Julia Marinaccio

Linking Theory with Practice?

Cadre Training and Environmental Governance in China

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Chapter One: Introduction

Cadre training has long been recognized as a central political institution in China's political system. Though a comparatively under-represented research topic in the study of Chinese politics, a series of informative works have been published since the early 1960s. These explore different premises where Chinese officials undergo training, the organizational processes of training management, the institutional and regulatory adjustments that accompanied China's socio-economic transformation, and the role of training in state cohesion (Price, 1976; Shambaugh, 2008; Pieke, 2009a; Chin, 2011; Lee, 2015). Given these insights, why the need for another book on this topic?

In this book, I argue that extant literature fails to fully grasp the complexities of China's official training structure and its critical function in (environmental) governance. While studies have so far focused on training in party schools and academies of administration, I explore the training of officials working at the State Forestry Administration. Collocating it in China's multi-layered cadre training structure, I tackle the question of the role of training in the central government's efforts to operationalize what I will call the Chinese Communist Party's 'ideology of sustainability.'

Borrowing from theories of ideology and political steering, I argue that cadre training is a critical feature of the party-state efforts to come to terms with its ecological crisis and steer China onto a path of sustainable development. Rather than an outcome, I understand sustainability as a political project and a discursive regime. Constructs such as 'Scientific Development Outlook' (科学发展观), 'Socialist Harmonious Society' (社会主义和谐社会), and 'Ecological Civilization' (生态文明) constitute the Chinese Communist Party's ideology of sustainability, "a systematic set of ideas which it used to create its own organization and to achieve its goals" (Schurmann, 1971, p. 19). They are, therefore, authoritative ideas with action consequences. While existing literature sees either performance as a source of legitimacy (Zhu, 2005) or ideology as a "symbolic narrative" (Noesselt, 2017, p. 342) and mediator of public perceptions (Holbig, 2018) in the context of regime legitimation, I contend that ideology is multidimensional, composed of symbolic and operational aspects (Free & Cantril, 1967) and the Chinese Communist Party's legitimacy depends on the party-state's capacity to reform and innovate both elements of ideology and bring them into coherence. Key to this endeavor are cadres who are responsible for operationalizing the party's ideology of sustainability.

While literature describes training as a communication channel through which the central government conveys its policy directives to local officials (Schurmann, 1968; Shambaugh, 2008; Pieke, 2009a; Heberer & Trappel, 2013; Tsai & Dean, 2013), I argue that training does more than that. It is a critical hierarchical instrument through which the Chinese Communist Party attempts to steer local political action. By constructing ecological knowledge, it creates the conditions of possibility for thinking about nature as well as its intervention. Operating on two levels, training translates symbolic ideology into operational ideology horizontally, and transforms abstract and general ideas into concrete and specific directions of thinking and action vertically. It is this redirecting of the thinking about development and the action on how to reconcile economic, social, and environmental interests, how training pursues a higher degree of responsiveness of local government agencies toward central mandates and so avoid a disconnect between symbolic and operational aspects of ideology that would jeopardize the legitimacy of the one-party rule in the long run.

My book makes the following three contributions: First, by unpicking China's training structure, I expound how 'sector-specific training' (行业培训) in functional bureaucracies re

lates to what is commonly understood as 'cadre training' (干部培训) in literature that primarily focuses on party schools and other training institutes under the authority of party organs. Second, focusing on discursive processes, I explain how training in the forestry administration transmits development directives from the central to the local level and shapes what officials involved in policy implementation think about and how they act upon with regards to sustainable development. Third, based on document analysis and data collection from three rounds of fieldwork in Beijing, Fujian, Chongqing, and Yunnan, I demonstrate why training fails to enhance local capacities in natural resource management where it this most needed.

The remainder of this introductory chapter explains how my research ties in with recent and past scholarship, gives a brief summary of my theoretical contribution to the understanding of political processes in contemporary China and the methodological design of this study, and, finally, offers a brief summary of each chapter.

