōsen sanrinkaihō*, Vol. 100 (1933), 23-25.

sustainable yield forestry, which sought, as Patrick Caffrey has shown, to preserve the “unending maintenance of the benefits derived from forests.”¹²³

Table 4.6. Timber Imports into Manchuria by Country of Origin, 1932-1935

Year/ Country	1932		1933		1934		1935	
	Value (Manchukuo yuan)	%	Value	%	Value	%	Value	%
Japan	704,498	32.1	2,433,165	42.8	4,505,068	43.7	3,843,910	45.5
Korea	903,793	41.2	2,172,119	38.2	2,446,015	23.7	2,137,745	25.3
China	62,509	2.9	83,385	1.5	180,043	1.7	92,987	1.1
North America	85,965	3.9	394,774	6.9	2,906,876	28.2	1,936,749	23.0
USSR	423,837	19.3	540,396	9.5	145,577	1.4	270,411	3.2
Other	13,033	0.6	62,402	1.1	134,990	1.3	161,800	1.9
Total	2,193,635	100.0	5,686,241	100.0	10,318,569	100.0	8,443,602	100.0

Source: Adapted from Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 347.

But for Korea’s timber merchants, the problem now lay in Manchuria’s own tariffs. While large volumes of timber flowed into Manchuria and Andong-based merchants were enjoying “excessive profits,” noted one editorial, “sixteen sawmills in Sinuiju face potential closure.” Sinuiju was consequently confronted with myriad social problems, unemployment chief among them.¹²⁴ And while the proliferation of sawmills and factories in the region suggest that timber policies did not break the industry, these frustrations were grave enough that the Sinuiju Chamber of Commerce took the issue directly to the Government-General, the Foreign Ministry, and the Development Bureau. Led by Tada Eikichi, business representatives bemoaned that Manchurian tariffs led to “irrational pricing” and scarcity in Korea.¹²⁵

¹²³ Patrick J. Caffrey, “Transforming the Forests of a Counterfeit Nation: Japan’s ‘Manchu’ Nation in Northeast China,” *Environmental History* Vol. 18 (2013), 313.

¹²⁴ “Shakai mondaika sen to suru Shingishuu no seizai jigyō,” *Ōkkō nippō*, June 14, 1933.

¹²⁵ In the eyes of the Sinuiju Chamber of Commerce, while the Government-General took steps to “consult with the realities of Korea-based lumber industry” and had drawn up plans “to

It was in fact the latter issue—scarcity—that was most troubling to Sinūiju’s timber businesses. As scarcity became more apparent, so did the timber industry’s dependency on the Forest Management Bureau as a source of raw materials and forestland. Although timber companies were then benefitting from considerable investment in and expansion of its forestry operations in the region, much of the raw harvested forest materials were flowing directly into Manchukuo so as to provision troops and establish *chian*—order and security. By the reckoning of Nakagome Seiichi, no less than 80 percent of timber floated down to Sinūiju in 1933 was sent to Manchuria.¹²⁶ In a blistering syndicated editorial, Tada Eikichi called the Government General’s restricted leasing of national forestland for export to Manchuria “a great failure” and “a blow to Korea that disregards the entire point of economic regulation.”¹²⁷ The Sinūiju Timber Industry Trade Association went so far as to prohibit the export of raw timber materials (but not processed timber) into Manchuria in an effort to boost supply in the region. These efforts and appeals, however, did little to alter the “great distress of the timber world.”¹²⁸ The arrival of a shipment of 20,000 *koku* of timber to Inch’ōn brought by the

implement self-sufficiency through the Forest Management Bureau edicts and comprehensive plans,” the tariff policies in China had undercut this effort. Manchuria timber interests allowed the SMRC and Kwantung authority a subsidy that made timber import virtually tariff free. Moreover, Manchuria’s timber tariff remained consistent with that of China, not the empire, leading to irrational pricing. See *Shingishū Shōkō Kaigisho*, ed., *Shingishū Shōkō Kaigisho 10-nen shi*, 47-48.

¹²⁶ “Genboku yushutsu kinshi shizainan kanwa to ren” *Ōkkō Nippō*, November 8, 1933.

¹²⁷ Tada noted that Korean timber was not just for military purposes, but used for homes, factories, and other commercial uses. While Andong was selling timber for 8-9 yen per *shakujime*, Sinūiju timber was only going for 6-7 yen. See “Taiman mokuzai yushutsu kinshi,” *Ōkkō nippō*, November 16, 1933.

¹²⁸ “Shizainan kanwa sarezu zaikai no kunō shinkoku,” *Ōkkō nippō*, August 24, 1934.

Mitsui Corporation from Karafuto was for many timber industrialists symbolic of the persistent trade imbalances that had for years hobbled the industry.¹²⁹

Just as the outbreak of the Second Sino-Japanese War in 1937 intensified the flow of Korean timber into northeastern China to meet military demands, so did it intensify the rhetoric of “Korea-Manchuria Unity.” But while Japanese on both sides of the Yalu contributed to the making of *Mansen*—the interlinked, though ill-defined, sphere of Japanese control on the continent—questions and doubts about this union lingered in the minds of many officials on both sides of the Yalu.¹³⁰ This is especially true of the timber industry representatives in Andong and Sinŭiju, who became, in a basic sense, proxies for their respective colonies.¹³¹ These disputes colored many future conflicts over resourcing the empire—especially the damming of the Yalu for hydropower—as the onset of total war once again transformed the logic of natural resource allocation on the continent.¹³²

But it is overly simplistic to view the dispute over timber duties as a conflict in which the interests of one colony were simply arrayed against the other. Although the rhetoric of the conflict was sometimes framed in precisely those terms, the nature of business in the Yalu River Basin was never so straightforward. To understand how this was the case we need look no further than the Ōji Paper Company (Ōji Seishi Kabushiki Kaisha, hereafter Ōji), a pioneer of the pulp and paper industry in Korea, whose own

¹²⁹ “Sennai no shizaikan ni Karafutozai ga shinshutsu su,” *Ōkkō nippō*, August 27, 1933.

¹³⁰ See, e.g., “Zenman mokuzai gyōsha no shimei o sei suru kizeki mondai,” *Manshū nippō*, January 23, 1931.

¹³¹ “Zenman mokuzai gyōsha no shimei o sei suru kizeki mondai,” *Manshū nippō*, January 23, 1931.

¹³² The most comprehensive analysis of the politics surrounding wartime continental resource management can be found in Noda Kimio, ed., *Nihon teikokuken no nōrin shigen kaihatsu: “Shigenka” to sōryokusen taisei no higashi ajia* (Kyōto: Kyoto Daigaku Gakujutsu Shuppankai, 2013).

operations in the Yalu River basin both reflected and promoted the transformation of the region.

Dai-Ōji

That the growth of Japan's "Taishō Democracy" was marked by a flourishing print culture is a well-established theme of historical scholarship.¹³³ Far less scrutinized, however, is what the proliferation of political journals, the expansion in newspaper readership, and the newfound demand for product packaging that accompanied urban modernity meant for the forests of Japan and its empire.¹³⁴ Quite simply, a newky voracious demand for paper set off a scramble for pulp in all corners of the colonies. And while many companies sought to corner the swelling market for western paper (*yōshi*), no company was grander in scope or ambition than the Ōji Paper Company. Starting from a few paper mills in a suburb of Tokyo, Ōji steadily grew into a sprawling transnational paper production company that included a state-of-the-art processing factory in Tomakomai (Hokkaido) and massive forestry operations in Karafuto, initially the largest reserve of trees for pulp production in the empire.¹³⁵

¹³³ According to Miriam Silverberg, "Newspaper circulation, which had been 1,630,000 in 1905, soared to 6,250,000 (one household out of six) by 1924 and by 1931 the population of 65 million purchased 10 million copies due to the successful marketing ploys of offering new forms of entertainment." See Miriam Silverberg, "Constructing Japanese Cultural History," in: Masao Miyoshi and Harry Harootunian, eds., *Japan in the World* (Durham: Duke University Press, 1993), 123.

¹³⁴ That Japan's growing paper market caught the attention of Canadian paper companies is a further testament to the global integration of the timber industry. Wrote one trade journal in March 1921: "Experts in the Forestry Bureau believe that Japan's future annual consumption of wood will go as high as 6,000,000 koku, or approximately three times the present figure. Production figures for 1919 show that Japan proper turned out 207,960 koku; Saghalin, 1,382,731 koku, while 1,746,902 koke was produced from wood cut in Hokkaido. The quantity produced in Saghalin that year jumped forty-one times over the total amount produced in 1913." See "Recent Developments in Japan," *Pulp and Paper Magazine*, Vol. 19 (1921), 268.

¹³⁵ For an in-depth study of pulp production in Karafuto see Karafutochō naimubu rinnmuka, ed., *Karafuto no parupu narabini seishi kōgyō* (Toyohara: Karafutochō naimubu rinnmuka, 1925).

With word spreading throughout the forestry world of the impressive reserves of the Yalu basin, it was only a matter of time before the company set its sights on Korea and Manchuria. The first step towards expansion into the continent came in the form of surveys conducted in the 1910s by Ōji employees Maeda Heikichi and Gen Tetsusaburō, who confirmed that the Yalu River was well endowed with timber reserves suitable for pulp production. The ample stands of Yezo spruce (*Picea jezoensis*) and Sakhalin fir (*Abies sachalinensis*) stretching across the region were indeed exactly what the corporation was looking for.¹³⁶

Soon thereafter, Ōji pushed forward with an exploratory venture in the region: the Chōsen Paper Company (*Chōsen Seishi Kabushiki Kaisha*), the first pulp processing operation in Korea.¹³⁷ Backed by a large investment from Ōji, then a subsidiary of Mitsui Holdings¹³⁸, the company began operations in June 1919, producing as much 4,000 tons of pulp in its first half year. Although management problems beset the factory from the outset, few doubted the potential of the region for the growing paper and pulp industry. Just one year after opening its factory, in December 1920, the Chōsen Paper Company was formally Ōji Paper.

Offering “ample forest resources, the ability to float timber and move products on the Yalu River, and cheap labor,” Sinŭiju was a natural base for the corporation’s

¹³⁶ Ōji Seishi Kabushiki Kaisha, ed., *Ōji Seishi sanrin jigyōshi* [Hereafter OSSJ], (Tokyo: Ōji Seishi Kabushiki Kaisha, 1976), 223-226.

¹³⁷ “Chōsen seishi shinchoku,” *Karafuto nichinichi shimbun*, Novemebr 8, 1917.

¹³⁸ . Founded in 1873 by the magnate Shibusawa Eiichi, the firm grew rapidly such that by 1919, boosted by profits reaped in the boom years of World War I, the company had nine factories in Japan, Karafuto, and, eventually, Korea. The critical link with Mitsui Holdings came through Fujiwara Ginjirō, who was transferred by Mitsui to take over the ailing company in 1911. For a broader context on the history of the company see Ōji Seishi Kabushiki Kaisha, ed., *Ōji Seishi shashi* (Tokyo: Ōji Seishi Kabushiki Kaisha, 2001).

expansion into the continent. As the only industrial-scale paper company in the region, moreover, Ōji was largely free of competition for the particular stocks sought for pulp production. Sinŭiju thus quickly became the staging ground for a large-scale forestry operation overshadowed only by that of the colonial government.¹³⁹

Ōji Paper enjoyed from the outset preferential treatment from the Government-General and the Forest Management Bureau. The relationship ran both ways; Ōji was virtually unhampered in its ability to supply its factory with raw materials, while the Forest Management Stations were able to dispose of low-quality timber that was only truly suitable for pulp production. That Kobayashi Junichirō, Ōji's Vice President, was a former classmate at Tokyo Imperial University with Itō Jūjirō, a seasoned Chief of the Bureau of Forestry in Korea, certainly did not hurt Ōji's fortunes.

Ōji's ready access to land and lumber came in three principal forms: standard purchases of raw pulpwood from third parties; direct purchases of pulpwood cut and processed by the Forest Management Bureau; and the leasing or purchase of National Forestland placed directly under the oversight of the company itself. The latter accounted for the largest share of Ōji's operations in the region. In the early 1920s, Ōji bought large tracts of forestland in Huch'ang County (present-day Kimhyongjik County), and by its third year of operations had processed as much as 200,000 *shakujime* of lumber yielding more than 10,000 tons of pulp (see Table 4.7).¹⁴⁰ Thereafter, Ōji's Korea-based operations expanded to include land acquisitions and field offices in Chungangjin in North P'yōng'an Province, as well as Hyesanjin and Shinpoto in South Hamgyōng Province.

¹³⁹ OSSJ, 223-225.

¹⁴⁰ OSSJ, 16.

Table 4.7. Annual Pulpwood Consumption, Paper Pulp Production at the Ōji Paper Korea Factory

Year	Raw Pulpwood Consumption	Paper Pulp Production	% of total annual paper pulp production
1919	43,572 (<i>koku</i>)	1,835 (tons)	0.8 (%)
1920	210,377	9,397	3.5
1921	228,240	10,513	4.2
1922	189,245	9,433	3.1
1923	Operation Suspended		
1924	Suspended		
1925	152,512	8,280	2.0
1926	203,844	12,307	2.4
1927	195,728	5,396	1.0
1928	224,796	13,296	2.3
1929	295,751	15,234	2.6
1930	199,280	14,221	2.3
1931	201,548	15,092	2.7
1932	276,302	15,178	2.8
1933	313,807	16,081	2.7
1934	314,331	18,018	2.6
1935	226,252	16,866	2.3
1936	241,512	16,959	2.3
1937	198,566	16,944	2.0

Source: Ōji Seishi Kabushiki Kaisha, ed., *Ōji Seishi sanrin jigyō shi*, 228.

Ōji's forestry operations mirrored those of the Forest Management Stations.

While Japanese employees (led by Murai Teizō, chief of Ōji's Forestry office) oversaw most of the day-to-day forestry operations, the heavylifting was often performed by contract workers at every stop of the processing chain. Trees harvested on Ōji forestland were eventually floated downstream to the company's pulp plant, where they were processed by a workforce of around two hundred employees (of which 64 were Japanese, 108 Korean, and 40 Chinese).¹⁴¹ While the cost of delivering the raw materials to the

¹⁴¹ While the majority of these employees were men, women were also hired for tasks such as managing the chipping process and sorting the timber. Wages in the factory varied greatly, with Japanese making as much as 60 percent more than Koreans, and men making three times more than women. OSSJ, 224.

factory were high, labor and energy resources were cheap and abundant, making the undertaking economically viable.¹⁴²

Ōji's operations in the region, however, were shaped by more than economics; changes in colonial governance and the political climate in Korea also impacted the company's fortunes. The massive demonstrations on March 1, 1919 were perhaps the first sign that times were about to change. As a result of the March First Movement (and fear of more protestation to follow), the Government-General took measures to ameliorate Koreans concerns about the nature of colonial governance. One component of the Government-General's pivot towards accommodation was a newfound commitment to distribute forestland to Korean farming communities that had been pushed off the land through the Forestland Surveys. As part of this initiative, however, the Forest Management Bureau began to place restrictions on the amount of forestland leased out to Japanese corporations and capitalists. Thus, by late 1920, just shortly after Ōji had absorbed the Chōsen Paper Company, the Government-General began to curtail the amount of land it leased out to Japanese timber corporations.

If to the Government-General this policy pivot was accommodating the demands of Korean subjects, it was to Ōji's board of directors "anti-Ōji"—so much so, in fact, that Fujiwara Ginjirō, Ōji's President, traveled to Seoul to appeal directly to government officials.¹⁴³ Fujiwara found sympathetic listeners in the Government-General: Ōji and its lobbyists were eventually able to persuade colonial officials to slowly roll back restrictions on the leasing of forestland, thereby ensuring Ōji's access to raw materials, albeit in reduced quantities.

¹⁴² OSSJ, 227-228.

¹⁴³ OSSJ, 16.

But while Ōji officials were able to wield considerable influence to steer policy back in their favor, they were unable to withstand the deterioration of global market conditions in the 1920s, as a postwar economic downturn hampered the global paper industry. As a result of what one former employee in Korea remembers as “the effects of a global economic panic,” Ōji was forced to shutter its factory in Korea from September 1922 to April 1925.¹⁴⁴

Depression, however, spurred innovation. Ever vigilant for new forest stocks, Ōji’s foresters explored deeper into the forests surrounding Mt. Paektu, where they discovered extensive stands suitable for pulp production in Hyesan County. The company wasted no time in acquiring the rights over these woodlands and, in 1924, laborers began to fell timber, which anticipated the re-opening of the factory the next fall. Although initial shortfalls prompted Ōji’s management to ship in raw materials from Karafuto in 1925, the company quickly ramped up its operations.

As was the case across the industrial spectrum, so in the paper industry Japan’s post-World War I depression gave rise to cartels, corporate takeovers, and oligopolistic behavior. Although Ōji found itself in fierce competition for resources and market shares, it did not shy away from participating in Japan Paper Association cartel agreements on price controls that enabled it to both contain competition and, when necessary, weather economic hardship. As Shinomiya Toshiyuki has shown, corporate management strategies of this sort were typical of an industry characterized by rapid growth,

¹⁴⁴ Yi Sŭng-sam (Yi Seng san), “Chōsen hantō no seishi kōgyō ranshōki,” *Kamipa gikyōshi*, Vol. 27, No. 7 (1955), 1.

complicated supply chains, and often-temperamental market conditions.¹⁴⁵ Nor was Ōji reluctant to buy out smaller companies then ailing from the turn in market conditions. So it was not entirely surprising to some when, in 1933, Ōji Paper absorbed its chief two competitors, Fuji Paper and Karafuto Industries. With 33 factories now processing trees harvested from across the empire, Ōji began to supply more than 80 percent of the paper on the Japanese market.

Naturally, Ōji's expanding corporate structure increased its appetite for natural resources. And while Korea continued to form a vital reserve of raw materials, Manchuria also presented ample opportunities for resources and revenue, which the company began to survey in the early 1910s.¹⁴⁶ In a manner not unlike its initial forays in Korea, Ōji first invested in a handful of already established timber companies in the region. Company representatives also made efforts to work through high-ranking government connections in the Forestry Section in Jilin in order to secure the rights for felling timber, some of which was processed in its factory back in Korea.¹⁴⁷

¹⁴⁵ A path-breaking examination of these corporate tactics and the growth of Japan's paper industry more generally is Shinomiya Toshiyuki, *Kindai Nihon seishigō no kyōsō to kyōchō: Ōji Seishi, Fuji Seishi, Karafuto Kōgyō no seichō to karuteru katsudō no hensen* (Tokyo: Nihon Keizai Hyōronsha, 1997).

¹⁴⁶ As Tak Matsusaka has shown, not everyone was so bullish about the potential of timber in Manchuria. Kwantung Army surveyors came to a much more sober conclusion: "It is widely believed that Manchuria is blessed with rich, old-growth forests stretching for thousands of leagues, so dense that one cannot see the sky in broad daylight, and offering a virtually limitless source of high quality timber....However, the reality is entirely different. If current rates of exploitation continue, the best stands will be gone within ten years." As cited in Yoshihisa Tak Matsusaka, *The Making of Japanese Manchuria*, 178.

¹⁴⁷ These investments included the Funei zōshi kōshi and the Kamori seizai kōshi, both located in Jilin. For a discussion of Ōji's business tactics in Manchuria see Wang Dachuan, "Kindai Manshū ringyō ni okeru Nitchū gōben jigyō: rinjyōken funsō o chūshin," *Chōsa to kenkyū*, Vol. 30 (2005), 65-68.

In the 1930s, as Japanese corporations took to the notion of “Japanese capital and know-how combined with China’s resources,” Ōji’s ambitions in the region grew. “We have developed Taiwan and we have developed Korea and we have developed Hokkaido,” declared Ōji’s president Fujiwara Ginjirō. “In the same way we will shock the world by transforming the continent within the space of ten or twenty years.”¹⁴⁸ Pooling resources with other firms in the region, the company pushed forward in 1934 with the construction of a factory in Dunhua, located near the vast reserves of Jilin timber, and soon thereafter established a new Manchuria-based subsidiary, the Nichiman Pulp Company.¹⁴⁹ Another boost to its business in Manchuria came in June 1935, when Ōji took over the management of the Japanese-owned Yalu River Paper Company, then ailing due in part to Ōji’s oligopoly.¹⁵⁰ This acquisition gave Ōji an even better share of the estimated 17,242,800 *koku* of woodlands deemed suitable for pulp production in Manchuria, the aerial mapping of which was also soon underway.¹⁵¹

Concurrent with Ōji’s incursions into Manchurian woodlands was the emergence of a new endeavor for the corporation: producing rayon, then coveted as a key ingredient in the production of synthetic fibers. Driven in part by the innovative research of Nagata Yoshinosuke, an engineer and forester who pioneered an alternative method for the processing of Korean larch into rayon, Ōji soon found itself at the forefront of the

¹⁴⁸ As cited in Louise Young, *Japan’s Total Empire: Manchuria and the Culture of Wartime Imperialism* (Berkeley: University of California Press, 1999), 230.

¹⁴⁹ OSSJ, 337-340.

¹⁵⁰ Although the factory had shut down due to hardship between 1923-1926, its production rose steadily, peaking in 1938 with 309,366 *koku* of timber processed. For a discussion of this takeover see OSSJ, 336.

¹⁵¹ OSSJ, 334.

chemical manufacture industry.¹⁵² This shift was no doubt welcomed by Government-General officials, who were keen to promote the production of fibers and chemicals.¹⁵³ Indeed, in the eyes of Governor-General Ugaki Kazushige, the output of chemical products was nothing short of a national policy (*kokusaku*) of Korea and a pillar of the Northern Development Plan discussed below.¹⁵⁴

So it was that the establishment in 1935 of the North Korea Paper and Chemical Manufacture Company (Hokusen Seishi Kagaku Kōgyō Kabushiki Kaisha) was met with much fanfare. Jointly funded by Japanese and Korean investors (including Fujiwara Ginjirō and Pak Hung-sik), the factory in Kilju was heralded not only as a model of advanced industrial production, but as a symbol of *naisen yūwa* (“harmony between Japan and Korea”).¹⁵⁵ Standing at the center of this project was Tada Eikichi. Indeed, to the Ōji employee Ueno Naoaki—who, in a noteworthy transition of phrase, was impressed by “the prevalence of small trees and saplings” he saw streaking by the train window upon his arrival to Korea in 1935—Tada was one of the chief architects of this project.¹⁵⁶

But if, as another former employee noted, the factory at Kilju was “born in the climate of Japan and Korea as one (*naisen ittai*),” the day-to-day work of the factory’s

¹⁵² OSSJ, 17.

¹⁵³ Fukuoka Masanobu, “Senjiki Chōsen ni okeru jinken bōsekigyō to jinken orimonogyō,” *Ajia kenkyū*, Vol. 50, No. 3 (2004), 65-84

¹⁵⁴ For this sort of rhetoric see, e.g., “Jinken parupu seisan ni ryōkōjō o fukkatsu,” *Osaka Mainichi Shimbun*, September 2, 1936.

¹⁵⁵ Ōji Paper owned 52 percent of the shares, while Korean capital (including that of Pak Hung-sik and Han Sun-ryon) accounted for nearly one third of the shares. “Chōsen de parupu kōgyō naisen shihon o gōdō shite daiseishi kaisha o shinsetsu,” *Keijō nippō*, January 11, 1935.

¹⁵⁶ Ueno Naoaki, *Chōsen, Manshū no omoide: kyū Ōji Seishi jidai no kiroku* (Fujisawa: Shinbisha Seisaku, 1975), 3-8.

forestry operations suggested otherwise. Logging activities in and around Samchang in Musan County (North Hamgyōng Province) were “carried out under the menace of bandits”—routinely identified as Communist guerrilla fighters—to the point that Ōji employees were required to travel under police escort. The company even created its own “self-defense force” (*jieitai*).¹⁵⁷ Such tensions were potent reminders of the lingering opposition to Japan’s rule—and of the fact that Korea’s forests remained a refuge for those who actively militated against the state.

Finally, alongside Ōji’s paper processing enterprise grew a robust initiative to gain ownership of Korea’s forestlands through the Forest Ordinance land lease process. Enticed by opportunities for cheap forestland, Ōji’s subsidiary, Ōji Afforestation (*Ōji Zōrin*), opened an office in 1938 in Seoul, from which it began to buy up forest plots across the peninsula. In its first three years, Ōji Afforestation leased tracts of land amounting to 62,000 *chōbu* in over thirteen locations, which grew over the coming years to encompass a total of 85,000 *chōbu* in nineteen locations. The central component of this work was planting seedlings and saplings for afforestation, but employees also undertook a variety of erosion control projects and regulation. Particularly demanding was the policing of these territories for slash-and-burn and timber banditry. To that end, employees established a variety of field offices and underwrote the establishment of local Forest Protection Associations in numerous locations.¹⁵⁸ Although Saitō Otosaku had by 1938 already passed away, he surely would have been pleased to see afforestation works unfolding in such close alignment with his vision for outsourcing forestland reclamation.

¹⁵⁷ Shirai Yomo, “Hokusen seishi no tanjyō to hisoku kyōika no sanrin jigyō,” *Kamipa gikyōshi*, Vol. 26, No. 9 (1972), 420-433.

¹⁵⁸ An overview of these afforestation activities can be found in OSSJ, 479-487.

In some respects, Ōji Paper’s operations in Korea were truly exceptional. It specialized in and held a virtual monopoly over the production of particular products (paper, pulp, and, later, rayon) in Korea. It channeled the peninsula’s forest products into a highly complex production chain that stretched across the empire. And it wielded an outsized influence on industrial planning, forestry policy, and even life in Sinŭiju. It is indeed for good reason that Ōji was eventually crowned *Dai-Ōji*—the Great Ōji Paper Company—and celebrated as one of Japan’s largest corporations. But Ōji was not alone. Mitsubishi Holdings, Nomura Forestry, Sumitomo Forestry and other corporations also vied for their share of Korea’s forest resources. For all of these companies, combatting slash-and-burn agricultural was rapidly becoming a pressing priority.

Fire Fields

If the appointment of Saitō Makoto as Governor-General in 1919 marked a pivot towards the policy of “cultural rule,” it also ushered in a new era of development for the Yalu River Basin. The first signs that the Yalu River was to be targeted by the colonial state for industrial development came during the proceedings of the Industrial Commission of 1921: a committee of Japanese and Korean experts and businessmen assembled to gather “public opinion” regarding the invigoration of industrial policy in Korea. And while some participants “complained about the meager colonial budget for Korean industries, and criticized the metropolitan perception of Korea as a mere source of raw materials,” others were quick to highlight the northern region of Korea as ideally suited for development.¹⁵⁹ Endowed with a ready source of hydropower, already woven into shipping routes, and located near the expanding markets of Manchuria, northern

¹⁵⁹ Jun Uchida, “Japanese Settler Colonialism and Capitalism in Korea,” *Reischauer Institute for Japanese Studies, Occasional Papers in Japanese Studies*, Vol. 2002-03 (2002), 13.

Korea—and especially the Yalu River basin—became a new focal point of state-led industrial development.

Forestry reforms occupied a central place in these industrial plans. The Industrial Commission issued a motion regarding forestry, laying out the new imperatives of forest management as related to the promotion of heavy industry: rationalizing and standardizing the oversight structure of National Forest management in order to stabilize supply and demand; afforestation and especially land reclamation of privately owned forestlands; and the reasonable disposal of unclaimed forestland to entitled parties.¹⁶⁰ Emphasis on afforestation underscored the consensus among forestry officials that sustainable forestry was vital to Korea's development.

These new imperatives prompted a sweeping set of forest policy reforms, articulated in the Korean Forest Management Plan (*Chōsen rinsei keikaku*) of 1926.¹⁶¹ A significant overhaul to the bureaucratic architecture of forest management, the Plan created sixty “forest protection zones” to be overseen by the newly consolidated Forestry Office (*Sanrinbu*), and set new and ambitious targets for the production of timber, pulp, and charcoal. It also set out to resolve the persistent problem of slash-and-burn agriculture, an issue that was particularly pernicious in northern Korea, where farming communities and other groups routinely impinged on the progress of afforestation works

¹⁶⁰ As cited in Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kan suru shiteki kenkyū” 28. For details of the Industrial Commission proceedings as related to forestry see “Chōsen no ringyō wa ika ni shite kaizen subekika,” *Tokyo nichinichi shimbun*, October 14, 1921; see also “Kōhai seru Chōsen sanrin,” *Osaka shinpō*, October 28, 1921. See also Chōsen sōtokufu, ed., Sangyō Chōsa Iinkai giji sokkiroku (Keijō: Chōsen sōtokufu, 1921).

¹⁶¹ The Forest Management Plan effectively replaced the Management Stations with 36 field stations and called for the further disposal of denuded and degraded areas as well as arable farmland in national forests (about 1,300,000 chōbu) through land leases and sale to the public. See, e.g., Chōsen sōtokufu, ed., *Chōsen rinsei ni kansuru setsumeisho* (Keijō: Chōsen sōtokufu, 1926).

and sustainable yield forestry initiatives.¹⁶² That the Korean practice of *hwajōn* (literally, fire fields) nonetheless grew over the course of the colonial period bespeaks the profound rural displacement wrought by the colonial state's land reforms.

Although scholars debate the nature and extent of this displacement, it is beyond doubt that tenancy rates among Korean farmers increased as Japanese settlers and the Oriental Development Company acquired more and more land.¹⁶³ While many were able to subsist in these conditions (often supplementing their farm work with wage labor), Korea's longstanding communities of swidden farmers were soon displaced. This in turn prompted many farmers to venture into the mountainous regions of the north (a region considered largely unsettled), where they began to practice fire field agriculture on steep hillsides and deep in forests. Thus while foresters went to great lengths to regulate access to National Forestland, they may have initially been unaware that a massive migration touched off by other agricultural—and forestry—policies was undercutting their efforts.

The initial shortcomings of slash-and-burn regulation were not for want of trying, however. From the very outset of colonial rule, Japanese officials sought to limit, if not eradicate, the practice of slash-and-burn agriculture. “While it is obvious that deforestation comes as a result of overcutting,” wrote one account of forestry reforms in

¹⁶² Efforts to combat slash-and-burn agriculture in Korea well predate the colonial period. As early as 1653, for instance, the Chosŏn state issued edicts banning the lighting of fires for the purposes of agricultural production. See, e.g., Ko Pyōng-un, *Chōsen kaden (yakihata) min no rekishi*, (Tokyo: Yūzankaku shuppan, 2001), 1-17.

¹⁶³ According to Gi-Wook Shin, “By the time the cadastral survey was completed, 77.2% of the rural population were reported to lease part or all of their cultivated land.” See Gi-Wook Shin, *Peasant Protest and Social Change in Colonial Korea* (Seattle: University of Washington Press, 2014), 51. Edwin Gragert, however, has shown that in many cases the cadastral survey did little to alter local level contours of land ownership. See Edwin Gragert, *Landownership Under Colonial Rule: Korea’s Japanese Experience, 1900-1935* (Honolulu: University of Hawai’i Press, 1994).

Korea, “uncontrolled agriculture (*mutōsei no nōgyō*) through the opening of steep slopes and fire field cultivation is the greatest source [of deforestation in Korea].”¹⁶⁴ Both the Forest Law (1908) and Forest Ordinance (1911) took aggressive measures to punish anyone caught practicing swidden agriculture.¹⁶⁵ The latter laid out a stringent set of punishments including imprisonment for lighting fires in National Forestland and fines for cultivating land belonging to someone else.¹⁶⁶ In addition to regulating access and controlling the lighting of fires, in 1916 the Government-General also established a strict topographical threshold for agriculture: seeking to prevent the encroachment of fire fields deeper into mountain areas, the cultivation of land of a grade of 30 degrees or higher was strictly forbidden.¹⁶⁷

But while the colonial government made a concerted effort to stave off such practices, to police the forests, and to, where possible, sedentarize these communities through land transfers since as early as 1916, these amounted to little more than temporary salves.¹⁶⁸ Even in the instances when laws were known to have transgressed, enforcement (to say nothing of prosecution) was nearly impossible given the remoteness of the terrain and the fluidity of these communities.

¹⁶⁴ Nakamura Shōzō, *Taiwan, Chōsen, Karafuto no ringyō* (Tokyo: Mokuzai Tsūshinsha, 1936), 6.

¹⁶⁵ Per Article 18 of the Forest Ordinance, setting fire to or cultivating someone else’s land could lead to imprisonment under 10 years or to fines of up to 200 yen.

¹⁶⁶ These legal statutes were accompanied by a robust public relations effort campaign encouraging Koreans to give up on the practice. See, e.g., “Choson hwajon kaeryangch’aeck,” *Maeil sinbo*, November 3-10.

¹⁶⁷ See, e.g., Ch’oe P’yōng-t’aeck, “Choson Ch’ongdokpu ūi hwajon chōngni saōp,” *Han’guk munhwa*, Vol. 58 (2012), 139-177.

¹⁶⁸ These efforts are outlined in Chōsen sōtokufu, Nōrin kyoku, ed., *Hokusen kaitaku jigyō keikaku ni yoru kadenmin shidō oyobi shinrin hogo shisetsu gaiyō* (Keijō: Nōrin kyoku, 1934).

In short, Korea's northern frontier was not a blank slate upon which new industrial plans could be drawn. It was rather, as one forestry official noted, the domain of the “lumpen proletariat of the mountains” (*yama no runpen*), who posed a major challenge to the administration of the area.¹⁶⁹ A long string of studies confirmed both the alarming extent of swidden agriculture and its deleterious effects on the landscape: depletion of soil quality, unsustainable use of forest products for fuel, erosion, and, perhaps most troubling of all, the inadvertent triggering of massive forest fires.

The conclusions of Zenshō Eisuke in his exhaustive and oft-cited report on “The Current State of Fire Fields” elaborated on this concern. According to his calculations (which were based on cursory surveys and province-level statistics), as of 1926 more than one million individuals were practicing slash-and-burn agriculture on over 400,000 *chōbu* of forestland nationwide (see Table 4.8).¹⁷⁰ That a majority of the fire fields could be found within the confines of Bureau of Forest Management land prompted forestry officials to double down on their efforts to police these woodlands.¹⁷¹ Many swidden plots also turned up on land designated for disposal to other parties, thereby destabilizing a central strategy of the state’s forest management.¹⁷² By the late 1920s, slash and burn was deemed “a social disease,” threatening forests, village improvement campaigns, and civic values alike.¹⁷³

¹⁶⁹ “Kadenmin kaihatsu wa kin’yū shisetsu ga kyumu,” *Ōkkō nippō*, December 25, 1932.

¹⁷⁰ DRSK, 127.

¹⁷¹ See Zenshō Eisuke, *Kaden no genjō* (Keijō: Government-General of Korea, Archives Section, 1926), 79-99.

¹⁷² As of 1924, as much as 314,823 individuals were practicing slash-and-burn agriculture on 140,551 *chō* of National Forestland designated for disposal. See DRSK, 133.

¹⁷³ For a detailed analysis of the Government-General’s research agenda regarding shifting cultivation see Komeie Taisaku, “Colonial Environmentalism and Shifting Cultivation in Korea:

Table 4.8. Population of Swidden Farmers in Korea by Province (as of 1926)

Province	Area	Households	Population
Kyōnggi	2,686 (chō)	3,727	16,450
North Ch'ungch'ōng	2,075.28	3,836	16,009
South Ch'ungch'ōng	52	342	1,358
North Chōlla	1,289.51	6,207	27,578
South Chōlla	2,544.32	5,899	26,427
North Kyōngsang	1,470	3,669	15,709
South Kyōngsang	218	1,069	4,842
Hwanghae	14,085.25	12,959	57,637
South P'yōng'an	41,107	21,177	111,628
North P'yōng'an	21,665	55,955	278,266
Kangwōn	56,451	43,894	205,037
South Hamgyōng	85,197	45,084	248,731
North Hamgyōng	5,864	6,365	38,593
Total	323,704.37	210,183	1,048,265
Forest Management Stations	76,257.78	20,402	110,761
Sum Total	400,962.15	230,585	1,159,026

Source: Data from Zenshō Eisuke, *Kaden no genjō*; compiled in DRSK, 130-131.

Not all who studied these communities shared this sentiment. Odauchi Michitoshi, a geographer who spent many months among slash-and-burn agriculturalists in the Kaema Plateau, saw in their practices of crop rotation and cultivation a far more sophisticated regimen than was often noted.¹⁷⁴ Although their lifestyle was “primitive” in many respects, he argued, some of the more stable villages had achieved considerable social stability and economic vitality.¹⁷⁵ Of particular interest was Odauchi’s conclusion

Japanese Mapping, Research, and Representation,” *Geographical Review of Japan*, Vol. 79, No. 12 (2006), 664-679.

¹⁷⁴ Odauchi was, according to Komeie, “a well-known fieldworker in rural geography and had worked for several ministries and agencies. After a general observation of rural Korea which included field trips to sixteen various settlements, Odauchi focused on the *hwajeon* societies as an important topic and presented an official report with reprint in Japan.” See Komeie Taisaku, Colonial Environmentalism and Shifting Cultivation in Korea,” 671.

¹⁷⁵ Odauchi’s writings on fire fields in Korea include Odauchi Michitoshi, *Chōsen buraku chōsa hōkoku Vol. 1: Kadenmin Raijū Shinajin* (Keijō: Government-General of Korea, 1924); and Odauchi Michitoshi, “Chōsen kandenmin no shakaiteki kōsatsu,” *Tōyō*, Vol. 27, No. 11 (1924), 5-21.

that there was, in effect, two different types of slash and burn communities: those that had practiced an advanced form of slash-and-burn in the region for generations; and a newer, poorer type of itinerant farmer who made their way into the region out of sheer desperation.¹⁷⁶ As Odauchi saw it, it was the latter group that was wreaking havoc on northern Korea's mountains. Not only did this group create fire fields in areas not suited for swidden agriculture, but their desperation resulted in shorter crop rotations and greater damage to the soil.

Government foresters soon began to undertake studies of their own. A set of "Slash and Burn Survey Guidelines" (*Kaden chōsa yōkō*) issued in March 1928 led to a series of fact-finding missions concentrated in the three northernmost provinces that May. These and other surveys—as well as the popular press coverage of the issue—drew greater attention to the problem of swidden agriculture.¹⁷⁷ One study focused its attention on the crop cycle of swidden agriculturalists, describing the successive shift from potato to millet to soy and barley.¹⁷⁸ Another probed the social organizations of these communities, noting the existence of local-level associations (or *gye*, especially for marriages and funerals).¹⁷⁹ Still other surveys showed that many swidden farmers in the

¹⁷⁶ For a more detailed analysis of these findings see Komeie Taisaku, "Colonial Environmentalism and Shifting Cultivation in Korea," 671-672.

¹⁷⁷ A detailed account of these survey efforts can be found in "Kaden no hanashi," *Keijō nippō*, June 15, 1928.

¹⁷⁸ Uemura Tsunesaburō, "Chōsen ni okeru rinya no iriai kankei o ronjite kaden ni oyobu," (*Keijō*: unknown, 1929); and Watanabe Yoshio, "Kaden to kadenmin ni tsuite: omo toshite Chōsen enshūrin ni okeru kaden," *Hokkaidō Teikoku Daigaku nōgakubu enshūrin kenkyū hōkoku*, Vol. 7 (1932), 251-274.

¹⁷⁹ Ōkaga Yui, "Kadenmin no seikaitsu ni tsuite," *Chōsen sanrinkaihō*, Vol. 143 (1937), 29-37; Sawano Akira, "Hokusen chihou ni okeru kaden ni tsuite," *Chōsen sanrinkaihō*, Vol. 126 (1935), 21-29.

north routinely crossed provincial and administrative borders, meaning that any effort to curb the problem could not be left to one single local authority.¹⁸⁰

And yet, for all their richness and detail, these studies offered little insight into the human dimensions of fire fields. Framed in the cold terms of policy and agronomy, they seldom touched upon the lives and personal histories that drove these communities into abject poverty or why others would want to stubbornly adhere to this way of life.¹⁸¹ The Korean-language press, by contrast, did much to focus attention on the plight of these communities. Often based on travel surveys by journalists deep into the mountains (and serialized in installments), these accounts drew national attention to the underlying social problems that drove many into the mountains.¹⁸² One article profiled the sad fate of a slash-and burn agriculturalist who had been pushed out of his village near Anju and sought refuge in the mountains, only to find himself displaced once again by government restrictions, leaving him with no choice but to escape to the Jiandao marshlands.¹⁸³ Yet another article profiled the difficulties posed to swidden farmers by Sumitomo Industries and the Oriental Development Company, whose efforts to improve rice production “collapsed villages” and interfered in longstanding communal land-use arrangements.¹⁸⁴

¹⁸⁰ This was one of many key findings from the most exhaustive survey conducted by forestry officials and agricultural experts (including Kasai Kanichi, Kamio Kazuharu, Mitsui Eichō, and Hashimoto Denzaemon) tapped by the Government-General to research in the problem in the late 1920s. Their findings are compiled in Chōsen sōtokufu, ed., *Kaden chōsa hōkokusho* (Keijō: Chōsen sōtokufu, 1928).

¹⁸¹ “Sallimpōp kwa hwajōnmin” *Tonga ilbo*, December 16, 1933.

¹⁸² Perhaps the best example of these dispatches is the serialized article “Kowōn hwajōn nong'chon t'ambang somun sogam,” which ran in the *Tonga ilbo* through the summer of 1931.

¹⁸³ “Hwajōn do hal su ka ūpsō, T'ongkando urō yuri,” *Tonga ilbo*, February 10, 1927.

¹⁸⁴ “Nong'chon ūi mollak,” *Tonga ilbo*, May 29, 1931.

Perhaps one article in the *Chosōn Ilbo* best captured the essence of this reporting when it noted that “these people [*hwajönmin*], too, need our warmth.”¹⁸⁵

Whatever the contrasts in coverage, reporting on the issue of fire fields more or less arrived at the same two conclusions: that slash-and-burn was rampant and that policy to date was largely ineffectual. As such, the discussion of slash-and-burn soon shifted away from all-out eradication towards local-level improvement. The Government-General tapped Hashimoto Denzaemon and other agronomists to spearhead an agricultural improvement campaign specifically tailored to slash-and-burn communities. At the heart of this campaign was the promotion of intensification techniques (especially the use of fertilizer and compost) that would undo what Hashimoto and others had begun to call the “predatory agricultural practices” of these communities. Officials essentially promoted a form of agricultural production that would simultaneously anchor these communities to the soil and spare significant damage to surrounding forests, which were, by one assessment, “crying out” for protection.¹⁸⁶

To that end, provincial officials took special measures to lease out land free of charge. By 1940, as many as 430,000 swidden farmers had received “settlement land” (*teichakuchi*) through free disposals. In some areas, the Government-General also facilitated the distribution of tools for intensive agriculture. According to Watanabe Toyohiko, a high-ranking official charged with resolving the fire-field problem, they were especially keen to lease oxen (which were often obtained from the Forest Management Bureau, whose oxen were only needed for winter lumbering operations).

¹⁸⁵ “Kanggye Chōng-nam ūi hwajönmin ch'amsang,” *Chosōn ilbo*, November 7, 1930.

¹⁸⁶ OKG (pen name), “Chōsen no shinrin wa sagebu: hogo no jyūyōsei to sanrin kaji,” *Chōsen*, Special Volume (1937), 29. For a discussion of this effort see Komeie Taisaku, “Colonial Environmentalism and Shifting Cultivation in Korea,” 673-674.

The use of draft animals not only promoted settlement but also produced fertilizer.¹⁸⁷ Self-sufficient production of manure and compost was considered by many to be a crucial element of reform. Through the Northern Development Plan colonial officials thus incentivized and subsidized fertilizer production. In 1941 alone, over 130 million *kan* of compost was applied by slash-and-burn agriculturalists. Due to these and other measures, government officials noted, the average annual income of “mountain farming” households—a term used to describe settled slash-and-burners—grew steadily over from 252 yen in 1933 to as much as 848 yen in 1941.¹⁸⁸ Beginning in the 1930s, officials likewise created slash-and-burn farmers cooperative associations and “agricultural guidance zones.” The idea was to bind swidden farmers together in collective associations, model in best practices for agriculture in mountainous areas, and closely monitor the lifestyle of these communities.¹⁸⁹

The flip side of this agricultural improvement campaign was a push towards more stringent regulation. Having created extensive forests protection zones in 1928 and assigned an additional 277 forest rangers to patrol and police the region, officials now cracked down hard on offenders.¹⁹⁰ Even colonial Korea’s court system weighed in on the issue, calling for more severe punishments to dissuade those who persisted in their practice of fire field agriculture. Provincial forestry officials, for their part, intensified their efforts to inculcate these farmers with “forest love thought” by convening a variety

¹⁸⁷ These policies are elaborated in “Sanrin gyōsei,” in: Mizuta Naomasa, ed., *Watanabe Toyohiko kōgyōtsu, Chōsen sōtokufu kaikodan* (Tokyo: Yūhō Kyōkai, 1984), 34.

¹⁸⁸ DRSK, 138-139.

¹⁸⁹ The establishment of these zones and institutions is examined in Ch’oe P’yōng-t’ae, “Chosŏn Ch’ongdokpu ūi hwajon chōngni saōp,” 167-174.

¹⁹⁰ See Sin Min-jöng, “Shokuminchiki Chōsen, Kōgendō chiiki ni okeru kaden, kadenmin ni kan suru kenkyū: Tōa nippō kiji no bunseki o chūshin ni,” *Ringyō keizai*, Vol. 62, No. 6 (2009), 3.

of roundtables, holding lectures, and promoting the creation of Forest Protection Association (*shinrin hogo kumiai*).¹⁹¹ In this, they were joined by a number of private corporations including Sumitomo Forestry and Nomura Forestry, who were also active in policing the region to prevent incursions into their own corporate-owned forestland.¹⁹²

In spite of these efforts, fire fields did not simply disappear.¹⁹³ While the Korean population in the 1930s grew by roughly 6 percent, the number of farmers engaged in slash and burn grew by 16 percent.¹⁹⁴ A spate of floods, worsening agricultural conditions, and a rapid drop in the price of rice in the mid 1930s only exacerbated the trend. By 1942, the last year for which solid statistics are available, there were as many as 80,000 individuals and 30,000 households practicing swidden agriculture.¹⁹⁵ That this practice persisted throughout the colonial period is perhaps best evidenced by the fact that fire fields remained a perennial problem for Korea's postwar government under the Pak Chōng-hŭi regime.¹⁹⁶

The Yalu Obstructed

Few colonial officials had grander plans for northern Korea than Ugaki Kazushige. On returning to his post as Governor-General in 1931, Ugaki put forward an

¹⁹¹ Officials held in 1933 alone 970 lectures, with 68,214 participants. They also convened 958 roundtables with 22,181 in attendance. DRSK, 140.

¹⁹² A brief discussion of the role of Sumitomo and others can be found in Sin Min-jŏng, "Shokuminchiki Chōsen, Kōgendō chiiki ni okeru kaden, kadenmin ni kan suru kenkyū: tōa nippō kiji no bunseki o chūshin ni," 6-7.

¹⁹³ By 1940, as much as 68,177 *chō* had been allotted to slash and burners in 21,492 land transfer transactions. DRSK, 137.

¹⁹⁴ These statistics come from Koike Yōichi, "Chōsen kandemin no hassei," Japanese Journal of Human Geography, Vol. 5, No. 2 (1953), 103-114.

¹⁹⁵ DRSK, 134.

¹⁹⁶ For a discussion of these communities in post-colonial Korea see, e.g., Ko Pyōng-un, *Chōsen kaden (yakihata) min no rekishi*, 65-121.

ambitious agenda for northern Korea: the 1932 Northern Development Plan. A fifteen-year roadmap for *nōkō heishin* (“the parallel development of industry and agriculture”), the plan called for road improvements, railway construction, and myriad agricultural improvement projects in the eight northernmost districts of the region—that is, the borderlands abutting the Yalu River.¹⁹⁷ Forestry was placed front and center in the plan, which established a tripartite agenda for officials: increased forest utilization, increased protection, and the amelioration of slash-and-burn agriculture.¹⁹⁸

In prioritizing the development of the Korean districts along the border, the Northern Development Plan also aimed to further integrate northern Korea with enterprises across the Yalu. Motivated initially by the desire to provision the “the construction of Asia,”¹⁹⁹ the linking of Manchuria and Korea would later become enfolded into the wartime “defense economy” (*kokubō keizai*). And while the making of

¹⁹⁷ The shift towards this doctrine stemmed in part from the highly unsettling effects of shifts in Korea’s rice market: due to bumper crops in the production of rice across the empire in 1930, the value of Korean rice plummeted, thereby intensifying rural strife in many parts of the peninsula. For this and other reasons, the Government-General under Ugaki aimed to diversify Korea’s agricultural production through a new slogan of *nanmen hokuyō*—“cotton in the south, sheep in the north.” Such a plan sought to simultaneously re-vitalize rural life and boost Korea’s position in the growing textile market by settling new lands, especially those in the north. What this meant for swidden agriculture reform was a newfound determination to anchor these communities to specific areas targeted for agricultural improvement, much in the manner articulated by Hashimoto Denzaemon and other specialists. For a discussion of these plans as related to forestry policy see Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 92. For a detailed study of cotton production as related to rice-production policies in colonial Korea see Kimura Mitsuhiko, “Shokuminchika Chōsen no watasaku ni tsuite,” *Asian Studies*, Vol. 30, No. 1 (1983), 54-79. For a discussion of this policy pivot see Mark Caprio, “Images of the North in Occupied Korea, 1904-1945” in: Sun Joo Kim, ed., *The Northern Region of Korea: History, Identity, and Culture*, 316-320.

¹⁹⁸ These plans are most clearly laid out in Chōsen sōtokufu, sanrinbu, ed., “Hokusen shinrin kaitaku jigyō keikakusho,” (Keijō: Chōsen sōtokufu, sanrinbu, 1932). YB: reel B318; and Chōsen sōtokufu, “Hokusen takushoku jigyō keikakusho (shinrin kankei no bun),” (Keijō: Chōsen sōtokufu, 1932), YB: reel B319.

¹⁹⁹ “Tōa kensetsu ni taisuru Chōsen ringyō no shimei,” *Chōsen sanrinhakihō*, Vol. 186 (1940), 41-60.

Mansen found many expressions, it was consistently anchored—in both time and space—to the Yalu River basin. By the late 1930s, Japanese officials had heralded both a “Yalu Era of Development” and a “Yalu River Economic Bloc.”

The Northern Development Plan dealt a mixed hand for timber interests. On one hand, it meant a surge in government investment in the development of the Yalu River basin’s extractive infrastructure.²⁰⁰ Whereas in the first twenty years of the timber industry 308 kilometers of skidways, 48 kilometers of forest railways, and 252 kilometers of logging roads were built, in just eight years from 1933 to 1940 no less than 506 km of skid-ways, 67 km of railways, and 410 km of logging roads were added to this sprawling network of timber transport.²⁰¹ Foresters also enjoyed new discretionary funds to combat problems of slash-and-burn agriculture, which were used to carry out public outreach, provide loans (for land and fertilizer), and strengthen regulation.²⁰²

At the same time, the proliferation of plants, factories, and railways markedly altered the nature—and geography—of timber extraction and transport. More and more, Sinūju and its civilian economy were bypassed or overtaken by military interests. Timber industry representatives, that is to say, no longer enjoyed the same access they one had to the region’s resources and infrastructure. Most immediately, the gradual tightening of government control over access to forest resources to meet the industrial demands of war—fuel, lumber, and, increasingly, synthetic fibers—led to significant

²⁰⁰ See, e.g., Ebihara Akira, “Hokusen kaitaku jigyō,” *Chōsen sanrinkaihō*, Vol. 129 (1935), 29-34.

²⁰¹ The largest project was a large forest railway from Hyesan to Kilju. See Ch’oe In-hwa, “Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū,” 34.

²⁰² It set aside 6,202,996 yen for “the development of forestry,” and 2,037,648 for the slash and burn problem, as well as 3,942,996 for forest protection, amounting to 12,183,640 yen. See DRSK, 135.

retrenchment and consolidation of the Sinŭiju-based timber industry. The completion in 1939 of a new railway bridge across the Yalu at Manp'o was perhaps the most conspicuous symbol of the new spatial orientation of regional industry, which raised the prospect of an “economic revolution” in the eyes of some Sinŭiju -based businessmen.²⁰³ Strategically placed further upstream and able to handle much larger loads of material and freight, the new bridge wired northern Korea and its factories into the industrial circuitry—and military supply chains—extending further into northern China.²⁰⁴

But it was the push to transform the Yalu—“the lifeline of Sinŭiju”—into a source of hydropower that spelled the greatest change for the region and its timber industry. Such a shift of course was anything but sudden; colonial engineers and bureaucrats had long eyed Korea’s rivers as a precious source of hydropower, already a vital source of energy back in mainland Japan.²⁰⁵ The promulgation of the 1937 Manchukuo Industrial Plan provided just the catalyst for these grand plans. Soon thereafter, officials from the newly formed Yalu River Hydropower Company undertook extensive research into the viability of the enterprise in the region and, by 1937, began construction on the Sup'ung Dam—the second largest hydropower project in the world.²⁰⁶

²⁰³ “Manpōsen no kōji wa keizai bunya ni henkaku,” *Ōkkō Nippō*, March 16, 1934.

²⁰⁴ Suzuki Tokuji, “Tōa no keizai kensetsu to mokuzai shigen,” *Chōsen sanrinkaihō*, Vol. 167 (1939), 5-7.

²⁰⁵ See Aaron S. Moore, *Constructing East Asia: Technology, Ideology, and Empire in Japan’s Wartime Era, 1931-1945* (Stanford: Stanford University Press, 2013).

²⁰⁶ For a pioneering study of this project see, e.g., Hirose Teizō, “Shokuminki chōsen ni okeru suihō hatsudenjo kensetsu to ryūbatsu mondai,” *Niigata Kokusai Jōhō Daigaku, Jōhō bunka gakubu kiyō* Vol. 1 (1998), 39-58; Tanigawa Ryūichi, “Ryūten suru hitobito, tensei suru kenzōbutsu: Chōsen hantō hokubu ni okeru Suihō damu no kensetsu to sono seisei,” *Shisō* Vol. 1005, (2008), 61-81.

The response of timber companies to the Yalu Hydropower's proposals to dam the Yalu ranged from skepticism to indignation.²⁰⁷ At a minimum, timber companies sought non-obstruction guarantees and, where possible, compensation for damage to their businesses.²⁰⁸ At the forefront of the opposition to the damming project and the push for such guarantees were the Forest Management Bureau and Ōji Paper, both of which were dependent on the Yalu to deliver raw materials downstream to their processing centers in Sinūju. As Aaron Moore has shown, both groups “asserted timber’s strategic importance for Japan’s war economy” and “insisted on the company and the state’s duty to protect people’s livelihoods.”²⁰⁹

But the proposal threw into relief the divergent interests of Andong and Sinūju. Although the timber industry remained important to both towns, Andong had less to lose in supporting the hydropower projects on the Yalu. For one thing, the making of Manchukuo had nurtured considerable industrial diversification in Andong. Widely considered “a frontline base for developing Asia,” it had become the hub of a wide array of industrial projects including mining, aircraft production, sericulture, and cement production that stretched to Dandong.²¹⁰ While timber remained an important business in Andong, many large timber companies had already shifted their operations to Jilin, where a much larger—and more propitiously located—forestry operation was underway.

²⁰⁷ See, e.g., “Suihō Damu kenzō to tsūbatsu shisetsu mondai,” *Shingishū shōkōkaigijo geppō* Vol. 122 (1940), 9-11; and “Ryūbatsu mondai masu masu jyūdaika,” *Shingishū shōkōkaigijo geppō* Vol. 133 (1940), 10-13.

²⁰⁸ See, e.g., Ijichi Takemori, “Ōryōkkō Suihō entei no ryuubatsurō kentō no tame no mokei jikken,” *Chōsen sanrinkaihō*, Vol. 172 (1939), 36-48.

²⁰⁹ Moore, “The Yalu River Era of Developing Asia,” 124.

²¹⁰ Moore, “The Yalu River Era of Developing Asia,” 124.

Sinūju, by contrast, remained a timber town at heart. The flow of timber was vital to the industrial health of the city and the welfare of its residents.

In the earliest stages of construction, Yalu Hydropower made assurances that their engineers would accommodate the timber industry by constructing special gates and channels to facilitate the flow of timber. But their pledges outstripped the abilities and resources of their engineers.²¹¹ That the dam hampered the transportation of timber downstream was evident immediately: in 1940, just a year after its completion, the amount of timber collected at Sinūju fell by nearly 95 percent.²¹² As Moore has shown, timber industry officials, working through the Sinūju Chamber of Commerce, took their frustrations to the Government-General, which tried to broker a deal between Sinūju's timber industry and Yalu Hydropower. As a result of these often-heated exchanges, Yalu Hydropower agreed to bolster its effort to resolve timber transportation.²¹³

But Sinūju would never be the same. The real losers were the city's smaller timber companies, which had neither the resources nor the connections to successfully press for compensation. Cut off from its raw materials, even the industrial giant Ōji was unable to persist in Sinūju. As a result, timber industries rushed upstream to Manp'o. As historian Hirose Teizō has noted, the new infrastructure of the north had prompted a radical re-orientation in the geography of the timber industry: lumber was now floated to Manp'o,

²¹¹ Writes Moore: "Company and state engineers conducted a week of tests at a timberyard in November 1938 to determine the average time to guide logging rafts of different sizes through a sluice gate as well as the average travel time over 100 meters. However, they had difficulty simulating the proper glide effect present in an actual channel." Moore, "The Yalu River Era of Developing Asia," 124.

²¹² See, e.g., Hirose Teizō, "Shokuminki Chōsen ni okeru Suihō hatsudenjo kensetsu to ryūbatsu mondai," *Niigata Kokusai Jōhō Daigaku, Jōhō bunka gakubu kiyō* Vol. 1 (1998), 39-58

²¹³ For a discussion of these and other concessions see, e.g., "Ōryōkkō jidai o kataru zadankai," *Shingishū shōkōkaigijo geppō*, Vol. 122 (1939), 1-8.

where it was shipped by rail either north to Manchuria or south on the new Manp'o rail line towards place like Kanggye, Chōnch'ōn, Hūich'ōn, and P'yōngy'an—the new timber towns of Korea.²¹⁴ In the meantime, Sinŭiju began its transition from a timber capital to a diversified industrial hub, taking advantage of the power generated by the dam and making the most of its access to shipping routes. This was perhaps a fitting denouement in the history of a local industry that had long seen its place in the market subordinated to the larger imperatives of continental expansion, geopolitics, and war.

Conclusion

Despite the multi-faceted nature of the timber undertaking described above, a single question about forestry in the National Forests of the northern Korea has reigned supreme: to what extent can we describe the so-called timber undertaking as a plundering of Korea's natural resources? While scholars have arrived at different conclusions regarding the so-called “northern primeval forest plunder thesis” (*pukpu wōnsirim sut'al non*), most agree that the exploitation of Korean timber reserves unfolded in three distinct phases. Following an initial period of policy planning, a decade of more or less sustainable forestry that began in 1926 ultimately gave way in 1937 to the exigencies of total war, which prompted pell-mell cutting in state-owned lands.²¹⁵

Different scholars have offered different metrics to support this schema. Ch'oe In-hwa has noted that while in 1910 there was an estimated 1,005,300,000 *shakujime* of accumulated timber stock in Korea's National Forestlands, this figure fell by 1927 to 500,878,700 *shakujime* (56 percent of the 1910 figure) and by 1940 to just 303,520,000

²¹⁴ Hirose Teizō, “Shokuminki Chōsen ni okeru Suihō hatsudenjo kensetsu to ryūbatsu mondai,” 54.

²¹⁵ See, e.g., Pae, “Ilche ūi Chosŏn sallim chōngch'aek e kwanhan yōng'u: kugyurim chōngch'aek ūl chungshim urō,” Ph.D. Diss., Seoul National University, Department of Agriculture (1997).

skakujime (32 percent of the 1910 figure).²¹⁶ Paek Ŭl-sun, meanwhile, has calculated that while there was a steady increase in the earnings rate of state-led forestry (from nearly 50% in 1932 to 120% in 1939), the same period witnessed a significant reduction in the investment in afforestation, which dropped to less than 2 percent of total expenditures on forestry—a level significantly lower than called for in the Forest Management Plan. Paek concludes that Japan’s “management of forest resources was strongly exploitative in character.”²¹⁷ Yi U-yōn, by contrast, has emphasized that while the colonial government did heavily extract timber from the north, much of the revenue generated from this enterprise was used (at least up until 1942) to fund afforestation works elsewhere in the peninsula—what he sees as consistent with the colonial government’s practice of regenerative forestry.²¹⁸

Such a focus on the question of exploitation, however, has obscured other important insights into the forestry project on National Forestland. While state-led forestry was often heralded as a vehicle of industry and a hallmark of the modern state, it also came into conflict with other aspects of modernization and industrial development. If, as one eminent forest historian has put it, “the various ways of using forest and wood have continually cut across one another,” the Yalu River basin’s timber industry is an instructive case in point.²¹⁹ To survey the history of the region is to chronicle a number of

²¹⁶ The fluctuations in these figures came in part as a result of the disposal and transfer of national forestlands to private forestland. See Ch’oe In-hwa, “Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū,” 37-38.

²¹⁷ Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” 44.

²¹⁸ This point is emphasized in Yi U-yōn, “Singminjigi imōp ūi kündaeħwa ch’aeħ’wi imōp eso yuksōng imōp ūro,” *Kyōngje sahak*, Vol. 38 (2005), 147-153.

²¹⁹ Joachim Radkau, *Wood: A History* (New York: Polity, 2011), 7.

heated and often-protracted conflicts involving a range of stakeholders: corporations seeking access to raw materials; colonies competing to shape metropolitan policies regarding resource flows; swidden farmers battling forestry officials over the multiple uses of forestland; and river port towns facing off against their neighbors over the changing utility of the Yalu itself.

More than simply exemplifying the exploitative nature of the state, the timber undertaking reveals how the changing priorities of development, the shifting boundaries of its resources reserves, and the protean value of forests often undercut the interests of Korea's timber industry. For all their efforts to bolster their market position by constructing new railways, improving extractive practices, and policing the woodlands, industry and state officials could never exercise full control over the marketplace. The politics of continental expansion, domestic timber provisioning, and wartime defense consistently undercut the profitability of Sinŭiju's industry at the same time that it bolstered the interests of its counterparts across the Yalu.

That this undertaking provided raw materials crucial for the modernizing agenda of colonial rule is a well-established fact. Less explored, however, is how the timber undertaking gave impetus to a particular industrial geography of extraction. Well before there was a Northern Development Plan or a Yalu River Economic Bloc, there was a lumbering industry. This industry drew labor, capital, and infrastructure to the Korea's northern region: developments best reflected in the rise of the timber capital of Sinŭiju. Through its transportation routes, interpersonal connections, and capital pools, the northern timber industry in turn played a significant part in the industrialization of the north and the making of *Mansen*.

But while a regional analysis of the northern timber undertaking brings into view the role of transnational corporations, the growth of cities, and the sprawling network of railways, it offers little insight into the rhythms of forestry and forest management at the level of lived experience and village politics. Nor does its connection with the National Forests that predominated the north elucidate the politics of forest management on privately- or provincially-owned woodlands, where an equally robust set of reforms shaped communal politics, resource consumption, and village life across the peninsula, the subject of the next chapter.

Chapter 5

Civic Forestry

For all their talk of forestry as an investment in Korea's future, those charged with forest management in Korea exhibited a keen interest in the forests of Korea's past.

Shioda Masahiro, for instance, combed the Annals of the Chosŏn Dynasty, the 1,893 volume dynastic chronicle, for any insight it offered into the forestry policies of the pre-modern period.¹ Yielding a weighty compilation of local forest histories, Tokumitsu Nobuyuki, a researcher in one of Korea's numerous Forestry Experiment Stations, conducted exhaustive documentary and physical surveys of Korea's *rinsō* (K: *imsu*): parcels of protected forests whose history often dated back to ancient times.² Although these and other studies did little to alter the fundamentally dismissive rhetoric regarding the Chosŏn period as "without forestry or forest management," as one official put it, they did on occasion inspire optimism that Korean commoners were primed for forest conservation.³

This was especially true of Japanese foresters' views on *songgye* (松契): the pine associations that had for centuries overseen the protection and plantation principally of pine trees in areas across the peninsula.⁴ To be sure, research into these local-level organizations sharpened the focus on a number of local practices that were, at least in the eyes of Japanese officials, as deeply flawed as they were ingrained: the monoculture of

¹ Shioda Masahiro, *Chōsen sanrin shiryō* (Keijō: Chōsen sanrinkai, 1934).

² Tokumitsu Nobuyuki, *Chōsen no rinsō* (Keijō: Chōsen sōtokufu ringyō shikenjo, 1938).

³ Oka Eiji, "Kankoku makki no ringyō sōshi jidai," in CRI, 85.

⁴ See, e.g., TYBK, 309; and "Chōsen no rinsei oyobi sanrinkai kaikyū zadankai," in CRI, 512-513.

pine trees, the over-cutting of forests, and the lax regulation of the commons.⁵ But they also presented evidence of collective conservationist instincts. As Watanabe Toyohiko put it, “In Korea’s past, pine associations [*songgye*], afforestation associations [*siklimgye*], and the like were formed, whereby forest landowners banded together to jointly protect the forest and plant trees—a beautiful custom of collective action that achieved considerable results.”⁶ But if pine associations hinted at the latent potential of conservation in rural communities, they also re-affirmed for these officials the absolute necessity of *state-led* forestry. *Songgye* had failed to curb deforestation on a national scale, it was thought, precisely because of their parochialism. Their legacy was atomized pockets of protected pine forest scattered across the peninsula. For village forestry to flourish, the state now needed to step in and coordinate, if not regulate, these local institutions.

This presented forestry officials with two seemingly contradictory imperatives. On the one hand, they wanted to shore up the rights of individual forestland holders through the Forestland Survey and enforce the boundaries of private forestland. On the other, foresters also strove to bind individuals into collective institutions. How, then, could officials honor and enforce individual ownership rights at the same time as they encouraged collective forestry efforts? This question generated many responses, but none was pursued with more determination than Forestry Owners Associations (J: *shinrin kumiai*; K: *sallim chohap*): local institutions that pooled the resources and labor of forest

⁵ For criticisms of this sort see, e.g., DRSK, 84.

⁶ Watanabe Toyohiko, “Rinsei no hongi,” *Chōsen*, Vol. 176 (1930), 82.

owners to coordinate the work of forestry.⁷ In essence, the Forest Owners Association was envisioned to function in exactly the ways that the *songgye* had not: coordinated by the state, comprehensive in coverage, institutionally standardized, financially solvent, and a champion of best practices.

By means of an analysis of forestry on privately- and communally-owned forests, this chapter probes the resulting project of civic forestry: communal arrangements that amalgamated individuals, households, villages, and towns behind the improvement and day-to-day management of privately owned forests. Forest Owners Associations were but one incarnation of the many and various local level institutions that carried out the work of communal forestry. Erosion control associations, forest love associations, forest protection associations: different arrangements of various scales and mandates proliferated throughout the colonial period.

Unifying these disparate organizations was the desire on the part of the colonial government to *compel* rather than control local forestry. Indeed, whereas foresters were relatively unimpeded in their management of the National Forestlands discussed in the previous chapter, their management of privately owned forestlands (*minyūrin*) required a

⁷ The sheer volume and variety of local-level forestry institutions in rural Korea presents the historian with a translation quandary. Although *shinrin kumiai* (森林組合) is routinely translated as “forestry cooperative” in Japan, I have elected to render it here as Forest Owners Associations for two principal reasons. The first is the nature of the institutional politics of these organizations: typically in Korea for an organization to qualify as a cooperative it needed to offer its members equal voting rights and equal opportunity to assume management associations. Forestry Associations were often placed squarely under the leadership of village leaders and Japanese officials. Given that *shinrin kumiai* were placed squarely under the leadership of village leaders and Japanese officials, a term other than cooperative is in order. It is also important to note that *kyōdō kumiai* (共同組合) operated alongside *shinrin kumiai*—a fact that strongly suggests that these associations were distinct entities from forestry cooperatives. Second, seeing as the formation of these associations was inextricably linked to the progress of the Forestland Survey (as discussed below) it seems only appropriate to place the ownership front and center in their title, as some scholars in Japan have done. I thank Holly Stephens for pushing me to clarify this point.

softer touch. It necessitated a campaign of what, in the context of urban Japan, Sheldon Garon has called “moral suasion”⁸ and what, in the context of rural Korea, Gi-Wook Shin and Do-Hyun Han have called “colonial corporatism”: the creation of “new, semiofficial, semivoluntary, intermediary associations for colonial control and mobilization.”⁹ Seeking to penetrate the values of rural society, officials turned to these institutions as a means to shape local forestry practices and, to the extent possible, propagate the fundamental tenets of ecological modernity: thrift, fuel economy, by-employments, and so forth.

Such, at least, was the ideal. Although forestry bureaucrats painted Forest Owners Associations as “everywhere operating in accordance with the will of the people (*mini*),” the dogged protests of many communities sometimes suggested otherwise.¹⁰ At nearly every step officials encountered stiff opposition and administrative hurdles. Behind these setbacks stood conflicting visions and puzzling questions over what constituted the natural unit of local society and, thus, the proper scale of civic forestry arrangements. They provide not only a parallel case study to the irrigation associations examined by Matsumoto Takenori, but also an opportunity to broaden our understanding of everyday life in rural Korea by paying heed to the linkages between agriculture and forestry.¹¹ Forest Owners Associations, in other words, offer a window onto the village-level politics of sustainability and the mediation of state power in rural society.

⁸ Sheldon Garon, *Molding Japanese Minds: The State in Everyday Life* (Princeton: Princeton University Press, 1997), introduction.

⁹ Gi-Wook Shin and Do-Hyun Han, “Colonial Corporatism: The Rural Revitalization Campaign, 1932-1940,” in Shin and Robinson, ed., *Colonial Modernity in Korea*, 76.

¹⁰ XY (penname), “Shinrin kumiai jigyō no hensen,” in CRI, 362.

¹¹ Matsumoto Takenori has long drawn attention to the highly contentious nature of the effort to re-configure agricultural production in colonial Korea. See, e.g., Matsumoto Takenori, *Shokuminchi kenryoku to Chōsen nōmin*, (Tokyo: Shakai hyōronsha, 1998); and Matsumoto Takenori, *Shokuminchi Chōsen no suiri kumiai jigyō* (Tokyo: Miraisha, 1991).

Individual Rights, Collective Regulation

By the commencement of the 1908 forestland registration process in Korea, Forest Owners Associations had firmly established themselves as the favored institutions of village-level forestry in Japan proper. Motivated in part by the desire to forge order out of the upheaval in forestry governance that accompanied the Meiji Restoration, officials began to promote these organizations as a means to restore regulation to the forested areas then transitioning from commons (*iriaichi*) and village forests (*burakurin*) to state- and privately-owned woodlands.¹² In particular, two types of ground-level associations emerged in Japan after 1880 as dynamic forces of community-based forestry: Forest Associations (*sanrin kumiai*) and Private Forest Protection Associations (*minrin hogo kumiai*).¹³

The surge in national demand for timber and other forest resources precipitated by the Sino- and Russo-Japanese Wars accelerated the formation of these associations. As village-level fuel and timber sufficiency became slogans of wartime forest management, bureaucrats in the Ministry of Industry, Agriculture, and Commerce pressed for the passage of forestry association regulations, which remained outside the purview of the 1897 Forest Law. For this and other reasons, forestry policy officials promulgated a revised Forest Law in 1907, which enabled the establishment of four types of forestry-related associations: afforestation associations (*zōrin kumiai*), forest management associations (*seyō shinrin kumiai*), forest engineering associations (*dokō shinrin kumiai*),

¹² The erosion in forestry governance is described in detail in Takahashi Takuya, “Shinrin hō no seitei,” in *Meiji ringyō isshi*, 62.

¹³ The definitive treatise on the formation of Japan’s Forest Associations is Shimada Kinzō, *Shinrin kumiai ron* (Tokyo: Iwanami Shoten, 1941).

and forest protection associations (*hogo shinrin kumiai*).¹⁴ Thereafter, due to the enthusiastic promotion of forestry bureaucrats, village leaders, and the Japan Forestry Association, these associations proliferated across the archipelago until by 1946 a total of 5,686 forestry associations encompassed over three and a half million members nationwide.¹⁵

Many among the first wave of forestry officials sent to Korea brought with them an abiding faith in the value and efficacy of these institutions. For while they often took great pains to highlight the distinctive nature of Korea's denudation, they saw in the peninsula's past a policy vacuum not unlike that of the early Meiji period: a lapse in local-level forest governance that could be rectified through proactive state intervention. If forestry associations had helped revive local management of communal forests in Japan, they held equal potential for invigorating village-level management of Korea's "un-owned public mountains." In the eyes of Japanese advisors, it was imperative that village-level forestry reforms take place on two distinct, but equally critical registers: the clarification of the boundaries of privately owned forestland in and around each village through the previously described Forestland Survey (*rinya chōsa jigyō*); and the formation of village level institutions that would bind these newly established land owners together.

¹⁴ Tsuzuki Nobuyuki, "Shinrin kumiai no shinrin, ringyō seisaku ni okeru yakuwari to jigyō tenkai," *Keizai kagaku kenkyūjo kiyō* Vol. 40 (2010), 122. For a detailed analysis of the function and organizational infrastructure of these various associations see, e.g., Tanaka Shigeru, *Nihon ringyō no hatten to shinrin kumiai: ringyō ka no tenkai to soshikika* (Tokyo: Nihon Ringyō Chōsakai, 1982).

¹⁵ Zenkoku shinrin kumiai rengōkai, ed., *Shizen o mamoru shinrin, ringyō saisan undō* (Tokyo: Ie no Hikari Kyōkai, 2011), 134.

Although from the outset Japanese officials supported the establishment of a host of more specialized local forestry institutions, they invested their resources and faith principally in Forest Owners Associations. In contrast to the seemingly compartmentalized functions of Korea's forestry *kye* (which were often configured into distinct plantation associations, protection associations, or patrol associations), each Forest Owners Association was envisaged as a full-service, multi-faceted entity responsible for every aspect of local forest management: plantating, harvesting, labor recruitment, finance, protection, fuel regulation, forest love thought promotion, and more. Officials typically grouped these activities under two broad categories: advancing afforestation and regulating exploitation. The former would be achieved through pooling resources to establish nurseries for the production of saplings, the planting and protection of trees, and often-laborious erosion control projects. The latter would be implemented through a coordinated effort to police local level forests, to draw up plans for rational consumption, and to promote self-sufficiency at the local level (e.g., the economical collection of fuel, fertilizer, and timber). In the most basic sense, Forest Owners Associations formed the local level engine of the Government-General's afforestation initiative as it unfolded on privately owned forestland—the principal arena of afforestation throughout the colonial period.¹⁶

But another more practical consideration also impelled the establishment of Forest Owners Associations: stabilizing and, where possible, expanding provincial finances. Indeed, as Ch'oe Pyōng-t'aek has shown, while Japanese officials cloaked the promotion

¹⁶ The basic objectives and operations of these organizations—both real and aspirational—are laid out in XY (penname), “Shinrin kumiai jigyō no hensen,” in CRI, 359-365.

of these institutions in the rhetoric of forest and village improvement, they made no bones about the fact that Forest Owners Associations would also generate considerable revenue for local governments. At a meeting of high-ranking provincial forestry officials in 1916, for example, Governor-General Terauchi Masatake himself identified the establishment and utilization of communally managed forests as a vital source of income for provincial coffers.¹⁷ More specifically, forestry officials saw collecting Forest Owners Association membership fees as a viable alternative to a forestland tax, the levying of which was unfeasible due to the highly unsettled nature of forestland ownership.

But while forestry officials were keen to get these associations up and running (and their revenue streams flowing), a coordinated national effort was slow to materialize. Due to regional differences, lingering policy questions, and the early emphasis on agricultural production and irrigation improvements, the formation of forestry associations remained piecemeal throughout the late 1910s and early 1920s. In fact, the first forestry-related associations to take root in Korea were not Forest Owners Associations but Forest Protection Associations: local level institutions charged by provincial edicts with protecting and policing forestland. The announcement of the Forest Protection Protocol (*sanrin hogo kiyaku*) in South P'yōng'an Province in February 1913 prompted the creation of the first officially recognized Japanese-style forestry association in Korea. Shortly thereafter, officials in South Hamgyōng Province issued an edict that called upon each *myōn* (or township) to form Forest Protection Associations. This was followed by the passage of a similar set of bylaws in 1915 in Kyōnggi Province, which established *myōn*-level Forest Protection Associations across the province. In contrast to

¹⁷ As cited in Ch'oe Pyōng-t'aek, "1930-yōndae chōnban ilche ūi minyulim chōngch'aek 'chōnhwan' kwa imya seje toip ūi paegyōng mit ūimi," *Han'guksa yōn'gu*, Vol. 138 (2007), 182.

the robust associations of mainland Japan, however, these early institutions amounted to little more than mandated associations tasked with the protection and policing of surrounding woodlands, be they private, provincial, or national forests.¹⁸

The institution established in Gwangyang County (South Cholla Province) in 1915 was of a different ilk, however. Voluntary in nature, this countywide association was formed with the express intention of enabling local residents in the area to gain exclusive ownership rights to surrounding forestland through the incipient Forestland Survey. Insofar as its very *raison d'être* was tied directly to the acquisition of individual forestland ownership rights, it may be described as Korea's first Forest Owners Association. By pooling their resources and know-how, it was reasoned, residents stood a better chance of meeting the often-exacting demands of the Forestland Survey process. Local residents thus banded together to split the costs of surveying, registration, and purchase the resources needed to undertake forest reclamation. And as the demands of forest management shifted from registration to regulation, so did the activities of the Gwangyang Association. Rather than simply dissolve the organization, local owners continued to oversee local afforestation and protection programs in an arrangement much like the Forest Associations of mainland Japan.¹⁹

The growth of subsequent Forest Owners Associations unfolded in tandem with the Forestland Survey, which proceeded in fits and starts from 1918 onwards. Whether

¹⁸ The emergence of these early forest protection associations is examined in Kwon O-kyu (Kwon Oh Kyu), "Kankoku sanrin kumiai no shiteki tenkai to hatten hōkō ni kansuru kenkyū: Nihon shinrin kumiai to no hikaku ni mu furute," *Ringsō keizai*, Vol. 45, No. 6 (1992), 4-6.

¹⁹ The formation of this Forest Owners Association is described in detail in XY, "Shinrin kumiai jigyō no hensen," 360. For an analysis of this Association as related to the acquisition of ownership writes see Kang Yǒng-sim, "Ilche ūi sallim chohap kyōlsōng kwa Han'gugin ūi chōhang," 137.

created in anticipation of the land survey (as in Gwangyang) or after the contours of local ownership were established, Forest Owners Associations gained currency over the 1920s as the new institutional architecture of joint forestry operations. And while little in the way of a standardized charter or set of bylaws bound these institutions together, they multiplied to the point that by 1921 there were a total of 1,344 village or hamlet-level forestry associations in Korea, of which 275 were concerned principally with afforestation, 675 were concerned principally with protection, and 444 with both.²⁰

This is not to suggest, however, that Forest Owners Associations completely supplanted other local level institutions.²¹ A bewildering array of local institutions—Agricultural associations (*nōkai; nonghoe*), financial associations (*kin'yū kumiai; kǔmyung chohap*), irrigation associations (*suiri kumiai; suri chohap*)—grew alongside Forest Owners Associations.²² In some cases (such as basket weaving cooperatives), these organizations were only obliquely related to the work of forestry. But given the interlaced connections between forestry and rural life, forestry matters were often a shared concern. Irrigation Associations planted and protected trees in order to better control water flows, while Livestock Associations promoted grazing patterns that spared as much forest floor as possible. Erosion Control Protection Associations (*sabō hogo kumiai*) labored to improve soil quality by regulating fuel collection at the same time as

²⁰ Kwōn O-kyu, “Kankoku sanrin kumiai no shiteki tenkai to hatten hōkō ni kansuru kenkyū: Nihon shinrin kumiai to no hikaku ni mu furute,” 5.

²¹ Chōsen sōtokufu shokusan kyoku, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu shokusan kyoku, 1925), 65-66.

²² On irrigation associations in Korea see Matsumoto Takenori, *Shokuminchiki Chōsen no suiri kumiai jigyō* (Tokyo: Miraisha, 1992). On the establishment and role of the Korean Agricultural Association see Doi Hirotugu, “Chōsen Nōkai no soshiki to jigyō: keitō nōkai taisei seiritsu kara senjitaiseiki o chūshin ni,” *Kōbe Daigaku shigaku nenpō*, Vol. 22 (2007), 40-67. On financial associations see Yi Kyōng-nan, *Ilcheha kǔmyung yōn'gu* (Seoul: Hyean, 2002).

Forest Beautification Associations (*sanrin bika kumiai*) groomed trees and woodlands so as to nurture “love for each parcel of forestland.”²³

Forestry-related *kye* were no less active. Japanese officials of course had high hopes that Forest Owners Associations would absorb Korea’s forestry *kye* by consolidating their disparate functions under one institutional roof. In some cases, this is precisely what happened. As Kwon O-kyu has argued, pine associations in particular formed the “parent organization” (*botai*) of colonial-era Forest Owners Associations.²⁴ But in areas where this institutional transition proved difficult, local officials did little to interfere in the operations of these associations. Forestry-related *kye*, after all, were not *all* bad: Okazaki Tetsurō, for one, noted that in southern Korea one could find many as 70 to 80 *songgye* that “afforested, regulated forests, lumbered, and whose leader inspired confidence.”²⁵ Okazaki and other forestry officials heaped particular praise on the “splendid *songgye* of Yangyang County” in Kangwŏn Province, which, as they saw it, were unusually dynamic in their collaboration with villagers.²⁶

Simply put, while Japanese officials often harbored doubts about the effectiveness of these organizations, they were keen to promote any sort of village association concerned with forestry. Furthermore, after witnessing the broad based participation of

²³ Midori (penname), “Chōsen sanrin bika kumiai,” in *Chōsen ringyō isshi*, 392.

²⁴ Although references to these arrangements extend in the early Chosŏn period, *songgye* began to emerge widely in 18th century to oversee the management of communal lands that had escaped the grasp of local elites, especially *yangban* families that staked a claim to the forests surrounding villages. They involved regulations of these lands and often dispatched a patrol force. For locally grounded case studies of these associations see, e.g., Han Mi-ra, “Chosŏn hugi Kajwa-dong kŭmsonggye ūi unyōng kwa kinŭng,” *Yōksa minsok hakhoe*, Vol. 35 (2011), 141-173; and Kim Kyōng-ok, “18-19 segi Sōnamhae Tosō yōnan chiyōk songgye ūi chojik kwa kinŭng,” *Yōksahak yōn’gu*, Vol. 26 (2006), 1-55.

²⁵ “Chōsen no rinsei oyobi sanrinkai kaikyū zadankai,” in CRI, 512.

²⁶ “Chōsen no rinsei oyobi sanrinkai kaikyū zadankai,” in CRI, 512-513.

rural society in the 1919 March First Movement, they also sought to soothe rural discontent. The retention of traditional institutions was one way to do so. Thus, at the same time as the colonial state more or less condoned Korean *kye*, it also conducted extensive research into their history, mechanics, and potential reformation. As this research made clear, Korea's forestry-related *kye* came in five principal forms: forest love associations (*aelimgye*); forest patrol associations (*sünsangye*); afforestation associations (*siklimgye*); pine protection associations (*kumsonggye*); and pine associations (*songgye*).²⁷ Together, they oversaw “protection against pestilence, forest fire prevention, regulation of over cutting, management of nurseries, cultivation of broad leaf trees, and other various duties.”²⁸

Although the persistence of *kye* suggests a general tolerance of local customs among forestry officials, it also testifies to the myriad problems afflicting Forest Owners Associations. Many technical issues stymied the operations of these associations: the legal mechanisms of enforcement; the distribution of revenue; individual or communal holdouts. The roots of these problems, in essence, all traced back to the question of *scale*. If Forest Owners Associations were to be standardized and closely coordinate by the state, at what unit of administrative governance should they be established—the hamlet (*ri*), the town (*myōn*), or the county (*gun*)? Insofar as the *myōn* formed the Korean equivalent to the *mura* (or village)—the standard scale of Forest Owners Associations in mainland Japan—it was considered, at least initially, to form the natural ambit of these institutions.

²⁷ These are examined in detail in Chōsen sōtokufu gyōsei shiryōka chōsa, ed., *Nōsangyoson ni okeru kei* (Keijō: Chōsen sōtokufu, 1937).

²⁸ Kudō Eiichi, “Sallim chohap rūl kaebal ke hara,” *Chōsen sanrinkaihō*, Vol. 7 (1921), 2.

But the *myōn* was in many respects an artificial creation. The problem lay in part in the Government-General's administrative reforms of 1914: a set of regulations that intended to streamline Korea's bureaucratic architecture by consolidating different hamlets and villages into *myōn*. As one might expect, this effort stimulated no small measure of administrative friction and communal antagonism. As Kim Kwang-ok has shown, "Numerous conflicts and disputes arose between newly amalgamated villages and between villages and their administrative offices...many villages, related through kinship and marriage networks, were separated, while *yangban* villages were incorporated into an administrative unit with non-*yangban* villages."²⁹ As a result, communities and social groups that had long lain outside one another's orbit were forced into the same local governing structures. Questions regarding the hierarchy of leadership, the pooling of communal resources, and ownership of surrounding land tested village politics, and oftentimes made Forest Owners Associations a tough sell.

It was not just administrative friction, however, that beset Forest Owners Associations; the piecemeal nature of their formation also caused considerable confusion about their oversight. By the early 1920s many officials were pressing for the passage of a comprehensive Forest Owners Associations ordinance: a decree from the Government-General that would (much like Japan's 1907 Revised Forest Law) standardize their function, scope, and legal status. When, for instance, the movers and shakers of the forestry world convened in 1921 to hash out policy recommendations for the Industrial Commission, they went so far as to draw up a proposal for the passage of a Forest

²⁹ Kwang-Ok Kim, "Colonial Body and Indigenous Soul," in Lee, Ha, and Sorenson, ed., *Colonial Rule and Social Change in Korea, 1910-1945* (Seattle: University of Washington Press, 2013), 278.

Owners Association edict. But due to doubts about the efficacy of *myōn*-level arrangements, the proposal was ultimately tabled.³⁰ More and more, in fact, officials were beginning to push for a strategic shift towards the promotion of Forest Owners Associations at the level of the county (or *gun*).³¹ When compared to the *myōn*, which, as one official lamented, were still “in their infancy,” county-level Forest Owners Associations promised both a broadened reserve of collective resources and closer alignment with provincial governmental organs.³²

Two developments in 1926 further galvanized the formation of county-level Forest Owners Associations. The first was the enactment of the Agricultural Association Ordinance (*Nōkairei*) in March 1926, which mandated that every county across Korea consolidate a host of local level institutions into a catchall Agricultural Association. Some forestry officials naturally saw in the passage of this Ordinance a blueprint for the future of Forestry Associations: mandatory county-level institutions that would operate under the same over-arching bylaws and with the same legal authority.³³ The second development was the passage of the aforementioned Forest Management Plan (*Chōsen rinsei keikaku*), which, among other things, laid out a roadmap toward self-sufficiency in domestic timber production—a goal predicated on the rational consumption of timber at the local level. The 1926 plan in fact identified the Korean Forestry Association and

³⁰ See, e.g., “Imya chōngch’aeck immu chuim e taehan Siksangukchang ūi hūnsi,” *Tonga ilbo*, November 30, 1921; and XY, “Shinrin kumiai jigyō no hensen,” 360.

³¹ “Sallim chohap sollip kyehoek,” *Tonga ilbo*, October 18, 1922. This provision is examined in Kang Yōng-sim, “Ilche ūi sallim chohap kyōlsōng kwa Han’gugin ūi chōhang,” 138.

³² XY, “Shinrin kumiai jigyō no hensen,” 362.

³³ “Sallim chohap hyōnsang,” *Tonga ilbo*, December 5, 1925.

Forest Owners Associations as critical components of this initiative, though it, too, fell short of mandating their creation.³⁴

Thus while foresters continued to identify the management of the (still expanding) privately owned forests as vital to Korea's national strength and industrial progress, by 1926 only about one third of Korea's forestland was placed under the oversight of these associations.³⁵ This did not sit well with forestry officials, who began to call for some sort of Forest Owners Association legislation.³⁶ In South Chōlla Province, leaders went so far as to issue at a general meeting of provincial association leaders a motion calling for the passage of a Forest Owners Association Edict. To Katayama Ryūzō, such a law was long overdue. Because of "the ambiguity of the scope of the benefit and protection of the law," the ability of these Associations to enforce rules, to penalize infractions, to collect necessary funds, and to carry out the work central to their charter remained severely hindered.³⁷

Despite these individual appeals and collective motions, the political support for such a law never materialized, due in part to the growing resistance of local communities. The Government-General did, however, pass the 1927 Forest Owners Associations Financial Assistance Regulations (*Shinrin kumiai hojo kisoku*), a budgetary measure that offered substantial subsidies to county-level Forest Owners Associations. Part of a slew of legislation passed in connection with the rollout of the 1926 Forest Management Plan, this measure allocated funds from the national treasury and provincial coffers for a

³⁴ Chōsen sōtokufu, ed., *Chōsen rinsei keikakusho* (Keijō: Chōsen sōtokufu, 1927), 67.

³⁵ DRSK, 77.

³⁶ "Sallim chohapnyōng pon-yōndochung e palp'o," *Tonga ilbo*, May 20, 1927.

³⁷ Katayama Ryūzō, "Shinrin kumiai ni tsuite ni, san no kōsatsu," *Chōsen sanrinkaihō*, Vol. 72 (1931), 29-30.

variety of purposes (including pest control, saplings, and forestry research). It also paid out half the annual salary of “technical specialists” embedded within county-level Forest Owners Associations.³⁸ By 1933, there were as many as 1,900 full time employees of Forest Owners Associations, who modeled best practices, advised on all forestry-related matters, and coordinated policy with other associations as well as the state itself.³⁹

But what was for foresters a welcome overhaul to village forestry was for Korean farmers an intrusion of the state into village life. As will be discussed in detail below, many communities came to view Forest Owners Associations as a local arm of state power, an institution that simultaneously extracted funds in the form of fees and cut communities off from precious fuel sources through the enforcement of the Forest Ordinance. Japanese officials often placed considerable pressure on forestland owners—rich and poor, Japanese and Korean—to join these associations. To do so, they often turned to township leaders, or *myōnjang*, who typically assumed leadership positions. As members of the board of directors, they exercised control over all budgetary and policy matters, and often worked in close consultation with Japanese officials.⁴⁰

Typical of a Forest Owners Association leader was Kim Yǒng-mu (1891-1953), a resident of Sunch’ang County (South Chǒlla Province). After graduating from Meiji University in Tokyo in 1914, Kim served for nearly a decade as a local court official in his native county. By the mid-1920’s Kim had assumed a variety of political leadership positions (including Provincial Assembly member and Sunch’ang Village Council

³⁸ DRSK, 76-78.

³⁹ “Rinyazei no fuka ni tsuite,” *Keijō nippō*, February 15-17, 1933.

⁴⁰ A brief discussion of leadership structures can be found in XY, “Shinrin kumiai jigyō no hensen,” 362.

member); in 1924, he was elected vice-president of Sunch'ang County's newly formed Forest Owners Association.⁴¹ Kim was perhaps more connected to the official organs of the colonial state than most, but he was precisely the sort of local leader targeted by forestry officials.

Japanese officials also tried to ensure that agricultural experts could be found among the ranks of Forest Owners Association leaders. For this they often tapped Japanese settlers. The farmer Kumakawa Kenjirō (a graduate of the Minakuchi School of Agriculture and Forestry in Shiga Prefecture), for instance, served as a special councilor on local forestry issues to the Forest Owners Association of Ch'ōngp'yōng County (South Hamgyōng Province).⁴² These associations often also employed at least one resident (who had graduated from a technical or agricultural school) and one full-time patrolman.⁴³

At their peak there were 211 county-level Forest Owners Associations (of 220 total counties) in Korea, with a total of 1,700,000 members and as much as 9,370,000 *chōbu* of forestland placed under their oversight (see Table 5.1). Perhaps most impressive was the sum total of the membership fees (collected, for example, in 1929): 2,129,316 yen. A good portion of this revenue—1,535,736 yen—was used to fund the “operations” of these Associations: the afforestation projects, the raw materials, and the forest utilization initiatives that formed the very core of their mandate. But much of the

⁴¹ This biographical information was reconstructed from the Korean History Database [hereafter HYCTS]: http://db.history.go.kr/item/level.do?levelId=im_101_10746 [Accessed March 10, 2015]

⁴² This biographical information was reconstructed from the HYCTS: <http://db.history.go.kr/item/level.do?itemId=im&setId=190055&position=14> [Accessed March 10, 2015]

⁴³ XY, “Shinrin kumiai jigyō no hensen,” 362.

remaining revenue was steered into local-level administrative offices, thereby easing the financial burden placed on provincial purse strings.⁴⁴

Table 5.1. Status of Forest Association Membership in 1932

Province	Number of County Associations	Occupants of Private Forestland	Area of Association Forestland	Gross Area of Private Forestland	Membership rate
Kyōnggi	20	143,080	725,259 (<i>chōbu</i>)	732,408 (<i>chōbu</i>)	99 (%)
North Ch'ungch'ōng	10	64,481	378,316	468,651	81
South Ch'ungch'ōng	14	94,008	419,384	497,846	86
North Chōlla	10	103,908	460,721	523,403	88
South Chōlla	22	214,854	761,167	830,173	92
North Kyōngsang	23	189,336	1,263,127	1,313,311	99
South Kyōngsang	19	171,496	735,168	830,553	89
Hwanghae	17	162,626	794,879	811,122	98
North P'yōng'an	19	129,981	1,153,517	1,183,412	97
South P'yōng'an	14	122,416	661,303	761,663	92
Kangwōn	21	141,984	896,420	1,110,713	80
North Hamgyōng	12	12,254	140,792	163,992	86
South Hamgyōng	10	143,679	979,920	1,124,003	87
Total	211	1,695,302	9,375,171	10,306,356	91

Source: Data from Oka Eiji, *Chōsen ringyōshi*; compiled in Kang Yōng-sim, “Ilche ūi sallim chohap kyōlsōng kwa Han'gugin ūi chōhang,” *Han'guk kün-hyōndaesa yōn'gu*, Vol. 8 (1998), 143.

In provinces such as Kyōnggi and North Kyōngsang, participation rates among forestland owners were as high as 99 percent. But in remote, poorer areas, many communities resisted, due in no small part to their inability to incur the costs of

⁴⁴ Although data is not readily available for 1931, it stands to reason that the budget allocation for 1929 was similar in nature: of the total 2,227,550 yen collected, 257,385 yen went to office fees, 1,535,736 went to operations, 28,256 to meeting fees, 122,399 to reserves, and 185,540 for other costs. See Ch'oe Pyōng-t'aek, “1930-yōndae chōnban Ilche ūi minyulim chōngch'aek ‘chōnhwan’ kwa imya seje toip ūi paegyōng mit ūimi,” 201.

membership fees. While fees were prorated and could be as little as 4 *sen*, the average fee levied upon a forestland owner was about 15 *sen* per *chōbu*—a sum that was far beyond the wherewithal of many farming households.⁴⁵ These fees were sometimes compounded by a variety of other circumstantial costs including timber inspection fees, exploitation permission processing fees, and the procurement of saplings and other tools. So, too, did they often come with an opportunity cost: members were expected to carry out communal forestry projects at the expense of their own farm work and fuel collection.⁴⁶

Korean forestland owners did not take the imposition of such fees sitting down. Especially after 1926, as provincial officials began to twist the arms of individual forest landowners to join county-level associations, Forest Owners Associations became the source of considerable rural unrest. In some cases, this amounted to written protest, demonstrations, and so-called “everyday forms of resistance”: hiding caches of fuel, collecting grasses in restricted areas, and surreptitiously felling trees out of season. But in other cases, this resistance metastasized into violent expressions of rural discontent. To understand how this latter form of unrest took shape one need look no further than Tanch’ŏn County, South Hamgyōng Province, where farmers, intellectuals, journalists, youth groups, and village leaders set into motion a series of conflicts that dealt a decisive blow to the promotion of Forest Owners Associations nationwide.

Trouble in Tanch’ŏn

The Tanch’ŏn uprising was borne of a climate of tumultuous change and growing unrest in rural Korea. While for some landlords the surging economic productivity of the

⁴⁵ “Rinyazei no fuka ni tsuite,” *Keijō nippō*, February 15-17, 1933. A closer examination of these figures can be found in Ch’oe Pyōng-t’ae, “1930-yōndae chōnban Ilche ūi minyulim chōngch’ae kwa imya seje toip ūi paegyōng mit ūimi,” 200.

⁴⁶ For complaints of this sort see, e.g., “Hwamok i ōpssō kollan,” *Tonga ilbo*, September 15, 1926.

1920s spelled newfound prosperity, the commercialization of agriculture also facilitated what one scholar has described as a process of “social differentiation of the Korean rural classes, into big landlords and some managerial farmers on the one hand and small tenants and wage laborers on the other.”⁴⁷ Although scholars continue to debate the extent to which we may describe these changes as the “pauperization” of the Korean farmer, there is no denying that the reconfiguration of traditional landholding patterns spurred considerable rural strife. Most often, these conflicts took the form of tenancy disputes, of which there were “140,969 incidents involving 360,254 tenants, landlords, and agents” between 1920 and 1939.⁴⁸ But this acrimony often also found expression in coordinated opposition movements against the coerced formation of rural institutions: the 1927 movement in Yangyang County (Kangwon Province) against the formation of an Agricultural Association; the 1928 conflict in Anryong County (Hwanghae Province) over the formation of an Irrigation Association; the Red Peasant Union movement of the 1930s.⁴⁹

If colonial-era agricultural reforms reconfigured production and landholding patterns in rural Korea, they also engendered new alliances in rural society. Youth groups, tenant farmers associations, and other social bodies grew alongside—and sometimes in response to—Government-General-backed local institutions. And while by the late 1920s the Government-General had all but stamped out official Communist Party activities in Korea (with guerilla fighters like Kim Il-sung taking refuge in the remote forests of Mt.

⁴⁷ Gi-Wook Shin, *Peasant Protest and Social Change in Colonial Korea*, 30.

⁴⁸ Gi-Wook Shin, *Peasant Protest and Social Change in Colonial Korea*, 54.

⁴⁹ Kim Yong-dal, *Nongmin undong* (Ch'ónan: Tongnip Kinyōmgwan Han'guk Tongnip Undongsa Yǒn'guso, 2009), chapter 4.

Paektu), these groups often drew inspiration from communist rhetoric on class conflict, colonial subjugation, and peasant liberation.⁵⁰ Many parts of rural Korea in the late 1920s witnessed an efflorescence of socialist thought, as groups like the Singanhoe forged alliances between intellectuals, farmers, youth, journalists, and other reformers. Preaching a heady admixture of universal socialism and Korean nationalism, these organizations advocated a form of class conflict and independence activism that was closely aligned with the Comintern's December Theses of 1928: "Only by bringing the peasants under the influence, only by appealing to them by means of intelligible and popular slogans and demands, will the working class and its vanguard be able to accomplish a victorious revolution in Korea."⁵¹

Nowhere were these forces more conspicuously operative than in Tanch'ŏn, a heavily forested county on the northeastern tip of South Hamgyōng Province.⁵² Just a short distance from the southerly forests of Mt. Paektu, where Ōji Paper's employees had routinely skirmished with communist guerrilla bandits—who, according to one police report, "had to move like monkeys through the woodmen's paths in the dense forest"—the region was then a hotbed of communist activity in Korea.⁵³ The formation in 1925 in Tanch'ŏn of a Youth League (*Tanch'ŏn Ch'ongnyŏn Tongmaeng*), a local affiliate of the

⁵⁰ For a fine-grained analysis of Government-General policy regarding the communist movement in Korea, see Robert Scalapino and Chung-sik Lee, *Communism in Korea, Vol. 1: The Movement* (Berkeley: University of California Press, 1972).