1.1 Changing values of development

In the early 2000s, the Chinese leadership officially acknowledged that the former development model, based on irrational economic growth, had not only brought prosperity for the few, while it left behind a significant proportion of China's population, but had also taken a damaging toll on the country's natural resources and the environment. Against the backdrop of an increasingly disparate society and rampant environmental degradation that jeopardized the foundations of China's future economy and society, the leaders of the Chinese Communist Party officially declared their intention to put China on a path of sustainable development.

In the years after the 16th Party Congress in 2002, the new leadership under Hu Jintao (胡锦涛) and Wen Jiabao (温家宝) promulgated two new ideological guidelines—the Scientific Development Outlook and Harmonious Socialist Society—rhetorically turning its back on the former development model based on frantic economic growth. This paradigmatic shift of values promised the adoption of a more comprehensive approach towards development that would refrain from pursuing economic growth at the expense of social equity and environmental soundness.

The Scientific Development Outlook stressed the importance of more equitably sharing the benefits of China's development through the reform policies, as well as an institutionalization of governance (Fewsmith, 2004, p. 7). Harmonious Socialist Society acknowledged for the first time the "serious social contractions that have arisen in the process of transition" (Holbig 2005: 28) and "refine[d] the party's management of social expectations implicit in the 'scientific development concept'" (Holbig, 2005, p. 27). Since then, China's leaders have continued to construct a vision of sustainability with 'Chinese characteristics', inserting a series of new or refined constructs and slogans into official party ideology. These include, among others, the concept of Ecological Civilization and Beautiful China (美丽中国) which have gained momentum with the rise of the fifth leadership generation under the leadership of Xi Jinping (习近平). Both refer to a strategy and vision of sustainable development, and so stress the relevance of environmental protection for national construction (Ran, 2017, p. 648).

Ideological constructs are vital aspects of 'official language' (官话) in China, not only because they "define the goals of the party and its leaders" (Davies, 2014, p. 150) but also because of their discursive and political authority. The Chinese Communist Party's official language is a methodology of power that aims to "manipulate the language and thought processes" (Cao in Link, 2013, p. 296) of its party-state administration and the entire populace. By controlling meaning, the language system prescribes the framework and possibilities of action. The abstract concepts that constitute the Chinese Communist Party's vision of sustainability are, therefore, authoritative guidelines that predefine the framework within which the leadership

expects people to think about and act on sustainability. This demand pertains, in particular, to those who are employed in the vast party-state administration. In other words, sustainability is not a "politically neutral and universally achievable condition, but […] a political project that creates the conditions of possibility for thinking about nature as well as its intervention" (Yeh, 2009, p. 885).

These reflections beg the following question: Given the leadership's aim to overcome the attitudes and values that have so far supported the former development model, how does the party-state prevail upon its agents to think about, and set actions that foster, a model of sustainability that follows the Chinese Communist Party's authoritative vision?

1.1.1 Cadre management and political steering

A central topic in policy studies concerned with delegated discretion is the effectiveness of these instruments that affect the responsiveness of lower levels toward higher-levels' expectations. To answer these questions, institutionalists traditionally focus on the regulatory and control mechanisms that steer local agents and make them accountable for their actions. As recent scholarship predominantly focuses on institutional (or personnel-related) control over local governments and government branches, the topic of cadre management became a popular research topic, including in the field of environmental governance.

Cadre management entails the recruitment, training, promotion, transfer, removal, and the retirement of Chinese officials (Manion, 1985; Burns, 1987, 1994; Chan, 2004). It came into focus for researchers in the late 1990s, when scholars sought explanations for China's unprecedented economic development and answers for what stimulated cadres' behaviour. Principal-agent theories dominated, which saw officials as agents both of higher levels of the party-state administration and of local communities (Edin, 1998, p. 98). This theory assumes that in order to make agents' own interests work towards the benefit of the principal, the principal needs to install an effective incentive structure (e.g., promotion, bonus, etc.). At the same time, to detect diverging behaviour, agents must be monitored and, if necessary, sanctioned (e.g., transfer or removal) (Edin, 1998, p. 98).