⁵¹ As cited in Gi-Wook Shin, *Peasant Protest and Social Change in Colonial Korea*, 89.

⁵² According to Robert Scalapino and Chung-sik Lee, "South Hamgyōng also bordered Manchuria, and in its border areas that contained some wild, mountainous country. These were areas that, historically, had often created problems for governments. The Japanese complained that the people of this region were 'violent and unruly' in character, fiercely nationalistic, and resistant to authority." Scalapino and Lee, *Communism in Korea*, 200.

⁵³ As quoted in Bruce Cumings, *North Korea: Another Country* (New York: The New Press, 2004), 116.

New Rising Youth Association (*Shinhung Ch'ōngnyōnhoe*), brought newfound organizational discipline to protest in the reason.⁵⁴ Comprised principally of “young local leaders, usually modestly educated, whose main occupation was agriculture,” local groups such as this one worked to enjoin the peasant masses into the socialist cause.⁵⁵ Tapping into a deep well of frustration, they mobilized young men like Yi Chu-yōn (1903-1969) and Yi Hak-mo (1903-?) to build ties between local communities and effect change through organized protest.⁵⁶

Peasants themselves also began to organize. In 1926, local farmers banded together to form the Tanch'ōn Peasants League (*Tanch'ōn Nongmin Tongmaeng*), which began to coordinate responses to local social problems. But while the Peasants League firmly established itself as a vigorous advocate of rural issues in its own right, it was its continued partnership with the Youth League after 1926 that marked the origins of what many scholars have characterized as a full-fledged “opposition movement” (K: *pandae undong*) in the county. As both groups realized their aligned interests they increasingly joined hands to the point where “the leadership and membership of these organizations almost entirely overlapped.”⁵⁷ Seeking to broaden their base of local support, between December 1927 and April 1929 both organizations set out to establish branch organizations in townships throughout the county. And with success: by 1930, the Tanch'ōn Peasant Alliance and the Youth Alliance had grown to 1,253 and 1,600

⁵⁴ “Tanchōn ch'ōngnyōn ch'angnip,” *Tonga ilbo*, November 25, 1926.

⁵⁵ Gi-Wook Shin, *Peasant Protest and Social Change in Colonial Korea*, 101.

⁵⁶ Basic biographical information on Yi Hak-mo, a resident of Chunam Village (Pata Township), can be found in HYCTS, http://db.history.go.kr/item/level.do?levelId=im_108_11017 [Accessed March 3, 2015]

⁵⁷ Yi Chun-sik, “Tanch'ōn sallim chohap pandae undong ūi ch'ōngnyōn kwa sōngkyōk,” *Sahoe wa yoksa*, No. 28 (1991), 113.

members respectively.⁵⁸ Together, they worked to address the myriad social concerns of farming communities in the region: corvée labor for construction projects, forced sericulture sale structures, resistance to irrigation associations, and the treatment of slash-and-burn farmers, to name but the most pressing issues.⁵⁹

Such an alliance naturally left Japanese officials uneasy. These groups indeed garnered considerable attention from local police and gendarmes, who began to crack down on their activities by dissolving rallies, searching the homes of local leaders, and, increasingly, arresting and interrogating participants.⁶⁰ On January 22, 1930 a meeting to celebrate the creation of a Youth Alliance branch in the town of Gwangch'ön was banned by local officials, which prompted nearly 300 youth members to hold a demonstration at which they asserted their right to assemble.⁶¹ Japanese officials swiftly disbanded the protestors and detained many of the alleged leaders. In a manner that foreshadowed the conflict to come, three days later Yi Hak-mo, Kim Che-kyu and other youth leaders mobilized a demonstration of 2,000 local farmers,⁶² who descended upon the local town office to invoke their right to hold the ceremony and called for the release of those they

⁵⁸ Yi Chun-sik, “Tanch’ön sallim chohap pandae undong ūi chön’gae kwajön kwa söngkyök,” 114.

⁵⁹ For press coverage on these rural problems see, e.g., “Tanch’ön ūi hwajönmin Ch’ongdokpu e chinjöng,” *Tonga ilbo*, August 9, 1927; “Tanch’ön sakon chinsang,” *Tonga ilbo*, October 7, 1927; and “Tanch’ön kugi sanghwang,” *Tonga ilbo*, June 25, 1928.

⁶⁰ Perhaps the clearest articulation of the concern of local officials (and their efforts to stabilize the region) can be found in the confidential memo composed by local security officials in the immediate aftermath of the 1930 uprising, Chōsen sōtokufu keimukyokuchō hōkoku, “Tansen shinrin kumiai ni kansuru bumin no bōjō ni kansuru ken,” No. 1048, July 22, 1930, reproduced in: Kajimura Hideki and Kang Tōk-sang, eds., *Gendaishi shiryō* (Tokyo: Misuzu Shobō, 1982), 395-396.

⁶¹ “Tanch’on chungmaeng kinyōmil manse sakon ūi chönmal,” *Chungoe ilbo*, January 31, 1930. See also, e.g., “Tanch’ön sahoe tanch’e e taehan Tanch’ön kyōngch’alsō ūi wihyōp,” *Chungoe ilbo*, May 19, 1928.

⁶² See, e.g., “Manse sakon ūi Kim Ssi kataek susaek,” *Chungoe ilbo*, February 14, 1930.

alleged were unlawfully detained.⁶³ Confrontations of this sort continued throughout 1930.⁶⁴

It was against this backdrop that the promotion of Forestry Owners Associations in Tanch'ŏn became a lightning rod of rural discontent. Although officials had gestured towards establishing such an association early in the 1920s, it was not until the summer of 1928 that provincial officials began to strong-arm their creation across the province. That forestry formed a key local industry and a vital source of income for the region surely lent intensity to this campaign.⁶⁵ Following an appeal for their county-level formation by the Governor of South Hamgyōng Province in July 1928, local officials launched an aggressive grassroots campaign to drum up support for these associations. From March to May 1929, they traveled from village to village, where they met with township-leaders, local elites, and peasant representatives to cajole forestland owners to join.

Resistance to this campaign was as immediate as it was intense.⁶⁶ Especially in the townships of Ijung and Pokkwi, which were already riled up about the formation of county-level Agricultural Associations, local farmers and forestland owners convened town meetings, at which they unequivocally stated their opposition to the Forest Owners

⁶³ Yi Chun-sik, "Tanch'ŏn sallim chohap pandae undong ūi ch ὁn'gae kwajōn kwa söngkyōk." 115.

⁶⁴ See, e.g., "Tanch'ŏn nongmin tongmaeng wiwōnhoe kŭmji," *Chungoe ilbo*, January 24, 1930; and "Tanch'ŏn nongmin tongmaeng Chiphaeung Wiwōnhoe," *Chungoe ilbo*, May 3, 1930.

⁶⁵ Forests comprised 2,680,000 *chōbu* of South Hamgyōng Province, or roughly 83 percent of its territory, making it the most forested in terms of area. It was, as such, a main source of revenue for the region, amounting to as much as 5,000,000 yen (presumably) annually. "Kannan no ringyō," *Chōsen sanrinkaihō*, Vol. 147 (1937), 1.

⁶⁶ Chōsen sōtokufu keimukyokuchō hōkoku, "Tansen shinrin kumiai ni kansuru bumin ni bōdō ni kansuru ken," No. 1061, July 20, 1930, reproduced in: Kajimura Hideki and Kang Tōk-sang, eds., *Gendaishi shiryō* (Tokyo: Misuzu Shobō, 1982), 397-402.

Association. Part of their resistance stemmed from the already simmering resentment over the provincial regulation of fuel consumption through the Private Forest Protection Regulations (*shiyūrin hogo kisoku*), which laid out strict guidelines for the collection of forest resources. By 1929, spats between provincial forest rangers and peasants over the illegal collection of fuel in Tanch'ōn were “daily occurrences,” and formed a regular point of contention raised by the Peasant League.⁶⁷

But the crux of the their opposition to the Forest Owners Association was more basic. With farming households already shouldering the burden of Agricultural Association fees, the membership fees required by a Forest Owners Association were simply untenable. As of 1931 there was 140,833 *chōbu* of privately owned forestland in Tanch'ōn County split between 14,934 individuals, making the average area of a privately owned forestland plot roughly 9.4 *chōbu*. All else being equal, according to Yi Chun-sik, this would have required each forestland member to pay out approximately 74 *sen* in annual membership fees—far more than most farming households, then suffering from sharply declining prices in rice, had to spare (see Table 5.2).⁶⁸

Table 5.2. Forest Association Fees in South Hamgyōng Province

Area of Ownership	Membership Fee	Acreage Fee
Less than 1 tanbu	10 sen	--
1 tanbu to 1 chōbu	10 sen	10 sen
2 to 10 chōbu	10 sen	8 sen per chōbu
11 to 50 chōbu	10 sen	6 sen per chōbu
51 to 100 chōbu	10 sen	4 sen per chōbu
Over 100 chōbu	10 sen	3 sen per chōbu

Source: Data from Shōwa 5-nendo shinrin kumiai hojo shorui; compiled in Yi, “Tanch'ōn sallim chohap pandae undong ūi ch ᄊn'gae kwajōn kwa söngkyōk,” 121.

⁶⁷ See, e.g., “Ch'ogün songpi ro yonmyōng sallimju wa maeil punjaeng,” *Tonga ilbo*, June 6, 1929.

⁶⁸ Yi Chun-sik, “Tanch'ōn sallim chohap pandae undong ūi ch ᄊn'gae kwajōn kwa söngkyōk.” 121.

It did not take long for the objections voiced at these town meetings to make their way to leaders of the Youth and Peasants Leagues. In November 1929, the Youth League met to discuss the opposition to the Forestry Association, but this meeting, too, was promptly shut down by local police. Troubled by the increasing intrusions of police officials into rural affairs, the Tanch'ὸn Press Assembly convened a meeting on February 15, 1930, where they tapped Hung Sun-ha and Kim Che-kyu to lead an investigative inquiry into rural hardship, the promotion of Forest Owners Associations, and the treatment of opposition movement leaders.⁶⁹

Enhanced media attention did little to soften the resolve of Japanese officials, however. Using coercive tactics including “threat, detention, and accusation,” Japanese officials leaned on community leaders, especially elected village chiefs, to join the Association, which was formally inaugurated at a ceremony held on May 1, 1930.⁷⁰ But while Japanese officials touted the organization as a potent vehicle for “the promotion of forest love thought, forest fire prevention, forest protection and care,” membership rates in Tanch'ὸn were the lowest in the province. So vehement was rural resistance that when the first general assembly of the Association was convened later that month only 100 village and town leaders (of roughly 15,000 forestland owners) were in attendance.⁷¹ The holdouts were largely from the same three townships in the county: Ijung, Pokkwi, and

⁶⁹ See, e.g., “Myōnmin taehoe kūmji,” *Tonga ilbo*, April 1, 1930.

⁷⁰ Chōsen sōtokufu keimukyokuchō hōkoku, “Tansen shinrin kumiai ni kansuru bumin no bōjō ni kansuru ken,” 397.

⁷¹ Yi Chun-sik, “Tanch'ὸn sallim chohap pandae undong ūi ch ὁn'gae kwajὸn kwa söngkyōk,” 119.

Hada—the same areas that had long been strongholds of the Youth and Peasants Leagues.⁷²

It was in fact in the village of Yǒngdae in Hada township that the conflict came to a head in July 1930. That the catalyst was not Japanese but Korean—Yang Sǒng-hwan, a forest inspector whose aggressive inspection tactics had earned him the ire of the local community—reflects the complicated local politics of forest regulation. Although the exact sequence of events remains unclear, it appears that the incident came to a boiling point when Yang went to the home of Hō Tal-kyu, a forestland owner he suspected of illegally felling timber. There, a confrontation ensued, during which Yang allegedly assaulted Hō’s wife. As word of the incident spread, a mob was formed, which in turn assailed Yang. The conflict further escalated when, in response, local officials including Gotō Soichi (an assistant administrator of the Tanch’ǒn Forest Owners Association) and Pak Man-hun (its executive secretary) traveled to Yǒndae to issue a court summons for the illegal felling of trees by a number of the farmers in the town.⁷³

Tapping into their extensive social network in the region, local leaders of the Farmers Alliance hastened to mobilize a protest. Led by Kim Hyong-mok and Chon Yong-su, a group of approximately 200 farmers marched to the Hada Town Office, where they called upon Gōto to clarify the rules of inspection and explain his actions.

⁷² Japanese officials nevertheless continued to pressure these communities to join the Association. The membership figures in the Tanch’ǒn Association accordingly climbed: by 1932, of 14,934 forestland owners only 4,483 had refused to join the Forest Association—the highest rate of non-enrollment in all of South Hamgyōng Province. Yi Chun-sik, “Tanch’ǒn sallim chohap pandae undong ūi ch ᄊn’gae kwajōn kwa sǒngkyōk,” 120.

⁷³ This incident is reconstructed from Chōsen sōtokufu keimukyokuchō hōkoku, “Tansen shinrin kumiai ni kansuru bumin no bōjō ni kansuru ken,” 396; Chōsen sōtokufu keimukyokuchō hōkoku, “Tansen shinrin kumiai ni kansuru bumin ni bōdō ni kansuru ken,” 398; and Yi Chun-sik, “Tanch’ǒn sallim chohap pandae undong ūi ch ᄊn’gae kwajōn kwa sǒngkyōk,” 124-125.

After exchanging insults with officials, the crowd stormed the office, where they assaulted Gōto and others. As night fell, police forces were brought in to restore order to the town and detain those responsible.⁷⁴

In contrast to Japanese characterizations of the ensuing conflict as an outbreak of spasmodic violence, the opposition movement that took shape in response bespeaks a highly organized social infrastructure established by community leaders in the region. Rallying the masses were seasoned youth leaders such as Yi Tae-un, Yi Yong-hwan, and Kim Sung-mo, who called upon farmers from across the district to assemble the morning of July 20th to voice their opposition to the wrongful accusation and detention of their peasant brethren.⁷⁵ After holding a mass meeting, around 2,000 farmers marched to the Tanch'ōn County Office to hold yet another demonstration, which spilled over to the nearby Tanch'ōn Police Office.⁷⁶ In both locations, however, the protest quickly turned violent.⁷⁷ Seeking to deter the large mob as they stormed both buildings, Japanese security forces opened fire on the crowd. When the smoke had cleared, 16 protesters had been killed and another 14 injured.⁷⁸ An estimated ten police officers were also injured in

⁷⁴ Among those held responsible for organizing the rally at Pada were Kim Hyong-Muk (age 26, a farmer from Yōngdae who was active in the Farmers Alliance Hata branch); Chon Yong-Su (age 24, a farmer, also active in the Farmers Alliance); and So Mun-sok (age 21, a farmer from Yōngdae).

⁷⁵ A digest of police reports and local media coverage as related to censorship of these events can be found in Chōsen sōtokufu, ed., *Chōsen shuppan keisatsu geppō*, Vol. 23, July 23, 24, 25, 30, 1930.

⁷⁶ “Ch'oegün 3-tae sabyōn kwa hyōnjang kwanggyōng,” *Chapchimyōng*, Vol. 8, September 1930.

⁷⁷ See, e.g., “Shinrin kumiai setrsuristu ni hantai shi gunchō keisatsusho o osofu,” *Keijō Nippō*, July 22, 1930; and “Hamgyōng namdo Tanch'ōn 2,000 kunjung, kyōnggwan kwa tae ch'ungdol,” *Maeil sinbo*, July 22, 1930.

⁷⁸ See “Ch'oegün 3-tae sabyōn kwa hyōnjang kwanggyōng,” *Chapchimyōng*, Vol. 8 (September 1930), 2.

the melee.⁷⁹ With word of the incident quickly spreading, provincial officials sent in a surge of gendarmes to restore order to the region.⁸⁰ More than 400 individuals, most of them young men in their twenties, were subsequently arrested.⁸¹

Organized protests only continued. Although the outburst of violence in the summer of 1930 placed organizations like the Tanch'ón Peasant League under greater scrutiny, it did little to halt their activities. In 1931, many of the same communities rose up to protest their coerced participation in an erosion control project in the region.⁸² And in 1933 another large-scale uprising—this one organized by the local chapter of the Red Peasant Union—unfolded in response to the increasing financial burdens placed on these communities by its Agricultural Association. At the forefront of these later opposition movements were many of those involved in the Forest Owners Association conflict, including Yi Hak-mo and Kim Che-kyu.⁸³

Coming as it did on the heels of a long string of disputes between local police, youth leaders, and peasants, the 1930 Tanch'ón opposition movement was fueled by

⁷⁹ Chōsen sōtokufu keimukyokuchō hōkoku, “Tansen shinrin kumiai ni kansuru bumin no bōjō ni kansuru ken,” 395.

⁸⁰ See, e.g., “Hamgyōng namdo Tanch'ónmyōn Pata-myōn ūi myōnmin,” *Chosón ilbo*, July 21, 1930.

⁸¹ In the process, police also discovered a manifesto disseminated by youth leaders in the days leading up to the uprising, which officials used in the prosecution of those held responsible for inciting violence to argue that the uprising was part of a premeditated insurrectionist plot. Seven individuals were tried as the principal perpetrators of the violence. Among those put to trial and placed in jail were Yi Kyong-un (5 years), Yi Song-mo (4 years), and Yi Hui-chol (2 years). See, e.g., “Sallim chohap pandae sakon ch'oeo 5-yōn yok,” December 25, 1931. For information on the manifesto see “Keijō honmachi keisatsushochō, “Keikaku hakken ni kansuru ken,” Cable 5132, July 29, 1930; and “Tanch'ón sakon rül kihwa ro kyōngmun salp'o rül kido,” *Maeil sinbo*, July 30, 1930.

⁸² See, e.g., “Tanch'ón nongmin un sabang kongsa pandae, sallim chohap kwan'ge,” *Tonga ilbo*, February 23, 1931.

⁸³ See, e.g., “Hamgyōng chibang pangbōpwōn eso Tan'chōn chōksaekkye nongmin chohap,” *Tonga ilbo*, October 7, 1933; and “Che 2-ch'a nongmin chohap undong urō Hamgyōng hyōng,” *Tonga ilbo*, May 29, 1936.

more than frustrations with forest policy. One need look no further than the assembly before the Tanch'ὸn District Office on the afternoon of July 20 to gain a sense of the myriad stakeholders involved: farmers asserting their right to livelihood; youth leaders voicing their right to assemble; intellectuals advocating for the proletariat. More than simply binary conflicts between the colonial state and farming communities, these disputes were shaped by a host of actors with multiple, often-overlapping agendas. In this sense, the Tanch'ὸn Forest Owners Association conflict allows us to take a broader view of the evolving relationship between forest management and village politics that stretched back to the previously examined Bokil Island Incident of 1908. The politics of sustainability, in other words, were also shaped by Korean farmers' engagement with socialism, nationalism, and agrarianism.

For Japanese forestry officials, the sobering events in Tanch'ὸn confirmed what many had already suspected: that county-level Forest Owners Cooperatives were ill-suited for many Korean communities. Although few disputes compared in terms of scale or intensity to that in Tanch'ὸn, it was not an isolated event. Other conflicts over Forest Owners Associations such as that in Changsōng County (South Chōlla Province) in 1928 had raised serious doubts about the health and efficacy of these institutions.⁸⁴ What is more, aside from the generation of much-needed revenue, the achievements of these institutions were often difficult to pinpoint. To some officials, the political costs of Forest Owners Associations simply outweighed their benefits. By the early 1930s, some influential forestry bureaucrats were beginning to call for a fundamental overhaul to the

⁸⁴ This incident is briefly examined in Ch'oe Pyōng-t'aek, "1930-yōndae chōnban Ilche ūi minyulim chōngch'aek 'chōnhwan' kwa imya seje toip ūi paegyōng mit ūimi," 202-203.

guidelines for forest management on privately owned woodlands—and the abandonment of the Forest Owners Association system altogether.

Old Wine, New Bottles

That Forest Owners Associations aroused dogged resistance from rural communities such as those in Tanch'ón was but one of a number of problems facing forest management on private forestland. Of immediate concern was the fact that, in spite of all of their efforts, the quality of forest stock in private forests in some regions had not materially improved by the early 1930s. Indeed, by the end of the 1920s the accumulation of timber per *chōbu* had actually begun to *decrease* in some privately owned forests—evidence of the fact that in many areas extraction continued to outstrip afforestation.⁸⁵

The source of the problem, many suspected, was the stubborn adherence of Korean farmers to flawed afforestation practices. Regenerative efforts and cutting plans often over-protected the overstory, thereby stunting the growth of younger trees, grasses, and other plants. The scarcity of detritus in turn engendered even more desperate fuel collection practices. In some areas, moreover, the economics of afforestation also hobbled the management of private forestland: seeds and saplings were growing more expensive and in some areas even scarce.⁸⁶

⁸⁵ According to the calculations of Ch'oe, while in 1927 the accumulation of timber on private forestland was 10.8 cubic meters per *chōbu*, this figure had decreased to 9.0 cubic meters in 1931. Ch'oe Pyöng-t'aek, "1930-yöndae chönban Ilche ūi minyulim chöngch'aek 'chönhwan' kwa imya seje toip ūi paegyöng mit üimi," 188.

⁸⁶ Although some of the more capable Forest Associations were able to sustain their own growing operations, most were dependent upon these nurseries for the raw material of afforestation. These nurseries, as a result, grew increasingly profit oriented: a shift that has led some scholars to conclude that they were less interested in properly furnishing the tools needed for afforestation than they were generating profit. Ch'oe Pyöng-t'aek, "1930-yöndae chönban Ilche ūi minyulim chöngch'aek 'chönhwan' kwa imya seje toip ūi paegyöng mit üimi," 190.

But it was the growing frustration with the organizational inconsistencies and operational obstacles of Forest Owners Associations that ultimately did them in.⁸⁷ In spite of the amplifying calls for a comprehensive Forest Owner Association edict, Forest Owners Associations remained “voluntary organizations” (*nin’i dantai*) with “no basis in the rule of law”—a fatal flaw in the eyes of many officials.⁸⁸ Also problematic was the fact that, due to the highly differentiated patterns of land ownership and forest quality across the peninsula, these bodies often placed wildly different burdens on their members.

For these and other reasons, in 1933 Japanese officials dissolved Korea’s Forest Owners Associations.⁸⁹ This shift coincided with a spate of legislation—especially the Arbitration Ordinance of 1932 and the Agricultural Land Ordinance of 1934—that aimed to assuage rural conflict and tenancy disputes in rural Korea as part of the Rural Revitalization Plan. For forestry policy makers, the dissolution of Forest Owners Associations raised a number of knotty questions: How should foresters go about local level regulation and forest improvement without provoking local discontent? Perhaps more immediately pressing was the question of local finances. If Forest Owners Association fees had provided a direly needed stream of revenue for local governments, how ought they fund local forestry works moving forward?

The answer, though straightforward, was a delicate proposition: raising a forest tax (J: *rinyazei*; K: *imyase*). Forestry officials balked at the idea of such a tax for two principle reasons. First and most simply, they remained hesitant to implement yet another

⁸⁷ DRSK, 84.

⁸⁸ “Imyase ch’angnip, bukwa e taehaya,” *Maeil sinbo*, November 25-27, 1933.

⁸⁹ “Rinyazei no fuka ni tsuite,” *Keijō nippō*, February 15-17, 1933.

form of taxes lest it arouse further protests from Korean subjects. Second, given their eagerness to outsource the work of afforestation to Japanese corporations, many officials were reluctant to do anything that might discourage their partners in reclamation. Even Saitō Otosaku identified (in one of his many promotional writings) the lack of a forestland tax as one of the underlying virtues of afforestation works in Korea.⁹⁰ But with no viable alternatives, Japanese officials pressed forward with the tax—what one commentator called “a matter of life and death” for those concerned with forest management.⁹¹

Forestry officials such as Shioda Masahiro, then the chief of the Forest Policy Section, were soon taking to Korea’s dailies to sell the public on the forestland tax. When compared to the “burden of previous fees,” he asserted, the forest tax would form a “just system.” Not only would each province grant tax exemptions to small forestland owners, schools, and town-forests, but they would also cap the amount of revenue collected at 80 percent of the amount collected through Forest Owners Associations fees.⁹² Furthermore, he argued, by shifting this revenue flow directly to provincial governments forestry measures would be overseen by forestry experts capable of tailoring these effort to the specific needs and differentiated landscapes of each province. Given that forestland owners were “the direct recipients of the profits reaped from the forest,” it was only natural that they be held “principally responsible to pay such a tax.”⁹³

⁹⁰ Saitō Otosaku, Chōsen shokurin jigyō no yūbō,” 8-9.

⁹¹ Hakutō Sanjin (pen name), “Futatabi Chōsen rinya no kazei mondai ni tsuite,” *Chōsen Nōkaihō*, Vol. 8 (1933), 91-94.

⁹² “Rinyazei no fuka ni tsuite,” *Keijō nippō*, February 15, 1933. This was also translated into Korean and published in installments in the Maeil sinbo from February 16-18.

⁹³ “Rinyazei no fuka ni tsuite,” *Keijō nippō*, February 15, 1933

With the promulgation of the forestland tax by provincial decree on April 1, 1933, defenses of the policy shift soon gave way to technical explanations of its implementation.⁹⁴ Slight variations in provincial policy notwithstanding, the tax established a three-tiered bracket system that pegged tax rates to the overall area and relative quality of the forestland under one's possession.⁹⁵ Although the allocation of the funds collected through the tax was discretionary, it was used principally to increase forestland protection efforts, finance afforestation, and fund the local level civil servants who undertook day-to-day operations of provincial forestry work. This was essentially the same duties of the Forest Owners Associations, but coordinated by provincial employees. By 1940, taxes of forestland were used to pay the salaries of approximately 1,800 employees charged with forestland protection and management.⁹⁶

And yet, contrary to the assurances of forestry officials, it appears that the rhetoric of alleviating the burden of Forest Owners Associations fees was hollow. In the case of Kyōnggi Province, for example, as Ch'oe Pyōng-t'aek has shown, the tax levied in 1933 was as high as 17 *sen* per *chōbu*—2 *sen* higher than the Forest Association fees collected a year earlier. The aggregate sum of taxes indeed suggests that little had changed: whereas in 1932 a total of 1,119,948 *yen* was collected in Forest Ownership Association fees, in 1933 the sum total of forestland tax collected was 1,181,295 *yen*—a difference of about 60,000 *yen*. Koreans were quick to voice their displeasure. In fact, some simply refused to pay, leading to a surge in disputes over tax delinquency. In just the first four

⁹⁴ See, e.g., "Imyase ch'angnip, bukwa e taehaya," *Maeil sinbo*, November 25-27, 1933.

⁹⁵ See, e.g., "Hwanghae-do imyase 3-tünggüp ūro kubun bukwa," *Maeil sinbo*, March 8, 1933.

⁹⁶ DRSK, 85.

months of 1934, as many as 400 parcels of forestland were seized and sold off as a result of forestland tax evasion.⁹⁷

Some Japanese forestland owners were also outspoken in their criticism of the tax, viewing it as a contravention of the terms and spirit of the land lease provisions of the Forest Ordinance. After noting that there existed in Korea a glaring gap between the profits made on national and private forestland, one representative from the Sanyō Agriculture and Forestry Company, for instance, griped that “for forestland owners [in Korea], misfortunes seldom come alone.” Like many others, he viewed the forestland tax as yet another financial burden for companies trying to transform their investment in afforestation into a profitable enterprise.⁹⁸ Saddled with rising costs in shipping and afforestation materials (not to mention investments in forestland protection), the easy profits promised by forestry bureaucrats proved elusive. Even the Oriental Development Company—the largest corporate landowner in Korea—had turned precisely *zero* profits from its forestry operations by the early 1930s.⁹⁹

These problems were not lost on forestry officials. Most immediately, they set out to mollify Japanese capitalists by promising a steady reduction in shipping costs, the promotion of Korean lumber and charcoal products back in mainland Japan, and other salves. But with the number of private forestland owners rapidly growing thanks to the Special Disposal Edict Process (1926-1933) and a void in oversight left by the dissolution of the Forest Owners Associations, officials also called for a fundamental overhaul to the

⁹⁷ See Ch'oe Pyōng-t'aek, “1930-yōndae chōnban Ilche ūi minyulim chōngch'aek ‘chōnhwan’ kwa imya seje toip ūi paegyōng mit ūimi,” 210-211.

⁹⁸ Hakutō Sanjin, “Futatabi Chōsen rinya no kazei mondai ni tsuite,” *Chōsen Nōkaihō*, Vol. 8 (1933), 92.

⁹⁹ This point is elaborated in Ch'oe Pyōng-t'aek, “1930-yōndae chōnban ilche ūi minyulim chōngch'aek ‘chōnhwan’ kwa imya seje toip ūi paegyōng mit ūimi,” 208.

management of privately owned forestland. To that end, in January 1933 the Forestry Bureau issued the Outline of Private Forestland Guidelines (*Minyūrin shidō hōshin taikō*), a new set of forestry principles designed to correct longstanding flaws by providing forestland owners with an eminently accessible set of best practices for local forestry work. In addition to “break[ing] down the longstanding, deep rooted evil” inherent to Korean practices, as one commentator put it,¹⁰⁰ these Guidelines aimed to “rationalize afforestation methods based on the condition of the woodlands and the cultural level of Koreans” and stimulate forest love thought.¹⁰¹

Concerned chiefly with forestry as it was practiced by farming households, the Guidelines offered direction in three particular arenas of forest management. The first, predictably enough, was the encouragement of afforestation (*zōrin shōrei hōshin*). Although the Guidelines recycled much of the by-then-tired rhetoric about the virtues of afforestation, it marked a departure from previous practice in one crucial way. It encouraged farming communities to prioritize natural regeneration (*tennen zōrin*) over (often capital-intensive and technically complicated) artificial regeneration (*jinkō zōrin*). Aiming to reduce the cost of afforestation works and simplify forest management, the Guidelines encouraged communities to do away with the painstaking work of transplantation and focus instead on the facilitation and protection of natural regenerative processes.¹⁰²

¹⁰⁰ “Airin shisō no yōkō to shokurin jigyō no shinchoku hakare,” *Keijō nippō*, April 26, 27, 1935.

¹⁰¹ Watanabe Shinobu, *Minyūrin shidō hōshin taikō seitei ni tsuite* (Keijō: Chōsen sōtokufu nōrinkyoku, 1933), 117. YB.

¹⁰² DRSK, 79.

Another central tenet of the Guidelines was guidance in the principles of tree felling (*bassai shidō hōshin*). As Kakeba Sadakichi saw it, forestry officials' nearly myopic focus on the promotion of tree plantation had inadvertently overshadowed their encouragement of what he considered an equally important activity: selective cutting.¹⁰³ It was thus imperative, he argued, that foresters clarify the mechanics of sustainable utilization and, to borrow the parlance of the woodsmen, stand structure. To this end, officials disseminated a wide range of publications on the superintendence of tree felling. One such text was an instructional pamphlet entitled *The Key to Afforestation* (Shokurin no hiketsu), published in both Japanese and Korean in May 1933. Opening with the familiar rhetoric of Mencius—"If axes are allowed in the mountains and forests only in the appropriate seasons, there will be more timber than can be used"¹⁰⁴—the pamphlet proceeded to break down, in the simplest language possible, the fundamentals of tree harvesting. If there was a central motif to the pamphlet it was simply "Don't cut with a sickle!" (Kamo de kиру na): "What has devastated Korea's mountains and forests is not the saw or the axe—It is the sickle, which is used to gather small plants for fuel."¹⁰⁵ Urging farmers to "nurture the small and fell the big," it also included a number of diagrams (such as Figure 5.1, "the selection method for felling"), which were used to visually aid farmers in their targeting of the proper trees for harvesting.¹⁰⁶

¹⁰³ See, e.g., Kakeba Sadakichi, "Minyūrin kaizensaku no ichi, shokuju henchō yori kiri oshimi no kyōsei," (unknown: self-published, 1931). YB: M4-122.

¹⁰⁴ This in fact was a common reference of forestry bureaucrats, who thought Koreans might digest Confucian rhetoric more readily.

¹⁰⁵ Chōsen sōtokufu, ed., *Shokurin no hiketsu* (Keijō: Chōsen sōtokufu, 1933), 6. See also, "Shokurin no hiketsu," *Keijō nippō*, July 1, 2, 1933.

¹⁰⁶ Chōsen sōtokufu, *Shokurin no hiketsu*, 1.

Figure 5.1. The Selection Method for Felling Trees (1933)

方ミ選ノ樹ル伐



Source: Chōsen sōtokufu, ed., *Shokurin no hiketsu* (Keijō: Chōsen sōtokufu, 1933), 7.

The third key tenet of the Guidelines was closely connected to the second: the overall improvement of ground cover. In the most basic sense, the Guidelines presented an instruction manual for the establishment and maintenance of what were often called “agricultural-use forestlands” (*nōyōrin*): forestlands that were maintained so as to maximize the production of what one officials called “the three materials of agricultural

life”: fuel, fertilizer, and fodder.¹⁰⁷ It was hoped that by more efficiently furnishing farming households with these materials, officials could curb the collection of grasses, roots, culm and other nutrient rich layers of groundcover that were routinely scraped up to be used as fuel in the *ondol*. The Guidelines called for the creation of a management plan for any given parcel of forestland that laid out a timeline for staggered exploitation, the production of alternative fuel sources (such as charcoal), prohibition of swidden agriculture, and the collaboration with local institutions (such as the Agricultural Association) to increase production of fertilizers.¹⁰⁸

Although it is difficult to ascertain what, exactly, local communities made of these Guidelines, Japanese officials and members of the Korean Forestry Association made them difficult to ignore. Tapping into the extensive public relations architecture of the colonial state, they actively wove the principles enshrined in the Guidelines into the fabric of everyday life. As will be discussed in detail in the next chapter, the fundamentals of private forestry became routine fare for billboards, radio programs, and literature. They formed concrete instructions for the realization of forest love thought sought by these officials.

Increasingly instrumental to this campaign were forestry-related *kye*, which were quick to fill the void left by Forest Owners Associations.¹⁰⁹ Although *kye* had persisted alongside Forest Owners Associations throughout the colonial period, they assumed newfound prominence after 1933 as they absorbed many of the responsibilities of Forest Owners Associations. Particularly quick to multiply were “forest love associations” (K:

¹⁰⁷ Suzukawa Tokio, “Nōyōrinchi no setsuei,” *Chōsen Nōkaihō*, Vol. 1 (1936), 55.

¹⁰⁸ These guidelines are reproduced in full in DRSK, 78-83.

¹⁰⁹ DRSK, 84.

aelimgye). Often reincarnations of other local institutions, they served as both vehicles for the implementation of forestry works and proponents of a wide range of forest love thought activities including ceremonial plantings, lectures, and cultural activities.

Take, for example, the Forest Love Association of Changkwan village (Chinch'ón County, North Ch'ungch'óng Province). As in many other communities, its origins stretched back to a preceding local institution: in this case an Erosion Control Area Protection Association (*sabōchi hogo kumiai*) that was founded in the 1920s to guard the community's investment in a local erosion control project. But as the forest grew so did the responsibilities and activities of the association. Led by Yi Ki-t'aek, a village elder who was identified as a visionary behind the organization, the group restyled itself as a Forest Love Association in the 1930s. Thereafter, it oversaw the management of 180 *chōbu* of forest and promoted local fertilizer production, fuel economy, and *ondol* improvement. As part of an effort to shape best practices, moreover, the association formed a youth and wives section, and sponsored a local lecture forum.¹¹⁰

Jointly owned Town Forests (J: *menyūrin*; K: *myōnyulim*) also took hold over the 1930s as fixtures of local forest management. Initially created as part of the Government-General's initiative to consolidate financial resources around the *myōn* in the 1920s, the real impetus behind their formation was the Special Disposal of Claimant Forest Ordinance. As discussed in Chapter Three, after realizing the hazards of leaving so many farming households without their own forestland, the Government-General took special measures beginning in 1926 to lease out small parcels of forestland to claimants through a special land lease process. The vast majority of land transfers were to private

¹¹⁰ Chōsen Sanrinkai, ed., *Minyūringyō jisekishū* (Keijō: Chōsen Sanrinkai, 1934), 39-41.

individuals. But some communities also banded together to lease larger parcels of land—typically forested areas that had long been considered local commons—as a collective. By 1933, as much as 658,679 *chōbu* had become village forests—a tenfold increase from just a decade earlier (see Table 5.3).¹¹¹

Table 5.3. Area of Forestland Transferred through Special Disposal of Claimant Forest Ordinance

	Private Ownership	Temple Ownership	Joint Public Ownership Arrangements			Total
			Townships	Schools and Associations	Sum	
National Forestland Leased to Entitlement Parties	2,397,399 (<i>chōbu</i>) (88.7%)	8,549 (0.3)	291,646 (10.8)	5,926 (0.2)	297,573 (11.0)	2,703,520
Non-Entitlement National Forestland	1,792	2,565	1,589	4	1,593	5,951
Other	64,365	14	5,815	162	5,978	70,356
Total	2,463,556 (88.6)	11,128 (0.4)	299,051 (10.8)	6,093 (0.2)	305,143 (11.0)	2,779,828

Source: Data from Oka Eiji (1945); Compiled in Yi U-yōn, TYBK, 269.

The Village Forest of the Naetong Township (Kyōnju County, North Kyōngsang Province) is a case in point. The boundaries of this village forest actually corresponded neatly to a long-protected crown forest (*pūngsan*) of the Chosōn period. But due to overcutting, went one official account, by the 1920s the “once great forest became fully denuded.” Confronted with scarcity, the community moved to establish a village forest in 1927. Pooling their labor and capital, they planted red pine, Japanese oak, and sawtooth oak, which by 1933 had grown into a substantial forest. Shortly thereafter, the village

¹¹¹ These arrangements are examined in Ch’oe Pyōng-t’ae, “Ilcheha Chosōn Ch’ongdokpu ui sallim kongyongkwōn chōngni wa myōnyulim ch’angch’ul sido,” *Yōksa kyoyuk*, Vol. 99 (2006), 165-201.

established a Village Forest Protection Association (*Menyūrin hogo kumiai*), which patrolled the local forest to combat illegal felling, pestilence, and forest fire.¹¹²

This protection association was just one of thousands of small-scale institutions that carried out the manifold duties of local forest management. Although the labeling and the political structures of these organizations were different, these institutions more or less tackled the same local problems and responsibilities: the prudent collection of fuel; producing fertilizer and charcoal; regulating cutting; policing the woodlands; regulating pasturage; establishing agricultural-use woodlands; *ondol* improvement. They formed, in essence, multi-purpose local organizations that grew in tandem with the landscape to adapt to the changing imperatives of local forestry.

But while the dream of standardized, compulsory, and legally empowered county-level forestry associations proved elusive, forestry officials did not muffle their calls for institutional regulation. What was needed, they argued, was an umbrella organization that could incorporate these manifold institutions and their leaders into a highly coordinated campaign of collective forest management. Such was precisely the role assumed by the Korean Forestry Association (*Chōsen sanrinkai*, hereafter KFA), which firmly established itself over the 1930s as the flagship institution of civic forestry. As a central forum for debates over forestry policy, a far-reaching instrument of public outreach, a sponsor of forestry research, and a close partner (if not de facto wing) of the Government-General, the KFA stood at the center of the effort to re-shape not only Korea's woodlands but also the ecological sensibilities of Korean subjects.

Collaborators in Conservation: the *Chōsen Sanrinkai*

¹¹² A profile of the activities of this town forest can be found in Chōsen Sanrinkai, *Minyū ringyō jisekishū*, 83-85.

As Korea-based forestry officials pondered how to enlist the public in forest conservation, it was only natural that they turn to the Japan Forestry Association (*Dai Nippon Sanrinkai*) for insights into the coordination of grassroots forestry. After all, the Japan Forestry Association formed a well-established bridge between Japan's forestry bureaucrats at the center and community leaders across Japan. In its third decade of operations by the time of Korea's annexation (and with branches established across the archipelago), it was a well-oiled instrument of mass coordination. Its members included bureaucrats, politicians, lawyers, teachers, and community leaders of all stripes. Among them were some Korea-based foresters, who published accounts on the progress of Korean reforms, attended meetings, and arranged study tours on the peninsula. The inner workings of the Japan Forestry Association were thus intimately familiar to the small group of influential foresters (including Oka Eiji, Nakano Toshi, Kakeba Sadakichi, and Kada Naoji) that gathered in the Chōsen Hotel in February 1921 to discuss the possibility of establishing Korea's very own Forestry Association.¹¹³

What emerged from this meeting was in essence the founding committee of the KFA, which over the months to follow worked to gain the approval of the Government-General, raise funds, and recruit the first cohort of members.¹¹⁴ On June 11, 1921, the

¹¹³ An account of this meeting and the “birth” of the KFA can be found in “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 464–465.

¹¹⁴ Certainly, the membership fees collected helped underwrite the activities of the Association. But they were not nearly enough to mitigate the significant costs incurred in the initial phase of its establishment. The Association, as such, quickly appealed to countless corporations and private donors for financial backing, which they duly received. Initially, their largest supporter was Taki Kumejirō, founder and president of the rapidly expanding fertilizer industry and a major procurer of forestland for afforestation, who donated 1,000 yen at a crucial time. Joining Taki were corporations like the Oriental Development Company, Sumitomo, Tada Eikichi, and Pak Yong-gun (of North Chōlla Province). A list of early donors can be found in CRI, 477-479.

KFA held its inaugural meeting in the Keijō Civic Auditorium. “If speeches were trees,” logged Yun Ch’i-ho in his diary following the event, “there was enough of them to have reforested all the bare hills of Korea.”¹¹⁵ In addition to speeches from the usual suspects (Saitō Otosaku, Kada Naoji), the 300 attendees also took in prepared remarks from the Governor-General and congratulatory dispatches from forestry associations abroad. By meeting’s end, however, the aims of the KFA (as enshrined in its charter) were abundantly clear: to “develop forestry” and “advance forestland reclamation (*chisan chisui*)”; to “undertake surveys as needed of forestry matters” and “share opinions regarding forestry”; and to “exchange views with officials, hold exhibitions and lectures, field questions regarding forestry, promote forestry related publications, work with other associations, develop curricula, and other duties.”¹¹⁶

Promoted through journal advertisements, newspaper articles, and the interpersonal network of the forestry world, membership of both “Korea’s influential [forestry] officials and lay people” in the Association steadily rose.¹¹⁷ In just the first month, membership reached 1,300 individuals and increased over the coming decade to around 4,700.¹¹⁸ On the board of the KFA sat many of Korea’s most seasoned forestry bureaucrats: Minobe Shunkichi (1869-1945, President), a native of Gunma and veteran official Ministry of Agriculture and Industry who also served on the board of the

¹¹⁵ Diary of Yun Chi-ho, June 11, 1921. [Accessed on HYCTS, May 2, 2015]

¹¹⁶ “Chōsen sanrikai kisoku,” *Chōsen sanrinkaihō*, Vol. 1 (1921), preface.

¹¹⁷ Chōsen sōtokufu shokusan kyoku, ed., *Chōsen no ringyō* (Keijō: Chōsen sōtokufu shokusan kyoku, 1925), 66.

¹¹⁸ In 1921, membership was 1,886 members and in 1925 it had grown to 2,581. See “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 467.

influential Bank of Chōsen¹¹⁹; Han Ch’ang-su (1862-1933, Vice President), a native of Ch’ōngju and longtime advisor to the Korean Government who worked closely with Japanese officials in the Ministry of Industry, Agricultural, and Commerce to oversee a variety of economic reforms, including those related to forestry¹²⁰; Kada Naoji (1877-?, Vice President), a native of Yamaguchi, who, after working as a high-ranking forest policy official in Taiwan, ventured into a host of private forestry ventures in Korea, acquiring substantial forestland holdings in the process¹²¹; and Han Sang-nyōng (Board Member, 1880-1947), a longtime member of the executive board of the Keijō Chamber of Commerce and Hansōng Bank official, who was among the best connected Korean entrepreneurs of the colonial period.¹²²

As word of the Association spread beyond the elite circles of Seoul and the halls of government institutions, the Korean Forestry Association also began to take on more rank-and-file members. Whether Japanese merchants, Korean community leaders, forest owners, or agricultural reformers, these men presented precisely the linkages with local society sought by officials. In many cases, members concurrently served leadership roles in local-level forestry institutions. Kim Yung-mu, for instance, the aforementioned Vice-President of the Forest Owners Association in Hyonju County (South Chōlla Province), joined the Korean Forestry Association in 1924, and thereafter worked in this capacity to

¹¹⁹ This biographical information is derived from HYCTS:
http://db.history.go.kr/item/level.do?levelId=im_215_21262 [Accessed March 24, 2015]

¹²⁰ This biographical information is derived from HYCTS:
<http://encykorea.aks.ac.kr/Contents/Index> [Accessed March 24, 2015]

¹²¹ This biographical information is derived from HYCTS:
http://db.history.go.kr/item/level.do?levelId=im_215_01867 [Accessed March 24, 2015]

¹²² This biographical information is derived from HYCTS:
http://encykorea.aks.ac.kr/Contents/Index?contents_id=E0061703 [Accessed March 24, 2015]

advance the goals of the KFA in his community.¹²³ Japanese settlers such as Nakano Sōzaburō also joined.¹²⁴ A native of Yamaguchi, Nakano moved to Korea in 1911 and acquired land in Kimje County (North Chōlla Province). He eventually established Nakashiba Industries, which specialized in the construction and sale of agricultural implements. As an influential local resident active in village improvement, an agricultural entrepreneur, and a civically engaged agricultural expert (who, at various stages, served on the boards of the Korean Agricultural Association, the Korean Livestock Association, and the Kimje Forest Owners Association), Nakano was just the sort of local leader sought by the KFA, which he joined in the late 1920s.¹²⁵

To further facilitate local level coordination the KFA established its own provincial branches beginning in 1924. In addition to coordinating lecture circuits, facilitating local level research, and promoting participation in Forest Owners Associations, provincial branches across Korea held demonstrations on topics such as charcoal production techniques or proper fuel collection for farming communities across Korea.¹²⁶ They likewise assumed principal responsibility for the local level diffusion of forest love thought through a multi-faceted public relations campaign that included public

¹²³ For basic biographical information on Kim see Taet'ongnyōng Sosok Ch'inil Panminjok Haengwi Chinsang Kyumgyōng Wiwōnhoe, ed., *Ch'inil panminjok haengwi chinsang kyumyōng pogosō*, Vol. 4. (Sōul: Taet'ongnyōng Sosok Ch'inil Panminjok Haengwi Chinsang Kyumgyōng Wiwōnhoe, 2009), 392-407. See also HYCTS: http://db.history.go.kr/item/level.do?levelId=im_101_10746 [Accessed March 22, 2015]

¹²⁴ Other settler members of the KFA included Tada Eikichi (of Sinūiju), Gen Shirō (of Changhŭng County, South Chōlla Province), Tsukamoto Tokujirō (of Nonsan County, South Ch'ungch'ōng Province), and Matsuda Gensaburō (of Sinmak County, Hwanghae Province).

¹²⁵ This biographical information is derived from HYCTS: <http://db.history.go.kr/item/level.do?itemId=im&setId=339556&position=5> [Accessed March 22, 2014]

¹²⁶ These events are amply evidenced in the bulletin of KFA, which is examined in Chapter Seven.

spectacles and cultural activities. One staple activity of the KFA was the conferral of prizes and honors upon leaders in forestry and afforestation whose behavior the KFA sought to spotlight. Using funds donated by the fertilizer magnate Taki Kumejirō, the KFA annually decorated settlers (e.g., Tada Eikichi), government officials (Oka Eiji), village leaders (Yi U-ki), institutions (the Mountain Patrol Association of Gwangju County), and corporations (Mitsui Holdings) for their exceptional forestry work across Korea.¹²⁷

The request from the Japan Forestry Association to convene in 1926 its 36th Annual Meeting on the peninsula offered both an endorsement of the KFA and a challenge to its organizational capacities.¹²⁸ To the KFA leadership, hosting this meeting provided a welcome opportunity to showcase the progress of reforms and drum up further investment in forestry work in Korea. The arrival of hundreds of members of the Japan Forestry Association in October 1926 touched off a flurry of forestry related events. Most of the convention's proceedings occurred in and around the Government-General's headquarters in Seoul. On October 3, nearly 1,600 participants gathered for the opening ceremonies, which included speeches not only from the leading lights of the forestry world but also from Governor General Saitō Makoto and Prince Nashimoto Morimasa, a member of the imperial family who then served as President of the Japan Forestry

¹²⁷ A complete list of those awarded up until 1931 can be found in “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 476-479.

¹²⁸ Early into the planning process, the KFA appealed to the Ministry of Finance for support for the event. The Government-General eventually paid out 7,500 yen in support of the KFA and the proceedings, in which it had an obvious stake. The financing of the event is related in “Chōsen no rinsei oyobi sanrinkai kaikyū zadankai,” in CRI, 519.

Association.¹²⁹ A long series of lectures on topics such as “forest management in Korea” and “the difficulties of afforestation” were to follow.¹³⁰ Although the commemorative photo-book distributed to participants entitled *Greenness of the Peninsula* presented a singularly roseate portrait of the modernization of Korea’s forests, the day’s speakers routinely made references to Korea’s persistently bald mountains as evidence of the ample work yet to be done.¹³¹ “Should the mountains turn green,” proclaimed Han Sang-nyōng, “the nation will blossom as in spring and all will enliven.”¹³²

While the view of these mountains from the train window was sufficient enough for some participants, others sought to see the conditions of Korea’s forests and forestry works firsthand. The KFA accordingly arranged a tour following the convention, which took participants from the school the grounds of Korea’s flagship forestry school in Suwōn to the scenic mountains surrounding Mt. Kūmgang to the timber processing plants of Sinŭiju and the Yalu River Basin.¹³³ Insofar as this annual meeting prompted the Association to rapidly expand its public relations infrastructure and raised its institutional profile it primed the Association for the increasingly active ideological role it would play over the 1930s.

The growing sophistication of the KFA was also reflected in its monthly Bulletin (*kaihō*). Initially beset by financial problems, the KFA Bulletin grew over the 1920s into a versatile publication that addressed the day-to-day business of the Association, shared

¹²⁹ Dai Nippon Sanrinkai, “Dai Nippon Sanrinkai Dai 36-kai Taikai kiji,” *Dai Nippon Sanrinkaihō*, Special Volume (February 1927), 7.

¹³⁰ Dai Nippon Sanrinkai, “Dai Nippon Sanrinkai Dai 36-kai Taikai kiji,” 10.

¹³¹ See, e.g., Chōsen Sanrinkai, ed., *Hantō no suiryoku* (Keijō: Chōsen Sanrinkai, 1926).

¹³² Dai Nippon Sanrinkai, “Dai Nippon Sanrinkai Dai 36-kai Taikai kiji,” 23.

¹³³ Dai Nippon Sanrinkai, “Dai Nippon Sanrinkai Dai 36-kai Taikai kiji,” 1-4.

cutting-edge research, reported on international forestry trends, and circulated the opinions of its members.¹³⁴ To thumb through any issue is to take stock off the wide range of issues of concern to Korea's forestry world: from global lumber costs to treatises on Korea's forest culture to updates on forestry under Germany's Third Reich. Loaded as they were with advertisements, these Bulletins also offer a window into the growing economic interests that coalesced around colonial Korea's forestry project: lumber dealers, *ondol* improvement specialists, shipping companies, seed nurseries, and the like.

Owing largely to the close ties between the KFA and the institutions of forestry research and education in Korea, the Bulletin also published a wide range of research articles produced by researchers in Korea's Forestry Experiment Stations. Taking up topics as diverse as the cross-breeding of acacia saplings, household fuel calorific consumption patterns, and soil retention methods, these research articles illuminate the burning concerns and scientific worldview of forestry officials. In fact, it was not long before the KFA established itself as a de facto research wing of the colonial government and began to publish stand-alone research publications of its own. In 1925, for example, the KFA began to publish and disseminate the research reports of Korea's Forestry Experiment Stations. Similarly, the KFA published its own studies of forestry in Korea, including province-by-province surveys of privately owned forests,¹³⁵ a treatise on forestry-related crimes,¹³⁶ and forest histories of Korea.¹³⁷

¹³⁴ "Chōsen sanrinkai jyūkanen no kaiko," in CRI, 464.

¹³⁵ See, e.g., Chōsen Sanrinkai, ed., *Minyū ringyō jisekishū* (Keijō: Chōsen Sanrinkai, 1934).

¹³⁶ See, e.g., Chōsen Sanrinkai Keinan shibu, ed., *Shinrin hanzai ni kansuru jitsumu teiyō* (Pusan: Chōsen Sanrinkai Keinan shibu, 1935).

¹³⁷ See, e.g., Shioda Tadahiro, ed., *Chōsen sanrin shiryō* (Keijō: Chōsen Sanrinkai, 1934).

The dissolution of county-level Forest Owners Associations in 1933 prompted a marked expansion in the local level engagement of this organization. As a consequence, leaders of the KFA, together with colonial officials, moved to establish its provincial branches as incorporated foundations (*zaidan hōjin*), which, among other things, standardized their bylaws and provided for closer financial cooperation with the colonial state.¹³⁸ This shift marked a new chapter in the KFA's cooperation with the Government-General. With the growing unease of the 1930s and the onset of the wartime system in 1937, the work of the KFA became all the more pivotal. The KFA and its local affiliates accordingly emerged as champions not only of forest management, but also of state ideology regarding imperial fealty, thrift, and material sacrifice. They became, in essence, the flag-bearers of what Harada Toshio called "sylvan patriotism" (*sanrin hōkoku*): a view that cast forestry as "the duty of the homefront" and "vital to the realization of comprehensive national security."¹³⁹

Sylvan patriotism and its attendant values were promoted on many fronts, but few were considered as essential to the success of civic forestry as the schoolroom. Indeed, at the heart of the effort to penetrate the values and everyday practices of Koreans was a deep-seated faith in the power of educational institutions. For the forests of country and the empire to henceforth thrive, officials asserted, it was imperative that the state mold the next generation of forest stewards. From the lecture halls of agricultural colleges to the grounds of primary schools, forests and forestry occupied a prominent position in classroom curricula as officials across Korea set out to seed the nation's future.

Seeds of Change

¹³⁸ DRSK, 85.

¹³⁹ Harada Toshio, "Sanrin hōkoku to shiteki kansatsu," *Chōsen sanrinkaihō*, Vol. 164 (1938), 49.

Forestry education in Korea unfolded on two principle tiers. At the most basic level, forestry officials took steps to integrate forestry and outdoor education more generally into the classroom curricula of lower and elementary schools throughout Korea. By weaving the basic tenets of forest management (and, especially, the methods of tree plantation) into classwork, officials hoped to sculpt the environmental values of Korea's youth into alignment with goals of state-led forestry. At the same time, forestry officials also came to realize the importance of training a small subset of Koreans in the principles of agricultural and scientific forestry: those who would go on to serve as bureaucrats, professional scientists, and, especially, local-level experts overseeing the day-to-day of communal forestry in towns and villages across Korea.¹⁴⁰

Front and center in the educational forestry campaign was the Suwon Higher School of Agriculture and Forestry. Established in 1906, it drew its first batch of students principally from the Agricultural, Commercial, and Industrial School in Seoul.¹⁴¹ “The aim of the school,” went one official account, “is to raise up trained men who will assist in effecting the progress and development of the agricultural and dendrological industry in Chosen.”¹⁴² Although agriculture monopolized the school’s resources and course offerings, the forestry program steadily grew into Korea’s flagship training school and a

¹⁴⁰ Although when compared to their Japanese counterparts Koreans faced considerable hurdles to access elite forestry institutions, forestry education in Korea nevertheless lends further credence to Patricia Tsurumi’s claim that while “the Japanese tried to concentrate upon slow but steady expansion of basic elementary education and to discourage ‘unnecessary’ higher education,” they “ended up as reluctant architects of a reproduction—albeit an inferior ‘colonial’ reproduction—of the ruling country’s entire education system.” Patricia Tsurumi, “Colonial Education in Korea and Taiwan,” in: Myers and Peattie, eds., *Japan’s Colonial Empire, 1895-1945*, 308.

¹⁴¹ Ueki Homiki, “Chōsen no ringyō kyōiku,” in CRI, 240.

¹⁴² Gakumukyoku, ed., *Manual of Education in Chosen* (Seoul: Government General of Chousen, Bureau of Education, 1920), 83.

hothouse for silvicultural research. Placed under the supervision of some of Korea's most senior forestry officials (including the likes of Dōke Atsuyuki, Ueki Homiki, and Ishida Tsunehide), students were immersed in an array of topics, including basic sciences (such as physics and biology) as well as forestry-specific specializations (such as forest ecology, forest surveying, and forest engineering).¹⁴³

Given that the forestry program at Suwon aimed to train Koreans and Japanese in order to staff the growing network of nurseries in Korea, its curricular emphasis on theories and techniques of afforestation is unsurprising. The school was outfitted with its own nursery, afforestation laboratory, and model forest, where students put their theoretical training into practice. This hands-on approach to forestry was in keeping with the central aims of the institution, as laid out in its general mission statement: "Although the teaching ought to be based on scientific principles and to follow the progress of the times, ideals should not be followed too much, but the students should be taught to aim at mastering the art and fixing the quality thereof taking special pains not to neglect practical experience."¹⁴⁴

Attracted by the possibility of securing a lucrative government job, many students—both Korean and Japanese—made their way to Suwon. For Koreans, the barriers to enrollment were substantial. Not only were they required to have graduated from middle school (and be at least 17 years of age), but they were also expected to be proficient in Japanese, the principal language of instruction. The enrollment of Koreans at

¹⁴³ In 1909, the school regulations were revised to extend the course length from two years to three and revised again in 1913 to require that students stay in residence during the summer to practice their skills. A list of course offerings can be found in Chōsen sōtokufu, ed., *Suigen kōtō nōrin gakkō ichiran* (Keijō: Chōsen sōtokufu Suigen kōtō nōrin gakkō, 1931), 52-53.

¹⁴⁴ Gakumukyoku, *Manual of Education in Chosen*, 85.

Suwǒn was thus considerably lower than Japanese throughout the colonial period. This was not for lack of effort: the number of applicants consistently outstripped the available spots, sometimes fivefold. Of the 47 students admitted in the first two years of the program only ten were Koreans. The applications of Koreans also revealed a particular geographical logic: a vast majority of applicants came from Kyōnggi Province (where the requisite normal school education was most accessible) and North and South P'yōng'an Provinces (where, it was speculated, longstanding regional discrimination drove elite families to have their sons pursue educational and employment opportunities that had long lain out of reach).¹⁴⁵ By 1931, the school had graduated 791 students, many of whom went on to serve as foresters, provincial bureaucrats, agricultural experts, and researchers.¹⁴⁶

Representative of this career trajectory was Hyǒn Sin-kyu (1912-1986). Although his career was in many respects extraordinary (as he went on to become the “father” of state forestry in postcolonial South Korea), his path into and out of Suwǒn was typical.¹⁴⁷ Born in 1912 in Anju (South P'yōng'an Province), Hyǒn aspired from a young age to become a scholar of literature, much like his literati father. His family's worsening financial state, however, scotched his dreams of studying literature in Japan. Instead, in spite of his lack of interest in and familiarity with agricultural issues, Hyǒn was encouraged to apply to the program at Suwǒn, which he entered in 1930 as one of twelve

¹⁴⁵ For a discussion of the geographical nature of application and enrollment see Ueki Homiki, “Chōsen no ringyō kyōiku,” in CRI, 240-241.

¹⁴⁶ Chōsen sōtokufu, ed., *Suigen kōtō nōrin gakkō ichiran*, 159.

¹⁴⁷ For detailed studies of his life see, e.g., Son Yu-jōng, “Ilche kangjōmgi Hyǒn Sin-kyu ū imhakja urō ui sōngjang kwa kū ūimi,” *Han'guk Inmulsa yǒn'gu*, Vol. 21 (2014), 505-544; Son Yu-jōng, “Hyǒn Sin-kyu ūi rigidedo sonamu yǒn'gu,” *Han'guk Kwahaksa Hakhoeji*, Vol. 27, No. 2 (2005), 27-60; Pak Sōng-nae, “Han'guk sallim nokhwa saōp ui iltüng kongsin Hyǒn Sin-kyu,” *Kwahakkwa kisul*, Vol. 37, No. 3 (2004), 100-103.

Koreans (of a class of 65 students) and one of only two Korean students to specialize in forestry.

Although there is ample evidence that Koreans experienced discrimination at Suwǒn, Hyǒn’s experience suggests that such was not always the case.¹⁴⁸ Much of his experience at Suwǒn was unremarkable. He went to classes each morning and into the field for practice each afternoon—an immersion chiefly in the German principles of *Dauerwald*.¹⁴⁹ But Hyǒn was not blind to the social fissures that colored everyday life at Suwǒn. Koreans, for instance, slept in their own dormitory, had limited social interaction with their Japanese counterparts, and organized student protests.¹⁵⁰ This is not to suggest that Hyǒn felt mistreated. To the contrary, he warmly recalled the support of Suwǒn’s faculty, especially that of Ueki Homiki, an expert in afforestation techniques who took Hyǒn under his wing.¹⁵¹

As formative for Hyǒn as the instruction of Ueki was his experience serving as a communications clerk for the Suwǒn Forest Academic Society, an academic forum that

¹⁴⁸ For example, Kang Pyǒng-ju, a resident of the North P’yǒng’an Province who attended the school from 1929-1931, recalled his time there as follows: “At the college everybody was supposed to live in a dormitory—the West Dorm for the Japanese students and the East Dorm for Koreans. Each dorm was self-governing...So either intentionally or unintentionally, each side did not associate with the other....Usually we just nodded to acknowledge the other’s present. This is the kind of symbiotic relationship we had with the Japanese students.” Hildi Kang, *Under the Black Umbrella*, 54.

¹⁴⁹ A detailed remembrance of the interactions of faculty and students and the rhythms of the school schedule is Oka Eiji, “Kankoku makki no ringyō sōshi jidai,” in CRI, 85-87.

¹⁵⁰ See, e.g., Cho Sǒng-un, “Ilcheha Suwǒn Konong ūi haksael undong kwa nulloksu undong,” *Kyongju Sahak*, Vol. 14 (1995), 109-136.

¹⁵¹ Uegi Homiki came to Korea in 1907 upon graduating from the Tokyo University Department of Agriculture. After a brief stint studying at Harvard in 1909, Uegi returned to Korea where he began to sharpen his methods for the breeding and afforestation of *Pinus Rigida*, a research project that left a deep impression on Hyon. Perhaps more revealing was the fact that during his time at Suwǒn only two members of the faculty were Korean: Cho Paek-hyǒn and Yi T’ae-jǒng. Son Yu-jǒng, “Ilche kangjǒmgi Hyǒn Sin-kyu ūi imhakja ūro ūi sǒngjang kwa kǔ ūimi,” 511.

circulated through its journal the research and opinions of forestry experts from across Korea. Through this role, Hyǒn was put in touch with a range of forestry scholars and officials. By the time he entered the masters program in forestry at Kyushu Imperial University in 1933, Hyǒn was indeed well connected to the network of professional forestry. These connections in fact paid dividends when, upon his graduation, Hyǒn was able to secure a coveted position as a researcher in one of Korea's Forestry Experiment Stations, an unusual accomplishment for a Korean at the time.¹⁵² That Hyǒn, through the introduction of a companion from his days at Suwǒn, also became an active member of a church in the Yoshizuka area of Fukuoka is also noteworthy, for it speaks to the spiritual zeal shared by many foresters of the time.¹⁵³

Although Hyǒn was in many respects a trailblazer, his accomplishments were not without precedent. Chǒng Tae-hyǒn, who was among the first Korean graduates of Suwǒn, worked for a decade in the Forestry Bureau before beginning work in at a Forestry Experiment Station in 1922.¹⁵⁴ The highest-ranking official in the Forestry Experiment Stations was in fact Kim Tong-sōp, who, upon graduating from the Forestry School of Tokyo Imperial University in 1931, began work on seed breeding methods. And while Hyǒn was the first Korean to enter the forestry program at Kyushu Imperial

¹⁵² Son Yu-jǒng, "Hyǒn Sin-kyu ūi rigidedo sonamu yǒn'gu," *Han'guk Kwahaksa Hakhoeji*, Vol. 27, No. 2 (2005), 27-60; and Son Yu-jǒng, "Ilche kangjǒmgi Hyǒn Sin-kyu ūi imhakja urō ūi sǒngjang kwa kǔ ūimi," 514.

¹⁵³ Son Yu-jǒng, "Ilche kangjǒmgi Hyǒn Sin-kyu ūi imhakja urō ūi sǒngjang kwa kǔ ūimi," 514-524.

¹⁵⁴ A native of Kyōnggi Province, Chǒng entered at the age of 24, where he sharpened his thinking on plant taxonomy, the study of which he pioneered in Korea. His biography is derived from the Encyclopedia of Korean Culture: <http://encykorea.aks.ac.kr/Contents/Index> [Accessed March 26, 2015]

University,¹⁵⁵ he was not the first Korean to enroll in the Department of Agriculture: Chǒng Sang-ho and Yun Chǒng-ho graduated from the Agriculture Program in 1927 and 1929 respectively, and Kim Ho-sik received a degree in agricultural chemistry in 1929.¹⁵⁶ Over the course of his career Hyǒn would come into contact with numerous other professional forestry scientists—Kim Kyo-Ung, Chǒn Tong-hun, and Kim Yi-man—many of whom would assume influential positions in the forestry bureaucracy and academia in the post-colonial period.¹⁵⁷

But while highly trained dendrologists of this sort were considered integral to the advancement of the forestry sciences, they were largely removed from the day-to-day operations of forest management. For that reason, the colonial government also made a concerted effort to train community leaders with a specialized knowledge of forestry and forest related issues. Certainly, Suwǒn served this function to a degree. Many of its graduates went on to serve as local-level bureaucrats and agricultural experts. But due in part to the high barriers of admission, forestry officials also pressed for a more broad-based effort to teach the basic principles of forest management at agricultural and trade schools across the peninsula.

It was not long before public agricultural schools (*kōritsu nōgyō gakkō*) also began to offer—and sometimes require—basic training in agricultural forestry. Although

¹⁵⁵ Together with Tokyo Imperial University and Hokkaido Imperial University, Kyushu Imperial University formed an important training ground for Korea-based forestry officials. Not only did it operate its own Experiment Forest in Korea (near the base of Mt. Chiri), it also channeled graduates like Hyǒn into the ranks of the bureaucracy.

¹⁵⁶ Yu-jöng, “Ilche kangjöngi Hyǒn Sin-kyu ūi imhakja urō ūi söngjang kwa kū ūimi,” 519.

¹⁵⁷ Hyǒn describes his interactions with these and other scientists in his personal reflection on his time in the Forestry Experiment Stations, which was serialized as “Na ūi iryōkusō,” *Han’guk ilbo*, March 3- July 22, 1981. This network is also pieced together in Son Yu-jöng, “Ilche kangjöngi Hyǒn Sin-kyu ūi imhakja ūro ūi söngjang kwa kū ūimi,” 529-530.

focused principally on the hard skills of agricultural management and improvement, these schools (of which there were 22 in 1931) devoted significant portions of time to forestry matters, with the school in Taegu, for example, requiring a minimum of 26 hours of forestry instruction for all pupils.¹⁵⁸ Upon graduation, it was hoped, these students would return to their hometowns to serve as leading members of Agricultural and Forestry Associations, to consult with local leaders, and to serve as models for best forestry practices. More than merely act upon these new skills, graduates were expected to serve as liaisons and teachers at the local level: to form the “front lines of village improvement activities” and the vanguards of a new era in forest management. “Graduates of these schools,” stated one roundtable of agricultural experts, “return home to their towns where they assume leadership roles in improving cultivation.”¹⁵⁹ As such, they concluded, a forestry curriculum should prioritize village improvement above all else. It should encourage regional specialization; lay a foundation for agricultural forestry; train for leadership; offer experience in model forests; and touch on the promotion of forest love thought.¹⁶⁰ Thus envisaged, forestry schools became a means through which to improve not only the forests but also the community and its productivity *writ large*.

To facilitate this effort, forestry officials went so far as to commission the publication of forestry textbooks that were tailored to the unique challenges and most profitable techniques of forestry in Korea. Published in 1921, the Forest Textbook

¹⁵⁸ Following the establishment of the first provincial agricultural school in Pyongyang in 1908, similar institutions were established in places like Daegu, Uiju, Anju, and Kimhae. See Ueki Homiki, “Chōsen no ringyō kyōiku,” in CRI, 245-246.

¹⁵⁹ “Kongo no nōgyō gakkō ni okeru ringyō kyōiku ni tsuite” *Chōsen Sanrinkaihō*, Vol 140 (1936), 3.

¹⁶⁰ “Kongo no nōgyō gakkō ni okeru ringyō kyōiku ni tsuite,” *Chōsen Sanrinkaihō*, Vol 140 (1936), 85.

(*Shinrin kyōkasho*), for example, was used in agricultural colleges across Korea to provide students an accessible reference text that was suited to Korea's forests.¹⁶¹ In addition to surveying the myriad ways in which forestry was connected to village life in Korea, it offered practical and accessible know-how on a wide range of topics: the physical demarcation of land ownership, forest fire protection, cutting techniques, and wildlife management.

In essence, what this textbook and Korea's forestry educators sought to impart was the maintenance of agricultural use forestland (*nōyōrin*): the management of small plots of farmland in order to meet the everyday needs of a typical farming household. The impetus behind the creation of agricultural use forestland was the fact that by the 1930s less than half of farming households owned their own forestland plots, which, at 2-5 *chōbu* per household, were often inadequate to yield the approximately 3,800 *kan* of forest materials needed annually by the average farming family.¹⁶² While the Special Disposal Edict discussed in Chapter Three certainly expanded the access of farming households to these resources, many households continued to collect fuel from surrounding private, public, and national forestlands.

Seeking to curb this practice, in 1933 the Government-General began to offer subsidies for the establishment of agricultural use forestland plots of about one *chōbu* per household. Forestry experts, meanwhile, set out to educate households and farming

¹⁶¹ Chōsen sōtokufu, ed., *Shinrin kyōkasho: zōrin no bu, shinrin hogo oyobi sokuju no bu* (Keijō: Chōsen sōtokufu, 1921).

¹⁶² In Korea, subsistence farming was prevalent. Something similar could be said for the forests. They collected it individually for fuel and for their particular agricultural needs. An average annual consumption of forest products per farming household was estimated to be 1,800 *kan* of forest resources. Additionally, 1,000 *kan* of mountain grass was consumed in the production of green fertilizer, while another 1,000 *kan* of brush were consumed by grazing animals, bringing the total to 3,800 *kan*. See DRSK, 83-84.

villages in how to properly make use of the little forestland that they owned.¹⁶³ Although small in area, the benefits of these plots (*nōyōrinchi*) were manifold. By concentrating intensively on a few meticulously managed forest parcel, farming communities would witness improvements in erosion control, flood prevention, irrigation, and agricultural productivity more generally.¹⁶⁴ To do so, however, required that these households and communities draw up a year-round management plan that provided for the sustainable production of agricultural and household materials.

Such a program required more than enlightened foresters; it also demanded the active participation of each and every member of any given rural community. This included Korea's youth, who officials were quick to identify as the next generation of forest custodians. Therefore, at the same time as officials trained village leaders and preached purportedly enlightened forestry practices, they also moved to imprint a love of planting and protecting trees into pupils at a young and impressionable age.

To do so, as Takemoto Tarō has shown, Japanese officials turned to *gakkōrin*: small tracts of forestlands placed directly under the administration of school classes across Korea. Impressed with the success of a similar program in Japan, Korea-based officials began to explore the possibility of distributing forestland to schools through the 1911 Forest Ordinance. To that end, the Bureau of Agriculture, Commerce, and Industry (led once again by Saitō), issued to provincial authorities a 1911 edict Regarding the Establishment of School Forests (*gakkōrin setsuei ni kansuru ken*), which called for the establishment of forests as a means to cultivate “ideas of forest protection” (*shinrin aigo no shisō*) and introduce the customs and work of forestry (in addition to actively

¹⁶³ Suzukawa Toshio, “Nōyōrinchi no setsuei,” *Chōsen nōkaihō*, Vol. 1 (1936), 55.

¹⁶⁴ Kada Naoji, “Nōka to ringyō,” *Chōsen nōkaihō*, Vol. 17 (1922), 1-2.

reclaiming forests). Among its recommendations were that “each year roughly ten saplings should be planted per student” and that “plantings should be sustainable so that they can continue for future classes.” This was followed by a 1913 edict that codified the process whereby provincial authorities would lease out to schools forestland through the Forest Ordinance Process free of charge as so-called “training forests” (*jisshūrin*) to institutions at all levels of Korea’s education system: middle schools, public normal schools, private schools, and technical training schools.¹⁶⁵

As of 1912, 348 schools had established school forests amounting to 3,748 *chōbu*, into which 2,465,431 trees had been planted (see Table 5.4). By 1924, the number of school forests had grown to 1,179 schools, covering roughly 22,367 *chōbu*, in which no less than 29,640,998 trees had been planted. All told, at its peak, one in eight schools oversaw the management of its own school forests.¹⁶⁶ When one further considers the breakdown of these forests by school type, it becomes clear that school forests were managed principally by Korean students: while in 1924 a total of 3,891 *chōbu* of forestland was leased to 299 middle schools for Japanese-speaking students, 11,504 *chōbu* was leased to 632 equivalent educational institutions for Korean students.¹⁶⁷

¹⁶⁵ This memo is reproduced in full in Takemoto Tarō, *Gakkōrin no kenkyū*, 173.

¹⁶⁶ Takemoto Tarō, *Gakkōrin no kenkyū*, 184.

¹⁶⁷ Takemoto Tarō, *Gakkōrin no kenkyū*, 175.

Table 5.4. Annual Disposal of Forestland for the Establishment of School Forests

Year	Transactions	Area (Chōbu)
1910	--	--
1911	31	216
1912	46	370
1913	124	1,028
1914	130	1,115
1915	207	1,723
1916	127	1,288
1917	114	1,231
1918	40	410
1919	29	229
1920	35	373
1921	15	129
1922	29	270
1923	22	255
1924	30	273
1925	42	278
1926	40	303
1927	27	334
1928	45	432
1929	45	397
1930	25	278
1931	24	178
1932	17	176
1933	18	146
1934	14	209
1935	16	195
1936	10	138
1937	21	239
1938	34	192
1939	14	109
1940	18	176

Source: Data from *Chōsen sōtokufu tōkei nenpō* (1934, 1942); Compiled in Takemoto Tarō, *Gakkōrin no kenkyū*, 176-177.

Although the size of these plots paled in comparison to the amounts of forestland distributed to the flagship forestry programs of Japan's imperial universities as experimental forests (*enshūrin*), they nevertheless formed an important arena for the

dissemination of forestry knowledge and the promotion of ecological modernity.¹⁶⁸ Not only did students get their hands dirty with the day-to-day maintenance of the forests, but they also gained invaluable experience in forestry and village economics. They learned how to plant trees, how to properly protect the forest, and, crucially, how to maintain the forest overtime—precisely the mechanics of village level forest management then espoused by forestry officials.¹⁶⁹

Conclusion

To fully appreciate the complexity of the management of private forestland in colonial Korea one must recognize that, due to the mechanics of the land lease process, the contours of forestland ownership in Korea remained in flux. Such fluidity was precisely per the design of forestry officials, who increasingly recognized the need to embrace rural Koreans of all sorts into the work of forest reclamation and conservation. The granting (or promise of the eventual extension of) ownership rights—first through the Forestland Survey, then through the Special Disposal edict—was the very lifeblood of this process. It was the foundation upon which all other components of civic forestry rested.

Yet, the transfer of individual ownership rights was only the starting point of forestland management. Clearly established boundaries did not always translate to carefully managed woodlands. As such, as this chapter has shown, forestry officials simultaneously pursued a host of strategies that sought to improve the quality of forests

¹⁶⁸ For a discussion of the acquisition, maintenance, and research applications of experimental forests in Korea see, e.g., Onaka Fumihiko, “Chōsen ni okeru Kyōto TeiDai enshūrin no enkaku to sono jigyō,” in CRI, 347-357.

¹⁶⁹ Details of the inner workings of these school forests can be gleaned from Chōsen sōtokufu, ed., *Ringyō keieijō mohan to narubeki jiseki gaiyō*, examples of which are examined in Takemoto Tarō, *Gakkōrin no kenkyū*, 175-184.

and forestry at the interlaced scales of the farm, village, school, county, and province. Spearheading this campaign were a host of government-sanctioned (and sometimes sponsored) institutions concerned with the regulation of local forests. The command center of this effort was the KFA, which after 1921 led the charge in the improvement of privately owned forests. But below the KFA operated an assortment of local organizations: from Forest Owners Associations to pine associations, from groups of housewives to forest love thought guilds.

But while these institutions initially promised regulation, coordination, and revenue, they sometimes delivered a different set of realities. They sparked conflict, as evidenced by the story of the forest ranger Yang Sǒng-hwan and the actions of Tanch'ōn's Peasant and Youth Alliances. They generated policy debates over the proper scale of regulation and the extent of the colonial state's reach, as exemplified in the dissolution of Forest Owners Associations and the shift to a Forestland Tax. They also met mixed results: while some civic forestry groups were celebrated by colonial officials as model partners in conservation others faltered.

But local forestry institutions never went away. Whatever their faults, inconsistencies, or limitations, Japanese officials were resolute in their efforts to unite neighbors behind communal forestry efforts. In this way, forest management was cast as an unconditionally collective undertaking and a central component of village improvement. Although Japanese officials held strong preferences for how these arrangements should take shape, they supported collective efforts of all sorts. So it was

that forestry-related *kye* persisted until 1945—only to be resurrected by Pak Chǒng-hŭi as part of his greenification campaign of the 1960s.¹⁷⁰

As many forestry officials came to realize, it was not the official title or institutional packing of the arrangement that mattered; it was the values and practices of its constitutive members that made the difference. The success of forestry, in other words, boiled down to individual ethics, values, and knowledge. The civic forestry project thus also entailed a vigorous public relations campaign that sought to not only impart the concrete fundamentals of modern forestry but also instill abstract notions of ecological modernity among the masses. The 1933 Guidelines and the training of experts are perhaps the best examples of the former; the establishment of school forests and the ideological campaign of the KFA the latter.

Running latent through the Japanese debate on private forest management was the rhetoric of assimilation. Just as there was “a physical and metaphysical form of assimilation,” argued the forestry official Dōke Atsuyuki, there was a material and spiritual component to the forests. However, “due to longstanding overcutting that has left mountains without trees and rivers without water,” he wrote, “beautiful scenery in Korea is rare.”¹⁷¹ The result was a vicious cycle: Koreans had little awe for its landscape, which in turn led to further degeneration of its terrain. Although few foresters took up the theme of assimilation as explicitly as Dōke, the view that forestry was as much about the spiritual as the material was widely held. From the very outset of the colonial period, forestry officials sought to re-mold the purportedly malformed environmental values of

¹⁷⁰ On the ambitious greenification efforts of the Pak regime and the role of the re-constitution of these associations see Yi Kyōng-hun, *Mindungsan ül kŭmsu kangsan ūro: Pak Chǒng-hŭi ka irun kijōk* (Sōul: Kip’arang, 2010).

¹⁷¹ Dōke Mitsuyuki, “Shinrin to dōka,” *Chōsen oyobi Manshū*, Vol. 45 (1911), 17.

Koreans. They did so through a multi-faceted ideological campaign of forest love thought and a persistent concern with forestry as related to everyday life, the subject of Part III.

PART III: CAMPAIGNS

CHAPTER 6 The *Ondol* Problem

Few fixtures of Koreans' everyday life elicited as much comment from sojourners to turn-of-the-century Korea as the *ondol*, the cooking stove cum heated floor system used in homes across the country. Like the white garments traditionally worn by Koreans, the *ondol* was routinely highlighted as a distinctive feature of life in the often-frigid peninsula. "In the midst of freezing temperatures," wrote Takahashi Kishichirō, within the *ondol* it feels as if a spring day. Even without a blanket, one can still fall into a sweet dream....Mainland Japanese have an expression—"clothes, food, and shelter"—to describe the basic necessities of daily life. But in Korea the expression is simply "fire and food"... For life in Korea in general and the lifestyle of the Korean people in particular, fuel, that is, the *ondol* is here an essential part of life.¹

Western travelers to Korea shared Takahashi's interest in the *ondol*, but not, it seems, his tolerance for its often-stifling temperatures. "The place of honor in a room," wrote George Heber Jones, "is over the fireplace, and foreigners in traveling about the country have been scorched, burned, fried, and roasted in turns by the honest efforts of their Korean friends to be hospitable."² Another observer simply quipped that "House warming" is "here most literally applied."³ The account by Louise Jordan Miln, an American missionary, is perhaps most typical:

Every Korean house has a cellar; not for the storing of wine, but for the storing of heat...On a cold night you will see one or more seemingly white-clad figures cramming the mouth, as fast as they can, with twigs, branches, and other combustible food...A Korean house heated at sunset keeps warm all night, because the fire built is invariably huge, because the floors through which the

¹ Takahashi Kishichirō, "Ondoru no kizukikata to nenryō," *Chōsen*, Vol. 94 (1923), 1.

² George Heber Jones, *Korea; the land, people, and customs*, 27.

³ Purcivall Lowell, *Choson, The land of the Morning Calm; A Sketch of Korea*, 81.

heat permeates are made of oil-paper, and because the furnace itself is largely a mass of wooden and of stone intestines, pipes, and flues that retain and give out heat.⁴

Taken together, these portraits served to draw attention to what Japanese commentators had begun to call Koreans’ “*ondol culture*” (*ondoru bunka*) and “*ondol lifestyle*” (*ondoru seikatsu*): a rhythm to and outlook on daily life that was deeply structured by the heated floor system.⁵ Held up as a constitutive component of Korean culture and a marker of ethnic difference, the *ondol* became a source not simply of warmth, but of a peculiarly Korean disposition.

As the principal social space of the Korean home, it was also considered a repository of tradition, history, and nostalgia.⁶ For Japanese settlers such as Suzuki Toyokazu, it was a place where one (“wrapped in a warmth unknown in winter”) played cards, listened to Japanese music, and brought in the New Year. Warm experiences shared with family “while a dreadful wind howls outside the window” were to Suzuki the “gift” of the *ondol*.⁷ For Koreans, the *ondol* meant much more. A time-honored technology, it had sustained life and shaped traditions in the peninsula for centuries.⁸

⁴ Louise Jordan Miln, *Quaint Korea*, (London: Osgood McIlvane & Co., 1895), 23-24.

⁵ Descriptions of the *ondol* by Western travelers are many and various. See, for example, Isabella Byrd Bishop, *Korea and Her Neighbors, A Narrative of Travel with an account of the recent vicissitudes and condition of the country*, 1905, 140; Horace Allen, *Special Consular Report: Heating and cooking stoves*, Washington Govt Printing Office, 1901, 353; and Lillias Underwood, *Fifteen Years Among the Top-Knots: Or Life in Korea*, 42.

⁶ In this sense it merits comparison with Jordan Sand’s analysis of the Japanese home as both site and artifact in *House and Home in Modern Japan* (Cambridge: Harvard University Asia Center, 2005), 1-5.

⁷ Suzuki Toyokazu, “Chōsen ondoru to ringyō,” *Chōsen nōkaihō*, Vol. 25, No. 1, 1920), 22.

⁸ Although scholars continue to debate the exact origins and diffusion of *ondol*-style heating practices, it is widely accepted that its usage stretches back as far as Parhae kingdom (698-926). For detailed analysis of the history of *ondol* and its relationship with the development of Korean culture see, e.g., Kim Nam-ung, *Kudul iyagi, ondol iyagi: munhon kwa yujok ūro pon* (Sōul: Tanguk Taehakkyo Ch’ulp’anbu, 2011); Kim Chun-bong, Ri Sin-ho, O Hong-sik, ed., *Ondol, kū*

Many Koreans had long viewed these heated floors with a warm fondness, a point perhaps best evidenced by the following verse from the twelfth-century poet Yi Kyu-bo (1169-1241):

Beneath the winter's moon the biting cold
Sharp-toothed sets fingers on my quivering skin.
At last—good luck—a fire blows 'neath the floor
With heat awakening from its faggot brand
The welcome warmth is like the breath of spring
And friendly grows the blanket at its spell⁹

By the 20th century, Koreans' nostalgia for this "welcome warmth" had hardly changed.

To the Korean writer Chǒng In-sōp, the *ondol* was "the cradle of Korean culture." Politics, economics, law, religion, science: these and other "beautiful things," he wrote, were "crafted in the *ondol*."¹⁰ Although most Japanese settlers could not truthfully remark as Koreans often did that they "were born on the *ondol* floor and would die on the *ondol* floor," many colonists nevertheless shared in this sense of nostalgia. "For life in Korea," wrote Takahashi, "the *ondol* should be an intimate part, and something held dear."¹¹

Yet for the corps of Japanese foresters dispatched to Korea upon its annexation in 1910 there was not just an *ondol* lifestyle; there was also an *ondol* problem (*ondoru mondai*): the unregulated use of forest biomass for fuel. Again and again, foresters wrote despairingly of Korean hillsides that had been "battered," "stripped," and "denuded" by the imprudent Korean farmer and his *ondol*. "[I]f you take a general view of Korea,"

ch'allanhan kudūl munhwa: charangsürön uri ūi munhwa yusan (Sōul: Ch'ōnghong, 2008); and Ch'oe Chǒng-hwa and Kim Mun-suk, *Ondol kwa Han'gugin ūi sumyōn saenghwal: ch'imsang kihu rūl chungsim ūro* (Sōul: Sōul Taehakkyo, 2007).

⁹ As quoted in Bruce Cummings, *Korea's Place in the Sun: A Modern History* (New York: Norton & Company, 2005), 35-36.

¹⁰ Chǒng In-sōp, *Ondoru yawa* (Tokyo: Miyagi Shoten, 1927, reprint 1983), 5.

¹¹ DRSK, 268.

wrote the forestry official Kakeba Sadakichi, “you see that almost all of its forests are being eagerly collected as fuel for the *ondol*.¹²” This was not a simple matter of conservation: in the eyes of many colonial administrators, *ondol* reform was tantamount to economic and rural revitalization. Erosion, nutrient depletion, flood, drought, timber famine: these and other ostensibly impending environmental crises lent new urgency to the Government-General’s efforts to intervene in the relationship between Korea’s and their *ondol*. Only once its usage was rationalized, it was argued, could the Japanese bring an end to the overuse of forest resources for fuel that had long plundered Korea’s ample natural endowments.

The Korean home and its *ondol*, in other words, formed in the eyes of many foresters ground zero of Korea’s environmental decline. As widely used as it was allegedly inefficient, it impinged upon the Government-General’s pursuit of a modernized nature: an ecosystem that, through proper planning and oversight, could be streamlined to reach maximum levels of sustainable productivity. It was, in the words of Suzuki Toyokazu, the “the great foe of the forest.”¹³ If Korea’s hinterlands were to be properly managed and Korea spared the fate of bygone European nations ruined by timber famine, it was argued, local *ondol* practices must be swiftly brought under control.

This was no easy task. Nor was it the sole prerogative of foresters. From doctors concerned with hygiene to Christian reformers concerned with sloth, a wide range of commentators, both Korean and Japanese, put forward their visions for a modernized Korean home and its hearth. But while a consensus emerged among these reformers that the *ondol* problem required remediation, how and what precisely to reform was far from

¹² Kakeba Sadakichi, “Ondoru no kairyō ni tsuite,” *Chōsen*, Vol. 96 (1923), 2.

¹³ Suzuki Toyokasu, “Chōsen ondoru to ringyō,” 2.

clear. This is because, as I aim to show in this chapter, the roots of Korea's *ondol* problem were inextricably entangled with concurrent debates about race, subjectivity, and cultural assimilation in Japan's empire.

That is to say, whatever the implications the *ondol* held for the degradation of nature *in* Korea, it also stood as a signifier of the nature *of* Koreans. Emblematic of Koreans' backwardness, filth, and sloth, the Korean home and its *ondol* became the subject of considerable commentary by Japanese seeking to justify and explain Japan's civilizing mission in Korea. The ethnographer Onjōji Kiyoshi's remark that "there is no way that the Korean people could produce human beings extraordinary in spirit and rich in vigor when they live in such narrow, ugly, and filthy cavelike houses" both reflected and promoted the perception that native houses—and the enervating heat that coursed throughout them—hindered national development.¹⁴ In its extreme form, this line of thinking cast the *ondol* as a driver of ruination (*ondoru bōkokuron*).¹⁵

And yet despite the chorus of voices denigrating the *ondol* on ecological, ethnological, or economic grounds, its usage persisted throughout the colonial period. Indeed, what started as a spirited campaign to stamp out the *ondol* and its practices altogether became by the late 1920s a more measured effort to reform and improve the existing *ondol* while integrating, where possible, newer heating devices and fuel sources. Many Japanese in fact conceded that the *ondol* had its virtues: it was relatively cheap and easy to build and, above all else, it generated warmth better than any Japanese or Western building could. Japanese foresters, like settler colonialists across the peninsula, were

¹⁴ As cited in Peter Duus, *The Abacus and the Sword*, 403.

¹⁵ For a discussion of the *ondol* as it informed perceptions of Korea's national decline see Kwōn Sōg-yōng, "Nitobe Inazō no Chōsen bōkokuron," *Hokkaido daigaku bungaku kenkyūka kiyō*, Vol. 126 (2008), 37-60.

indeed dependent on the *ondol* as a source of heat for their own homes, offices, and field stations. As a time-tested source of heat in the “harsh continental clime” the *ondol* provided the warmth, however inefficiently, that enabled life in an often bitterly cold land.

Building on the groundbreaking research of Kwǒn Sōg-yōng, this chapter examines the *ondol* as a site of contestation over forestry policy, modernization, and efficiency.¹⁶ While scholars have hitherto appraised the manner in which the colonial government promoted industry and reformed agriculture, insufficient attention has been paid in English to the manifold implications this breakneck modernization campaign held for the politics of resource management at various levels of the colonial state. Especially overlooked is the question of how energy flows created by the colonial state made their way into the home and its heating devices—resources flows that were both mediated through different sectors of Korean society and intimately connected to everyday life in the colony. What made sense in the offices of the colonial capital were often entirely unrealistic in the mountains of Hamgyōng Province; what were feasible targets for domestic coal consumption in 1922 were unrealistic by the time war had broken out in 1937. The logic of fuel economy, like the state of the forest, was always in flux. No matter how hard they tried, Japanese officials could not control the vicissitudes of the market, the forces of the natural world, or the geopolitics of their time. Within the *ondol*, in short, the challenges of resource management and the conflicts of state-led forestry lay revealed.

¹⁶ The definitive account of the modern history of the *ondol* and the colonial era debates surrounding its reform is Kwǒn Sōg-yōng, *Ondol ūi kündesa: ondol ūl tullōssan Chosōnin ū sam kwa yoksa* (Sōul: Ilchogak, 2010).

From Floor to Floor

It did not take long for travelers to home in on the collection of fuel for the *ondol* as a potent force of deforestation. In urban Korea, one need only see “the long lines of bullocks and ponies bringing in their bulky loads of grass and fagots,” and the resulting “thick pall of smoke hang[ing] over the city” to draw the connection between the bald mountains and Korean heating practices.¹⁷ In rural Korea, one need only calculate, as government surveyors did, the amount of time spent by children and mothers collecting fuel sources from the forest to gain a sense of both the centrality of the *ondol* to everyday existence and its immediate effects on surrounding woodlands.¹⁸ Scenes of “young boys scraping up the dead grass with their ingenious bamboo rakes” were widespread, and many travelers included photographs of this common practice in their accounts (see Figure 6.1).¹⁹ By and by, the connection between the forest floor and the *ondol* floor was firmly established.

¹⁷ Homer Hulbert, *The Passing of Korea*, 271-272.

¹⁸ See, e.g., Daihachi shidan gunibu, ed., *Chōsenjin no ishokujyū oyobi sonota no eisei* (Keijō: publisher unknown, 1915).

¹⁹ Homer Hulbert, *The Passing of Korea*, 272.

Figure 6.1. A photograph of “Boys who gather grass for fuel.”



BOYS WHO GATHER GRASS FOR FUEL

Source: Homer Hulbert, *The Passing of Korea*, 270.

But while routine, these were mere observations. It was not until the turn of the century that the *ondol* became a subject of systematic study as government-backed foresters gathered more and better information regarding indigenous land use arrangements, forestland ownership, and local agricultural practices across the peninsula. Instrumental to these early efforts were the host of exploratory surveys commissioned by Japan’s Bureau of Agriculture and Industry. Restricted though they were in geographical coverage, these early surveys provided a rough sketch of Korea’s forest physiognomy, climatic conditions, land use patterns, commercial lumbering operations, all of which served to inform policy-making decisions as the Japanese government further penetrated markets and politics in the peninsula.

Interest in the *ondol* in these early reports is slight. Although most describe in vivid detail the onerous collection by farming households of materials for fuel, the connection between the *ondol* stove, fuel consumption, and deforestation goes for the most part unexplored. For example, one 1907 provincial level survey of agricultural production across the peninsula touched on nearly every dimension of farming life in each region, but made only passing references to the *ondol* and patterns of fuel collection.²⁰ To Tanaka Kiyoji, who took note of the *ondol* during his pioneering silvical survey, the most remarkable feature of Korea's heating system was that it "killed two birds with one stone" by re-purposing the heat used for cooking to heat the home.²¹ As with other surveyors, Tanaka was less interested in explaining deforestation than he was in appraising the extent of environmental decline.

It was not until the initiation of the Forest Registration Survey of 1910 that foresters gained a clear, comprehensive picture of *ondol* usage and its effects on the forest. As discussed in Chapter Two, Japanese foresters set out in 1910 to investigate local conditions for themselves, to study local customs regarding forestry, and, crucially, to note "the condition of fuel consumption."²² The culmination of this survey came in August 1910 with the submission to the Government-General of the aforementioned summary report, *Opinions Regarding the Management of Korea's Forest Lands*, which was meant to guide top-level decision-making regarding forest management policy. The report wasted no time in identifying the consumption of forest biomass as a particularly pernicious force of deforestation. Just a few sentences into the lengthy report, Saitō

²⁰ Nōshōmushō, ed., *Kankoku tochi nōsan chōsa hōkoku* (Tokyo: Nōshōmushō, 1907).

²¹ Tanaka Kiyoji, *Kankoku shinrin shisatsu fukumeisho*, 46-47.

²² DRSK, 24.

Otosaku noted that a majority of Korea's timber consumption came through the burning of forest resources for fuel, meaning that any measures to staunch the degradation of Korea's forests must involve the promotion not of timber but of the production of charcoal.²³ Saitō went further to call for regulations on the collection of fallen leaves, the incentivization of charcoal production, and the promotion of local level afforestation measures that would eventually furnish much needed fuel sources. Although the report fell short of offering a concrete plan of action regarding Korea's so-called "fuel problem" (*nenryō mondai*), it identified the collection and burning of grass as a particularly pernicious problem and called for the regulation of these practices in addition to the enhanced production of fuel sources such as charcoal at the local level.²⁴

Many empirical studies of fuel consumption were to follow. One such report, *A Survey of Fuel Consumption Rates for the Ondol*, published by the Government-General the next year, calculated the amount, type, and patterns of fuel consumption for the average household nationwide. Based on aggregate figures collected from multiple province-level surveys, its authors surmised that the average annual fuel consumption in a single household with one *ondol* was 1974 *kan*, or 7402.5 kilograms. Of this figure about 566 *kan* was used exclusively for heating purposes, while the remaining fuel was for dual cooking use. The researchers went further to provide a breakdown of the usage of what they identified as the four principal fuel sources consumed by farming households: firewood, 592 *kan* (30 percent); branches and twigs, 730 *kan* (37 percent);

²³ Saitō Otosaku, "Kankoku seifu jidai no rinseki chōsa jigyō," in CRI, 77.

²⁴ Saitō Otosaku, "Kankoku seifu jidai no rinseki chōsa jigyō," in CRI, 12.

grass, 414 *kan* (21 percent); and other agricultural products (such as rice husks), 236 *kan* (12 percent).²⁵

When correlated with the most recent census data, other researchers estimated that the total annual nationwide consumption of fuel was 5,412,062,569 *kan*—or roughly the tonnage of 492 fully loaded Titanic ships. Particularly alarming were the rates of consumption for South P'yōng'an and South Ch'ungch'ōng Provinces, two of the most heavily populated regions, where consumption rates often well exceeded national averages (see Table 6.1).²⁶ Another Government-General report from 1930 went further to monetize the amount of timber lost to fuel consumption that year: 6,336,312 cubic feet of timber worth 12,208,000 yen in value.²⁷

Table 6.1. Average Annual Fuel Consumption per Household by Province.

Province	Number of Households	Annual Consumption of Fuel	
		Per Household (in kan)	Total (in kan)
Kyōnggi	382,334	1,624	523,540,248
North Ch'ungch'ōng	155,598	1,454	210,571,188
South Ch'ungch'ōng	232,223	2,807	591,462,970
North Chōlla	265,512	1,561	366,755,389
South Chōlla	422,313	948	361,058,124
North Kyōngsang	427,378	1,619	627,801,249
South Kyōngsang	384,099	312	106,984,329
Hwanghae	279,045	2,965	810,625,725
South P'yōng'an	240,136	5,643	1,355,087,448
North P'yōng'an	252,502	2,121	535,556,742
Kangwōn	240,197	2,538	609,619,986
South Hamgyōng	228,558	1,931	441,574,056
North Hamgyōng	104,611	2,201	230,248,811
Total	3,614,505		7,108,291,003
Average		1,967	

²⁵ DRSK, 273.

²⁶ “Ondoruyō nenryō shōhi mikomi gakuchō,” in *Chōsen Sōtokufu nenpō*, (Keijō: Chōsen sōtokufu, 1911), 65-67. For a close reading of these reports see Kwōn Sōg-yōng, *Ondol ūi kūndaesa*, 112-115.

²⁷ Chōsen sōtokufu, *Tōkei nenpō* (Keijō: Chōsen sōtokufu, 1930), 122-123.

Source: Compiled from Takahashi Kishichirō, “Ondoru,” in DRSK, 273.

More focused provincial level studies yielded further insights into the nature and challenges of *ondol* reform. For instance, it was determined that “the amount of fuel consumed in wealthy households is far higher than that in poor households”; that “the amount of fuel consumed in a farming household varies greatly depending on whether or not they are keeping livestock”; that “in mountainous areas fuel sources are ample so there is extravagant usage, but in valleys and cities the cost of fuel is high so less is consumed”; and that “the amount of fuel consumed in a farm household is far higher than that in a merchant household.”²⁸

Not surprisingly, investigations into Korea’s climate were also part and parcel of this research. In the most basic sense, this research sought to account for the tremendous climatic variation—across both space and time—throughout the peninsula, which, despite its small size, witnessed a range of climatological extremes that stretched the length of the Japanese peninsula from Kyushu in the south to Hokkaido in the north (see Table 6.2). Of particular interest to these researchers was the Korean meteorological phenomena of *sankanshion*: the winter-time fluctuation between three days of extreme cold followed by four days of warmer temperatures. According to Takahashi, this has a pronounced effect on the “winter lifestyle” (*fuyu no seikatsu*) of Koreans.²⁹

²⁸ Takahashi Kishichirō, “Ondoru,” in DRSK, 274.