A great deal of research likens the idea of accountability with the system of cadre evaluation in combination with promotion prospects. Scholars attribute the cadre evaluation system a steering function, but with varying degrees of effectiveness. Gunther Schubert & Anna Ahlers (2012) find that in cadre evaluation the final allocation of points produces a hierarchy among local governments and government departments and awards those that finish at the top with promotion prospects and more funds. Although Yuen Yuen Ang (2016) shows that only about 1 percent of all cadres have the chance of promotion (Ang, 2016), Thomas Heberer & René Trappel (2013, p. 1065) argue that even cadres without promotion perspectives must play the game, as an "attention slip" could be the end of their appointment. In the context of environmental protection, Carlos Wing-Hung Lo & Shui Yan Tang (2007) find that the introduction of environmental targets into the cadre responsibility system has indeed improved environmental governance. Heberer & Trappel (2013, p. 1093) come to a similar conclusion, claiming that if a local government chooses to stress environmental policies, then environmental targets can become hard targets, and thus a prerequisite of cadre promotion.[1]

The introduction of the 'life-long ecological and environmental damage responsibility system' (生态环境损害责任终身追究制) in 2013, the newly enacted Environmental Protection Law

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[1] The understanding that the behaviour of Chinese officials is stimulated by rational-linear control mechanisms (i.e., the aims and goals are clearly linked with the instruments used to exert control) continued to stimulate research in this field and gained popularity with the emergence of literature on regime resilience at the turn of the 21st century (see discussion below).

(环保法), the closing of highly polluting industries (Foreign Affairs, 2017), and the recent revival of Green GDP under the former Minister of China's environmental protection administration Chen Jining (陈吉宁) and his vice-minister Pan Yue (潘岳) are indeed strong indicators that the central government is attempting to achieve a value change by finessing the cadre evaluation system, lending more weight to environmental targets.

Nevertheless, the problem proves to be much more complicated than merely shifting weight from economic targets to environmental targets, as "enhanced accountability may not necessarily produce better performance" (Chan & Li, 2009, p. 58). Policy studies show that cadre evaluation produces considerable side-effects (Lam & Chan, 1996; Edin, 1998; Chan & Li, 2009; Wu et al., 2013; Kostka, 2014). These can be explained by the interaction between formal institutions of cadre evaluation and informal factors such as political coalition-building or social capital, the strategic behaviour of cadres to obtain tax alleviation, and funding or rent-seeking activities for the purpose of supplementing one's income (Whiting, 2004; Zhang et al., 2004; Tsai, 2007; Kung et al., 2009). Since China's tax and financial system burdens local governments with the financial responsibility for public policy provision, these organizations have long continued to prioritize revenue-generating policies over the provision of environmental services that do not bring any direct revenue for their budgets (Wu et al., 2013). Studies also show that different state actors have different interests and expectations of development (Tilt, 2009) but also that local governments face difficulties in meeting multiple goals set by higher levels (Bernstein & Lu, 2003; Tsai, 2007; Chan & Li, 2009; Tilt, 2009; Kostka, 2014) and, therefore, revert to "selective implementation" (O'Brien & Li, 1999). Another problem facing performance measurement in China is that the system remains prone to manipulation in terms of false reporting. Over the years, researchers have pointed to the problematic distortion and the lack of credibility in China's internal information system (Xiao & Womack, 2014) as having serious implications not only for environmental monitoring (Brombal, 2017) but also for cadre evaluation.

To summarize, the political steering literature considers the institution of cadre evaluation to be an effective instrument to direct the actions of lower administrative levels, albeit with reservations. Although this political instrument arguably affects behaviour, as it has prevented some local governments from further deteriorating the environment irrationally, it does not prevail upon agents to subscribe to new values, especially when environmental goals conflict with other goals. Hence, to counterbalance the pitfalls of hard accountability, it is still necessary to create newly shared values that "[make] their inroads into established organizations" (Schröter & Röber, 2015, p. 27). In the terminology of the Chinese Communist Party this means 'ideological conformity.'