²⁹ Takahashi Kishichirō, Ondoru, in DRSK, 268.

Table 6.2. Annual Temperature Fluctuations, North Chōlla Province in 1933

Day	Jan. 20th	21st	22nd	23rd	24th	25th	26th	27th	28th	29th	Avg.	Total Avg.
Temp at 10am (outside)	-10.4	-6.3	-5.4	-7.2	-10.6	-13.1	-18.5	-16.2	-11.7	-6.3	-10.6	
Daily High temp. (in fahrenheit)	-1.3	-1.8	-1.1	-1.1	-5.8	-5.6	-13.7	-9.4	-2.7	-2.5	-4.5	
Daily Low temp.	-20.1	-12.2	-14.0	-17.8	-13.0	-17.2	-21.4	-24.5	-19.6	-17.2	-17.7	-11.1
Indoor Morning temp.	58	55	58	59	56	50	55	46	50	51	53.8	
Indoor Evening temp.	55	57	52	52	57	56	48	52	55	50	53.4	53.6

Source: Based on meteorological recordings from Gunsan, North Chōlla; Compiled in Onodera Hirao, *Chōsen sanrinkaihō*, Vol. 98 (1933), 34-35.

Another study correlated fuel consumption with seasonality: from May-September the average Korean household consumes about 1 *kan* per day; in April and October about 2 *kan* per day; in March and November about 3 *kan* per day; and in December, January, and February, about 6 *kan* per day.³⁰ Still another analysis concluded that, due to variations in climate and forest distribution, “it can be said that in the south the annual amount of fuel consumed [per household] is about 2200 *kan*, in central Korea it is about 1400 *kan*, and in the north about 1800 *kan*.³¹ Of course, such nice, clean numbers belie the complex patterns of fuel use that were particular to each region, community, and household. But modern forestry would not have it any other way: these abstractions and precise figures formed the building blocks of state-led resource management.

³⁰ Suzuki Toyokazu, “Chōsen ondoru to ringyō,” *Chōsen nōkaihō*, Vol. 25, No. 1, (1920), 24.

³¹ Tobinaga Shōji, “Nōsanson no nenryō mondai,” *Chōsen*, Vol. 266 (1937), 44.

According to Kwǒn Sōg-yǒng, these figures also formed the foundational basis of the “crisis consciousness (*wigi ūisik*) connected to fuel consumption and the *ondol* that took root within the Government-General.³² By the mid-1920s calls for *ondol* reform and fuel conservation could be heard coming from various corners of the colonial state. In response, the Government-General invested heavily in research, especially that undertaken in Korea’s extensive network of forestry experiment stations, allocating in 1922 as much as three million yen towards ongoing research regarding the fuel problem and coal consumption in Korea.³³

Concern was not confined to those charged with forest-related reforms, however. One forester recalled a “heated discussion” with authorities from the fishing industry who were “screaming for the all-out abolition of the *ondol*” due to the harmful effects local erosion was having on coastal fishing operations in South Chōlla Province.³⁴ Architects, too, emerged as energetic contributors to the *ondol* debate. The establishment of the Korean Architectural Association (*Chōsen kenchikukai*) in 1922, for example, touched off a lively conversation in the pages of its journal *Chōsen to kenchiku* about the modernization of the home and the re-fashioning of the *ondol*, which many architects viewed as inefficient and an eyesore.³⁵ In this way, Korea’s *ondol* problem entangled a wide range of reformers, all of whom had different interests and facets of the land they sought to promote.

³² Kwǒn Sōg-yǒng, *Ondol ūi kündesa*, 113.

³³ “Nenryō mondai kaiketsu to rentan,” *Keijō nippō*, April 25, 1922.

³⁴ “Chōsen no rinsō jyōtai to ondoru mondai,” *Keijō nippō*, February 15, 1920.

³⁵ See, e.g., Fujimoto Gen’ichi, “Ondoru no kairyō ni tsuite,” *Chōsen to kenchiku*, Vol 2. No. 4 (1923). An exhaustive study of Japanese architects’ impressions of the *ondol* can be found in Kang Sang-Hoon, “Ilche kanjōmgi Ilbonindūl ūi ondol e taehan insik pyōnhwa wa ondol kaeryang,” *Taehan konch’uk hakhoe nonmunjip*, Vol. 22, No. 11 (2006), 253-260.

It was also the subject of considerable debate among Korean reformers. Indeed, as Koreans came to terms with their colonial status, many began to take stock of the country's deforestation and the harmful practices that had achieved such a landscape. The Korean reformer (and later independence activist) Han Hŭng-kyo, for example, weighed the costs and benefits of the *ondol* for readers of the *Taehan hŭnghakpo* in 1909. The deficiencies identified by Han were familiar enough: that high temperatures and dry conditions inside the home caused health problems; that high temperatures induced torpor; and that fuel collection had depleted Korea's forests, whose degraded state stood in sharp contrast to other civilized countries of the world. But Han devoted equal attention to its virtues: that it generated heat through the night, thereby economizing fuel; that it offered warmth in the harsh continental climate; and that it re-directed heat used for cooking to heat the home. In addition to offering comparative insights (ie, that the Korean *ondol* required less fuel, Japan and Western countries were using more efficient fuels such as charcoal), Han shared a few suggestions on how to make the *ondol* more hygienic and efficient.³⁶

Korean-language newspapers also ran occasional stories on the *ondol* reform, with one article from August 1910 informing readers of the Government-General's intention to abolish the *ondol* altogether.³⁷ But whatever awareness of the *ondol* problem had taken shape among Koreans, it was largely confined to elite, urban-dwellers. In the eyes of some Japanese, Korea's fuel crisis was largely lost on its rural population—so much so that in 1922 it could be opined that “in general little importance is attached to

³⁶ Han Hŭng-kyo, “Uri nara ondol ū ihae,” *Taehan hŭnghakpo*, Vol. 1 (1909), 55-59.

³⁷ See, e.g., “Ondol p’yejisol,” *Hwangsȏng sinmun*, August 19, 1910.

the fuel problem, but for a small group of well-informed individuals who are leading the charge.”³⁸

If scientific surveys of fuel consumption and the *ondol* verified foresters’ suspicion that the burning of forest biomass contributed to deforestation, the commencement of a regenerative forestry project in the 1910s cemented their resolve to swiftly resolve the *ondol* problem. Indeed, it was not until foresters began to plant sapling and open nurseries as part of their afforestation initiative that they became acutely sensitive to—and resentful of—local communities’ dependence on forests and their floors for fuel. The use of saplings for fuel, many of which had been painstakingly transported from Japan, was nothing short of a menace in the eyes of the foresters tasked with the reclamation of these ecosystems. Recalled Ishida Tsunehide, a former forestry expert in the Bureau of Forestry,

Even when we distributed saplings for free they would not grow, for the most part. When you ask what happened, it’s that the saplings would be left at the *ondol* to mouth to be burned as fuel. It seems that most of the saplings we brought from Japan became fuel. But even when they could grow and enlarge, they could no matter what be cut down.³⁹

Foresters were also struck by the widespread burning (especially in the south, where fuel was more scarce) of *nezumi*: tree roots whose extraction from the soil for charcoal production did much to exacerbate erosion.⁴⁰ Practices such as these were widely reported, and served to heighten the concern that the *ondol* was not simply inefficient but was actively inimical to Japanese efforts to rehabilitate these ecosystems. Colonial administrators and foresters accordingly pressed for concrete measures that could be

³⁸ “Nenryō mondai kaiketsu to rentan,” *Keijō nippō*, April 25, 1922.

³⁹ TYBK, 307.

⁴⁰ TYBK, 343.

taken to mitigate the environmental impact of the stove and to ease the strain it placed on Korea's forests. It was not long before a cadre of forestry experts and scientists trained their analytical gaze upon the Korean home, the *ondol* and the fuel burned therein, in search of solutions to the *ondol* problem. Wielding newfangled ideas about efficiency, conservation, and empirical rigor, these agricultural scientists, much like their international and colonial counterparts, sought to streamline its design so as save the forests.

Ondolology

However pernicious the *ondol* may have been in the eyes of professional foresters, few actually advocated for its prohibition. The *ondol*, after all, stood at the foundation of countless Korean buildings and was used day in and day out across the peninsula—to overhaul its design nationwide was simply infeasible. Given that “the *ondol* was a longstanding habit that could not be suddenly eradicated,” wrote Kakeba Sadakichi, it was imperative that the colonial state conduct research into how it could “not destroy this habit at the same time as the mountains were made better than at present.”⁴¹ Before long, a consensus had emerged that smart building practices, retro-fits, economical fuel use, and fuel replacement would be enough to mitigate its deleterious effects. Indeed, it did not take long for *ondol* improvement (*ondoru kairyō*) to become the guiding principle of the *ondol* debate. Consequently, the early 1920s saw the publication of a spate of articles on the improvement of the design and construction of the *ondol* and the fuels burned within it.

⁴¹ Kakeba Sadakichi, “Ondoru no kairyō ni tsuite,” *Chōsen*, Vol. 96 (1923), 2.

These writings, to be sure, were not unique to foresters. Japanese architects, for their part, also emerged as energetic contributors to this debate, especially those in the Korean Architectural Society, which inaugurated in 1922 a design competition for modernized Korean homes that offered many creative solutions to the *ondol* problem.⁴² But it was foresters who felt the negative effects of *ondol* use most acutely, prompting many to undertake the most detailed research into *ondol* usage patterns and designs. Meticulous in calculation and exhaustive in detail, these scientific studies stand as illuminating windows into the intellectual outlook of the forestry community: the desire to quantify, categorize, and empiricize complex natural phenomena so as to engineer a more efficient use of nature's resources.

Of the many fine-grained studies of *ondol* reform, few were as meticulously researched as those of Takahashi Kishichirō. First dispatched to Korea in 1914 to work as an agricultural consultant and engineer, Takahashi conducted agronomic research on a wide range of topics. But the *ondol* and fuel rationalization soon captured his attention. Shortly after taking up work in one of Korea's Forestry Experiment Stations, Takahashi published in 1923 one of the most exhaustive studies on the topic, *Methods of Ondol Construction and Fuel Consumption (Ondoru no kizukikata to nenryō)*. Bringing together a host of scientific experiments, historical research on Korean building techniques, and observations, it is in many respects an exemplar of the then burgeoning field of ondology.⁴³

⁴² This competition is examined in detail in Kang Sang-Hoon, “Ilche kanjōmgi Ilbonindūl ūi ondol e taehan insik pyōnhwa wa ondol kaeryang,” 253-260.

⁴³ Takahashi was far from the only researcher concerned with the *ondol* and fuel consumption. The network of Forestry Experiment Stations was a particularly important site for this research.

As with other studies, the starting point for Takahashi's analysis was the observation that Koreans' customs of *ondol* usage are tightly woven into the cultural and political fabric of the nation. Takahashi was indeed deeply concerned about the "state of society" (*shakai jyōtai*) and the linkages between fuel, lifestyle, and modernization. He was especially concerned with the purportedly broken political foundation upon which *ondol* customs rested:

The erosion and the failure of forest administration (*rinsei*), these are surely the greatest sources of the degradation of Korea's forests. In Korea's past, the right to participate in politics was one's livelihood. If you could not participate politically, you could not ensure your livelihood. To lose rights was to starve to death.⁴⁴

Takahashi went further to suggest that the erosion of forest governance left Korean's incapable of grasping concepts such as "the nation." Comments such as this one both promoted and reflected the widely held notion that Koreans lacked the civic mindedness required to act on behalf of the greater good.

To Takahashi, the signal failure of forest governance in pre-modern Korea was the state's negligence in regulating common woodlands. At the heart of the historical account of Korea's deforestation that prefaces Takahashi's research was a familiar tale of the tragedy of the commons. "In Korea," he wrote, "other than special forests, there are so-called un-owned public mountains, whose private ownership is not permitted and are thus subject to willy nilly exploitation (*jiyū nyūsan*). This is a severe failure of forest management, resulting in the degradation of nearly all of these public mountains."⁴⁵

Through passages such as this one, Takahashi sought to show how Korea's forests—a

See, e.g., Chōsen sōtokufu, Ringyō shikenjo, ed., "Kakushu ondoru nenryō no zenryoku sokutei," *Ringyō shikenjo hōkoku*, Vol. 16 (1939), 1-44.

⁴⁴ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō* (Keijō: Chōsen sōtokufu, 1923), 2.

⁴⁵ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 2.

shared, finite resource—had been ravaged by the self-interest of individuals and communities with little incentive to conserve for future generations. In so doing, he hinted at the necessity not only for an overhauled system of land ownership but also for the cultivation of a conservation ethic among Koreans, who were widely perceived as incapable of such stewardship. The Bureau of Forestry went to especially great lengths to cultivate an ostensibly newfound national appreciation of forest conservation (as discussed in detail in Chapter Seven).

Takahashi proceeded to identify five social structures of Korean society as particularly influential in shaping the architectural conventions and *ondol* use. The first was climate (*kikō*): the fact that Korea's had to endure frigid winters and hot summers. As he saw it, the heated floor system was a natural outgrowth of the need to cope with climatic extremes.⁴⁶ The second was “the state of society” (*shakai no jōtai*), by which he meant the “unlimited power of the King” and the segregation of the people into royal elite and commonfolk. Korea’s deep-seated social fissures, he argued, explained in part the extravagance of the elite *yangban* class on the one hand and the strict constraints placed on commoners in the construction of their homes on the other.⁴⁷ The third factor was “national character” (*kokumin no kishitsu*), the defining feature of which was the fact that Korea had long been placed between great powers, leading in turn to a muted sense of self-governance and strict adherence to traditional architectural conventions.⁴⁸ The fourth was topography (*chisei*): the fact that differences in the lay of the land spurred distinctive regional identities and building techniques. The fifth was geology and forest

⁴⁶ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 5.

⁴⁷ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 5.

⁴⁸ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 6.

physiognomy (*chishitsu oyobi rinsō*): forces that determined both the available building materials and fuel sources.⁴⁹

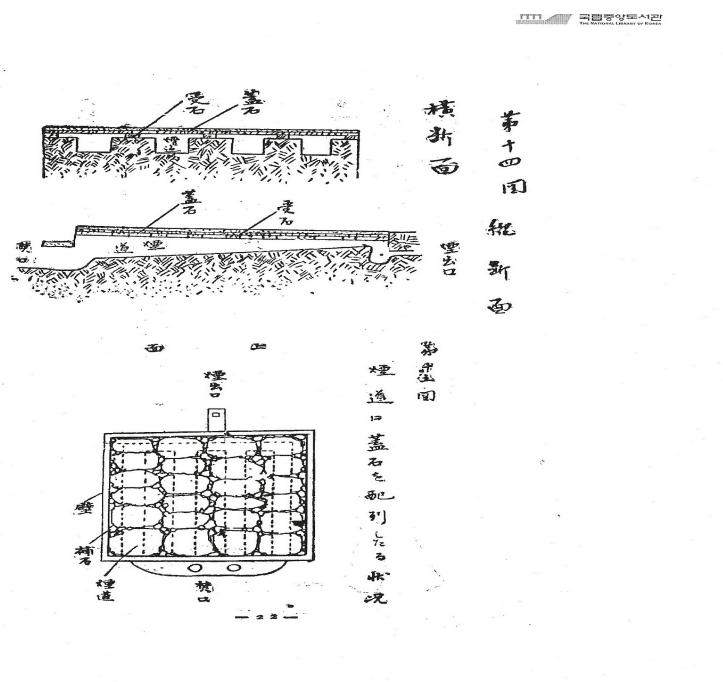
But while Takahashi was careful to qualify his analysis by noting that “social hierarchy, occupational differences, personal preference, and regional differences have led to an infinite variety in ondol installation,” it was not long before he began to gloss over the particularities of the local in order to create a synoptic view of the *ondol*.⁵⁰ This outlook was most conspicuous in his effort to deconstruct, piece-by-piece, the typical Korean home and its stove. Here Takahashi provided in granular detail a breakdown of the materials, building techniques, dimensions, and aesthetics that make up a typical Korean dwelling: from its *ondol* foundation (see Figure 6.2) to its roofing, from the number of windows to the many flumes, pipes, and chambers that form its thermal circuitry (see Figure 6.3). Regarding the foundation and floor construction, he estimated that the stones were typically granite of about 45-60 cm, and a thickness of 4-6 cm. As for the piping, he noted, there was typically a row of four pipes, with a width of about 1 *shaku* (30 cm); the chimney was about one *shaku*, five *sun* (or 45 cm) and a width of about 30-36 cm.⁵¹

⁴⁹ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 6-7.

⁵⁰ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 7.

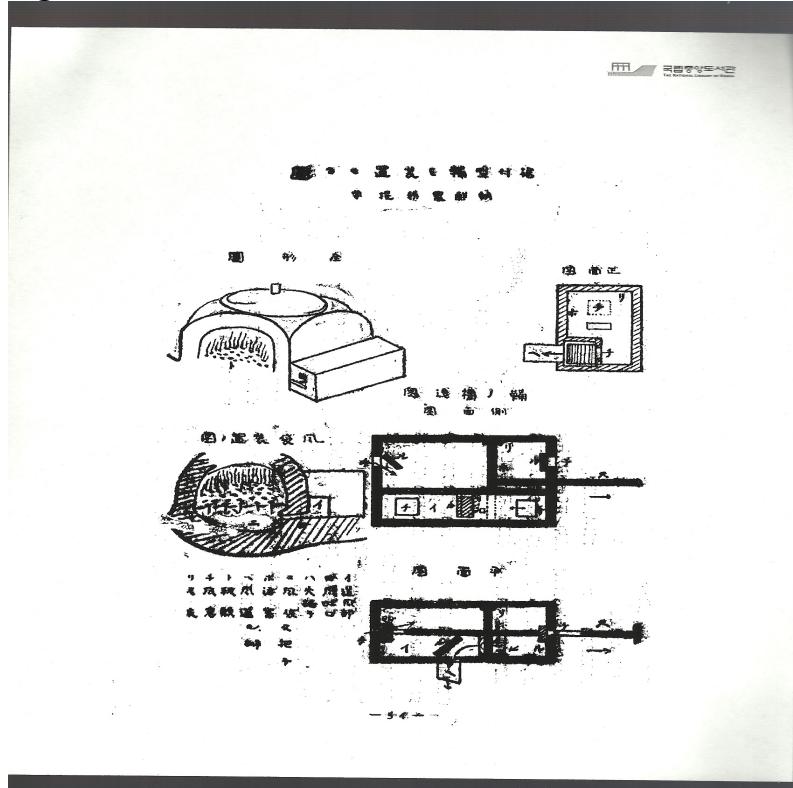
⁵¹ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 15-16.

Figure 6.2. The Structural Foundation of the *ondol*.



Source: Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 22.

Figure 6.3. A cross-section of the *ondol* mouth and its thermal flow.



Source: Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 34.

It did not take Takahashi long to seize upon the oversized firebox as the principal design flaw of the *ondol*. He identified two types of stove mouths: an exclusive heating type for which there is only one mouth; and a dual-use cooking firebox, which typically includes two or more mouths lined up in a row. On average 37.3 cm (1.23 *shaku*) in height and 43.9 cm (1.45 *shaku*) in width, the mouth of the stove, he argued, was in general far too large and ill-designed for heat retention. Should such “liberal” (*kaihōteki*) stove mouths be reduced in size, better sealed in, and outfitted with a fire grate (*rosotoru*), they would burn more efficiently and need to be stoked less often, thereby conserving fuel.⁵²

Takahashi was not alone in thinking so. Kakeba Sadakichi, a forester brought under the employ of the government-general in 1909, shortly after his graduation from the Agricultural School at Hokkaido University, similarly singled out the mouth of the stove as a particularly problematic feature of the stove in his study, *On the Improvement of the Ondol*. Because the mouth was unnecessarily large, he determined, oxygen could easily enter the stove and its flue system and thereby waste energy. “Whatever one may say,” he wrote, “the principal problem is that we must narrow down the *ondol* mouth.”⁵³ Kakeba came to many conclusions about fundamental re-configuration of building techniques, but, realizing that these were complicated, expensive, and therefore unrealistic for the majority of farming households, he put forward a much simpler suggestion: the addition of a wooden or tin-plated door that would serve to seal in the heat and block any drafts. By his estimate (based on admittedly still “unrefined

⁵² Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 50.

⁵³ Kakeba Sadakichi, *Ondoru no kairyō ni tsuite*, 8.

experiments”), if implemented this and other improvements (including more evenly built floors, better insulation, and fewer windows) would economize fuel consumption for heating purposes by as much as 40 percent.⁵⁴ He extrapolated from this estimate to determine that the nationwide implementation of these reforms would conserve roughly 16 billion *kan* of fuel.⁵⁵ Financially speaking, if prices were to hold at two *sen* per *kan*, these improvements would also save as much as as 3,200 *yen* a year.⁵⁶

Kakeba also noted that the improvement of the *ondol* would lead to other positive externalities. By freeing up farmers from the regular chore of fuel collection, he suggested, *ondol* improvement would stimulate subsidiary businesses and by employments among farmers. Given that the average “farming family spends one-fourth of its labor collecting fuel,” a decrease in demand would free these farmers up for other forms of more productive labor.⁵⁷ Especially appealing was the home-production of charcoal as an alternative fuel source—a by-employment that Japanese officials and forestry cooperatives promoted beginning in the late 1920s. *Ondol* improvement would also, he suggested, decrease the incidence of home fires, which were a regular occurrence in lower-class urban neighborhoods in Seoul and elsewhere.⁵⁸

But while Takahashi, like Kakeba, paid careful attention to the design and thermodynamics of the Korea home, it was the collection, combustion, and conservation of fuel sources that most appealed to his sensibilities as agricultural expert. Takahashi in

⁵⁴ Kakeba Sadakichi, *Ondoru no kairyō ni tsuite*, 9.

⁵⁵ According to Kakeba, of an average parcel of 2000 *kan*, approximately 60 percent or 1200 *kan* goes towards fuel. If you extend this figure to account for all of the population, this becomes 40,000,000,000 *kan*. Kakeba, *Ondoru no kairyō ni tsuite*, 10.

⁵⁶ Kakeba Sadakichi, *Ondoru no kairyō ni tsuite*, 10.

⁵⁷ See, e.g., “Hwajae nūn ondol esō,” *Chosōn ilbo*, January 30, 1925.

⁵⁸ Kakeba Sadakichi, *Ondoru no kairyō ni tsuite*, 11-12.

particular devoted a significant section of his report to an analysis of the various forms of fuel burned within the *ondol*, of which he identified seven principal sources: pine-needles (*matsuba*); firewood (*takigi*); mixed grasses (*kusa*); culm (*kara/kan*); coal (*sekitan/susutan*); fallen leaves (*ochiba*); and rice husks (*momigara*).

Two of these sources merit particular attention. The first is pine needles, which, according to Takahashi, were “simple to ignite,” “oily,” and available across the peninsula, making them a chief fuel source for the *ondol*. Based on his experiments, Takahashi determined that the combustion of one *kan* of pine-needles would burn for approximately 30 minutes and two *kan* would burn for 40-50 minutes. But because pine needles burn so quickly, he noted, you have to regularly tend to the stove, making them inconvenient and inefficient.⁵⁹ Although Takahashi did not explore this point in detail, it is also important to note that in the eyes of many officials the collection of pine needles for fuel, like that for grasses, culm, and thatch, was especially harmful to forest health as it stripped forest ecosystems of its nutrient rich detritus, making forestland reclamation considerably more difficult.

If Takahashi’s treatment of pine needles is noteworthy for its detail, his analysis of coal as a fuel source is remarkable for its brevity. “The use of coal for *ondol* fuel,” he wrote, “has increased in areas of recent coal production and in other large cities.”⁶⁰ But, as numerous other researchers also noted, coal was a problematic fuel source: it was expensive, inconsistently available, and it often burned far too hot, making it less than

⁵⁹ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 40.

⁶⁰ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 42.

ideal for most *ondol*.⁶¹ This was especially true of bituminous coal, which, though relatively abundant, was for the most part limited to industrial applications, especially as fuel for railway engines.

Anthracite coal, by contrast, could be used in the homes, especially when processed into coal briquettes (*rentan*), but even this was limited to urban areas, where more modern stoves were in use.⁶² The Seoul Chamber of Commerce, among other groups, conducted extensive research into the production of charcoal briquettes and brown lignite coal (or *kattan*).⁶³ It was eventually determined, however, that brown coal was too crude for large-scale production, so briquettes became the principal source.⁶⁴ By the 1920s the exploitation of small amounts of coal for briquette production was underway, especially from the coalfields around P'yōngyang.⁶⁵ Demand was met, at least in urban Korea, in part by re-allocating *rentan* harvested by the Imperial Navy (which enjoyed privileged access to Korea's coal resources) as well as ramping up the production quotes the few Japanese mining companies established in Korea. The Ryūzan Kōekitan Corporation, for instance, could not produce charcoal briquettes fast enough and sold out its production from three different processing facilities. These companies also experimented with mixing different coals to form large coal clumps, known as

⁶¹ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 42.

⁶² “Nenryō mondai kaiketsu to rentan,” *Keijō nippō*, April 25, 1922.

⁶³ “Nenryō to shōrai,” *Keijō nippō*, March 8, 1919.

⁶⁴ These and other issues related to coal are explored in Onodera Hirao, “Hoonyō netsuryō riyō mondai to ondoru sōchi,” *Chōsen sanrinkaihō*, Vol. 98 (1933), 29-38.

⁶⁵ As of 1910, there were 42 registered coal mines operating in Korea, which extracted approximately 128,000 kg of coal, most of which was shipped to Japan, where demand was higher. One Government-General estimate placed the total deposit of coal in Korea at 1,100,000,000 tons, roughly 75 percent of which was anthracite. Chōsen sōtokufu, ed., *Tōkei nenpō*, (Keijō: Chōsen sōtokufu, 1930), 174-76.

kaitan, although the results were not promising enough to prompt large-scale production.⁶⁶

But while domestic coal consumption in Korea increased a staggering 727 percent between 1909 to 1920, its usage was confined to a select few urban areas and, crucially, prioritized for shipping and transportation. Much of Korea's coal supply, in fact, was imported from Japan and, increasingly, China, as Table 6.4 makes clear. Of this, a vast majority was used by the colonial state for shipping and transport purposes: as Kim Ŭn-jöng has shown, 53 percent, 44 percent, and 35 percent of the coal consumed in 1916, 1921, and 1929 respectively was for ship and rail transport.⁶⁷ Much of the coal imported from Japan, moreover, was low quality, while Japanese corporations were quick to buy up Korea's high quality anthracite coal for sale back in Japan.⁶⁸

Table 6.4. Breakdown of Annual Coal Consumption in Korea, 1909-1920

Year	Total Production	Exports	Imports	Total Domestic Consumption
1909	56,138 (tons)	44,962	123,929	131,105
1910	78,452	72,764	130,367	136,056
1911	121,304	86,885	235,411	269,830
1912	127,870	86,143	306,330	348,057
1913	127,989	92,625	373,115	408,479
1914	183,262	120,405	355,991	418,848
1915	229,262	165,035	382,627	446,713
1916	191,327	122,640	402,271	470,958
1917	195,152	122,923	617,650	689,879
1918	187,623	120,315	750,840	818,148
1919	219,554	87,846	885,518	1,017,226
1920	274,938	115,498	822,891	982,332

⁶⁶ “Nenryō mondai kaiketsu to rentan,” *Keijō nippō*, April 25, 1922.

⁶⁷ Kim Ŭn-jöng, “Che 3-pu Han'guk kǔn-hyǒndaesa ūi chaejomyōng: Ilcheha sōkt'an ūi t'ongje wa iyong silt'ae,” *Ihwa sahak yōn'gu*, Vol. 30 (2003), 463.

⁶⁸ Kim Ŭn-jöng, “Che 3-pu Han'guk kǔn-hyǒndaesa ūi chaejomyōng: Ilcheha sōkt'an ūi t'ongje wa iyong silt'ae,” 451-470.

Source: Data from Chōsen ginkō chōsa kyoku, “Chōsen in okeru sekitan no juyō to sono riyō to tsuite,” 1921; compiled in Kim Ǒn-jöng, “Che 3-pu Han’guk kǔn-hyǒndaesa ūi chaejomyöng: Ilcheha sōkt’an ūi t’ongje wa iyong silt’ae,” 463.

There was also the matter of transporting the coal, whatever the form, to rural markets. Even if companies could meet the demand to provision rural markets with coal, as promoted by government officials, it was often an ordeal to transport the coal to a market in proximity enough that would enable rural Koreans to ship it home. For this and other reasons, local charcoal production became the central concern of colonial officials, despite the fact that this was often unrealistic for many local communities, who had neither the resources nor training to get local charcoal production underway.⁶⁹ The Government-General thus began to underwrite extensive research into increasing local charcoal production and use alongside research into *ondol* improvement. In the eyes of many officials these formed two sides of the same coin that was Korea’s so-called fuel problem.

When compared to other industrialized nations, the widespread exploitation and utilization of coal resources came late in Korea. Indeed, whereas many industrialized nations had by 1910 already transitioned their fuel economies to coal and vigorously promoted its usage in the home, such a campaign was barely underway in Korea. This is due in part to market forces and Korea’s relative scarcity and quality of domestic coal sources, but also, it seems, to the fact that Korean homes and their *ondol* did not lend themselves to a smooth transition to a coal-based fuel economy.⁷⁰ Thus while foresters

⁶⁹ See e.g., Kakeba Sadakichi, “Mokutan no zōsan taisaku,” *Chōsen sanrinkaihō*, Vol. 105 (1933), 2-12.

⁷⁰ On Japan’s breakneck transition to an industrial economy and its newfound demand for coal see Brett Walker, *Toxic Archipelago*, 103-150.

could point to the coal flowing out of Korea's mines and through its ports, they had little recourse to steer that flow into the homes and stoves of rural Korea.

This did not stop them from advocating for its usage, however. Members of the Korean Forestry Association indeed included the usage of coal and charcoal briquettes among their recommendations for future policies, which were as follows:

Short term:

- 1) The reclamation of forestlands used for fuel sources (*shintanrin*)

Long term:

- 1) the diffusion of charcoal briquettes, the use of coal
- 2) the use for fuel of husks
- 3) the improvement of the ondol mouth
- 4) the improvement of bedding
- 5) the inclusion of tatami mats in a section of the home
- 6) the reform of the preparation of food (and the adoption of a cold food diet)
- 7) the regulation of the number of ondol rooms per household⁷¹

Other forestry officials added their own suggestions to this list. Among them was the promotion of appropriately dried out fuels so as not to waste energy with watered-down fuel sources.⁷² Yet another called for a crusade on the summer usage of the *ondol*: a custom that was wasteful but unavoidable due to the *ondol*'s connection with food preparation.⁷³ The *ondol* problem also prompted many officials to double down on their commitment to allocate forestland to rural Koreans through the terms outlined in the Forest Ordinance process. By one estimate, there were as of 1937 still 1,600,000 households that owned no forestland (or about 56 percent of all farming households in

⁷¹ Takahashi Kishichirō, *Ondoru no kizukikata to nenryō*, 49.

⁷² “Rinsan nenryō no setsuyaku aigo ni tsuite,” *Chōsen sanrinkaihō*, (Vol. 166, 1939), 53.

⁷³ “Nōka no sanryō yori mitaru sanrin,” *Chōsen nōkaihō*, 1924.

Korea). There were also many households who owned land plots so small that they struggled to achieve self-sufficiency in fuel (to say nothing of fertilizer or fodder).⁷⁴ More generally, commenters called for the “enlightenment of the Korean farmer” and the promotion of *airin shisō*, which was seen as a vital front in the war on profligate fuel consumption. As one study put it, “The economization of forest fuel products can be achieved as outline above, but it must also entail the penetration of the hearts of residents of Korea.”⁷⁵ Or, in yet another formulation, “the first tenet of economization is the curtailment of extravagance and waste (*rōhi o habuku*).”⁷⁶

These and other reports doubtless found close readers in the Government-General and professional forestry community. But while the improvement of the *ondol* along the lines of outlined by Takahashi, Kakeba and others seemed straightforward enough to the experts and policymakers involved, the actual implementation of reform programs proved more difficult than expected. And it was not simply Koreans who vexed this reform campaign: the then rapidly growing population of Japanese settlers were also dependent on the *ondol* and thus compounding the pressure placed on Korea’s already scarce fuel sources. The implications of Japanese settlement in Korea were not lost on forestry experts, but they nonetheless figured only peripherally into their research on the *ondol*. The *ondol*, in other words, was cast as a definitively *Korean* problem. The role of Japanese settlers was, if anything, to lead the charge in the dissemination of modern heating practices and home economics. But for many writers and government officials who harbored concern about the maintenance of Japaneseness in the colonies, the *ondol*

⁷⁴ Tobinaga Shōji, “Nōsanson no nenryō mondai,” *Chōsen*, Vol. 266 (July 1937), 45.

⁷⁵ “Rinsan nenryō no setsuyaku aigo ni tsuite,” *Chōsen sanrinkaihō*, (Vol. 166, 1939), 54.

⁷⁶ “Rinsan nenryō no setsuyaku aigo ni tsuite,” *Chōsen sanrinkaihō*, (Vol. 166, 1939), 52

problem cut more deeply. It may have been for foresters an issue of conserving fuel, but for many Japanese it was a matter of conserving the Japanese way of life—and with it the legitimacy of Japan's status as a first-rank nation.

Yoboization and the *Ondol*

Of all the statistics compiled by researchers over the decades spent researching the *ondol*, few were likely as alarming to government officials as the fact that 24 percent of the Japanese residents of Seoul surveyed in 1925—4,519 households—heated their home with an *ondol*. When compared with the nearly 97 percent of Koreans who used the *ondol*, this figure seems slight.⁷⁷ But the fact that nearly one quarter of the Japanese residents of the capital city, the epicenter of Korea's wealth and civility, heated their home with the same stove as the putatively primitive Korean farmer was surely unsettling to some Japanese.

If this was the case for the capital city, what was this statistic for Japanese settlers in the more remote, agricultural regions of the peninsula? If the *ondol* was a source of Korean torpor, what did its prolonged usage mean for the maintenance of the Japanese way of life? How, in other words, might Japanese stay warm in a cold place without compromising their Japanesehood? It was questions such as these that placed the *ondol* within the then roiling currents of the debate over modernization and its inverse, yoboization (*yoboka*): the fear that, should they adopt the *ondol* and its attendant lifestyle,

⁷⁷ To be more precise, of 72,392 resident surveyed in 1925 in Keijō, 56,262 had *ondol* in their homes: 51,743 Korean and 4,519 Japanese. In other words, 77% of those surveyed used the *ondol*: 96 percent of Koreans and 24 percent of Japanese. “Ondol kwa chu’taek,” *Tonga ilbo*, October 31, 1925. A detailed examination of this survey can be found in Kwǒn Sōg-yǒng, *Ondol ūi kündesa*, 94-98.

Japanese settlers might descend to the depths of Korean backwardness, the characteristics of which were gathered under the derogatory epithet *yobo*.⁷⁸

As much a concern of Japanese officials in Tokyo as those in Seoul, the preservation of the Japanese way of life required careful consideration. After all, the construction and maintenance of fluid ethnic and cultural boundaries—those that simultaneously subordinated and incorporated Koreans by constructing what Oguma Eiji calls “ambivalent sameness”—was a signal feature of Japan’s imperial project.⁷⁹ As a marker of Koreans’ primitive lifestyle used widely by Japanese, the *ondol* threw the contradictions of Japanese colonial and racial rhetoric into sharp relief. It raised the specter of the contamination of the moral fiber of settler colonialists, the lifeblood of Japanese colonialism, who by 1930 numbered just over 500,000 and by 1945 would surpass 900,000.⁸⁰ Thus, as foresters pursued policy solutions to the *ondol* problem, a wide range of other commentators weighed in on the *ondol* lifestyle—from cartoonists to politicians to ethnographers—and the implications that it held for the maintenance of the Japanese disposition outside of the homeland.

Among the more strident contributors to this debate were the ethnographer Usuda Zan’un and cartoonist Torigoe Seiki, who provided in *Chōsen Manga* (Korean Caricatures), among other texts, an often graphic appraisal of Korean squalor, torpor, and

⁷⁸ For a detailed assessment of the rhetoric and reality of the *yobo* see Todd A. Henry, “Assimilation’s Racializing Sensibilities: Colonized Koreans as Yobos and the ‘Yobo-ization’ of Japanese Settlers,” *positions: east asia cultures critique*, Vol. 21, No. 1 (2013), 11-49.

⁷⁹ See Oguma Eiji, *A Genealogy of Japanese Self Images* (Melbourne: Transpacific Press, 2002).

⁸⁰ Jun Uchida, *Brokers of Empire: Japanese Settler Colonialism in Korea, 1910-1937* (Cambridge: Harvard University Press, 2011), 68.

ignorance, using what Todd Henry calls “the language of Japanese othering.”⁸¹ Not surprisingly, the “hygienically backward” state of native houses figures prominently into this account, which was quick to identify the *ondol* as the wellspring of Korean sloth.

Wrote Usuda:

Without developing ambition in isolation, without entering a fully zen state, without nurturing their imaginations, without a sense of urgency for the nation, without using their spare time to read even if they have a large library in back, they are only concerned about whether they have enough clothing, food, and if the house is comfortable.

“In sum,” he concluded, “the *ondol* lifestyle is to seclude oneself and thus lethally poison the climate of enterprise.”⁸² Accompanying images such as Figure 6.4 served to propagate the belief among some Japanese that Koreans simply idled their time on the *ondol* floor, preferring a pipe full of tobacco over an honest day’s work. Some Japanese went so far as to assert, categorically, that this laziness was ingrained within the Korean race: “The amount of work that the most industrious of them can finish in a day,” wrote Okita Kinjō in his popular ethnography *Korea Behind the Mask*, “does not even amount to what a Japanese can finish in a half-day...It is simply their inherent laziness that keeps them from doing so.”⁸³ Koreans were, by yet another formulation, a “kotatsu-esgue people”: a national body that would rather slumber under the *kotatsu*, a heated blanket commonly used in Japan, than labor on behalf of society.⁸⁴

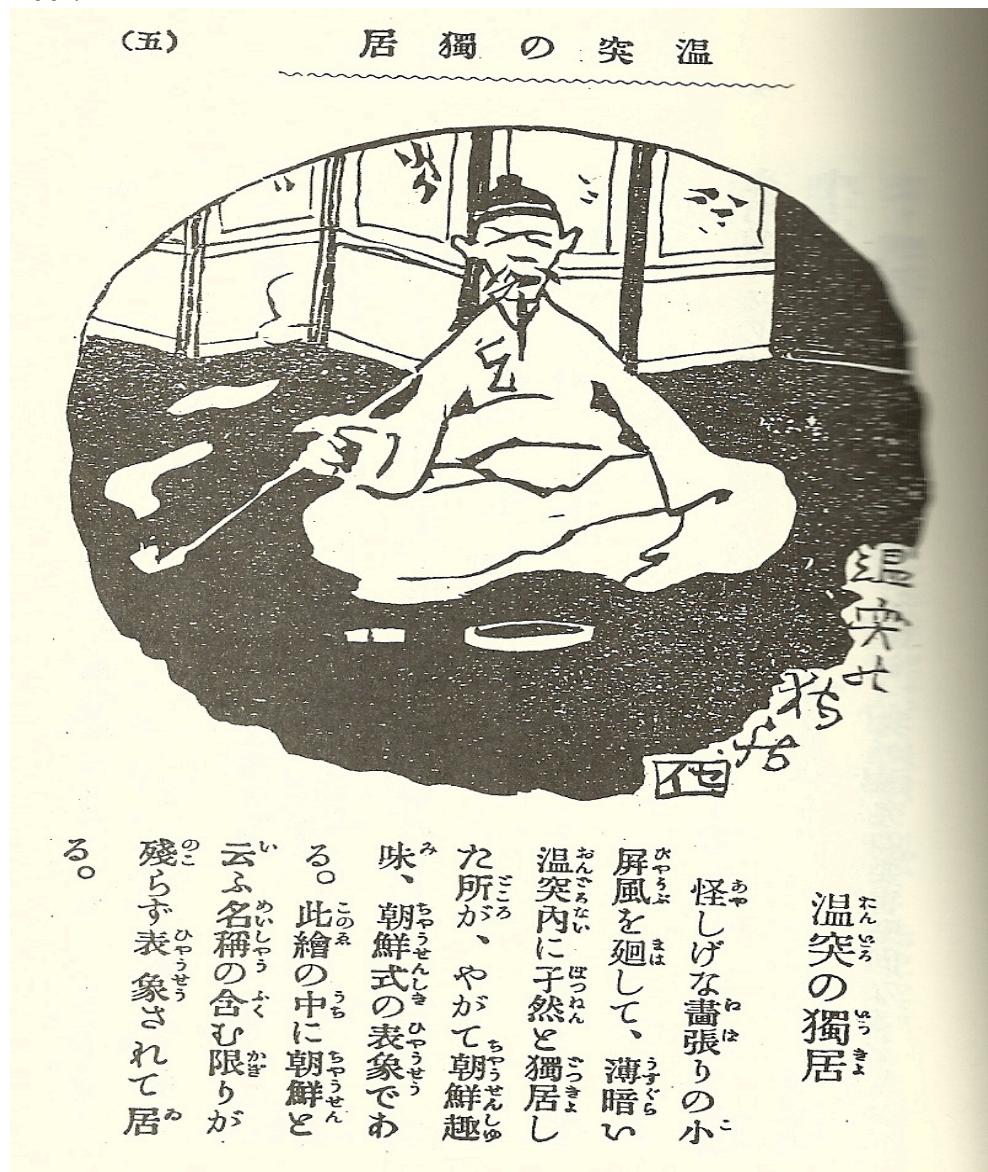
⁸¹ Todd Henry, “Sanitizing Empire: Japanese Articulations of Otherness and the Construction of Early Colonial Seoul,” *Journal of Asian Studies*, Vol. 64, No. 4, 2005, 646-7.

⁸² Seiki Torigoe and Usuda Zan'un, *Chōsen Manga*, (Keijō: Nikkan Shobō, 1909), 6.

⁸³ As cited in Duus, *The Abacus and the Sword*, 405.

⁸⁴ As cited in Kwōn Sōg-yōng *Ondol ūi kūndaesa*, 83.

Figure 6.4. A caricature of a sedate Korean *yobo* smoking his pipe on the *ondol* floor.



Source: Seiki Torigoe and Usuda Zan'un, *Chōsen Manga*, 5.

Still other Japanese objected to the *ondol* on the grounds of women's liberation. That the *ondol* system maintained the inner- (K: *an-chae*) and outer-chamber (K: *sarang-chae*) division to the Korean home, which had long kept Korean women confined to the innermost sections of the home, as prescribed by Confucian social code, was considered utterly anti-modern in the eyes of many Japanese. If the Government-General was to inculcate modern sensibilities in Korean minds, it was argued, the social taboo against

women moving freely throughout the home needed to be stamped out.⁸⁵ A modern woman was to be seen and heard—and made available for labor, a reform initiative that the Government-General was especially keen to promote.⁸⁶ She was also to be an enthusiastic practitioner of “domestic household scientific management”: what Theodore Jun Yoo calls “the mastery of scientific ideas like hygiene and sanitation that would make the kitchen more modern and efficient.”⁸⁷ Doing away with the architectural conventions of the *ondol* was thus seen not only as an advancement of women’s rights but also as a catalyzing jolt to Korean industry.

Implicit in all of these critiques of the *ondol* is the belief that no Japanese in their right mind would lead such a shiftless existence. Endowed with a hardy Yamato spirit and infused with modern ideas of hygiene, industry, and progress, Japanese settlers, it was argued, were incapable of such indolence. But neither the Yamato spirit nor modernity could warm their bodies. For that they needed a stove, which usually came in the form of an *ondol*. However easy it may have been to denigrate the *ondol* lifestyle, it was a necessary, time-tested part of life on the peninsula. So much so that the official residences of the government-general, numerous Japanese military barracks, and the dormitories of many Japanese corporations included *ondol*.⁸⁸

⁸⁵ For more on this sort of critique see Theodore Jun Yoo, *The Politics of Gender in Colonial Korea: Education, Labor, and Health, 1910-1945* (Berkeley: University of California Press, 2008).

⁸⁶ Stated one Government-General publication from 1913: “It is a matter of congratulations that many of the women, who in former days spent their time mainly in idleness, have received training in sericulture, filature, knitting, weaving, and other works, and showing their appreciation by taking up such employments.” Government-General of Korea, *Annual Report on Reforms and Progress in Chosen*, Seoul, 1912, 31.

⁸⁷ Theodore Jun Yoo, *The Politics of Gender in Colonial Korea*, 87.

⁸⁸ Kwǒn, *Ondol ūi kǔndaesa*, 95-96.

But as the trickle of Japanese settler colonialists turned into a flood—and as a new generation of Japanese youth began to be born abroad in the colonies—participation in the *ondol* lifestyle by Japanese settlers began to weigh heavily on the minds of colonial officials. The following words of concern from Okazaki Tōmitsu, a Japanese physician writing in *Chōsen oyobi Manshū* in 1912, evidence this anxiety:

Furthermore, there is a matter that one cannot overlook from the perspective of the development of national power, that is, avoiding the yoboization of native Japanese who immigrate to Korea. Put another way, Japanese residing in Korea must not change their homeland lifestyle conditions in perpetuity. The first step in satisfying this need is bringing the conditions of the [Korean] home into conformity with that of the homeland.⁸⁹

Although few would have agreed with his call for a ban of its construction, the general motifs of his rhetoric were echoed widely.

Not all Japanese thought ill of the *ondol*, however. Tamari Kizō, for one, a professor at the Morioka School of Agriculture and Forestry, saw in the *ondol* a ready alternative to the Japanese *kotatsu*, which he thought to be wasteful and deleterious to health. He also saw the *ondol* as instrumental to Japan's northern expansion into the increasingly inhospitable climates of Manchuria, Mongolia, and Siberia. Uniquely suited to facilitate settlement in harsh winter climates, the *ondol*, many reckoned, was indispensable to enabling life in *mansen*: the expanding sphere of Japanese influence that was to be fueled by the settlement and labor of large numbers of Japanese on the continent.⁹⁰ It was therefore imperative that the Japanese further investigate how it could

⁸⁹ Okazaki Tōmitsu, “Ondoru ni tsuite,” *Chōsen oyobi Manshū*, Vol. 52 (June 1912), 33.

⁹⁰ As cited in Kwōn, *Ondol ūi kǔndaesa*, 80-81.

be exported to Japan's imperial frontiers. Before long, others would be talking up how a "new and improved *ondol*" was perfectly suited for life in Manchuria.⁹¹

Perhaps the highest profile defender of the *ondol* was Kon Wajirō, the urbanist, architect, and father of the modernology movement in Japan. Invited to Korea by the Government-General in 1922 as part of the colonial government's effort to better understand, if not tolerate, Korean folk customs in the wake of the March First Movement, Kon undertook a month-long survey of Korean folk houses (*minka*) in the vicinity of Kyōngsang and P'yōng'ān Provinces. As he saw it, the *ondol* formed a defining feature of Korean folk architecture—it was something that could not simply be eradicated, if for no other reason than historical preservation. Although in the final report he submitted to the Government-General he acknowledged that there was a fuel problem in Korea, he deemed the *ondol* both hygienic and suitable for heat retention—provided that simple measures (such as the more efficient use of bedding) were taken.⁹²

At stake for Kon, as others, was not simply the rationalization of heat consumption but the aesthetics of design and the preservation of traditional building practices. In the eyes of Ogawa Hiromichi, a professor at the Keijō Higher Technical School (the premier training ground for Korean architects during the colonial period), the Korean home, like any other, served many functions: it was a giver of a warmth, sustenance, and protection; a place of relaxation and enjoyment; and an expression of

⁹¹ See, e.g., "Fuyu no manshū ni ureshii, Shinshiku ondoru," *Manshū nichinichi shinbun*, August 12, 1938; and Takeda Goichi, "Mansen no jyūtaku kenchiku," *Osaka mainichi shimbun*, September 6, 1916.

⁹² Kon Wajirō, *Chōsen buraku chōsa tokubetsu hōkoku, Vol 1. (Minka)*, (Keijō: Chōsen sōtokufu, 1924), 16-17. An explication of this report can be found in Ch'oe Sok-yōn, "Ilcheha Kon Wajirō ūi Chosŏn min'ga chosa bangbōp kwa insik," *Hyondae munhak ūi yōng'u*, Vol. 35 (2010), 191-229.

history, religious belief, and the the reconfiguration of the natural world. To Ogawa, the value of Korea's traditional architecture was not only that it captured and conveyed Korea's history and culture, but also that it had evolved over centuries in response to Korea's harsh and variegated climate.⁹³ Whatever the advancements of industrial, modern designs, he reasoned, Japanese architects and builders could not simply ignore the harsh demands of the peninsular environment: “to aimlessly adhere to tradition and transfer as is the architecture of mainland Japan to Korea is an extremely foolish thing.”⁹⁴

This was music to the ears of Son Chin-t'ae, a young Korean trained in ethnography at Waseda University in Tokyo (where Kon was then a professor), who became in the 1930s a central figure in the movement to document Korean folk culture. To Son, the *ondol* formed the very fount of Koreanness. In one article entitled “Praise for the Ondol” (*Ondol ye'chan*), Son described the *ondol* as “the placenta” of Korean culture and a “loving mother” that had nurtured the Korean race.⁹⁵ To fixate on its disadvantages was to ignore the beauty of Korea's folk customs. Although few would employ such grand terms, Son was not alone in celebrating *ondol* culture or calling for its active preservation. He was but part of a chorus of Koreans determined to document its history and to celebrate the *ondol* as a deep-seated source of tradition and pride, whatever the state of the forest.

⁹³ What Ogawa saw in Korea was in essence an inherent tension between the practical and industrial designs of modernism (which placed a premium on functionality) and the preservationist instincts of traditionalism (which valued the aesthetic and outward appearance). Both had their virtues, he argued, and both needed to be considered. Although he did not wade directly into the *ondol* debate, he nevertheless offered an important reminder that the value of the home extended well beyond its thermodynamic qualities. Ogawa Hiromichi, “Kishō to chōsen no kenchikubutsu” *Chōsen*, Vol. 195 (1931), 126.

⁹⁴ Ogawa Hiromichi, “Kishō to chōsen no kenchikubutsu,” 129.

⁹⁵ Son Chin-t'ae, “Ondol ye'chan,” *Pyōlgōn'gon*, Vol. 12/13 (1928), 188-189.

Published as it was in 1928, Son’s call for a celebration of the *ondol* coincided with a significant shift in the *ondol* debate. If the 1910s were marked by a reactionary call for abolishment of the *ondol* and its associated practices, the 1920s were characterized by an empirically-driven push to put forward pragmatic policies on *ondol* reform. Indeed, by the late 1920s, the question had changed from whether to how to re-configure the Korean home—a point on which foresters agreed. To Takahashi and others, it was imperative that Japanese settlers and officials move quickly to implement various practical improvements to the Korean home.

Upper-class communities of Japanese settlers were quick to heed this advice. While to one Japanese settler “the Korean home was extremely outmoded” and “unfit in every facet of the modern person’s lifestyle,” any “cultural home or Japanese-style home must retain heat during cold winters, and in this they are inferior to the Korean *ondol* central to most homes.”⁹⁶ In the author’s opinion, reforms should “take the *ondol* as the foundational basis and draw up a new form for the layout of the Korean home.”⁹⁷ Indeed, for the Japanese households with finances enough to re-model their homes, traditional Korean buildings became the foundation for two-floor structures that blended Western, Japanese, and Korean architectural styles.

Popularly called “cultural homes” (K: *munhwachut’ae*; J: *bunkajūtaku*), these structures appeared in increasing numbers across the urban centers of the peninsula. In addition to constructing a second floor that provided for better circulation of heat, these homes diverged from conventional *ondol* insofar as they sometimes included smaller heating units in multiple rooms, and often incorporated hot water, gas, or *pechka* heaters

⁹⁶ “Chōsen kaoku no kairyō ni tsukite,” *Keijō nippō*, May 28, 1931.

⁹⁷ “Chōsen kaoku no kairyō ni tsukite,” *Keijō nippō*, May 28, 1931.

(imported from Russia). In the words of Dr. Ikegami Yōkichi, the chief of a hospital in Seoul, while “to the ordinary person immediately imagines a *yobo*-style gloomy room when they hear *ondol*, it is more than just a gloomy room. In Keijō there are more than a few people who are constructing much-advanced *ondol*,” which, he went on to say, contribute to better ventilation, hygiene, and lighting.⁹⁸ Rather than replace the *ondol* altogether, these structures simply integrated the *ondol* into a more sophisticated system of heat control, conservation, and dispersal.⁹⁹ Increasingly common was the installation of a single *ondol* floor room to be used during the winter, while the family would sleep upon tatami and futon whenever the weather would permit. In so doing, the elite communities of Japanese settlers, those most loathe to live like *yobo*, were able to distance themselves from the *ondol* lifestyle and its derogative connotations.

That Doctor Ikegami’s advice was offered as one of eleven contributions to an ongoing series published in the *Keijō nippō* under the title “Problems of the home” reveals the keen interest among many Japanese in *ondol* reform. The series gave voice to a litany of frustrations with the *ondol* as it touched the lives of urban-based settlers: it caused colds, it was aesthetically jarring, it was unsanitary, it led to water drainage problems, it was outdated. But the series of articles also expressed a wide variety of heating-related recommendations. Beware of Japanese-style pillows which unlike Korean-style wooden pillows conduct heat and are thus can lead to colds and other ailments; invest in a pechka heater, which according to one housewife was “more

⁹⁸ “Jūtaku mondai,” *Keijō nippō*, February 19, 1918.

⁹⁹ The modern trappings of these “cultural homes” merit comparison with those then proliferating in mainland Japan. For an exhaustive treatment of the construction and design of modern homes in Japan see Jordan Sand, *House and Home in Modern Japan: Architecture, Domestic Space, and Bourgeois Culture, 1880-1930* (Cambridge: Harvard University Press, 2004).

hygienic, more economical, and extremely beneficial”¹⁰⁰; shift your heater and kitchen indoors, which leads to “better and more sanitary water drainage.”¹⁰¹

Although they offered different recommendations, most commentators shared their confusion about the erratic nature of building designs in Korea and a frustration with the seemingly inescapable cold. Satō Hidemitsu, for instance, the managing director of a leather company, expressed dismay at the lack of consideration given to heat protection in Korean homes and the “coarse pure Japanese style architecture or defective extreme mix of styles” left one’s daily life subject to “the invasion of the cold” that could “chip away at the freedom of daily life as well as profoundly affect one’s productivity.”¹⁰² What he called for was the construction of an *ondol* in between Japanese-style rooms and its usage only when absolutely necessary: a rational compromise that balanced the functionality of the *ondol* with the desire for a more coherent Japanese aesthetic.

These conversations were echoed in Korean communities as well. The following comment from Yi Kwang-su (1892-1950), the nationalist writer who in the 1920s-30s wrote on the need to “remake” Korea’s national consciousness and reform its national character, offers a sense of the elite Korean view of the *ondol* (at least among those who shared his outlook):

The Japanese that have come to Korea have consolidated their bedroom to a single *ondol*. This is much more rational. Those who grow accustomed to the *ondol* become fearful of stepping outside during winter. For the elderly, it is suitable. But there is a need to improve the home system so that, other than for sleeping, the young, active person is not ensnared by the *ondol*... The warm *ondol* has, since our infancy, weakened our body’s sustaining power and worn away at the vigor of our spirit. A life spent hunched over on the warm spot of the floor means to totally avoid struggle and seclude oneself.

¹⁰⁰ “Jūtaku mondai,” *Keijō nippō* February 11, 1918

¹⁰¹ “Jūtaku mondai,” *Keijō nippō*, February 12, 1918.

¹⁰² “Jūtaku mondai,” *Keijō nippō*, February 10, 1918

Yi concluded that “even if the *ondol* remains as is, I want the *ondol*-style lifestyle and mentality be eliminated as soon as possible and to return to a primeval time when we battled with beasts in the snow-covered mountains.”¹⁰³ Although few Koreans would have taken such a hardline, many well-to-do Koreans did seek out the trappings of the modern home and implement a wide range of architectural and aesthetic reforms.

Other Korean commentators like the medical doctor Pak Chong-sök were more practical in their commentary on the *ondol*. Viewed from the standpoint of public health, suggested Pak, the *ondol* was problematic: it hindered ventilation, blocked out sunlight, and produced overly dry interior conditions. This stood in marked contrast to the elaborate heating dynamics of the modern Korean home: “In recent times Korea seen the gradual increase of various sorts of cultural homes, which has also led to various methods for the provision of the needed heat during the winter.”¹⁰⁴ Coal-burning furnaces, pechka heaters, gas, hydraulic, and electric stoves: these and other heating systems are identified by Pak as fixtures of the newly modernized cultural home.

But while Pak was solicitous in his praise for these new heating technologies, he, like Japanese ondologists, was more interested in rationalizing *ondol* usage than in condemning its usage. When compared to the “ancestral tradition of the *ondol*,” he wrote, these “outside” heating systems were “troublesome” for many Koreans and something that could only be “longed for.”¹⁰⁵ Rather than waste ink writing about heaters that would never make their way into a majority of Korean homes, he argued, it was imperative that Koreans implement more practical reforms that would, overtime and in the aggregate,

¹⁰³ Yi Kwang-su, “Ondol,” *Chosŏn Ilbo*, January 9, 1934.

¹⁰⁴ Pak Chong-sök, “ŭihaksang ūro bon ondol,” *Chogwang* (February 1936), 215.

¹⁰⁵ Pak Chong-sök, “ŭihaksang ūro bon ondol,” 215.

serve to economize the *ondol*. These measures ranged from the inclusion of flower trays in the home to circulate oxygen to the curtailment of summer *ondol* usage and the adoption of cold food diets for both humans and domesticated animals (which had long enjoyed a stew-like feed called *soejuk*).¹⁰⁶

In offering pragmatic commentary geared to the majority of Koreans homes, Pak's commentary also raises the question of how these initiatives were received by rural communities, which many considered to be the true source of deforestation. The Korean farmer's place in the *ondol* debate is indeed much more difficult to situate. On the one hand, there is evidence of the willing participation of Koreans in *ondol* and fuel improvement campaigns, which were vigorously promoted through local civic groups and forestry cooperatives. As part of their effort to curb the collection of collection of grasses from the forest, one Forest Love Association established in 1931 in the village of Yongsang (Naju County, South Chōlla Province), for instance, installed in 172 *ondol* mouth covers in the 86 homes belonging to its members. As discussed in Chapter Five, these associations were also active participants in the drive to increase local production of charcoal and other alternative fuels.¹⁰⁷ Members of this same Forest Love Association also pooled their capital to purchase a rice huller, which produced in 1934 7,500 *kan* of rice husks (*momigara*) for fuel—or about 10 percent of the villages annual fuel requirements.¹⁰⁸

But ample evidence also suggests that many Koreans simply shunned these reforms or, as *hwajönmin*, remained outside the reach of government initiatives.

¹⁰⁶ Pak Chong-sōk, “ŭihaksang ūro bon ondol,” *Chogwang*, (February 1936), 216.

¹⁰⁷ See, e.g., “Ondol kaeryang e songgōng,” *Maeil sinbo*, June 19, 1941.

¹⁰⁸ Chōsen Sanrinkai, ed., *Minyū ringyō jisekishū*, 75.

Concerns over the ability to meet fuel consumption needs as a result of the land-redistribution measures of the state found routine expression in newspapers. But far more widespread were the subversive and desperate acts of everyday life: the collection of faggots in national forestland; the burning of forestland to grow enough food to eat; the continued collection of grass and detritus for fuel.¹⁰⁹ Especially in the northern region of Korea, forest related problems remained a constant concern for administrators.¹¹⁰ By one estimate, as of April 1938 around 33,000 criminal incidents “with origins in *ondol*”—banditry chief among them—had been committed.¹¹¹ If, as Chon U-yōn has written, Korean farming communities have long used the phrase “to starve to death or to freeze to death—both are death all the same,” this notion surely found new salience in the 1930s as Koreans, cut off from fuel sources, struggled to meet their fuel needs.¹¹²

Fragmentary evidence also suggests a gap between the word and deed of Japanese settlers. According to Kageyama Nobukage, a longtime Japanese bureaucrat who for many years directed forestry policy, while the *ondol* was economical in the sense that the re-purposed the heat for cooking to warm the home, some Japanese simply paid little attention to energy conservation. “Even though Japanese would install *ondol* in their official residences,” he remembers, “[Japanese officials] would light it separately for every meal and light it again for their bath water—we were doing a terribly wasteful thing (*hijō ni fukeizai na koto*).”¹¹³ Japanese reforms were only as good as those who

¹⁰⁹ Ōkaga Yui, “Kadenmin no seikatsu ni tsuite,” *Chōsen sanrinkaihō*, Vol. 143 (1937), 29-37.

¹¹⁰ DRSK, 132.

¹¹¹ “Ondol ūro in han pōmjoe,” *Maeil sinbo*, April 21, 1938.

¹¹² Chon U-yōn, (Kim San-yun trans.), *Mori to kankoku no bunka* (Tokyo: Kokusho kankōkai, 2004), 137.

¹¹³ TYBK, 433.

enforced and enacted them, and in this case, it appears, the individual desire to stay warm in some cases trumped the long-term economic goals of conservation. Although anecdotal, his comment offers a reminder that those with the resources were able to operate outside the colonial state's conservationist agenda. It also raises the question of implementation. How did this larger debate about modern efficiency and civility actually shape resource management policies? What measures, beyond funding research, were actually taken by the Government-General to resolve Korea's *ondol* problem?

Implementing Improvements

The implementation of *ondol* improvements proceeded in two principal forms: "one about encouragement, the other restraint."¹¹⁴ Regarding the former, colonial officials did all that they could to encourage the use of new fuels, improved stoves, and intelligent burning practices. Regarding the latter, the Government-General tightened controls on the collection of fuel by increasing forest constables, strengthening the forest penal codes, and monitoring local burning practices, especially in areas known as strongholds of slash-and-burn agriculture. In both cases, officials turned to the many and various local level associations discussed in the previous chapter to implement these measures.

The true engine of this effort was a public relations campaign. Using a variety of platforms including radio, pamphlets, billboards, and lectures, the colonial government and its foresters preached the gospel of intelligent burning practices and sounded the alarm of the fuel crisis. After conveying to readers the distressing tabulations of a recent study on the cost of *ondol* consumption—in fuel, timber, and yen—one article

¹¹⁴ DRSK, 274.

proclaimed that “the economization of fuel consumption is forest preservation,” and invited Koreans to “curb waste in order to prevent the return of red mountains.”¹¹⁵ Yet another laid out for readers basic measures they could take at home both to preserve fuel and prevent fires, then a problem in urban Korea.¹¹⁶ Still another article informed readers of an upcoming lecture series to be held in Gonju County, South Ch’ungch’ong Province by the local forestry cooperative on *ondol* improvement. It included a detailed list of “the defects of traditional *ondol*” and “the virtues of an improved model.”¹¹⁷

At the same time as officials addressed the problem in print, a small band of officials and local leaders began to spearhead the retro-fits and physical structural reforms to the *ondol* that many saw as the fundamental way forward. At the heart of these efforts was the improvement of the *ondol* mouth—a design flaw that could easily be remedied through simple renovation. To that end, provincial governments, upon receiving authorization from the Government-General, began in the 1930s to issue subsidies for *ondol* mouth improvement, which often amounted to the installation of a tin-plated or clay door (see Figure 6.5). They likewise allocated funding for the training of Korean builders in techniques that would provide for better insulation and more efficient *ondol* construction. By 1939, 37 percent of stoves across the peninsula had been improved in one way or another.¹¹⁸ This figure offered hope that the problem was being resolved, but also vexed many as progress came rather slowly.

¹¹⁵ “Chosŏn ondol yŏllo munje,” *Chosŏn ilbo*, January 16, 1927.

¹¹⁶ “Hwajae nŭn ondol esō,” *Chosŏn ilbo*, January 30, 1925.

¹¹⁷ “Ondol kaeryang yŏnsūp,” *Chosŏn ilbo*, August 21, 1924.

¹¹⁸ Takaichi Keifuku, “Ondoru takiguchi kairyō no ichikōsatsu,” 37.

Figure 6.5. Photographs of lids applied as part of the *ondol* improvement campaigns.



Source: Takaichi Keifuku, “Ondoru takiguchi kairyō no ichikōsatsu,” 38.

It was not forestry officials alone, however, who implemented these reforms.

Local communities also often took the initiative to implement *ondol* improvement campaigns. One county-level Forestry Association in P’och’ŏn County (Kyōnngi Province), for instance, designated one cluster of villages a “designated area of *ondol* improvement,” and subsidized by half the installation of 138 *ondol* mouths.¹¹⁹ The initiative of the Forest Owners Association in Asan County (South Ch’ungch’ōng Province) was even more robust. Working through the members of the Forestry Association and in cooperation with a finance association (which helped fund the operation), 400, 817, and 1,200 stove mouths were improved in 1931, 1932, and 1933 respectively. The operation also funded the employment of inspectors who patrolled villages to ensure that housewives did not subsequently remove these stove lids—the incidence of which strongly suggests that not all Korean families were willing

¹¹⁹ Chōsen sanrinkai, ed., *Minyū ringyō jisekishū* (Keijō: Chōsen Sanrinkai, 1934), 38.

participants in this campaign and that the lived experience of women were disproportionately affected by these reforms.¹²⁰

Forestry officials also vigorously promoted the local production of charcoal. As a locally produced and comparatively efficient fuel, charcoal was seen by many as one of the few practicable solutions to the fuel crisis. Japanese foresters accordingly held workshops, gave lectures, and in some cases subsidized the undertaking.¹²¹ They placed particular emphasis on the establishment and maintenance of *shintanrin*—parcels of (typically sawtooth oak) forest that would be managed by communities expressly for the purposes of furnishing wood and charcoal.¹²² That local charcoal production dovetailed with calls for the creation of Forest Owners Associations—a communal entity capable of executing such a technical, large-scale undertaking—surely fueled their enthusiasm for the project. And while it took a number of years for local operations to get into full swing (due in part to the time-consuming nature of the process), by 1939 the demand for charcoal was as high as 40,000,000 *kan*, up nearly fifty percent from just two years prior.¹²³ When coupled with stove door improvements and the other practical fixes—e.g., bedding, cold food diets, curbing usage in summer—this campaign was in the eyes of some foresters paying dividends by the late 1930s, a time when scarcity touched the lives of Koreans and Japanese alike as never before.

¹²⁰ Chōsen sanrinkai, ed., *Minyū ringyō jisekishū*, 51.

¹²¹ Kakeba Sadakichi, “Mokutan no zōsan taisaku,” *Chōsen sanrinkaihō*, Vol. 105 (1933), 2-12; a broad overview of these policies can be found in DRSK, 159-163.

¹²² See, e.g., Hayashi Mitsuhiro, “Shintanrin no kaizō to seitan jigyō no kairyō shōrei ni tsuite,” *Chōsen sanrinkaihō*, Vol. 79 (1931), 5-8.

¹²³ DRSK, 160.

Concomitant with this spirited improvement campaign by local governments and forestry officials was the growth of a private *ondol* industry. Indeed, while the market largely failed to deliver coal to Korean homes, it spurred a great deal of creative innovations to the stoves themselves. Eager to corner a market for modern heating appliances that the colonial government itself had abandoned, a number of enterprising Japanese settlers and engineers set out to peddle improved *ondol* of their own.

In some cases, the growth of this market stemmed directly from the Government-General's efforts to underwrite research into the fuel problem. Onodera Heita, for instance, first started his *ondol* improvement research in his capacity as a local official charged with the promotion of agricultural cooperatives in South Chōlla Province. It was there that he undertook a wide range of research into potential structural innovations to the *ondol*, which he later used as the basis for the establishment of his own company specializing in the construction of what he and others called “reformed *ondol*” (*kōseishiki ondoru*).¹²⁴ According to Onodera, the virtues of the reformed *ondol* were many: whereas a traditional stove required 3-4 lightings, an improved stove required just one (which could last for weeks); whereas a traditional *ondol* cost between 15-30 *sen*, an improved cost just 3-4 *sen*; and whereas a traditional *ondol* was characterized by extreme temperature fluctuations, an improved “maintains an extremely pleasant temperature.”¹²⁴

Onodera was but one of a growing number of Japanese entrepreneurs competing for an edge on the improved *ondol* market—a market that rarely extended beyond the confines of the largest cities in Korea. Whatever the subtle differences in design, all of these *ondol* manufacturers made reforms to conventional style *ondol*, focusing principally

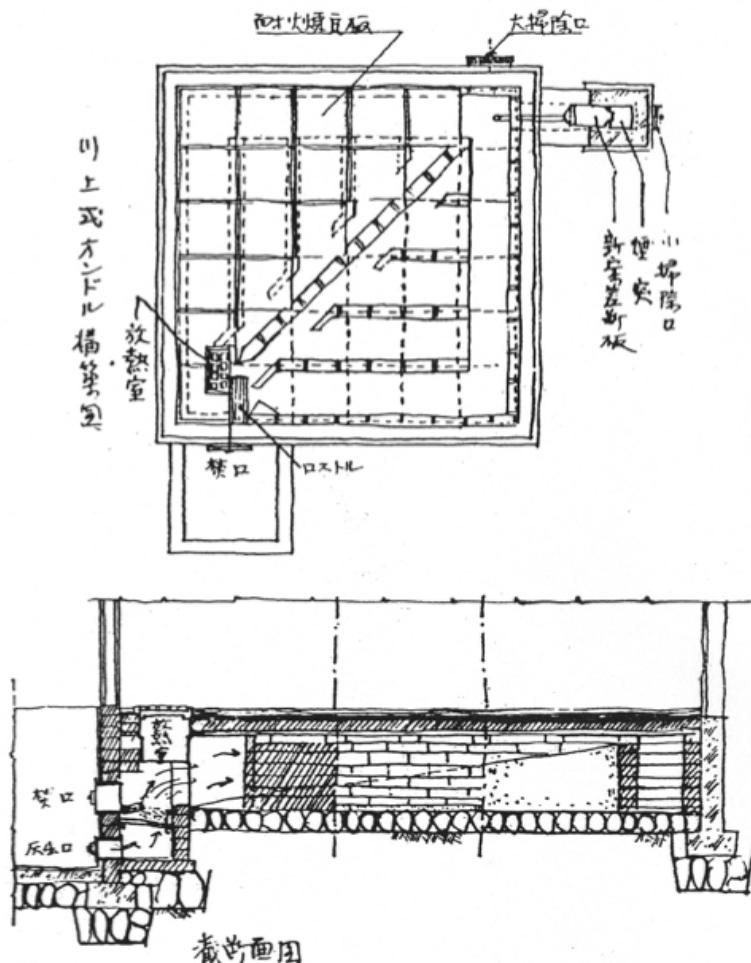
¹²⁴ Onodera Heita, “Hoonyō nenryō riyō mondai to ondoru sōchi” *Chōsen sanrinkaihō*, Vol. 98 (1933), 36-37.

on the stove mouth, pipes, and chimney. The first to be patented was the so-called “Kawakami-style” *ondol* (see Figure 6.6). Invented by Kawakami Sanjūrō in 1927 (and granted two utility model patents), the Kawakami *ondol* was marketed for its durability and its ability to maintain a pleasant temperature and air moisture. It added a cast iron radiator plate to the mouth of the stove, inlaid the pipe-system with bricks in a leaf-like pattern, and installed firebrick mortar.¹²⁵ It also added a heat-retention disc to the chimney to prevent freezing. According to the estimates of the designer, it was able to cut in half the fuel costs and was more durable. Accurate or not, the Kawakami *ondol* sold well: as of June 1928, just a year since it hit the market, 1,510 had been installed across the country.¹²⁶

¹²⁵ Kawakami Sanjūrō, “Kawakami-shiki ondoru no hanashi,” *Chōsen to kenchiku*, Vol. 6, No. 6 (1928), 25.

¹²⁶ Kang Sang-hun, “Ilche kanjōmgi Ilbonindŭl ūi ondol e taehan insik pyōnhwa wa ondol kaeryang, 258-260.

Figure 6.6. A sketch of a Kawakami-style *ondol*.



Source: Kawakami Sanjūrō, “Kawakami-shiki ondoru no hanashi,” *Chōsen to kenchiku*, Vol. 6, No. 6 (1928), 29.

The improved-*ondol* that subsequently hit the market were variations on a theme.

The Muraoka-style *ondol* dropped the position of the stove mouth lower and increased the size of the stove, which allowed for better circulation. The Ōno-style *ondol* was distinguished for its placement of the *ondol* on a podium. Subtleties in design and mechanics of this sort notwithstanding, these improved *ondol* all essentially offered the same thing: stable room temperatures and dry and well-ventilated rooms. Using new raw

materials (such as ferro-concrete) and new technologies (such as the ground plates and timers), these *ondol* offered those wealthy enough to afford them a traditional heating method in a modern package. That they were often marketed as “cultural *ondol*” (*bunka ondoru*) as well as cutting edge pieces of technology bespeaks the nostalgia that had taken shape around the heated floor.¹²⁷

And yet, for all the advancements in technology and the efforts of local officials, the *ondol* problem was far from resolved. To the contrary, until the very end of the colonial period a number of problems persisted. According to Takaichi Keifuku, three principal obstacles hobbled this reform effort. The first was the fact that furnace opening improvement was not cheap, meaning that it appealed less to rural Koreans—the very group they sought to target with this reform agenda. By Takaichi’s estimates, it costs about 1 yen per furnace opening, but in many rural households there are 3 or more furnace openings.¹²⁸ A second obstacle stemmed from the fact that provincial subsidies were difficult to obtain for many rural Koreans who were sometimes unaware of the campaign. A third obstacle—Korean ignorance—verged on the “humoresque” according to Takaichi. He provides examples of “Koreans having a lid attached but failing to properly close it” or Koreans having three *ondol* openings in a row but only installing one lid.¹²⁹

Conclusion

¹²⁷ Kang Sang-hun, “Ilche kanjōmgi Ilbonindūl ūi ondol e taehan insik pyōnhwa wa ondol kaeryang, 258-260.

¹²⁸ Takaichi Keifuku, “Ondoru takiguchi kairyō no ichikōsatsu,” 38.

¹²⁹ Takaichi Keifuku, “Ondoru takiguchi kairyō no ichikōsatsu,” *Chōsen sanrinkaihō*, Vol. 175 (1939), 38.

Writing about the burden placed on the bodies of Japanese citizens by Japan's swift modernization, Brett Walker has suggested that "ecological food chains...are essentially about the transference of energy; and in some respects the politics of nations are, too."¹³⁰ As this chapter has shown, these energy politics extended into homes and hearths of colonial Korea. Resourcing the empire was not solely about fueling industry and progress through the allocation of natural resources; it was also about provisioning the home with the heat needed to sustain everyday life. That arguably the most fundamental aspects of energy politics—the domestication of heat—is among the most overlooked is one of the ironies of the growing subfield of energy history. In the effort to trace resource flows, reconstruct extractive or generative processes, and explain market dynamics, the sensory, everyday experience of energy is overlooked.¹³¹

Running latent throughout the *ondol* debate was the human desire to stay comfortably warm in a bitterly cold place. Although this debate was framed in terms of fuel economization, resource allocation, and forestry policy, we must also remember that these politics shaped colonial Korea's most intimate interactions and social spaces: the heating of the bath; the preparation of meals; the comfort of the home. These quotidian experiences seldom figure into the studies of the colonial state (or energy history, for that

¹³⁰ Brett Walker, *Toxic Archipelago: A History of Industrial Disease in Japan* (Seattle: University of Washington Press, 2010), 177.

¹³¹ A few notable exceptions are H.C. von Baeyer, *Warmth Disperses and Time Passes: the History of Heat* (New York: The Modern Library, 1998); and Sean Patrick Adams, *Home Fires: How Americans Kept Warm in the Nineteenth Century* (Baltimore: Johns Hopkins University Press, 2014); and Mark Rose, *Cities of Light and Heat: Domesticating Electricity in Urban America* (Pennsylvania: Penn State University Press, 2004).

matter). But they figure prominently in the memories, perceptions, and sentiments—what Jun Uchida calls the “interior frontier”—of Japanese settlers and Korean subjects alike.¹³²

Increasingly, the *ondol* was accepted as a natural product of Koreans’ adaptation to the harsh continental climate. The task before Japanese reformers was thus to implement quick fixes and pragmatic reforms to the home itself: namely, the installation of lids, the promotion of local charcoal production, and lifestyle changes (such as diet and bedding adjustments). Such, at least, was the case in rural Korea. For urban elite, cutting edge *ondol* technologies also emerged as a fixture of the modern cultural homes, which sometimes incorporated other heating devices and often consolidated the *ondol* to a single room.

In their efforts to fine-tune and implement these improvements, forestry officials ventured into the realms of home economics, ethnography, and architecture. Although few were trained to undertake this sort of research, the particular demands of Korea’s fuel problem required that forestry experts attend to the inner workings of the Korean home. That officials such as Kakeba and Takahashi would delve so deeply into its materiality and rhythms is a testament to both the urgency behind the *ondol* problem and the close linkages between forestry and everyday life.

In bringing scientific methods to bear on the Korean home, foresters were not alone. As a staple feature of everyday life that structured not only fuel consumption but also building design, social/familial interactions, and home economics, the *ondol* was a

¹³² Writes Uchida: “Many former settlers had a tactile memory of living on *ondol* where they ‘slept and studied in the winter,’ or ‘lay flat on its cold surface to cool down in the summer.’ Settlers’ diet mirrored the pattern of dwelling, to selectively incorporate local customs into an overall Japanese lifestyle.” Jun Uchida, “A Sentimental Journey: Mapping the Interior Frontier of Japanese Settlers in Colonial Korea,” *The Journal of Asian Studies*, Vol. 70, No. 3 (2011), 710.

concern of many: Japanese and Korean architects in the Korean Architecture Association; doctors such as Pak Chong-sök and Ikegami Yōkichi; folklorists such as Kon Wajirō and Son Chin-t'ae; and writers as various as Ususa Zan'un and Yi Kwang-su. Insofar as this shared concern drew attention to the need to allocate resources towards the resolution of the *ondol* problem it was a blessing to forestry officials. But these interests did not always neatly align. The aesthetic concerns of architects were often of little interest to foresters concerned with practicable retro-fits. The recommendation of doctors to improve ventilation often cut against the grain of foresters' pleas for better insulation. The exhortations from settlers to incorporate Japanese-style building in Korea out of fears of yoboization muddled foresters' practical message of fuel economy and *ondol* improvement.

If the *ondol* problem presents a case study in the politics of sustainability, it also brings to the fore the politics of assimilation in colonial Korea. Woven into the rhetoric of *ondol* reform were statements about the reformation of the Korean disposition and national character.¹³³ Certainly, in the earliest decades of colonial rule, the *ondol* was held up as evidence of Koreans' cultural degeneracy. But as time wore on and as Japanese settlers came to accept the *ondol* as a bare necessity, this rhetoric ceded to calls

¹³³ Forestry officials outside of Korea were also considered with the assimilation of irrational forestry practices. In the United States, to take one example, federal foresters undertook a similar campaign to bring an end to the "light burning" practices of many local communities, which had long been associated with backwards "Indian way" of land management. In an episode almost perfectly contemporaneous with the *yobo* and *ondol* debates, foresters in the U.S. Forestry Service intentionally employed racist pejorative "Paiute forestry" to deride what they saw as unenlightened and deleterious burning practices—which sat in sharp contrast to their own newfangled methods of scientific forest management. For the definitive account on Paiute forestry see William Greeley, "Paiute Forestry, Or the Fallacy of Light Burning," *Timberman*, Vol. 21, 1920, 38-39. For a detailed account of American federal foresters and their criticisms of Paiute forestry see Stephen Pyne, *Year of the Fires: The Story of the Great Fire of 1910* (New York: Viking Press, 2001).

for the reformation of Koreans' daily habits and practices. It was not so much the *ondol* itself that was the problem; it was the way that Koreans were using it. It was therefore incumbent upon the state, settlers, and forestry reformers to diffuse a new set of best behaviors and practices. Such practices, it was thought, would not only ameliorate the *ondol* and fuel problems, but also inculcate Koreans with civic-mindedness, frugality, and a heightened environmental consciousness—values that had long been cast as hallmarks of the Japanese people. *Ondol* improvement, in this sense, formed to some a vehicle for national-improvement and the assimilation of the Korean people. By yoking the cause of forest conservation to daily decisions and practices, foresters aimed to nurture among Koreans a newfound enthusiasm for forest love thought, the subject of the next chapter.

CHAPTER 7

Forest Love Thought

For those tuned in to the Keijō Central Broadcast on April 2, 1936 the “moving tales of afforestation” (*shokurin bidan*) came in quick succession. As part of the lead up to Korea’s 26th annual ceremonial planting (J: *kinen shokuju*; K: *kinyōm siksu*), Yajima Sugizō, then Chief of the Bureau of Agriculture and Forestry, took to the airwaves to share with listeners the great achievements and colorful personalities of Korea’s forest conservation movement. He began with a well known story from Japan: that of Kinbara Meizen (1833-1923), an entrepreneur from Shizuoka Prefecture, who, upon seeing the damage wrought by the flooding of the Tenryū River in central Honshū, set out to reclaim the mountains surrounding his native soil. Using his own money and resources, Kinbara financed a massive, thirty-year-long afforestation project in a mountainous area that eventually became a large tract of imperial forestland, earning the praise of the Emperor himself.¹

Kinbara’s efforts were extraordinary. But they were not without comparison, for as Yajima noted, Korea had produced “small Kinbara” in each region—what he called the “afforestation pioneers of Korea” (*shokurin senkakusha*). Yajima offered as an example the story of Kim Hwa-du, a resident of the township of Pyōngkok (Hamyang County, South Kyōngsang Province). Realizing the dreadful state of the mountains surrounding his hamlet, Kim, together with his son, spearheaded the plantation of different varieties of oak—as many as 100,000 trees between 1912 and 1918—and the subsequent creation of a local Forest Protection Association. As time passed, the area

¹ Yajima Sugizō, “Kinen shokuju ni tsuite,” *Chōsen sanrinkaihō*, Vol. 133, (1936), 10. A detailed biography of Kinbara can be found in Nakayama Noritomo, *Kinbara Meizen: seisei hogo jigyō no senkakusha* (Shizuoka: Shizuoka seisei hogo kyōkai, 1966).

surrounding Kim's village had not just become a great forest, but "the production of fertilizer and fuel was abundant, and the villagers had for the first time achieved a stable lifestyle."² Yajima was quick to point out that "moving tales of afforestation could be told of different regions of Korea and are great in number." Although the details were different, the story was essentially the same: a local leader, stirred into action by the dreadful state of environmental decline, organized a collective response for the betterment of the local forests, local productivity, and, ultimately, the empire.

What united all these cases was the ostensible realization of *airin shisō* (愛林思想)—forest love thought—the ideological loadstone of colonial forestry in Korea. As discussed in Chapter Two, forest love thought was in essence a catch all term for the modern ecological sensibilities and environmental ethics championed by colonial foresters: the rational utilization of the forest's bounty, an appreciation of the subliminal power of forest scenery, service to the nation and empire through forest conservation, and an appreciation for the ways in which forests and forestry shaped everyday life. Forest love thought offered both self-improvement and spiritual reformation: "a pristine mountain environment," proclaimed Yajima, "brings great comfort to the individual and a verdant mountain area exerts much power to purify the spirit."³ But in their promotion of "forest love activities" (*airin undō*) forestry officials also envisioned a societal transformation. "The responsibility of forest protection involves the entirety of society," wrote Kada Naoji: "It is critical that it entail the efforts of those outside of the forestry

² Yajima Sugizō, "Kinen shokuju ni tsuite," 11.

³ Yajima Sugizō, "Kinen shokuju ni tsuite," 7-8.

industry and be a unified effort from all sectors of society.”⁴ Kada rattled off a number of means through which to achieve such a bold transformation: closer coordination between officials and the people, the further establishment of civic associations and youth groups, the surveying of famous trees and folklore customs, and the continued activities of the KFA.

But it was the ceremonial plantings held each April 3 that were unquestionably the “forest love activity” of choice for these officials. Although optional, these plantings aimed to bind each individual, household, and hamlet to the collective conservationist cause—a point clearly articulated by Yajima at the end of his radio address: “From province to district to county to village to hamlet, tomorrow there will be a ceremonial planting, so we hope that those who love the mountains will take the initiative to participate in the day’s planting events.”⁵ But on another level these plantings were also expressions of imperial fealty. Held on the anniversary of the death of Emperor Jimmu—the mythical founder of Japan—they marked an occasion for all residents of Korea to actively work towards the advancement of the empire as a whole.

That Japanese colonialism was undergirded by an ideological campaign to shape the values and behaviors of Korean subjects is a now well-established concept. But while scholars of colonial Korea have shed light on ideological dimensions of cultural assimilation,⁶ the wartime “imperialization” of Korean subjects,⁷ and public spectacle,⁸

⁴ Kada Naoji, “Airin undō no shakaika,” *Chōsen sanrinkaihō*, Vol. 75 (1931), 29.

⁵ “Yajima Sugizō, “Kinen shokuju ni tsuite,” 11.

⁶ See, e.g., Mark Caprio, *Japanese Assimilation Policies in Colonial Korea* (Seattle: University of Washington Press, 2009).

⁷ See, e.g., Takashi Fujitani, *Race for Empire: Koreans as Japanese and Japanese as Americans during World War II* (Berkeley: University of California Press, 2011).

the campaign to mold Koreans values into accordance with Japanese notions of ecological modernity has for the most part escaped scholarly scrutiny. Given their focus on the mechanics of forestry policy, Japan- and Korea-based scholars, meanwhile, have similarly overlooked the cultural dimensions of the forestry project in colonial Korea.⁹

As this chapter will show, the colonial state promoted an environmental ideology. Working hand in glove with the KFA, it did so in two principal fashions. First, it staged what I call spectacles of conservation: elaborate ceremonies and state rituals that were meant to prompt the masses into simultaneous acts of forest conservation that nurtured the landscape as well as a sense of civic pride. Second, it sponsored a multi-faceted, multi-sensory public relations campaign that made the tenets of forest love thought the stuff of everyday life. Radio broadcasts and “moving tales of afforestation” were among many platforms through which forestry officials promoted forest conservation to the general Korean public. This chapter examines both facets of the promotion of forest love thought—the spectacular and the ordinary—in order to enrich our understanding of the lived experience and ideological undercurrents of forestry reforms in Korea. Building on my examination of the *ondol* and the politics of fuel economy, I seek here to survey the larger ideological and rhetorical landscape of forests and forestry as related to everyday life.

Folk Forestry

From the very outset of colonial rule, the modern environmental ethics inherent to forest love thought were defined in contradistinction to the folk beliefs and ostensibly

⁸ See, e.g., Todd Henry, *Assimilating Seoul: Japanese Rule and the Politics of Public Space in Colonial Korea* (Berkeley: University of California Press, 2014).

⁹ One important exception is Takemoto Tarō’s *Gakkōrin no kenkyū*, which has done much to illuminate the promotion of forest love thought at home and in the colonies.

unenlightened forestry practices of Koreans. These deleterious customs came in many forms: myths about the healing power of trees; the practice of slash and burn agriculture; the collection of grasses for fuel; the obsession with pine trees. That Koreans clung to these superstitions and folk customs was considered a major impediment to the modernization of forestry at the grassroots level. Never mind that Japanese ethnographers such as Yanagita Kunio had thrown light on Japan's own forestry folk beliefs (which were often offered as evidence of its deep-rooted forest culture), forestry officials remained deeply concerned about the persistence of Korea's folk forestry and pressed for a fundamental re-configuration of the collective environmental consciousness of Koreans.¹⁰

Although the promotion of *airin shisō* was the lifeblood of this campaign, the slogan that most precisely captured Japanese foresters' views of the work before them was *shokuju airin* (植樹愛林): "plant trees, love the forest." It was Koreans' ostensible lack of *regenerative* instincts that most unsettled Japanese officials. While they could point to a long list of policies implemented during the Chosŏn period regulating access to forests and myriad customs of tree worship and reverence, they struggled to locate evidence of large-scale grassroots afforestation, even among *sonngye*. What they could find in spades, however, was evidence of tree-related superstitions. According to Saitō Otosaku, "the weak sense of tree planting and forest love (*aiju airin*) among the Korean people" found many expressions. Koreans, he noted, did not plant trees in the sedge bush surrounding tombs; feared planting trees within the confines of ones residence due to

¹⁰ See Yanagita Kunio, *Nihon Densetsu Meii* (Tokyo: Nihon Hōsō Kyōkai, 1971) in which he compiles a list of great trees and tree spirits. See also Yanagita Kunio (Ronald Morse, translator), *The Legends of Tono* (Plymouth: Lexington Books, 1975) in which he elaborates a theory on Japanese as mountain people or *yamabito*, deeply connected with forestry customs.

superstitions and legends; harbored superstitions (*meishin*) that trees near the home invite bad health (*akubyō*), and a related belief that sorceresses (*noro*) and other demons store their evils in trees.¹¹ Although embellished, comments of this sort gained currency during the first decade of colonial rule as officials began to strategize the ideological work of forestry.

Two incidents in the opening years of the colonial period hardened the view that Koreans were unpracticed in the ways of afforestation. The first was the commotion surrounding the commencement of the first large-scale afforestation and erosion control project in the outskirts of Seoul in 1907. Hoping to reclaim one of the more unsightly bald mountains looming over the capital and test the efficacy of Japan's erosion control methods on Korean soil, Japanese forestry advisors to the Korean government selected a hillside in Paegundong for targeted erosion control and, thus, aggressive afforestation. To do so, they invited Japanese experts, some of whom (such as Kobayashi Shōji) had gained extensive experience in the erosion control projects discussed in Chapter One.¹² No sooner had the work begun, however, than workers found themselves the object of curiosity and excitement of Koreans. Many of Korea's highest-ranking officials made visits to the site, which garnered tremendous public and media attention.¹³ That their undertaking was so novel to the Koreans who visited the area lent further credence to the notion that afforestation was terra incognita for most Koreans.

¹¹ Saitō Otosaku, “Kankoku tennō no seidai naru shinshokujyu shiki kyōkō,” in CRI, 34-35.

¹² This project is described in “Dōke Mitsuyuki, “Kankoku jidai no ringyō ni kansuru omoidebanashi,” in CRI, 8-9.

¹³ See, e.g., TYBK, 303.

Something similar could be said of the trial seedling dispersal program established in 1909. Using funds allocated from the Government-General as well as the Imperial Donation Fund, foresters established a program wherein any interested party could receive seedlings (sawtooth oak and chestnut) and saplings (sawtooth oak and red pine) free of charge from government-run nurseries freshly established in P'yōngyang, Daegu, and Suwŏn. Their hope was simply to furnish Koreans with the raw materials of forest reclamation. In 1909, just over 24,000 *ku* of seeds and 500,000 saplings were disbursed through this program.¹⁴ But while the seeds were quick to disappear, it became readily apparent to that some Koreans had little idea of how to properly use them. A close inspection of areas outside of Seoul, for instance, revealed that Korean communities were “eating the seeds for sustenance” or “burning the saplings in the *ondol* for fuel.” To some officials, the false start of this program made it clear that they would have to start with the basics of afforestation.¹⁵ In the years to come, this incident would be regularly marshaled to support the claim that the advancement of mass afforestation activities involving Koreans was hard won.

The subsequent waves of surveys carried out by forestry officials only lengthened the list of unenlightened forestry practices. Of particular importance was the Forest Registration Survey, which yielded the first national portrait of forestland ownership patterns and, crucially, local customs regarding forestry work. If anything, these surveys heightened concern over the pervasiveness of fire-field farming. To officials, few practices were more actively harmful to the forests—and more antithetical to the values of forest love thought—than the widespread practice of swidden agriculture. As described

¹⁴ Saitō Otosaku, “Kankoku tennō no seidai naru shinshokujyu shiki kyōkō,” in CRI, 34.

¹⁵ For rhetoric of this sort see, e.g., DRSK, 71.

in Chapter Five, foresters were quick to identify swidden agriculture as one of the most pernicious practices of Korean rural communities, especially in the northern provinces. Itinerant and stubborn, their lifestyle actively militated against the rational consumption patterns, sustainable forest management techniques, and civic mindedness espoused by forestry officials. Just as troubling was the portrait of Koreans' fuel consumption patterns and so-called *ondol* lifestyle that emerged from these surveys: pernicious burning practices that cut across geographic as well as socio-economic lines.

While forestry experts and colonial officials took steps to further understand these problems, others focused their attention on the spiritual undercurrent of Koreans' forest culture. Especially energetic in his effort to understand Korea's folk forestry customs was Ishidoya Tsutomu, who from 1916 to 1919 oversaw an ambitious project to compile a list of Korea's "great, old, and famous trees."¹⁶ Based in large part upon Honda Seiroku's own 1913 compendium of Japan's "old and famous trees,"¹⁷ Ishidoya collected details on the size, ownership status, and location of 3,200 different trees across the peninsula.¹⁸ Most importantly, he also collected details, wherever possible, on the preternatural or otherwise remarkable features of these trees, noting, for instance, how the residents of Chuksan Village (North Chōlla Province) held an annual New Year's ritual around a

¹⁶ Ishidoya Tsutomu, *Chōsen kyoju rōju meiboku shi* (Keijō: Chōsen sōtokufu, 1919).

¹⁷ Honda Seiroku, *Dai Nippon rōju meiboku shi* (Tokyo: Dai Nippon Sanrinkai, 1913).

¹⁸ A detailed comparative analysis of these two compilations is Satō Masaya, Abe Risa, Nomura, Kang Hun, and Seta Katsuya, "Nihon to Chōsen hantō no kyoju, jurui oyobi kyoju ni matsuwaru denshō no hikaku," *Shokuseishi kenkyū*, Vol. 21, No. 1 (2012), 3-19.

spirit tree¹⁹ or how anyone who manipulated one tree in the village of Chǔnggǒ (Suwǒn County, Kyōnggi Province) was liable to fall ill.²⁰

Ishidoya and subsequent researchers identified several different categories of notable trees in Korea: spirit trees, which were believed to harbor local deities; prayer trees, which were thought to yield special powers connected to the fate of local communities; famous trees, which were connected to local legend; village trees, which were the focal points of village rites and rituals. As varied as the types were the sources of their powers. In many cases, the trees were believed to have been planted by a king, wizard, or otherwise mystical/legendary figure, which endowed it with a particular power. Trees of this sort often became the subject of ritual: healing ceremonies, death ceremonies, prayers for protection from natural disasters, and so forth. Particularly commonplace was the practice of counting the germinated tree buds during auspicious periods of the year to forecast, say, the number of floods or the yield of crops. Many trees were also thought to hold healing powers, which often inspired elaborate rituals surrounding births, deaths, and the ill. Conversely, others were believed to bring illness or death to anyone who molested them.

Ishidoya's was but the most exhaustive of the growing canon of Korea tree culture research. The professor of forestry Ueki Homiki also produced rich studies of Korea's forestry customs and its famous trees. "Just as there are famous people, famous things and products, and famous mountains and rivers," he wrote, "so are there famous

¹⁹ Ishidoya Tsutomu, *Chōsen kyoju rōju meiboku shi*, 3.

²⁰ Ishidoya Tsutomu, *Chōsen kyoju rōju meiboku shi*, 4.

trees.”²¹ Where Ishidoya simply compiled data on these trees, Ueki went further to sketch out the spiritual topography of Korean tree worship: spiritual or otherwise notable trees, he noted, were particularly pronounced in the southern provinces, especially Kyōngsang and North and South Chōlla.²² Other researchers attended to the ecological logic of this spiritual topography: as numerous studies made clear, the tree species most regularly imbued with spiritual significance were Japanese elm (*Zelkova serrata*), red pine (*Pinus densiflora*), and, especially, Chinese hackberry (*Celtis sinensis*).²³

In the eyes of experts like Ishidoya, these superstitions were not harmful in their own right. Japan’s own belief systems, especially that of Shintō, after all, celebrated trees and often endowed them with incorporeal powers. But some Japanese officials interpreted these findings to mean that many Koreans were adhering to traditional folk beliefs at the expense of modern practices and forest love thought. When coupled, moreover, with crude characterizations of Koreans’ backwardness, sloth, and depravity, these studies cast the rural, farming Korean as a world apart from the environmental consciousness that foresters saw as an indispensable component of forestry reforms. To rectify these problems, some reasoned, officials would have to bring the principles of forest love thought to the doorsteps and everyday experiences of Koreans.

They did so in many ways: through the activities of Forest Owners Associations; through the circulation of pamphlets and other public relations materials; through the regulatory efforts of Forest Rangers and local authorities. But few facets of forest conservation were pursued by the colonial state as energetically as ceremonial plantings.

²¹ Ueki Homiki, “Chōsen no kyoju meiboku,” *Chōsen*, Vol. 179 (1930), 6.

²² Ueki Homiki, “Chōsen no kyoju meiboku,” *Chōsen*, Vol. 179 (1930), 7-8.

²³ Kakeba Sadakichi, “Chōsen no kyoju meiboku,” *Chōsen nōkaihō*, Vol. 11 (1916), 10-13.

As grand in scope as grandiose in rhetoric, the ceremonial plantings of each April 3rd formed a signature feature of the forestry enterprise in colonial Korea and a dynamic exercise in the tenets of ecological modernity.

The Spectacle of Conservation

For many among the “throngs of onlookers” gathered at Tongdaemun, the imperial procession of May 5, 1910 was a familiar scene. Dressed in formal court robes and flanked by a large retinue of flag-bearing advisors, Emperor Sunjong looked much as he did just a year earlier when he was escorted by Japanese officials on an imperial tour across the peninsula.²⁴ And as he made his way to the Great East Gate of the capital, long a site of imperial pageantry, he bore a strong resemblance to many of the Korean Kings who had followed a similar procession down the thoroughfare. So it must have come as something of a surprise when the emperor picked up a hoe and began to dig a hole. Under the supervision of Japanese advisors to the Ministry of Industry, Agriculture, and Commerce, Emperor Sunjong then placed into the earth a Japanese umbrella pine, among the first of the literally hundreds of millions of trees to be ceremonially planted during the colonial period.

The brainchild of the Japanese officials who shadowed the emperor throughout the proceedings, this public demonstration sought to, as one account put it, “instill a love of tree planting by conveying the ideals of the top down to the bottom.”²⁵ By 1907 to break ground in this way was far from groundbreaking. The Japanese Forestry Association, for instance, organized and supported a variety of tree planting events in the

²⁴ Accounts of this procession can be found in “Hwangjō haenggyesōl,” *Taehan maeil sinbo*, May 4, 1910; and “Ch’ingyōngsik chōlch’ā,” *Taehan maeil sinbo*, May 6, 1910.

²⁵ Saitō Otosaku, “Kankoku tennō no seidai naru shin shokuju shiki kyokō,” in CRI, 37-38.

late Meiji period. Indeed, just as Japanese forestry officials proved assiduous students of Western forestry science, so did they actively study the social vehicles through which they could inculcate the masses with an enthusiasm for the planting and protection of trees.

The American celebration of Arbor Day proved a particularly instructive template for these officials. Based on the recommendations of Birdsey Grant Northrop (among other advisors), local school and forestry officials began to institutionalize mass plantings in areas across Japan. They did so, as Takemoto Tarō has shown, principally through the establishment of school forests (which were created through transfers of National Forestland as forest trusts after 1895). Before long, plantings of this sort became annual events and celebrations, involving students, farmers, and youth groups from across the peninsula. Per the suggestion of Honda Seiroku, numerous plantings were subsequently coordinated on April 3rd—a date that coincided not only with ideal planting season in Japan but also the national holiday in honor of Japan's first Emperor.²⁶ More and more, the act of tree planting was cast as an expression of imperial devotion and national pride. The surge of nationalism that accompanied Japan's victories in the Sino- and Russo-Japanese Wars, for example, gave rise to a number of national tree-planting activities. The subsequent commencement of Commemorative Forestation for Imperial Accession activities in 1911 only tightened the knot between mass tree plantation and the celebration of the imperial system.

Few in Korea were more enthusiastic about the transformative power of these stately plantings than Saitō Otosaku. When, for instance, the Korean Bureau of

²⁶ As cited in Shunichi Kuga, *Dr. Birdsey G. Northrop: The Founder of Arbor Day in Japan* (Ashiya: self published, 1972), 28-30.

Agriculture, Industry, and Commerce began to hash out a long-term plan for forest reform in 1909, Saitō was emphatic that reform be implemented in concert with all facets of society. “I closely read your twenty-year plan for afforestation” he wrote to his colleagues in the Ministry of Agriculture, Industry, and Commerce, “which generally looks good.” But Saitō had “one reservation”: that “large numbers of the Korean people lack a love of forests and a love of planting, and cling to superstitions and other beliefs that frown upon the plantation of trees.”²⁷ Realizing the limitations of a top-down approach to forest management, he called for a grassroots campaign to instill Koreans of all stripes with a love of forest conservation.²⁸

Insofar as ceremonial plantings both actively reclaimed the landscape and promoted forest love thought, they formed a natural launching point for this campaign. Saitō offered his first concrete vision for ceremonial plantings at a Provincial Governors meeting in January 1911, where he presented his Plan for the Implementation of Ceremonial Plantings (*kinen shokuju jikō keikaku*). Among its chief recommendations were that the plantings be held on the anniversary of the passing of Emperor Jimmu (April 3); that the plantings held in locations where many people can easily observe (such as official office grounds, model forests, or near roads); that in order to simplify afforestation the plantings avoid the use of rare or curious tree types; that local authorities cooperate with experts to perform (*jitsuen shikyō*) the planting process for those in attendance; and that officials provide food and drinks to nurture enthusiasm for the

²⁷ Takemoto Tarō, *Gakkōrin no kenkyū*, 164.

²⁸ See also Saitō Otosaku, “Shokurin kōwa,” *Chōsen nōkaihō*, Vol. 8, No. 3 (1922), 42.

activity, but strictly forbid alcohol.²⁹

After careful consideration and close consultation with local authorities, on January 27, 1911 the Ministry of Agriculture, Commerce, and Industry issued the “Ceremonial Planting Decree” (*Kinen shokuju shōrei*) to each province. This set in motion the preparations for the inaugural planting to be held the following April. As stipulated in the decree, local authorities began to work with schools, officials, and residents across Korea to spread word of the event and survey potential locations.³⁰

The events of April 3, 1911 were met with much fanfare in Seoul as elsewhere. Notably, whereas the Korean Emperor had been the focal point of the planting in 1910, this time all eyes were on Governor-General Terauchi Masatake, who, positioned before a gaggle of press, joined a troop of students in the plantation of hundreds of red pine, oak, and birch trees. By day’s end similar ceremonies in provincial capitals and rural hamlets across the peninsula had brought about the planting of a total of over 4,650,000 trees—an achievement trumpeted by nearly every major newspaper in Korea and Japan.³¹

Heartened by the success of this campaign, Saitō and other officials moved to institutionalize and streamline the logistics of this annual event. Thereafter, the ceremonial plantings became a centerpiece of the Government-General’s afforestation activities and forest love thought campaign. With an operational framework in place, the ceremonial plantings became larger in scope over the 1910s. Occasional deviations notwithstanding, the amount of trees planted annually rose steadily from 4.5 million in

²⁹ This memo is reproduced in Takemoto Tarō, *Gakkōrin no kenkyū*, 165-166.

³⁰ This memo is reproduced in Takemoto Tarō, *Gakkōrin no kenkyū*, 166-167.

³¹ A detailed remembrance of this ceremonial planting can be found in Saitō Otosaku, “Sekai ni shōsan sareru chōsen kinen shokujyu no sōsetsu jihō,” in CRI , 44.

1911 to just over 10 million in 1912 to 20 million in 1916 and over 37 million trees in 1934. The proliferation of civic forestry associations discussed in the previous chapter only further enhanced the organizational infrastructure behind these plantings. Forest-love associations such as the Women's Forest Love Association of Sūngju Village in South Chōlla Province, for example, not only orchestrated every step of these plantings but also did their utmost to ensure that the trees planted were thereafter protected (see Figure 7.1).

Figure 7.1. A commemorative photograph of the ceremonial plantings undertaken by the Women's Forest Love Association of Sūngju Village



Source: Okazaki Tetsurō, "Kinen shokuju no jisaika o teishō," *Chōsen sanrinkaihō*, Vol. 74 (1931), 6.

Needless to say, these ceremonial plantings were about more than just trees.³² They were, first and foremost, expressions of civic and national duty. Each planting occasioned countless speeches, publications, and official pronouncements that recycled

³² Okazaki Tetsurō, "Kinen shokuju ni tsuite," *Chōsen sanrinkaihō*, Vol. 75 (1931), 2.

many well-worn tropes of forestry as related to national progress: the links between forestry and industry (“one can discern the strength of the nation based upon the color its mountains”)³³; the spiritual virtues of reclamation (“a clean mountain, a pure heart”)³⁴; and the indispensable value of the forests to the everyday (“the timber furnished from the forest is the foundation of human life”).³⁵

As the events of April 3 became more regular, so did their proceedings and programming become more elaborate. In many areas, ceremonial plantings were expanded to include (as part of what were sometimes designated “weeks of forest love activities”) practical demonstrations, exhibitions, and celebrations of forest culture.³⁶ Although both the Japanese- and Korean-language press ran countless articles on national and local plantation events, the participation of high-ranking government officials did much to raise the profile of these events. In what were often carefully orchestrated publicity stunts, the highest echelons of the colonial government—be they Governors-General, Provincial Governors, or forestry officials—labored side-by-side with ordinary Koreans. Photographs such as Figure 7.2, an image of Governor-General Saitō Makoto getting his hands dirty, circulated widely, and were used to bolster the claim that forestry was a truly communal project, involving the highest echelons as government as much as homemakers and school children. Although these ceremonies were aimed principally at Koreans, they also made a concerted effort to train Japanese settlers in the best methods of planting trees in Korea soil. The concern regarding Japanese settlers was not so much

³³ Kada Naoki, “Airin undō no shakaika,” *Chōsen sanrinkaihō*, Vol. 120 (1935), 28..

³⁴ Suzukawa Toshio, “Hantō no rinsei to kinen shokuju,” *Chōsen sanrinkaihō*, Vol. 120 (1935), 6.

³⁵ Itō Jūjirō, “Mori no megumi to airin,” *Chōsen sanrinkaihō*, Vol. 120 (1935), 7.

³⁶ “Ch’ungbuk ui nokhwa undong kinyōm siksul chōnhu ro aelim undong chugan silsi,” *Maeil sinbo*, March 26, 1936.

their lack of forestry ethics and modern sensibilities as it was their sheer unfamiliarity with Korea's landscape.

Figure 7.2. A Commemorative Photograph of Ceremonial Planting Activities



Source: Chōsen sanrinhaihō, Vol. 120 (1935), no page number.

Ceremonial plantings were not restricted to April 3. More and more, ritualistic plantings accompanied the inauguration of new buildings, parks, and other officials sites, as well as the launching of state-led projects. When, for instance, officials in Chōngsōn County (Kangwōn Province) broke ground on an erosion control project they brought in a

Shintō priest to perform a ritual so as to “pray to the gods of mountain reclamation.”³⁷

And when in 1935 colonial officials set out to commemorate the tenth anniversary of the enshrinement atop Namsan of Chōsen Jingū, the premier site of Shintō worship in Korea, they planted hundreds of trees from various regions of the peninsula in an arboretum established just adjacent to the shrine. These trees were meant to simultaneously “exalt the divine virtues” and “draw all eyes to the greening of the peninsula.”³⁸

As both events suggest, ceremonial plantings also grew more conspicuously martial in nature. Especially in the 1930s, when the exigencies of war energized the imperialization (*kōminka*) of everyday life in Korea, officials cloaked these proceedings in the rhetoric of imperial service and sacrifice. This was not particular to Japan’s colony in Korea, however. While few ceremonial plantings would surpass the intensity or scope of those in Korea, coordinated mass afforestation activities became a routine occurrence across the empire. From Taipei to Dalian, elaborate plantations became routine demonstrations of imperial pageantry.³⁹

On rare occasions, the coordination of ceremonial plantings spanned the entire empire. Such, at least, was the case with the celebration of Japan’s twenty sixth centennial anniversary in 1940, which prompted a transnational effort to care for and strengthen the material foundations—whether forests, mountain, river, or rice paddy—of the empire.⁴⁰ As a time-tested expression of imperial reverence and an undertaking with

³⁷ Keishō hokudō, ed., *Sabō o kataru* (unknown: Keishō-hokudō, unknown), YB, 095-5.

³⁸ “Airin shisō no yōkō to shokurin jigyō no shinchoku o hakare,” *Keijō nippō*, April 26, 1935.

³⁹ See, e.g., “Kantōshū no shokuju to jurin hogo,” *Manshū nichinichi shimbun*, March 27, 1921; and “Shina to ringyō,” *Taiwan nichinichi shimbun*, October 10-14, 1916.

⁴⁰ These events are outlined in detail in Kenneth Ruoff, *Imperial Japan at its Zenith: The Wartime Celebration of the Empire’s 2,600th Anniversary* (Ithaca: Cornell University Press, 2010).

immediate practical benefits, tree plantations were an obvious activity for the anniversary's wide-ranging proceedings. At the forefront of the coordination of these plantings was the Japan Forestry Association, which by the 1930s had close connections with its sister organizations in Taiwan and Korea.

Rather than mandate specific events, the Japanese Forestry Association encouraged "each prefecture, village hamlet, school, youth group, military group, hamlet, Forest Owners Association, Forestry Association, and other groups" to undertake a host of suggested activities. These included "regenerative plantings, special tree ceremonial plantings, the distribution of saplings, the establishment of parks, the opening of forest paths, the opening of forestry halls, and the establishment of forestry museums." These plantations were framed as much in terms of the empire's future as its time-honored past: these activities yielded resources that would "grow more splendidous with the passage of each year, and carry on the meaning of the memorial in perpetuity."⁴¹ They were carried out, in essence, to ensure that the empire saw another 2,600 years.

While the events of 1940 were extraordinary they nevertheless tapped into the same social infrastructure and rhetorical wellspring that took shape around the April 3rd ceremonial plantings. Forestry officials made much of these plantings, as they did with the progress of the afforestation initiative more generally. The amount of trees planted during Korea's April 3rd ceremonies was indeed truly staggering: 596 million trees (see Table 7.1). Statistics on seeds, saplings, and trees planted through these ceremonies were routinely bandied about by the colonial state as evidence of its benevolent rule and

⁴¹ "Kigen 2,600-nen kinen jigyō no susume," *Chōsen sanrinkaihō*, Vol. 161 (1938), 58.

encouragement of material progress.⁴² Such a precise figure, however, belies the fact that a large portion of those trees planted did not survive or offered little ecological benefit. The wildly fluctuating figures on participation (see Table 7.1) also raise questions about the real impact of these events on individual participants. This did not stop Japanese officials from trumpeting these achievements, which were prominently featured in newspapers, magazines, and trade journals—not just in Japan and Korea, but in the Western world as well.

Table 7.1. Trees Planted, Participants in Annual Ceremonial Plantings

Year	Number of Trees Planted	Number of Participants
1911	4,652,447	--
1912	10,164,760	605,719
1913	12,430,697	605,743
1914	13,567,315	569,594
1915	15,384,267	664,114
1916	20,475,978	751,058
1917	21,823,543	638,884
1918	20,402,455	647,708
1919	21,137,530	452,150
1920	17,680,259	387,188
1921	16,791,194	410,052
1922	13,855,256	406,449
1923	18,206,329	401,052
1924	19,962,416	499,106
1925	16,904,636	380,067
1926	13,071,305	379,006
1927	13,168,749	347,807
1928	15,040,269	577,839
1929	18,837,810	450,692
1930	15,964,980	443,593
1931	14,797,644	445,183
1932	13,351,234	505,966
1933	36,158,817	611,824
1934	37,364,700	778,390
1935	36,369,036	976,370
1936	25,023,530	863,263

⁴² DRSK, 73.

1937	29,059,883	894,407
1938	26,667,075	1,026,146
1939	26,662,255	1,134,970
1940	31,186,697	--
Total	596,163,066	16,855,280

Source: Data on trees planted from Chōsen sōtokufu tōkei nenpō (1934, 1942), data on participants from Oka Eiji, “Kinen shokuju no kaitō,” Chōsen sanrinkaihō, Vol. 184 (1940), 44-50; Data compiled in Takemoto Tarō, *Gakkōrin no kenkyū*, 168-169.

These efforts indeed garnered significant international attention. “The Japanese have taken the task of reforesting very seriously,” wrote the ichthyologist and founding President of Stanford University David Starr Jordan after a study tour of Korea: “Mr. O. Saito, the head forester, has in experimental cultivation nearly all the trees of value in temperate regions. This year three million pine trees were planted.”⁴³ Kermit Roosevelt, the son of President Theodore Roosevelt (a champion of state forestry in his own right), was similarly impressed by the progress of afforestation he witnessed during a tiger hunting expedition to Korea:

The country through which we drove was bleak and barren, but many of the hillsides showed proofs of a very tangible benefit the Koreans are reaping from Japanese administration, in the excellent work being done in reforestation. The long-denuded hills have been scientifically replanted, and the result is already being felt by the Korean, who is now allowed to cut the lower branches for firewood.⁴⁴

More effusive in his praise was the American missionary E.W. Koons, who wrote the following in a widely reproduced essay entitled “Afforestation in Korea”:

The need of afforestation is evident to all. We who have made our homes in this land can congratulate ourselves, and the people of Korea may well be glad, in knowing that this great and pressing problem is so well met by the Government. We can also be glad that private enterprise is sharing the work, and hope that it will be so profitable that this will be greatly extended. Most of all, we rejoice to know that the Government is showing the people how to do their part, and that

⁴³ David Starr Jordan, The American Review of Reviews, Vol. 46, (July-December 1912), 81-82.

⁴⁴ Kermit Roosevelt, “After Tigers In Korea,” *Asia* Vol. 24, No. 4 (April 1924): 257.

they are taking advantage of its assistance. Those 12 millions of Memorial trees are a hopeful sign for Korea.⁴⁵

Such views were not uncommon. Through study tours (often arranged by the Government-General), the publication of its English-language *Annual Reports on Reforms and Progress* (what one commentator called “a type of illustrated statistical report dressed up with a text tailored to propaganda”),⁴⁶ and the publication of a slew of propagandistic publications (such as the Bank of Korea’s commemorative history)⁴⁷, the colonial state made a concerted effort to draw attention to these afforestation efforts.

But not all foreigners were convinced. The Washington-D.C. based attorney Fred Dolph, for one, dismissed Korea’s ceremonial plantings as “evidence of the fact that Koreans are nothing loathe to celebrate the death of a Japanese Emperor, but is not convincing that the amount of afforestation there shown offsets the devastation of the Korean national forest preserves.”⁴⁸ This, however, was most certainly the minority view. Far more typical was the assessment of Arthur Bullard, who wrote to American readers of *Harper’s Monthly* that “One thing, which all tourists notice is the elaborate program of

⁴⁵ E.W. Koons, “Afforestation in Korea,” 42.

⁴⁶ Hermann Lautensach (Eckart and Dege translators), *Korea: a geography based on the author’s travels and literature* (Berline: Springer Verlag, 1988), 56.

⁴⁷ The Bank of Chosen, ed., *Economic History of Chosen: compiled in commemoration of the Decennial of the Bank of Chosen* (Seoul: The Bank of Chosen, 1921).

⁴⁸ Fred A. Dolph, *Japanese Stewardship of Korea: Economic and Financial* (Washington, D.C.: Byron Adams, 1920), 6.

reforestation. The barren and denuded hills of Korea are growing up to a new wealth for the profit of future generations.”⁴⁹

Much more difficult to ascertain is what Koreans themselves made of these ceremonies. Undoubtedly, many elite Koreans (especially those who were members of the KFA) were active participants and promoters of ceremonial plantings. Hong Chong-hwa, for instance, a member of the KFA’s North Kyōngsang branch, called the ceremonial plantings “an extremely effective mechanism for the diffusion of forest love thought” and called for an expansion of these activities into a full week of Arbor Day related activities.⁵⁰ Hong’s enthusiasm was doubtless shared by Korean members of local-level civic forestry groups (such as Forest Love Associations), whose very purpose was to see to it that afforestation was not simply a one-day affair.

But given that these events were also tinged with imperial rhetoric and foisted upon farming communities, it is not unreasonable to suggest that many other Koreans remained half-hearted participants. The subsequent utilization for fuel of many of the trees planted during these ceremonies certainly suggests that not all Koreans embraced the spirit of the undertaking.

Forestry officials were not oblivious to the limits and problems of these plantings. Most alarming was the fact that participants in these events were skewed towards the elite stratum of society. Seldom seen among the neat rows of participants combing the mountains with seedlings in hand were Korea’s tenant farmers, slash-and-burners, or

⁴⁹ Arthur Bullard, “Expanding Japan,” *Harper’s Monthly Magazine*, Vol. 139 (1919), 859.

⁵⁰ Hong Chong-hwa, “Chōsen ringyō kongo no ikikata oyobi airin shisō fukyū hōsaku ni tsuite no kaitō,” *Chōsen sanrinkaihō*, Vol. 140 (1936), 70.

working class poor. Officials likewise remained deeply concerned with the forestry practices exercised the other 364 days of the year. If forests were indispensable to modern life, they argued, then forest conservation needed to be quotidian. Forest love thought needed to be a daily practice and a household affair. Ecological modernity, in other words, needed to seep into the minutiae of everyday life. For this to happen, suggested Nakashima Kan, foresters needed to “diffuse forest love thought through the senses.”⁵¹

Forest Love, Seen and Heard

That Nakashima laid out his recommendations for foresters’ assault on the ears and eyes at a roundtable on “plans for the diffusion of forest love thought” sponsored by the Korean Forestry Association reveals the central role played by that organization in the coordination of the ideological campaign surrounding forest conservation. With members scattered across the peninsula, branch offices in each province, and board members concurrently serving in important government positions, the KFA was particularly well positioned to contribute to the cultivation of forest love thought. It is little wonder, then, that its members were the chief movers and shakers behind the multi-faceted public relations effort to, as Nakashima and other KFA members put it, promote “closer relations and interactions with trees.”⁵²

This campaign found many creative expressions. Seeking to tap into what some officials identified as Koreans’ innate love of music, the KFA commissioned and circulated a wide array of forestry-related songs. When in 1922, for instance, the KFA

⁵¹ Nakashima Kan, “Chōsen ringyō kongo no ikikata oyobi airin shisō fukyū hōsaku ni tsuite no kaitō,” *Chōsen sanrinkaihō*, Vol. 134 (1936), 90.

⁵² Nakashima Kan, “Chōsen ringyō kongo no ikikata oyobi airin shisō fukyū hōsaku ni tsuite no kaitō,” 90.

put out a call for original song lyrics related to Korea's forests, they received no less than 225 folk songs (*min'yō*) and 190 vocal songs (*shōka*) submissions. The KFA's Bulletin likewise devoted considerable print space to the publication of poems, songs, and ballads such as Onodera Tarō's lyrical ode to the "green ridges and base of Mt. Kumgan," which was selected as one of the winning submissions of the 1922 contest. Occasionally, the KFA actually reproduced the score and sheet music for these arrangements, such as "The Forestry Song of Kangwön," a work song about the "endless forests" and "sweeping mountains vistas" of Kangwön Province (see Figure 7.3).

Figure 7.3. The Kangwŏn Forestry Song

江原道林業の歌 (式歌詞)

Source: "Kōgendō ringyō no uta," *Chōsen sanrinkaihō*, Vol. 100 (1933), no page number.

For the more visually inclined, the KFA also solicited and distributed original forestry-themed posters and artwork. In May 1928, for instance, the KFA sponsored a forest fire prevention poster contest and distributed as many as 11,000 copies of the winning submissions across the peninsula.⁵³ They similarly sponsored regular poster and slogan contests regarding forest love thought, a theme that quite naturally lent itself to artistic renderings. Reminding residents of Korea that “a single particle bears a great forest” and exhorting them to “lovingly nurture saplings,” one such poster (the winning submission of Okada Shimaichi, a Japanese settler in North Chōlla Province) depicted the seeds of an apple tree as the heart of the body politic (see Figure 7.4). It evocatively visualized the growth of the forest at the same time that it conveyed a practical conservationist message—precisely the sort of visual imagery sought by the KFA and its agents.

⁵³ “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 498.

Figure 7.4. A Forest Love Thought Poster of the KFA



Source: Chōsen sanrinkaihō, Vol. 120 (1935), no page number.

Members of the KFA were no less enthusiastic about motion pictures. On February 16, 1924, following one of its regular meetings in Seoul, the KFA held its first major forest-themed public film screening. Some of the titles projected were predictable enough (*Forestry Along the Upper Yalu* and *The Sylvan Beauty of Mt. Kumgan*), while others such as *The Zoos of Germany* were only peripherally related to forestry matters. As films became a staple of KFA public outreach, however, this programming expanded to include such titles as *The Forest Products of Karafuto*, *The Forestry of Yoshino*, *Erosion Control and Afforestation in France*, *The Japan Alps of the Summer*, and *Timber*.

*Floating Down the Yalu.*⁵⁴ Seeking to inspire original creative expressions related to Korea's own forests, the KFA also solicited the submissions of original screenplays by residents of Korea, which ran under titles like *Tree Spirit Mountain, Love Shines Eternally*, and *Garden of the Color Green*.⁵⁵ Together with commentary on forestry and literature, essays, poems, and short stories, these original cultural productions were constitutive components of the multi-media outreach campaign that aimed to bake conservationist values into everyday experience.

Yet, for all their rhetoric of forestry as a shared national challenge that bound all residents of Korea together, the promotion of forest love thought was not coherent across space. Mindful of the distinctive challenges of forestry in each region, forestry officials tailored this campaign to the particular needs and so-called “cultural level” of Korean communities. In the main, however, the public outreach campaign of forest love thought found two distinct, though closely linked, articulations: the rural and the urban.

In rural Korea, officials were decidedly utilitarian in their espousal of forest love thought. In contrast to the elaborate ceremonies and cultural activities of Korea's major cities, forestry officials preached simple messages of forest protection, fire protection, and fuel economy. In essence, forestry officials moved to reinforce as often as possible the basic tenets of enlightened forestry practices (as enshrined in the 1933 Private Forest Guidelines). To that end, the KFA tapped into its sprawling public relations infrastructure to drill home the slogans of forest management: “Cover the *ondol* mouth!”; “Cut the big not the small!”; “Fire fields are forbidden!” Working through the local level institutions discussed in the previous chapter, it also sponsored a wide array of public demonstrations,

⁵⁴ “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 489-491.

⁵⁵ “Chōsen sanrinkai jyūkanen no kaiko,” in CRI, 497.

such as charcoal production workshops and *ondol* improvement lectures that sought to disseminate the basic know-how of agricultural forestry and fortify agricultural virtues such as thrift, fuel economy, and by-employments.

For Korea's urbanites, on the other hand, officials strove to integrate wherever possible trees and forests into the spatial matrix and lived experience of the city. The forestry official Okazaki Tetsurō in this vein noted that "the beauty (*bikan*) of the city" lies not just in its assemblage of wood and stone materials, but also in the balance it strikes with trees, flowers, and grasses. As he saw it, trees were not simply a latent backdrop, but a dynamic force of energy and purification. Through their seasonal transformations and circulation of oxygen, trees and plants "brought a freshness to the city and its residents" and thereby shook Koreans "from their *ondol* lifestyle."⁵⁶

Like many other officials of his day, Okazaki viewed green park spaces and tree-lined streets as a hallmark of the modern city. Such was certainly the case in mainland Japan, where urban planners and foresters had worked hand in hand to establish green spaces in the capital and other major urban complexes.⁵⁷ At the forefront of this movement was Honda Seiroku, one of Japan's most renowned and prolific professional foresters, who emerged as a vigorous proponent of the importance of green spaces in Japan's cities. Although Honda is best known as the visionary of Hibiya Park in Tokyo, he also left his mark on the parkscapes of urban Korea. He did so at the behest of the Government-General, which hired Honda in 1916 to draw up a plan for the construction of a park in the

⁵⁶ Okazaki Tetsurō, "Kinen shokuju ni tsuite," 6.

⁵⁷ The definitive treatment of park-planning and urban forestry in Japan is Thomas Havens, *Parkscapes: Green Spaces in Modern Japan* (Honolulu: University of Hawaii Press, 2011).

center of Seoul: what would soon become the largest public space in Korea and a showcase of colonial modernization.

The result was his 1917 Proposed Plan for Namsan Park. In addition to planting trees from across the peninsula into the city center, Honda called for the establishment of a garden and arboretum, which would allow visitors to survey Korea's ecological diversity and far-ranging scenery.⁵⁸ As part of his vision for the “forest park” of Namsan, he also advocated for incorporating trees and vegetation into the construction of the Chōsen Shrine, the spiritual epicenter of state Shintō in colonial Korea.⁵⁹ Honda's vision for a green, modern capital stretched beyond the confines of the park itself: he enjoined forestry officials to plant trees along thoroughfares throughout Korea, and even provided local officials with detailed instruction on the proper techniques to do so.⁶⁰

Thus, as officials moved to transform much of the capital city into what Todd Henry calls “showcase thoroughfares,” they turned to trees as a means to structure, beautify, and vivify urban space. “To improve the overall salubriousness of the urban environment,” writes Henry, “the [Seoul Sanitation Association] planted rows of white willow trees, seen by officials as the purifying ‘lungs of the city, along Keijō’s thoroughfares.’”⁶¹ Although some city-

⁵⁸ For a detailed analysis of this plan see Sōn Yong-hun (Son Yong-Hoon) and Sō Yōng-ae (Seo Young-Ai), “1917-nyōn Kyōngsōngbu Namsōn Kongwōn sōlgyean ūi sallim Kongwōn kaenyōm e kwanhan yōn’gu,” *Han’guk Chōnt’ong Chogydōng Hakhoe*, Vol. 30, No. 4 (2012), 23-31.

⁵⁹ See, e.g., Kang Yong-shin, “Kankoku ni okeru jinja no hattatsu to toshi kōen ni tsuite,” *Zōen zasshi*, Vol. 56, No. 5 (1993), 61-66.

⁶⁰ See, e.g., Honda Seiroku, “Kōdōju no shokusai o susume,” *Chōsen nōkaihō*, Vol. 8, No. 2 (1922), 10-14.

⁶¹ Todd Henry, *Assimilating Seoul*, 134.

dwellers began to uproot these trees as part of their effort to collect fuel for their *ondol*, this did not deter urban planners across Korea, who saw tree-lined streets and green spaces as a signature of the modern city.⁶²

What these officials displayed was an abiding faith in the transformative power of forest aesthetics. A flourishing sub-discipline of forest studies in Japan (rooted to the pioneering work of the German Heinrich von Salisch), forest aesthetics (*shinrin bigaku*) probed the relationship between forest scenery, individual aesthetics, and collective values.⁶³ In practice, it called for the careful, tender maintenance of forestland so as to harness the visceral, emotive power of forestscapes. As concerned with the qualities of a single tree as it was with panoramic scenery, forest aesthetics aimed to create as welcoming and awe-inspiring a forest scene as possible. Although this movement found its most vivid expression in urban Korea (where foresters were deeply concerned that urbanites had lost touch with nature), it was also considered a central component of village improvement in rural Korea.

According to Maruyama Jōzō, one of many Korea-based foresters to write on forest aesthetics, four principal factors shaped the beauty of forests (*shinrin no bisei*): 1) “the beauty of spatial relations”; 2) “the beauty of the passage of time”; 3) “the beauty of uniformity”; 4) and the “overall qualities” of a forest.⁶⁴ Invoking the ideals of John Ruskin (the environmental aesthete),

⁶² Todd Henry, *Assimilating Seoul*, 136.

⁶³ See, e.g., Jeffrey Wilson, *The German Forest: Nature, Identity, and the Contestation of a National Symbol, 1871-1914* (Toronto: University of Toronto Press, 2012); and Konda Keiichi, “Shinrin bigaku to zōengaku to no sabetsu,” *Ringakkai zasshi*, Vol. 14, No. 9 (1932), 730-739.

⁶⁴ Maruyama Jōzō, “Shinrin no bisei to fukei shisetsu,” *Chōsen*, Vol. 179 (1930), 20.

William Gilpin (who coined the term picturesque), and William Wordsworth (the Romantic poet), Maruyama laid out an almost transcendental philosophy of the forest. As he saw it, while critical, the economical management of forests had obscured their emotional and aesthetic power: that which had already been recognized by the “enlightened countries” of the world.⁶⁵ For a true transformation of forest values to proceed, Maruyama maintained, officials also needed to approach forest management “from the standpoint of forest aesthetics”—a project that was vital to instilling in Koreans the subliminal power of nature.⁶⁶ That Maruyama also expressed concern (albeit in passing) over the potentially harmful effects of industrial pollution on Korea’s tree health is also remarkable, for it reminds us that scientific forestry was not always the cure all to Korea’s environmental problems.⁶⁷

It was also hoped that the appeal of these green spaces would encourage Koreans to spend less time on their *ondol* floors and more time in the great outdoors. According to Yajima Sugizō, the growing numbers of forest and national parks offered the citizenry not only “the beauty of the wilderness (*daishizen*),” but also a means through which to “purify the spirit, promote health, and preserve the spirit and vigor of the people.”⁶⁸ What Yajima intimated were the defining features of what might be called Korea’s nascent alpine culture: a largely metropolitan movement to escape from the stresses of urban

⁶⁵ Maruyama Jōzō, “Shinrin no bisei to fukei shisetsu,” 34.

⁶⁶ Maruyama Jōzō, “Shinrin no bisei to fukei shisetsu,” 36.

⁶⁷ Maruyama Jōzō, “Shinrin no bisei to fukei shisetsu,” 38.

⁶⁸ Yajima Sugizō, “Kinen shokuju ni tsuite,” Vol. 133 (1936), 7-8.

life in the rapidly growing network of parks, mountain trails, and climbing routes that promised spiritual rejuvenation. As in Japan, the rhetoric of forest conservation was laced with references to modern mountaineering and alpinism, a decidedly modern activity that would deliver Koreans into the heart of the peninsula's forested regions. Spurred by the growing eco-tourism industry, the establishment of mountaineering clubs, and a rapidly expanding national transportation infrastructure, Korean city-dwellers, alpenstock in hand, took to Korea's mountain trails as never before.⁶⁹

Binding these disparate cultural activities together was the proposition that forests and forestry were inextricably linked to everyday life. Although forest love thought was the linguistic touchstone of foresters' ideological campaign, the notion of forest conservation rested on a different refrain of the colonial period: *sanrin to jinsei*, forests and human life. At nearly every turn, forestry officials called attention to the inextricable linkages—be they spiritual, material, or even political—between modern civilization and the forests. It was thus entirely predictable that the KFA selected *sanrin to jinsei* as the central theme of the 1935 Korean Forest Culture Exhibition, what was among the most impressive spectacles of conservation during the colonial period. As a carefully curated exhibition of Korea's forest culture and a crystallization of the forest love thought campaign, it stands as a revealing case study in the curation as well as cultivation of ecological modernity in colonial Korea.

Ecological Modernity On Display

⁶⁹ For an exhaustive treatment of Korea's mountaineering history see Son Kyōng-sōk, *Han'guk tūngsansa oe Han'guk sanak chonansa, Han'guk sūk'i paltalsa* (Sōul: Imaunt'in, 2010).

The Forest Culture Exhibition (*Chōsen sanrin bunka tenrankai*) of 1935 was not the first time that Japanese officials had orchestrated a forestry exhibition. Japan's first public display of the achievements and products of its timber industry was actually the World Forestry Exhibition held in Edinburgh of 1884. There, a small group of forestry bureaucrats (including Takashima Jo and Morimasa Takei) both marketed Japan's wood products to Westerners and, perhaps more crucially, gathered as much information as possible on the accomplishments of the forest management by other participant nations.⁷⁰

Convinced of the utility of showcasing forestry in this way, Japanese officials wasted no time to establish similar displays in Korea upon the establishment of a protectorate. With the hopes of conveying to the Korean people the breadth and benefits of their own woodlands, the first group of experts to arrive in Korea oversaw the construction of a display of Korean timber products and trees for an industrial exhibition held in Seoul in October 1907.⁷¹ Previously discussed conventions such as the National Timber Corporation Meeting (held in Sinŭiju in 1921) and the Annual Meeting of the Japan Forestry Association (held in Seoul in 1926) also occasioned large-scale public exhibition of Korean forestry products and reforms. So, too, did the Korea Exhibition of 1929, which included among its “spectacular displays of modernization that aimed to convince the colonized population that Japanese rule could enrich their lives” an impressive forestry exhibit, replete with its own model forest.⁷²

⁷⁰ The impact of these and other tours is taken up by Conrad Totman in *Japan's imperial forest, Goryōrin*, 18-23.

⁷¹ Dōke Mitsuyuki, “Kankoku jidai no ringyō ni kansuru omoidebayashi,” in CRI, 19-20

⁷² Todd Henry, *Assimilating Seoul*, 92.

But in substance, scope, and sophistication, the 1935 Korean Forest Culture Exhibition eclipsed all preceding events. Envisioned by the KFA and colonial officials as the main feature of the activities surrounding the 25th annual ceremonial planting, it endeavored to convey Korea's forest culture to the masses and to illuminate the myriad linkages between forests and everyday life. The organizers also had a more practical goal in mind: to promote the growing variety of consumer products connected to the forest.⁷³ To that end, in the months leading up to the exhibition, they solicited material contributions from a wide range of forestry companies and forestry institutions that would showcase the burgeoning consumer culture sustained by Korea's forests. They also collected contributions from provincial KFA branches and a host of private individuals and corporations (including Ōji Paper, the Oriental Development Company, and Kim Ki-dök) to finance the project.⁷⁴

The Mitsukoshi Department Store was well suited to meet these goals. As a high-end department store located in the heart of the capital's busiest shopping district, it offered both an easily accessible public location and an already consumer-oriented space through which to market forestry wares. In the weeks leading up to the event, the organizers placed advertisements in newspapers and magazines, posted fliers and posters, and even convened a press conference in the Chōsen Hotel.⁷⁵ Hoping to attract foot traffic, the organizers also placed larch and cherry blossoms in the department store's show windows, and adorned the area surrounding Mitsukoshi with cherry blossoms. As

⁷³ Chōsen sanrin bunka tenrankai jimu hōkoku," in: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi* (Keijō: Chōsen sōtokufu nōrinkoyku, 1935), 2.

⁷⁴ Chōsen sanrin bunka tenrankai jimu hōkoku," 60.

⁷⁵ "Chōsen sanrin bunka tenrankai jimu hōkoku," 30.

the organizers would later recall, once the exhibition opened its doors the morning of April 1, 1935, these ornate displays elicited a “surging interest” in the exhibition.⁷⁶

But the real spectacle was in the fourth floor hall and fifth floor gallery of the department store. To get there, however, one first had to travel through the “forest tunnel”: a stairwell and walkway elaborately lined with cedar, fir, spruce, and bedecked with cherry blossom flowers and white birch leaves (see Figure 7.5). By realistically recreating Korea’s “mountain scenery” and providing for a dynamic, active experience, the organizers tried to simulate a walk in the woods. More practically, the forest tunnel was used to usher participants to a series of display cases, dioramas, and forest products that condensed Korea’s biodiversity and forestry traditions into a single space. To walk through the tunnel was thus to be transported across the woodlands of the entire peninsula.

⁷⁶ “Chōsen sanrin bunka tenrankai no jōkyō,” *Chōsen sanrinkaihō*, Vol. 121 (1935), 54.

Figure 7.5. A photograph of “the forest tunnel.”



Source: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi* (Keijō: Chōsen sōtokufu nōrinkoyku, 1935), 17.

It was also to travel across a single lifespan. Indeed, as part of their effort to clarify the connections between forests and everyday existence, the curators of the exhibition divided the displays into different stages of human life.⁷⁷ The first phase (“birth”) featured a mother tending to her baby in a wooden cradle, surrounded by a range of wooden products included a bottle and toys. The next phase (“childhood”) focused on a young child climbing a tree. This was followed by a scene of young girls (“youth”),

⁷⁷ “Chōsen sanrin bunka tenrankai no jōkyō,” 56.

sporting the latest in alpine fashion, on a scenic hike through woods (see Figure 7.6). The adulthood phase (“the prime of life”) trained its gaze on the interior of a modern home and its myriad material goods (newspapers, magazines, lacquer-ware), while the display for old age (“the elderly”) exhibited a number of forestry products enjoyed by retirees.⁷⁸

While many of these displays did much to propagate images of forests furnishing a seemingly universal modern lifestyle, others highlighted Korea’s distinctive forest industries, traditions, and materials. One could hardly ignore the Korea-specific handicrafts, delicacies, and industries on display: the bamboo umbrellas of North Ch’olla; the walnuts of North Ch’ungch’ong; the furniture of Kyōnggi. Also remarkable were the highly gendered representations of the modern lifestyle: at nearly every stage of life a woman is seen surrounded by the material trappings of the modern home. Such indications strongly suggest that, while the organizers claimed to target the display at all citizens, they sought to tailor it to the sensibilities of the modern, urban dwelling woman.

⁷⁸ “Chōsen sanrin bunka tenrankai no jōkyō,” 59-61.

Figure 7.6. “Youth” enjoying a hike in the forest.

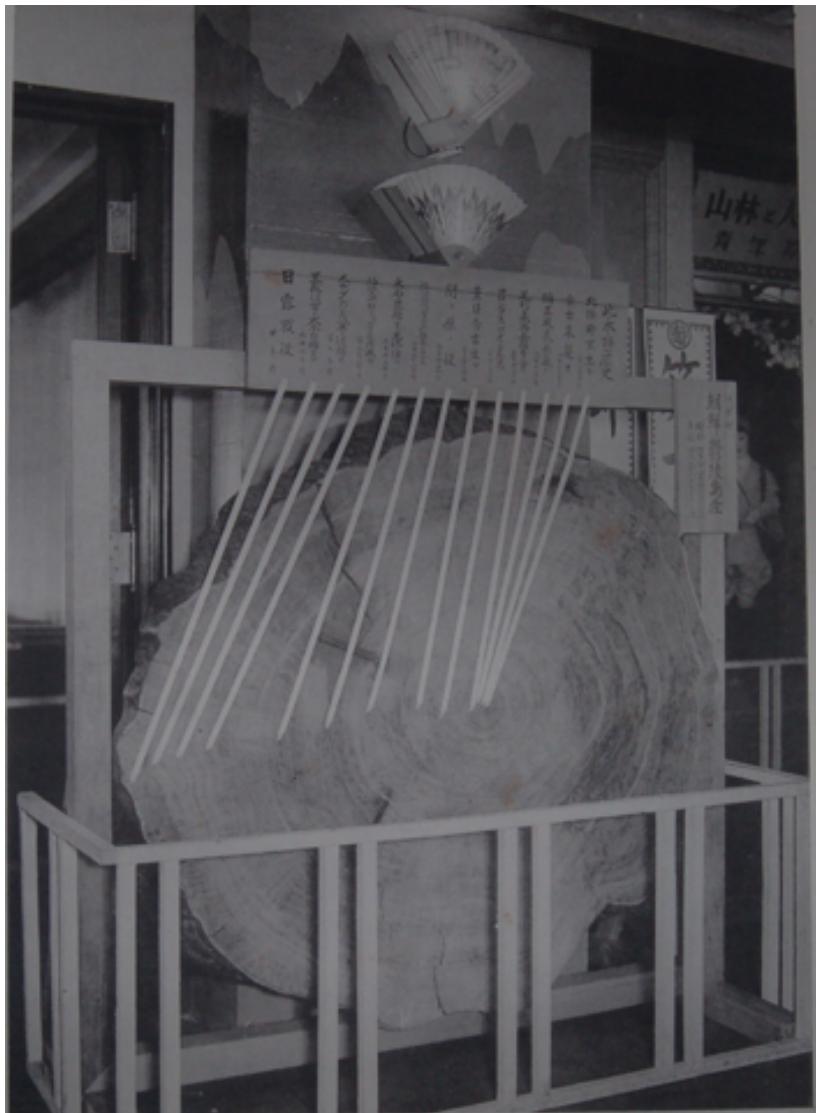


Source: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi* (Keijō: Chōsen sōtokufu nōrinkoyku, 1935), 23.

The fourth floor display also offered a history lesson. But while the content would have been familiar to most grade-school-aged children, the method of conveyance was entirely novel: a slice of a 688 year-old hemlock harvested on Ullüng Island. A monument to Korea’s forest history, this tree and its growth rings provided a potent reminder of the fact that trees and forests transcended the ebbs and flows of politics and spanned generations—that, when protected, trees could become records of the deep past. To illustrate this point, planners of the Exhibition created a dendrochronology of Korean and world history—showing how, for instance, at age 5 the tree grew through the birth of the legendary Japanese regent and warrior Hōjō Tokimune; how at age 242 the tree grew

through Columbus' discovery of the Americas; and how at age 688 the tree grew through the hostilities of the Russo-Japanese War (see Figure 7.7).

Figure 7.7. A dendrochronology on display.



Source: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi*, 20.

Reflections on Korea's forest history and culture were scarcely to be seen on the fifth floor, however. Whereas the exhibits of the fourth floor comprised a celebration of Korea's forest culture and lifestyle, the content of the fifth floor focused squarely on "the

impact of modern science on timber products.”⁷⁹ This was the realm of the Forest Management Stations, which, notably, had contributed a wide range of timber samples to the exhibition (see Figure 7.8), including those that lined the stairwell to the 5th floor that delivered participants into the world of industrial forestry. Among the items on display were freshly harvested construction and building materials; veneer; tannin; celluloid; synthetic fibers; cellophane; Ōji Paper pulp and synthetic fibers; and countless other chemical and industrial products.

Figure 7.8. Timber samples on display.



Source: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi*, 35.

It was not simply products that were on display, however. The organizers also sought to showcase advances in forestry techniques, scientific research, and material

⁷⁹ “Chōsen sanrin bunka tenrankai no jōkyō,” 61.

applications. One corner of the exhibit was dedicated to forestry as related to national security, and displayed a range of products such as propellers and airplane parts that were essential to military operations. Another displayed the modernization of forestry as laid out in the Northern Development Plan, which called for a massive expansion of and improvement in industrial lumbering operations along the Yalu and Tumen Rivers. For its part, the Forestry Experiment Stations, also contributed an elaborate diorama of the cutting-edge erosion methods, which visualized the material transformation of a number of regions targeted for afforestation and erosion control (see Figure 7.9). An outdoor space was also established on the roof of the building, where visitors could enjoy a break room (built with Sinūju timber), and see for themselves an improved *ondol*, as well as a variety of alternative fuels that the organizers sought to promote.⁸⁰

⁸⁰ “Chōsen sanrin bunka tenrankai no jōkyō,” 66.

Figure 7.9. A diorama and display of the progress of erosion control works.



Source: Chōsen sōtokufu nōrinkoyku, ed., *Chōsen sanrin bunka tenrankai shi* (Keijō: Chōsen sōtokufu nōrinkoyku, 1935), 43.

Much to the delight of the organizers, the Forest Culture Exhibition enjoyed significant attention from the public and the press. The attendance on the opening day of Governor-General Ugaki Kazushige, who was escorted through the exhibition by a gaggle of press and officials, certainly did much to raise the profile of the event. There he ran into a number of other heavy hitters in the world of forestry including Fujiwara Ginjirō, the President of Ōji Paper.⁸¹ The organizers were also pleased with the general attendance figures: according to official estimates, the Exhibition drew no fewer than

⁸¹ “Chōsen sanrin bunka tenrankai no jōkyō,” 55.

7,000 and as many as 15,000 visitors per day, with a total of about 65,000 total visitors over the week.

KFA organizers were quick to point to the large numbers of attendees as evidence of the growing interest in forest love thought and the expanding reach of their organization. This was perhaps in keeping with the quantitative predilection of forestry officials, who routinely trumpeted the numbers of saplings planted, seedlings dispersed, and hectares reclaims as evidence of modernization. According to those interviewed, not only did the Exhibition “arouse forest love thought” and demonstrate “how forestry is a mission not just of individual economics but of national economics,” it also did much to “boost the knowledge of the forest among commoners.”⁸² While the cosmopolitan location of the Exhibition draws into question the veracity of this latter claim, there is no denying that the exhibition did its part to further the KFA’s central goal of fostering closer relationships between the forests and residents of the peninsula. Comprised of art, poetry, spectacles, material displays (and accompanied by advertisements, posters, radio broadcasts, and an array of other public relations efforts), this weeklong event encompassed the full range of activities pursued by the KFA.

Conclusion

Whether or not foresters succeeded in their effort to capture the senses of residents of the Korea, there is no denying that the campaign of forest love thought gave rise to an extensive social infrastructure and media campaign concerned with forest management. High-ranking officials took to the radios while village leaders convened workshops. School children crafted posters while settlers penned forest love screenplays.

⁸² Katō Junichi, “Sanrin bunka tenraikai o mite,” 71-72; and KF (penname), “Chōsen sanrin bunka tenrankai shokan,” 67.

Sanitation Associations manicured parks in Korea's cities while Forest Love Associations guarded stands deep in their hinterlands. These commonplace activities, moreover, were often punctuated by spectacular celebrations and rituals, especially those carried out in conjunction with the ceremonial plantings of April 3rd. Running the gamut from the quotidian to the spectacular—and targeting *all* of the senses—these activities colored many different realms of modern life. Although it is difficult to draw conclusions about the extent to which the forest love thought campaign actually penetrated the value systems of Koreans, the sheer breadth of this campaign nevertheless underscores the centrality of forests and forestry to the everyday and sensory experience of colonial rule.

It is also revealing that foresters in mainland Japan actively studied colonial Korea's ceremonial plantings and forest love thought campaign when they sought to ramp up mass afforestation projects as part of their efforts to manage scarcity in “a time of crisis.”⁸³ In particular, as Takemoto Tarō has shown, in the lead up to the inaugural celebration of a national Forest Love Day (*airinbi*), officials in the Japanese Forestry Association actively studied the mechanics of Korea's own ceremonial plantings.⁸⁴ This marked something of a role reversal. While in the first years of colonial rule officials had turned to Japan's own efforts to coax the masses into forest plantation, by the 1930s the marked expansion of Korea's afforestation activities and forest love thought campaign offered lessons of its own. How, exactly, these officials drew upon Korea's experiences remains to be determined, but there is no denying that the intensity of the afforestation project in Korea spurred innovation—scientific, political, and social.

⁸³ The definitive account of rural revitalization during its so-called *hijōji* is Kerry Smith, *A Time of Crisis: Japan, the Great Depression, and Rural Revitalization* (Cambridge: Harvard University Asia Center, 2003).

⁸⁴ Takemoto Tarō, *Gakkōrin no kenkyū*, 189.

Given that Korea's afforestation activities were often heavily tinged with imperial ideology, they also did much to prime Korean subjects for the onset of total war. Indeed, after 1937 romantic notions of forest love thought gave way to expressions of devotion to the imperial cause. The rhetoric of forestry was quickly laced with the language of sacrifice, thrift, and fealty. It was braided, in short, with the language of imperialization (*kōminka*): the intensive push after 1937 to turn Korean subjects into loyal servants of the imperial cause. Confronted with the exigencies of industrial warfare and the provisioning the empire writ large, the priorities of forest governance and the mechanics of forest conservation transformed. So began a new chapter in the politics of sustainability, and with it a marked uptick in the extractive activities of the colonial state.

Conclusion

Mobilizing the Forest

The outbreak of the Second Sino-Japanese War in July 1937 ushered forth many changes in colonial Korea. Confronted with a newfound demand for war material and natural resources in northern China, the colonial state (now led by Minami Jirō, the longtime Army General who assumed the position of Governor-General in 1936) quickly ramped up the production of key wartime products, including timber, coal, and chemical components. To facilitate this shift, in 1937 the Law for Control of Major Industries was extended from the metropole to Korea, which tightened the Government-General's grip on key war industries. A slate of laws thereafter re-structured Korea's heavy industrial base so as to meet the requirements of Korea's so-called "national defense economy" (*kokubō keizai*).

These industrial shifts were accompanied by ideological shifts as well. In April 1937, for instance, the metropolitan National Mobilization Law was also extended to Korea, which enabled the conscription of Koreans into military service, principally as laborers. This was followed a few months later by an edict requiring that Korean subjects henceforth recite the "Oath as Subjects of the Imperial Nation" at all public gatherings. By 1938, a full-fledged National Spiritual Mobilization Movement was underway, as the colonial state dialed up its rhetoric of imperialization (*kōminka*), assimilation (*dōka*), and "Japan and Korea as one" (*naisen ittai*).¹

¹ For extended treatments of these wartime shifts see Soon-Won Park, *Colonial Industrialization and Labor: The Onoda Cement Factory* (Cambridge: Harvard University Press, 1999), chapter 3; Carter Eckert, *Offspring of Empire: The Koch'ang Kims and the Colonial Origins of Korean Capitalism, 1976-1945* (Seattle: University of Washington Press, 1991), chapter 8; and Jun Uchida, *Brokers of Empire: Japanese Settler Colonialism in Korea, 1876-1945* (Cambridge: Harvard University Asia Center, 2013), chapter 8.

If these shifts marked the advent of colonial Korea's so-called "wartime system," they also heralded the beginning of what many Korean scholars have called the colonial state's wartime "forest plunder" (K: *sallim sut'al*).² This transition, too, was set into motion by numerous policy shifts. The Timber Import-Export Temporary Measure Law (*Mokuzai no yushutsunyū rinji sochi hō*) of October 1937, for instance, established a new system of regulation of the trade of timber and thereby bolstered the state's ability to allocate timber resources at its discretion. In August 1938, a price ceiling was also established in order to facilitate the colonial state's acquisition and control of timber products, which led in turn to the consolidation of timber marketplaces to four sanctioned sites: Keijō, Sinuiju, Kimch'aek, and Hoeryōng.³ The Industrial Commission of 1938 likewise called for a substantial expansion in forest utilization as well as increased production of forest resources needed for military, infrastructural, and industrial applications—initiatives that were for the most part already underway as part of the Northern Development Plan.

But perhaps the date that best marks the inauguration of wartime forestry in Korea was September 1, 1937—the day the Korean Forestry Development Company (Chōsen Ringyō Kaihatsu Kabushiki Gaisha, hereafter KFDC) was chartered. Envisioned as a semi-official agent of the colonial state, the KFDC consolidated the resources of Korea's seven largest forestry corporations (including the ODC and Ōji Paper, which held 22 and 20 percent stakes in the company, respectively) into a central apparatus of forest management. Although the KFDC's responsibilities would change overtime, it assumed

² Kang Yōng-sim (Kang Young-shim), "Ilche sigi (1937-1945) chōnsi imjōng ha esō ūi sallim sut'al," *Han'guksa yon'gu*, Vol. 102 (1998), 261-290.

³ Paek Ūl-sun, "Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū," 38.

principal responsibility over two imperatives of wartime forest management: the management of large-scale afforestation projects and the coordination of private forestry enterprises in Korea.⁴

To facilitate the former, the Government-General, seeking to meet its ambitious targets for afforestation set in 1938, leased the corporation 50,000 *chōbu* of national forestland in North Kyōngsang and Kangwŏn Provinces and defrayed the costs of afforestation materials.⁵ To advance the latter, the company tapped into its extensive resources across the peninsula to streamline the processing and transport of timber harvested on privately owned woodlands. Over time, the company also intensified its own processing of timber on land leased out for afforestation—a development that has led some scholars to suggest that its creation was just another effort to siphon National Forestland to Japanese capital under the pretext of afforestation.⁶

Be that as it may, provisioning the wartime state with timber, pulp, and other wood products was a tall order. With war in China, scarcity across the empire, timber trade relations with the United States deteriorating, and the chemical applications of timber expanding markedly, demand for timber was soaring. Forestry officials across the empire thus took measures to control prices, commandeer transport routes, and expand productive capacities. In Korea, this effort found its clearest expression in the passage of the August 1939 Regulations for the Operations of Korea's National Forest, which, among other things, authorized more aggressive logging operations on National

⁴ For details on the establishment of the KFDC and its mandate see Chōsen sōtokufu, ed., *Chōsen Ringyō Kaihatsu Kabushiki Gaisha seturitsu yōkō* (Keijō: Chōsen sōtokufu, 1931).

⁵ Kang Yong-sim, “Ilche sigi (1937-1945) chōnsi imjōng ha esō ūi sallim sut’al,” 273.

⁶ Ch’oe Pyōng-t’ae, “Ilcheha chōnsi ch’ejegi (1937-1945) imōp tongwōnch’ae kwa sallim chawōn kongch’ul,” *Han’guksa hakpo*, Vol. 32 (2008), 280. Ch’oe shows that brought profits of as much as 155,000 yen to the company in 1940.

Forestlands. Per these new regulations and the revised Forest Management Plan, from 1937 to 1941 the amount of National Forestland areas targeted for utilization grew to 22 zones amounting to 1,008,328 *chōbu*.⁷ According to Ch'oe In-hwa, when compared to the plans for selective felling established in the period from 1913-1918 for certain areas of operation, the standard volume of felling had by 1940-1941 accelerated by as much as 150-500 percent. This was due in part to the fact that forest officials had pivoted away from their 70-120 year logging order plans towards clear-cutting operations.⁸

Table 8.1. Breakdown of Timber Felled by Ownership Category, 1930-1942

Year	National Forests		Privately Owned Forests				Sum Total	
	Quantity (<i>shakujime</i>)	%	Public	Temple	Private Property	Total	%	Total %
1929								
1930	4,014,852	45.8	112,333	457,007	4,186,193	4,755,533	54.2	8,770,385
1931	3,800,127	59.7	65,979	48,377	2,453,122	2,567,478	40.3	6,367,605
1932	3,586,456	53.8	92,141	18,571	2,970,157	3,080,869	46.2	6,667,325
1933	5,527,475	63.2	85,837	19,461	3,116,642	3,221,940	36.8	8,749,415
1934	5,560,451	60.9	59,147	106,345	3,405,911	3,571,403	39.1	9,131,854
1935	6,327,722	54.8	75,872	43,372	5,103,614	5,222,858	45.2	11,550,580
1936	5,971,245	58.3	111,364	110,615	4,041,862	4,263,841	41.7	10,235,086
1937	6,525,601	55.3	185,502	135,242	4,946,768	5,267,512	44.7	11,793,113
1938	6,554,237	55.9	130,582	198,563	4,845,518	5,174,663	44.1	11,728,900
1939	7,783,863	60.7	196,381	223,347	4,611,354	5,031,082	39.3	12,814,945
1940	7,047,506	53.6	197,869	164,524	5,739,174	6,101,567	46.4	13,149,073
1941	6,552,233	53.1	165,481	169,716	5,447,901	5,783,098	46.9	12,335,331
1942	6,598,674	52.8	184,275	175,079	5,539,728	5,899,082	47.2	12,497,756

Source: Data from Chōsen sōtokufu, “Rinya tōkei”; Compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 141.

Predictably enough, the most intensive logging unfolded in the north of Korea. In 1937, two additional Forest Management Bureau sites were created. The Government-General also increased the amount of land under the oversight of the Forest Management

⁷ Ch'oe In-hwa, “Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū,” 38-39.

⁸ Ch'oe In-hwa, “Kankoku ni okeru kokuyūrin no keiei keikaku to shigyō no tenkai katei ni kansuru kenkyū,” 41.

Stations to 4,280,000 *chōbu*, with the remainder left to the provinces.⁹ One need only inspect statistics on the production of timber provided in Table 8.1 to gain a sense of the intensification and expanding scope of forest utilization: whereas in 1932 approximately 3,500,000 *shakujime* of timber was produced from National Forestlands, this figure had by 1939 increased to 7,780,000 *shakujime*. By one estimate, although timber extraction expanded into areas such as Kangwŏn Province, over 80 percent of the timber produced on National Forestlands after 1935 came from the conifers of the National Forests of the Yalu River basin.¹⁰ But it was not just National Forestlands that saw an expansion in felling: working through market controls and regulatory measures that were propped up as part of the “new” wartime system (*shintaisei*), Koreans also began to sell off their timber to the state and Japanese merchants at significantly reduced prices.¹¹ The rapid intake of Korean timber resources by the state and its agents is reflected in the aggregate value of timber product transactions: in 1936 about 118,060,000 yen’s worth of timber products were sold, which grew in 1937 to 138,710,000 yen and in 1941 to 344,260,000 yen, an almost threefold increase from 1936.¹²

While traditional products like timber and rail ties continued to be produced in large quantities, the production of more specialized military products also expanded markedly. In 1940, for example, 45 percent of timber resources produced in Korea came

⁹ Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” 39.

¹⁰ Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” 39.

¹¹ The commandeering of private forestlands and fire-sale of timber by Koreans is examined in detail in Ch’oe Pyōng-t’ae, “Ilche ha chōnsi ch’ejegi (1937-1945) imōp tongwōnch’ae kwa sallim chawōn kongch’ul,” *Han’guksa hakpo*, Vol. 32 (2008), 267-305.

¹² Kang Yōng-sim, “Ilche sigi (1937-1945) chōnsi imjōng ha esō ūi sallim sut’al,” 270.

in the form of construction materials, followed by 15 percent mine timbers, 12 percent rail ties, and the remainder a variety of supplies of use for military applications (ship building materials, electrical poles, boxing materials).¹³ Of increasing utility and strategic importance was the production of pulp and rayon, which, through its flagship factory in Kilju, the Ōji-backed Korea Paper and Chemical Manufacture Company churned out in increasing quantities (see Table 8.2).

Table 8.2. Annual Pulp Production Rates in Korea (in relation to Japanese National Figures)

Year	Raw Timber Consumption		Pulp Production Rate						
	Amount (koku)	% of National	Paper Pulp (ton)	National (%)	Cellulose Pulp	National (%)	Total	National Percent	
1930	199,280	2.4	14,221	2.3	--	--	14,221	2.3	
1931	201,548	2.7	15,092	2.7	--	--	15,092	2.7	
1932	276,302	4.1	15,178	2.8	--	--	15,178	2.8	
1933	313,807	4.3	16,081	2.6	--	--	16,081	2.6	
1934	314,331	4.1	18,018	2.6	--	--	18,018	2.6	
1935	226,252	2.8	16,866	2.3	--	--	16,866	2.3	
1936	257,570	3.0	16,959	2.3	880	1.6	17,839	2.2	
1937	523,636	5.4	16,944	2.0	20,860	36.4	37,804	4.3	
1938	548,502	5.3	16,913	1.9	23,470	22.7	40,383	4.2	
1939	543,238	4.8	15,585	1.8	23,952	15.5	39,537	3.8	

Source: Data from Sanrin kyoku, “Sanrin ihō,” Sanrin kyoku, “Shōwa 14-nen honpō ni okeru mokuzai parupu no saisan kyōkyō”; Compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 127.

Working through supply chains that had grown in tandem with the making of the Korea-Manchuria Economic bloc, foresters and merchants channeled increasingly impressive volumes of timber into Manchukuo. But, as Table 8.3 makes clear, mainland Japan was also a regular destination of Korean timber—and increasingly so as total war brought new levels of scarcity to life in the archipelago. At the same time that officials in mainland Japan were ratcheting up domestic exploitation (and drawing in Korean timber),

¹³ See Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 142.

they were also implementing a robust public relations campaign of greenification, forest love, and imperial sacrifice—an ideological campaign that was wholly resonant with that unfolding in colonial Korea.¹⁴

Table 8.3. Total Value of Timber Exports (timber and sheets), 1930-1939

Year	Exports to Japan (yen)	Exports to China/Manchukuo	Exports to Other	Total	% of Total Exports
1930	624,525	1,702,784	--	2,327,309	0.9
1931	1,213,678	1,018,947	--	2,232,625	0.9
1932	1,024,142	1,614,656	--	2,638,798	0.8
1933	696,601	4,741,643	318,110	5,756,354	1.6
1934	1,145,485	5,943,180	242,315	7,330,980	1.6
1935	2,506,221	5,309,894	305,873	8,121,988	1.5
1936	1,744,366	5,263,674	439,562	7,447,602	1.3
1937	2,161,965	6,819,323	408,706	9,389,994	1.4
1938	1,899,718	3,407,489	14,753	5,321,960	0.6
1939	2,223,013	9,263,243	238,462	11,724,718	1.2

Source: Chōsen sōtokufu, “Chōsen sōtokufu tōkei nenpō” (each year); Compiled in Hagino Toshio, *Chōsen, Manshū, Taiwan ringyō hattatsu shiron*, 143.

Calls for sacrifice and thrift rang throughout Japan’s empire. From the scarcity of foodstuffs to curbed electrical output, officials called upon imperial subjects to go about their everyday lives in service of the imperial cause and the wartime state. The consumption of forest resources was no different. Cloaked in the rhetoric of national sacrifice, forestry bureaucrats called upon Koreans to exercise restraint wherever possible. To that end, the state issued in 1938 a revised set of Guidelines for Forestry on Private Forests, which stressed, among other things, the importance of afforestation and rational exploitation. As discussed in Chapter Seven, forestry-related rituals and ceremonies also grew more militaristic. The Ceremonial Plantings of April 3, for instance, increasingly became opportunities to labor in service of the wartime state. Although calls for village-

¹⁴ A detailed examination of this campaign can be found in Nakashima Kōji, 15-nen sensōki no ryōkka undō: sōdōin taiseika no shizen no hyōshō,” *Hokuriku Shigaku*, Vol. 49 (2000), 1-22.

level self-sufficiency, individual thrift, and the production of alternative fuel sources at the local level were nothing new, the rhetoric of war and national defense lent new urgency to these undertakings.

Rhetoric of this sort was also used to justify the state's commandeering of forest resources. The first step in this direction was the issuance of the Import and Export regulations of 1937, which required all timber merchants to receive permission for any timber transactions. But as wartime conditions worsened, the colonial state placed tighter and tighter limitations on fuel collection and forest utilization. The control of charcoal is a case in point. On one level, after 1937 the colonial state set out to ramp up domestic production through the formation of Charcoal Production Associations (*seitan kumiai*), which were essentially extensions of the previously examined civic forestry and *ondol* improvement projects. As a result of these efforts, the production of charcoal expanded substantially from roughly 25,494,000 *kan* in 1936 to 38,240,000 in 1940 and 76,135,000 in 1944.¹⁵

At another level, though, the Government-General also sought to more tightly regulate the heating practices of Koreans. They did so in part by setting price controls for charcoal. However, as Ch'oe Pyōng-t'aek has shown in his study of the "control economy" of charcoal, efforts to regulate the market had the unintended consequence of flooding the market with firewood. In response, the Government-General, hoping to restrict Koreans' cutting practices, established a firewood distribution system. In 1940, for instance, provincial authorities issued a series of edicts that placed strict limitations on firewood consumption in privately owned lands and strengthened the power of provincial

¹⁵ Kang Yōng-sim, "Ilche sigi (1937-1945) chōnsi imjōng ha esō ūi sallim sut'al," 284.

authorities to patrol and punish those found in violation of these regulations. Calling upon Koreans to summon “the Japanese spirit” to cope with newfound scarcity, the Government-General enjoined Koreans to “live a low temperature lifestyle” in order to do their part for the war effort.¹⁶

The outbreak of the Asia-Pacific War in 1941 compounded this scarcity. Thereafter, the condition of Korea’s forests precipitously declined as the colonial state moved to meet the exigencies of total war. Reflecting the shift to what might be called total war forestry was the fact that after 1941 afforestation activities were severely curtailed. With few alternatives and limited supplies, colonial officials for the most part reverted to natural regenerative approaches. This did not stop foresters from drawing up ambitious targets for afforestation, however. In 1943, forestry bureaucrats issued a national plan for afforestation, which called for afforestation works on no less than 102,500 *chōbu* of forestland. But this target was well beyond reach: as Paek Ŭl-sun has shown, only 46 percent of this figure (or 46,754 *chōbu*) was actually afforested.¹⁷ That the colonial state’s enthusiasm for the saw had outstripped its commitment to the seed was plain to see. But the very fact that afforestation activities continued well into 1943 should also prompt us to question the description of post-1937 forestry as one of singular “plunder.”¹⁸

¹⁶ An exhaustive study of this process can be found in Ch’oe Pyǒng-t’ae, “Chǒnsi ch’eje ha Ilche ūi mulcha sugüp mit t’ongje chǒngch’ae: Kyǒngsǒng ūi sint’an sugüp t’ongje rǔl chungsim ūro,” *Yǒksa wa hyǒnsil*, Vol. 53 (2005), 255-282.

¹⁷ Paek Ŭl-sun, “Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū,” 42.

¹⁸ Yi U-yǒn, “Singminjigi imǒp ūi kǔndaehwa: ch’aech’wi imǒp esǒ yuksǒng imǒp ūro,” *Kyǒngje sahak*, Vol. 38 (2008), 119-156.

One example of the state's efforts to control timber consumption was the passage in June 1942 of the Timber Control Ordinance (*Chōsen mokuzai tōsei rei*), which placed strict limitations on the amount of timber afforded to each community and household and the price at which it could be sold. To oversee this process, the colonial state entrusted timber allocation to a number of local institutions.¹⁹ In 1942, this responsibility was shifted principally to the Korean Timber Company (*Chōsen Mokuzai Kabushiki Gaisha*), a conglomeration of corporations, sawmills, processing plants, and timber cutting associations (including that of Sinūiju).²⁰ In 1943, in order to simplify and consolidate the processing and regulation of timber shipment in Korea, the Government General passed the Timber Control Management Guidelines, which tightened control over the flow and allocation of timber and timber products. Although it is difficult to trace these processes after 1943, it is reasonable to assume that the policies of timber control and exploitation only accelerated.²¹

Japan's declaration of surrender on August 15, 1945 prompted many responses from Koreans. Many took to the streets in celebration. Others channeled their energy into the destruction of Shintō shrines, the most conspicuous material symbols of Japan's ideological rule.²² Anecdotal evidence suggests that still others took to chopping down

¹⁹ Paek Ŭl-sun, "Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū," 38.

²⁰ Kang Yōng-sim, "Ilche sigi (1937-1945) chōnsi imjōng ha esō ūi sallim sut'al," 276.

²¹ According to Paek Ŭl-sun, for example, the amount felled in the first quarter of 1944 was 240 percent higher than previous targets for felling of trees. See Paek Ŭl-sun, "Kankoku kokuyūrin ni okeru basshutsu, ikurin jigyō no tenkai katei ni kansuru shiteki kenkyū," 40.

²² According to historian Saburō Ienaga, "...in an eight-day period after Japan surrendered in 1945, Koreans burned and destroyed 136 Shintō shrines and buildings where the imperial

trees, especially Japanese cherry blossoms (or *sakura*), the icon of Japan's forest culture.²³

So began a decades long—and still ongoing—process of cleansing the landscape of the material traces of colonial rule. The demolition of the Government-General's headquarters and the re-purposing of the site of the former Chōsen Shrine on Namsan are perhaps the best-known examples of this process.²⁴ But trees have also been a focal part of this campaign. To provide but one example, in the lead up to the celebrations in 1995 of the 50th anniversary of Korea's liberation from Japanese rule, the cherry blossoms that long lined Kyōngbok Palace in Seoul were felled. According to Emiko Ohnuki-Tierney, some Koreans in fact went further to put forward a plan to replace the Japanese cherry blossoms in the national cemetery in Seoul with the rose of Sharon, the national flower of Korea.²⁵ That those *sakura* that escaped destruction are now called by the native Korean term for cherry blossom—*pōnnamu*—suggests that linguistic tactics have also been deployed to render these legacies less visible.

But other reminders of the colonial forestry project sit unmolested in Korean soil. One of the more unlikely examples sits atop a hill near the Ch'ōngnyang subway stop just outside of Seoul. There lies the resting place of Asakawa Takumi (1891-1931): a Japanese settler who, according to his best-selling biography, “became Korean soil” and

photograph was on display.” Saburō Ienaga, *The Pacific War, 1931-1945* (New York: Knopf Doubleday, 2010), 158.

²³ For instance, Iksop Lee and S. Ramsey offer the following account: “One of the most vivid memories one of us has from that period is that, immediately upon liberation from Japanese rule, groups of local citizens spontaneously rose up and chopped down the cherry trees that had been planted in front of his elementary school.” Iksop Lee and S. Robert Ramsey, *The Korean Language* (New York: SUNY Press, 2000), 132.

²⁴ These processes are examined in Todd Henry, *Assimilating Seoul*, epilogue.

²⁵ Emiko Ohnuki-Tierney, *Kamikaze, Cherry Blossoms, and Nationalisms: The Milizarization of Aesthetics in Japanese History* (Chicago: Chicago University Press, 2010), 122-123.

who, according to his headstone, “loved Korea’s mountains and folk art” and “lives in the hearts of Koreans.”²⁶

Figure 8.1. The gravesite of Asakawa Takumi.



Source: Photograph by author.

That a former colonialist would be interred among and live in the hearts of Koreans is extraordinary. But little about Asakawa’s life story was ordinary. A native of Yamanashi Prefecture, Asakawa followed his brother Noritaka to Korea in 1914 to begin work as a forestry engineer in one of Korea’s forestry experiment stations. There, he conducted a wide range of research and pioneered a new method for the outdoor transplantation of seedlings—a process that many considered a major breakthrough in afforestation techniques in Korea. In the process of investigating Korean mountains and

²⁶ Asakawa has in recent years become a larger than life figure. In 2013, his best-selling autobiography was adapted into a feature-length film, *Hakuji no hito*. The definitive account of Asakawa (which was instrumental in stimulating interest in his life story) is Takasaki Sōji, *Chōsen no tsuji to natta Nihonjin: Asakawa Takumi no shōgai* (Tokyo: Sōfūkan, 2002).

forests, Asakawa also became an avid student of Korean language and folk culture. By the 1920s, he had emerged as a champion of Korea's folk culture, a collector of indigenous folk art, and an outspoken critic of the Japanization of the Korean way of life.²⁷

Remembered variously as a forest engineer, a cultural preservationist, a settler, a collector, and a reformer, Asakawa has been celebrated on both sides of the colonial divide. To Koreans, he represents the exception that proved the rule: a settler so unusual in his engagement with Korean culture and devotion to its landscape that he would elect to bury his bones "in the land of Chosŏn." To Japanese, his story encapsulates the struggles of many settlers to navigate the often-contradictory social landscape of colonial Korea. In both life and death, then, Asakawa has transcended the social fissures of the colonial experience.

What Asakawa's story offers to our understanding of colonial forestry is a reminder that forest management in Korea was more than the simple application of scientific and technological expertise; it was a dynamic process of negotiation with Korea's landscape, society, and forest customs. Like other forestry officials, Asakawa recognized that Japanese and Western forestry methods needed to be modified to meet the specific challenges presented by Korea's mountains and woodlands. He realized that while newfangled scientific methods of afforestation honed in laboratories were an essential component of forest reclamation they could not be separated from the habits, traditions, and land-use patterns of village life in rural Korea.

²⁷ A detailed examination of Asakawa Takumi's views on Korea and Koreans as revealed by his diary can be found in Chang Hye-jöng, "Asak'awa Taku'mi ūi sam ūi kwejök kwa Chosŏn: ilgi wa susang ūl chungsim ūro," *Segye munhak pigyo yǒn'gu*, Vol. 14 (2006), 103-122.

Asakawa was one of countless individuals that contributed to the forestry project in Korea. At the same that he labored in a nursery, bureaucrats such as Watanabe Toyohiko drew up plans in the Bureau of Forestry headquarters, lumberjacks such as Yi Sung-jun felled trees at the base of Mt. Paektu, settlers such as Shiozaki Chōji planted trees in leased out land plots, and forest patrols such as Yang Sǒng-hwan policed the woodlands. In their own ways, each breathed life into a forestry project that was closely entwined with everyday life in Korea. From *ondol* improvement in urban elite homes to the maintenance of agricultural-use forests in rural hamlets, forest conservation measures were a routine feature of life under colonial rule.

Needless to say, the scope and intensity of these forestry activities impacted Korea's forest ecology. As this and other studies have shown, changes to Korea's forest composition unfolded unevenly over both space and time. Geographically, afforestation activities were far more intensive in the south of Korea, where population was more densely concentrated and deforestation was historically more pervasive. In the north of Korea (and especially along the Yalu and Tumen River basins), by contrast, forestry officials established a vigorous lumbering operation in the newly established National Forestlands. As envisioned by forestry bureaucrats looking to outsource the work of afforestation and stimulate private industry, Japanese settlers, corporations, and capitalists played an important role in these material transformations at all stages of colonial rule.

The mandate of state-led forestry and the logic of sustainable forestry changed overtime. After the initial period of policy consolidation and land redistribution (1910-1926), forestry officials moved to expand production and sustain afforestation through

the Korean Forest Management Plan (1926-1937) until the exigencies of war prompted a shift towards a control economy of forest resources and an rapid uptick in exploitation (1937-1945). The flow and consumption of Korea's forest resources shifted in alignment with the changing resource needs, governing imperatives, and political realities of the colonial state in Korea. These shifts often complicated the politics of resource management, as Korea-based officials struggled to advance their own campaigns for afforestation and self-sufficiency at the same time as empire-wide demand steered Korea's forest resources outside of its borders.

Forestry reforms unfolded at many different scales of the colonial state: from imperial politics to regional industry to home economics. They likewise touched on many different facets of everyday existence in colonial Korea. Just as forestry officials sought to assimilate Korea's mountains into accordance with their notions of a healthy, productive forest, so did they move to assimilate Korean subjects into civic-minded forest stewards. Through highly paternalistic public relations campaigns and state rituals, Japanese officials made forest conservation part of an intensive ideological campaign to reform the environmental ethics of Korean subjects and cultivate imperial fealty.

But forestry reforms were not simply imposed from on high. Rather, they were fashioned through regular exchange and periodic confrontation with different sectors of colonial society. Korean journalists and reformers debated, criticized, lauded, and explained Japanese forestry reforms. Japanese settlers lobbied the Government-General to pursue land reforms, trade policies, and forestry regulations in their best interests. Rural Koreans and farming households routinely asserted their rights to access the forests and its bounty. Through acts of resistance running the gamut from illegal fuel collection

to large-scale violent uprisings, Koreans made it clear that the state could not simply commandeer Korea's forests.

Japanese forestry policy, as a result, proved adaptive and was punctuated by a number of policy pivots. Japanese concerns about Koreans' use of the *ondol*, for example, eventually gave way to the realization that it was an irreplaceable fixture of life in Korea. However pernicious it may have been, Japanese officials acknowledged that they would have to base fuel conservation measures around continued *ondol* usage. Japanese enthusiasm for the promotion of Japanese-style Forest Owners Associations was similarly tempered by Korean protests and pragmatic concern over institutional inconsistencies. Japanese officials eventually dismantled what had long been considered a centerpiece of village-level forestry improvement. The decades-long effort to shore up ownership rights through the claimant process was likewise conditioned by the realization among top-ranking forestry officials that they could not simply leave Korean communities without woodlands of their own. Although these policies were far less benevolent than Japanese officials made them out to be, they were a product of considerable efforts on the part of forestry bureaucrats to account for Korean forestry customs and informal land use rights.

Japanese foresters were not unusual in their interest in or sensitivity to local customs and conditions. If a prevailing theme has emerged from recent studies of colonial forestry it is that distinct local conditions gave rise to "site specific" forestry programs and the "hybrid practices" of administrators.²⁸ Using cases ranging from Dutch rule in 18th century Java to American rule in 20th century Philippines, historians of Western

²⁸ Greg Bankoff, "Breaking New Ground? Gifford Pinchot and the Birth of 'Empire Forestry' in the Phillipines, 1900-1905," *Environment and History*, Vol. 15, No. 3 (2009), 371.

colonial forestry have complicated conventional understandings of scientific forestry as a universal embrace of the tenets of German- and French-style forest management by showing how local actors, unique forestry customs, and geographical specificities gave rise to distinctive regimes of forest management.²⁹ To Nancy Lee Peluso and Peter Vandergeest, this variation gave expression to distinct “empires of forestry”: “networks of knowledge, practice and institutions produced differently in different local contexts, and exchanged across sites through institutions facilitating this exchange.”³⁰

One can observe a similar variation across Japan’s own “empire of forestry.” From Karafuto to the South Seas Mandate, Japanese officials encountered markedly different administrative challenges and physical landscapes across the empire. In Korea, the legacies of pine associations, the centuries-long prioritization of the cultivation of pines, burial customs, and use of the *ondol* had for centuries shaped the Korean landscape in distinctive ways. Many of the forestry officials dispatched to Korea accordingly hastened to survey local conditions, conduct ecological experiments, and research Korea’s historical forestry customs.

But while these and other conditions particular to Korea spawned novel forest management methods, Japanese reforms in Korea shared much in common with

²⁹ See, e.g., Michael Wood, “Charles Lane-Poole and Early Forest Surveys of Papua and New Guinea,” *The Journal of Pacific History*, Vol. 40, No. 3 (2005), 289-309; and Brett Bennett, “An Imperial, National and State Debate: The Rise and Near Fall of the Australian Forestry School, 1927-1945,” *Environment and History*, Vol. 15m No. 2 (2009), 217-244; and Tobias J. Lanz, “The Origins, Development and Legacy of Scientific Forestry in Cameroon,” *Environment and History*, Vol. 6, No. 1 (2000), 99-120; and Michael M. Roche and John Dargavel, “Imperial Ethos, Dominions Reality: Forestry Education in New Zealand and Australia, 1910-1965,” *Environment and History*, Vol. 14, No. 4 (2008), 523-543; Karen Brown, “‘Trees, Forests and Communities’: Some Historiographical Approaches to Environmental History on Africa,” *Area*, Vol. 35, No. 4 (2003), 343-356.

³⁰ Peter Vandergeest and Nancy Lee Peluso, “Empires of Forestry: Professional Forestry and State Power in Southeast Asia,” *Environment and History*, Vol. 12 (2006), 32

contemporaneous colonial forestry projects. Indeed, a number of the themes sustained throughout this study are but leitmotifs of the literature on colonial forestry. Like their counterparts in French Indochina, Japanese forestry officials in Korea touched off protracted conflicts over the closing of the commons, the re-configuration of multi-use woodlands to single use sites, and the reconfiguration of usufruct access rights.³¹ Like German foresters in Tanzania, Japanese officials moved to eliminate slash-and-burn agricultural practices by consolidating farming communities into state-sponsored settlements.³² Like foresters in India, Japanese officials utilized state forest reserves to lay railway lines and supply timber markets.³³ Like their American counterparts in the Philippines, they conducted extensive scientific research on forests to better understand their dynamics and value.³⁴

In all of these places, forestry officials cast state-led forestry as a pillar of national strength and a source of revenue. Japanese exhortations for conservation for the sake of national progress were closely aligned—and in some cases, actively modeled on—the rhetoric of government officials and conservation figures in Europe and the United States. In their fear of timber famine and environmental collapse, their faith in industrial progress, and their conviction that forestry was a key component of national security,

³¹ Mark Cleary, “Managing the Forest in Colonial Indochina c. 1900-1940,” *Modern Asian Studies*, Vol. 39, No. 2 (2005), 264.

³² See, e.g., Thaddeus Sunseri, *Wielding the Axe*; and Thaddeus Sunseri, “Reinterpreting a Colonial Rebellion: Forestry and Social Control in German East Africa, 1875-1915,” *Environmental History*, Vol. 8, No. 3 (2003), 430-451; and Thaddeus Sunseri, “Working in the Magroves and Beyond: Scientific Forestry and the Labour Question in Early Colonial Tanzania,” *Environment and History*, Vol. 11, No. 4 (2005), 365-394.

³³ See, e.g., R. Sivaramakrishnan, “Science, Environment and Empire History: Comparative Perspectives from Forests in Colonial India,” *Environment and History*, Vol 14, No. 1 (2008), 41-65.

³⁴ Greg Bankoff, “Breaking New Ground? Gifford Pinchot and the Birth of ‘Empire Forestry’ in the Phillipines, 1900-1905,” *Environment and History*, Vol. 15, No. 3 (2009), 371.

Japanese officials were part of a transnational conservationist chorus of the turn of the twentieth century.

Forestry officials across the globe were likewise unified in their efforts to stamp out ostensibly un-enlightened traditional forest management practices. Japanese concerns with Korea's *hwajonmin*, for instance, closely echoed French fears of the "incendiary Arab," and American frustrations with the "Pauite" burning practices of the American Indian.³⁵ In this respect, Japanese anxieties about the assimilation of Korean subjects and the cultural degeneration of settlers merit careful comparison with French Algeria, where settler colonialism was also extensive. Regardless of whether the "debates about hygiene, race, and climate change" were "distinctive" features of "calls for forest conservation in colonial Algeria," as Caroline Ford has suggested, Japanese foresters' concern with sloth, hygiene, and the Korean *yobo* point up the cultural concerns and racial dimensions of forestry reformers in colonies across Asia and Africa.³⁶

Such resonances, however, can be overstated. Although many of the aims, anxieties, and approaches of Japanese officials in Korea were widespread, Japanese foresters also drew on Japan's own distinctive traditions of forestry as they asserted control over Korea's mountains and forests. That through centuries of toil to keep the densely forested archipelago green Japanese officials, village leaders, and farmers alike

³⁵ To some Westerners, in fact, the kindred nature of the American Indian and the Korean farmer was plain to see. "I saw many evidences in my tour through Korea of a relationship between our American Indians and the Koreans," wrote the LA Times' correspondent in Korea, Frank Carpenter: "The probability is that some of these people made their way to the north and crossed the Bering Strait into Alaska. The cheekbones of the Koreans are high, and I saw many faces which made me think of our Indians." Frank Carpenter, "Interior Korea; Behind the Scenes with the Magistrates and People in the Backwoods of Korea," *The Los Angeles Times*, February 3, 1895

³⁶ Caroline Ford, "Reforestation, Landscape Conservation, and the Anxieties of Empire in French Colonial Algeria," *American Historical Review*, Vol. 113, No. 2 (2008), 349.

had nurtured a robust set of pre-industrial forestry practices is now well recognized by scholars across regions and disciplines. Although to many scholars early modern Europe (and especially Germany) remains the cradle of forest history, Japan offers, in the words of one eminent forest historian, “a little noticed cross-check for historians of the German and West European forest, indicating which conditions were essential to sustainable yield forestry and which were either marginal or replaceable.”³⁷

How, then, did Japanese officials in Korea reconfigure Japan’s own traditions of forest administration as they charted a new course for forest management in Korea? How, in other words, might we extend the history of Japan’s green archipelago not only into the twentieth century but also into the forests of Japan’s empire? As I see it, two legacies of Japan’s pre-industrial forest history were especially potent in shaping the forestry reforms pursued in Korea. The first was “the silvicultural corpus” generated during the Tokugawa period. Japan’s centuries-long effort to curb deforestation yielded many insights into afforestation techniques, regenerative forestry practices, and the village-level management of scarcity. What is perhaps most extraordinary about Japan’s pre-industrial forestry is not the stringent village level regulation of the exploitation of forests but the fact that by the 18th century a robust “positive regime” of regenerative forestry was underway.³⁸ Although extreme denudation was confined to a few select areas, the emergence in Japan of what Chiba Tokuji has called a “culture of bald mountains” shaped Japanese perceptions of and approaches to Korea’s forests.

³⁷ Joachim Radkau, *Wood: A History*, 295-96.

³⁸ The best overview of these practices can be found in Conrad Totman, *The Green Archipelago*, Conclusion.

In addition to providing the policy template for some of the earliest reforms pursued in Korea (such as the shared-yield forestry system and erosion control projects), these regenerative forestry traditions informed Japanese attitudes towards the relationship between deforestation and agricultural production, the effects of erosion and siltation, and the necessity of plantation forestry. Japanese officials in Korea went to their greatest lengths to highlight Japan's own distinctive traditions of forestry in their exhortations for grassroots tree plantation. While the approach to the administration of the nationalized timber reserves along the Yalu River basin bore a strong resemblance to other colonial and commercial forestry operations, efforts to stimulate village-level afforestation and village conservation were framed as extensions to Korea of Japan's traditions of forest love thought and its civic forestry institutions.

The second principal legacy was *iriai*, or the informal regulation of common pool resources and the collective management of woodlands. A defining feature of village politics in Japan, *iriai* formed a key conceptual touchstone for Japanese officials in Korea as they pondered how to reorganize village-level ownership boundaries and consumption patterns. Despite critical differences in the distribution, regulation, and history of common forestland usage in Korea, Japanese approached Korea's "un-owned public mountains" much as they did Japan's own *iriai* arrangements. Japanese views on how woodlands in Korea should be managed within and across villages, how land ownership should be proven without documentation, and how scarce resources should be allocated were all shaped by Japan's own re-configuration of *iriai* customs in the Meiji period.

To be sure, the approach to forest management pursued in Korea involved newfound Western scientific ideas about the dynamics of ecological change, techniques

of reforestation, and methods for erosion control. But this approach also entailed tailoring Japanese approaches to forest administration to Korean conditions. The shift from the 1908 Forest Law to the 1911 Forest Ordinance perhaps best exemplifies the hybrid nature of forestry reforms that emerged in the peninsula. Seeking to entice the participation of private capital in forestry works and afforestation projects, Japanese officials initially turned to Japan's own system of shared yield forestry. But when this proved ineffective officials looked to the lessons learned in Hokkaido, the northern frontier that many considered a hothouse for the development of colonial forestry practices. The resulting system of afforestation land leases—a linchpin of forest policy in Korea—was a blend of Western ideas about forestland tenure, traditional Japanese methods of joint reclamation, and more recent innovations honed in the proto-colonial conditions of Japan's northern frontier.

The evolving and composite nature of Japanese forestry practices in Korea presents a challenge to the forestry historian. It is indeed exceedingly difficult to tease out the many influences, ideas, and intellectual frameworks that gave expression to the forestry project in Korea. But the evolution of Japanese forestry practices and their applications in colonial territories also presents an opportunity to expand the geographical and temporal bounds of scholarship on the historical relationship between colonialism and conservationism to account for the forestry projects of Japan and its twentieth century empire.

In essence, green imperialism remains a story of Europeans asserting their authority over distant, tropical, and unfamiliar forested landscapes. Many of the defining features of the rise of modern conservationist thought remain rooted in the commercial

considerations, scientific networks, and administrative challenges of 19th and 20th century European empires. In Tanzania, concern with unfamiliar tropical diseases gave impetus to German efforts to stabilize the climate, which prompted the colonial government to devote considerable resources to forestry.³⁹ In Burma, efforts to vitalize the extraction of valuable stands of teak spurred important innovations in forest administration that were later disseminated through elite colonial forestry schools.⁴⁰ In India, the British Raj regularly battled with local communities over efforts to seize control over commercially enticing forest stands.⁴¹ In all of these places, colonial forestry and conservationism arose out of an effort to understand, control, maintain, and reap commercial gains from forests brought under the supervision of the colonial state.

This commercial approach to scientific forestry was operative in colonial Korea. The Japanese state did gain control over vast tracts of forestland and viewed forestry as a critical component of colonial development, finance, and industrialization. Wherever possible, the colonial state and Japanese corporations extracted timber and other wood products, which were used to supply not only mainland Japan but Japan's expansion into Manchuria as well. The desire among Japanese officials to ameliorate fuel scarcity, facilitate colonial settlement, and improve finances would have been wholly familiar to most colonial foresters.

But unlike their European counterparts, Japanese officials stepped into forest landscapes that were ecologically similar and geographically proximal to those of the

³⁹ Thaddeus Sunseri, *Wielding the Ax: Forestry and Social Conflict in Tanzania, 1820-2000*, (Ohio: Ohio University Press, 2009).

⁴⁰ Raymond L. Bryant "Romancing Colonial Forestry: The Discourse of Forestry as Progress in British Burma" *The Geographical Journal*, Vol. 162, No. 2 (1996), 169-178.

⁴¹ See, e.g., Ramachandra Guha and Madhav Gadgil, "State Forestry and Social Conflict in British India," *Past & Present*, No. 123 (1989), 141-177.

archipelago. Despite differences in climate and geological composition, the landscapes of both Korea and Japan shared a similar forest ecology (which comprised more than 70 percent of both landmasses), were densely populated, and had been groomed over centuries principally to facilitate the production of rice.⁴² Although each society had modified these landscapes in distinctive ways, many of the central questions of forest management, applications of forest resources, and challenges of conservation were shared. To some officials, these affinities suggested that they could look directly to Japan's own past for answers to Korea's forestry problems. That both countries had long been part of the same Confucian intellectual tradition also meant that Japanese foresters (unlike their European counterparts) could frame their appeals for forest conservation in readily accessible and already familiar ways.⁴³

The urgency with which Japanese forestry officials in Korea pursued forestry reforms also merits comparison with other colonial forestry projects. Whereas in many of Europe's colonies in Africa and Asia it took many decades for forestry to become a central concern (let alone function) of the colonial government, in Korea forestry reforms

⁴² Japan's geological origins and soil conditions had shaped particular patterns of forest use, for instance, while Korea's climate has left it prone to summer flooding and drought. These differences are critical, and Japanese forestry officials labored mightily to account for them. See Conrad Totman, *Pre-industrial Korea and Japan in Environmental Perspective*, (Leiden: Brill 2004).

⁴³ Whereas foresters in Java, Burma, or West Africa had to impose a wholly unfamiliar intellectual framework regarding forestry on colonial populations, Japanese officials routinely invoked Confucian rhetoric on the dire importance of mountain reclamation and flood control (*chisan chisui*), proper felling techniques, and other Confucian teachings as they framed their reforms to the Korean public. These intellectual traditions essentially allowed Japanese forestry officials to draw legitimacy in two different ways: as an Asian power that had mastered and could thus impart the scientific methods of the Western powers; but also as an Asian neighbor that had honed its own approaches to forestry.

were launched at the outset of colonial rule.⁴⁴ Forestry reforms were deemed the “urgent business” of the colonial state. Just three years after the establishment of a protectorate over Korea, Japanese officials promulgated the Forest Law and began to amass a cadre of forestry officials in Korea. By 1911, only one year after annexation, colonial officials had established a substantial forestry bureaucracy, set up a forestry school, built nurseries, carried out a comprehensive set of forestry surveys, and commenced afforestation works. Although it took more than a decade for the basic policies of forest management to be laid out (and although Japanese officials would regularly revise these plans), the Government-General in Korea was unusually swift in its commitment to enacting and supporting forestry reforms—not just on state land but on privately owned woodlands as well.

Many different objectives, concerns, and experiences lent intensity to this campaign. Part of this urgency stemmed from Japan’s own early Meiji-period experiences with deforestation and its environmental costs. If the latter half of the 19th century had taught forestry officials anything it was the need for the state to play an active role in forest conservation. Japan’s comparatively late emergence as a colonial power also allowed its forestry officials to draw upon the past experiences, intellectual traditions, and scientific insights of forestry institutions and projects across the globe. Erosion control methods were adapted from Austria; lumbering technology was borrowed from the Pacific Northwest; surveying techniques were absorbed in Germany.

⁴⁴ In India, for instance, it was not until the 1860s that the state even began to consider the establishment of a full-fledged forestry bureaucracy. Even with the support of the colonial government, moreover, forestry remained inconsistent in many parts of British control. In French Algeria, too, it took more than four decades for the government-general to pass a forestry law. In colonial contexts from New Zealand to Kenya to Java to Cameroon, forestry works were in their earliest stages contained principally to areas of commercial interest.

Compressed into a matter of decades, Japanese forestry officials had immersed themselves in Western forestry techniques, re-configured ownership of woodlands and the legal architecture of forest administration, and assumed control over woodlands from Taiwan to Karafuto. Colonial officials, as a result, arrived to Korea already convinced of the dire importance of state-led forestry and Japanese foresters came equipped with a wide range of administrative tools and scientific techniques.

The urgency of forestry officials in Korea should also be understood as an expression of utilitarian concerns about the promotion of industry, agriculture, and colonial settlement. If the intensity of afforestation measures in Korea was unusual, it was in large part because Japanese officials viewed Korea as a rice basket for Japan, a site for colonial settlement, and a stepping-stone for continental expansion. The deep-rooted concern with afforestation works on privately owned woodlands grew out of the desire to stabilize waters flows so as to boost agricultural productivity. Village self-sufficiency in timber and fuel was considered a key component of the promotion of industry: the economical use of fuel, timber, and fertilizer in agricultural-use woodlands meant that Koreans would be less likely to impinge upon the sustainable yield forestry projects unfolding on state land.

Forestry reforms and afforestation measures, in short, should also be viewed as a key component of the colonial state's development-oriented campaign of "extending the homeland" to the colonies (or *naichi enhō*). In contrast to European colonial projects in Africa, the colonial project in Korea witnesses an intensive investment in infrastructure and heavy industry. Forest resources were instrumental to this agenda. The intensity of colonial development in Korea required intense extraction and thus intensive

afforestation efforts. In the eyes of colonial officials, regenerative forestry was a means to stabilize water flows, facilitate village self-sufficiency, and improve finances. The rapid growth of a settler population (which would reach nearly one million by 1945) in an already densely populated landscape likewise stoked fears of timber famine and fuel scarcity. For settlement to be lasting and industrialization profitable, it was reasoned, the colonial state needed to move vigorously to regenerate forest stocks, reform fuel consumption patterns, and boost agricultural productivity. Settlers and corporations were seen by the state as both a strain on Korea's forest resources but also the standardbearers of forest conservation and the pioneers of afforestation.

Whatever the intentions, afforestation occupied a prominent place in the forestry policies rolled out by the Government-General. Although the Government-General also launched a vigorous extractive enterprise where timber reserves were available, the regeneration as well as regulation of both private and national forestlands was the preoccupation of many forestry bureaucrats in Korea. Nowhere was the colonial state's concern with or approach to afforestation more visible than in the 1911 Forest Ordinance, which tied afforestation works to the land redistribution process. As time wore on, the Forest Ordinance and the Forestland Survey became the engines of the Government General's distinctive program of regenerative forestry: the intervention of Japanese capital, the oversight of experts, as well as the broad-based participation and labor of Korean farming communities. These were all defining components of what scholars have called the "greenificationism" (*ryokkashugi*) of the colonial state in Korea.

Japanese officials were by no means unique in their commitment to afforestation works; the regeneration of forests was an essential component of forestry in colonial

contexts across Asia and Africa. But the extent to and rate at which state-led afforestation campaigns extended to into privately owned woodlands, school room activities, cultural forums, and village politics across Korea stands in contrast to the afforestation projects in other colonies. In many cases, afforestation works were focused principally on the regeneration of commercial forest stocks and state enterprises. It was not until settlers, scientists, and other interest groups exerted pressure on the state that these activities were expanded into more intensive afforestation campaigns.⁴⁵

Forest reclamation in Korea altered more than the landscape itself. Afforestation (and the legal architecture that supported it) reorganized patterns of forest usage, reconfigured ownership rights, shaped village politics, and expanded the reach of local officialdom into Korea's extensive hinterlands. Afforestation was a vehicle for the channeling of forestlands into the hands of the state, settlers, and corporations. It was a cause for mass participation in celebrations of the emperor. And it was a means to bolster the state's legitimacy in the eyes of foreign observers and Korean subjects alike. The greening of Korea, in short, presented the state with new opportunities for the penetration of rural society and the shaping of individual values.

Although Japanese officials routinely cast afforestation activities as for the betterment of Korea's soil and society, afforestation came at a cost for many. In reorganizing the boundaries of ownership, many communities were cut off from the land and the resources essential to their livelihood. The burden of afforestation was often

⁴⁵ In Algeria, for example, the first calls for afforestation came not from the colonial government but from the League of Reforestation, a public body composed of settlers and scientists that exerted pressure on the colonial government and politicians in Paris to proactively regenerate forests. Caroline Ford, "Reforestation, Landscape Conservation, and the Anxieties of Empire in French Colonial Algeria," *American Historical Review*, Vol. 113, No. 2 (2008), 351.

placed on local communities and farmers, who were expected to provide labor, raw materials, and fees to facilitate these efforts. Although forest regeneration promised increased forest resources in the future, it sometimes led to scarcity and strife in the present.

The ravages of the Asia-Pacific War could be seen in forests across Japan's empire. By 1945, in fact, bald mountains stretched across the Japanese archipelago, as desperate villagers sapped woodlands of any sustenance they could offer.⁴⁶ The re-emergence of bald mountains in Japan and denudation of forests across Japan's empire should prompt us to consider the environmental costs and consequences of total war in Asia. But it should also impel us to think more rigorously about the transnational dynamics of forest management in imperial and wartime Japan. To understand conservation and consumption in Japan, that is to say, it is imperative that we also attend to the politics of resource management in its colonies.

If writing the twentieth century history of Japan's green archipelago requires that we look beyond its national borders to the forests of Japan's empire, it also requires that we look beyond the colonial period. The transnational reach of Japanese timber corporations in the postwar era necessitates that we examine the relationship between Japan's economic rise and its continued consumption of timber products from abroad, especially those furnished from the forests of Southeast Asia.⁴⁷ Such a transnational approach to East Asia's twentieth century forest history will not only enable us to better

⁴⁶ On the environmental consequences of total war at home see William Tsutsui, "Landscapes in the Dark Valley: Toward an Environmental History of Wartime Japan," *Environmental History*, Vol. 8, No. 2 (2003), 294-311.

⁴⁷ See, e.g., Peter Dauvergne, *Shadows in the Forest: Japan and the Politics of Timber in Southeast Asia* (Boston: MIT Press, 1997).

understand the history and legacies of Japanese forestry in its colonies, but also to grasp how conflicts over forest access, sustainable forestry, and natural resource management persist into the twenty-first century.

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- MRI Dai Nippon Sanrinkai, ed, *Meiji ringyō isshi* (Tokyo: Dai Nippon Sanrinkai, 1931).
- CRI Chōsen Sanrinkai, ed., *Chōsen ringyō isshi* (Keijō: Chōsen Sanrinkai, 1933).
- TYBK Miyata Setsuko and Yi U-yōn, eds., *Chōsen no sanrin seisaku* (Tōyō Bunka Kenkyūjo, Yūhō Bunko, 2009).
- YB Yūhō Bunko, Tōyō Bunka Kenkyūjo, Gakushūin University, Tokyo, Japan.
- JCAHR Kokuritsu Kōbunshokan, Ajia Rekishi Shiryō Sentaa (National Archives of Japan, Japan Center for Asian Historical Records), Tokyo, Japan.
- HYCTS Han'guk Yōksa Chōngbo Tonghap Sisütem (Korean History Data Integration System), Kuksa P'yōnch'an Wiwōnhoe, Kyōnggi-do, Kwach'on-si, South Korea.

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Kōbe yūshin nippō
Kyōngsōng sinmun
Maeil sinbo
Manshū nippō
Manshū nichinichi shimbun
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Korea Review
Pulp and Paper Magazine
T'aegük hakpo
Taehan chaganghoe wǒlbo
Taehan hyōphoe hoebo
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