1.1.2 The organization of leadership training

In the discipline of Public Administration Studies, there is vital debate and growing international recognition that skill training of public officials is an essential factor in promoting reform and bringing about value changes in public administration (Peters, 1998; Witesman & Wise, 2009; Racko et al., 2014; Schröter & Röber, 2015). Brainard G. Peters (1998, p. 305) argues that similar values, skills, and understandings about policymaking are conducive to effective policy coordination between different governmental agencies. Manfred Schröter & Eckhard Röber (2015) see civil servant training as a "powerful tool of professional socialization," as training programmes are "the most effective conveyances to help new cultural dispositions making their inroads into established organizations" (Schröter & Röber, 2015, p. 27). Regarding the governance approach of such training, Eva Witesman & Charles Wise (2009) show that the structural characteristics of a government (i.e., centralization vs. decentralization) affect the availability of training in values and skills that are fundamental for political transition. They

theorize that democratization promoted via skill training is best supported by a centralized government structure. In contrast, Kristina Tõnnisson & Kaido Paabusk (2004) object to the assumption that only centralized structures can bring about a collective value change arguing that centralized tools can indeed facilitate the process of awareness building, but they are no guarantee that civil servants actually learn, let alone put the learning into practice (Tõnnisson & Paabusk, 2004, p. 8).

Like many other states, the Chinese party-state has a keen interest in promoting shared values and the professional skills of its agents. During the revolutionary period (i.e., before 1949), the Chinese Communist Party started to develop a systematic approach to making agents internalize the values and norms of party ideology. During the famous Rectification Period in Yan'an (1942–44), a constitutive phase for the Chinese Communist Party's ideological and organizational alignment, the party developed a systematic approach of 'study' (学系) in which "[e]ducation was designed to change the principles and norms one lived by as well as one's conduct and behaviour" (Apter & Saich, 1994, p. 273). "Exegetical bonding" (Apter & Saich, 1994) aimed to produce ideological uniformity through the intellectual and moral remoulding of those who joined the Communists and followed them into Yan'an. In the meantime, training contents and formats have diversified (Pieke, 2009a; Lee, 2015) but text learning and exegesis prevails a constitutive part of cadre training, where trainees are expected to internalize a specific way of thinking and reasoning about political, social, and environmental developments.

Over the past decades, a series of informative and insightful books and articles have been produced that specifically deal with the institution of cadre training. Jane Price's (1976) *Cadres, Commanders, and Commissars: The Training of the Chinese Communist Leadership, 1920-45* is the earliest comprehensive English-language volume on leadership education in China. Her historical research on the concept of leadership and its direct organizational expression in how leaders were trained during the revolutionary period is a central work in the literature on cadre training in China. Up until that point, cadre training had been tackled as a side-product of party organization (Schurmann, 1971) and cadre management (Vogel, 1967). Price's (1976) analysis of historical documents renders a detailed picture of the diverse premises of leadership training (e.g., party schools, military academies, etc.), introduces the practices of leadership training for Chinese Communist cadres, and explains how training served very concrete political goals during the revolutionary period. Most importantly, it shows that training conveyed both theoretical and practical competencies for enabling students to carry out the Communist Revolution and the fight against its enemies. Prices argues that training was a major contributing factor to the Chinese Communist Party's "political effectiveness" grounded in "an organization loyal to the state" (Price, 1976, p. 5).

With the introduction of a civil service system in China in the 1990s research was much preoccupied with the processes of its implementation, tackling questions regarding professionalization, administrative efficiency, and the persisting influence of the Chinese Communist Party in China's state administration (Burns, 1987, 1994; Aufrecht & Li, 1995; Tsao & Worthely, 1995; Tong et al., 1999; Brødgaard, 2002; Chou, 2004; Chan, 2004; Chan & Li, 2007; Tsao & Worthley, 2009; Jing & Zhu, 2012; Yang et al., 2012). Though the majority of these studies include civil servant training in their analyses, they mostly treated it as a by-product of the reforms. An exception is the study by Kaifeng Yang et al. (2012) on civil servant training in Nanning City in Guangxi Province. In their article, the authors identify three problems of contemporary training in academies of administration: Firstly, the centralized structure of civil servant training allows little flexibility at the local level. Secondly, the parallel structure of party schools and schools of administration creates overlapping functions, and the diffusion or waste of limited resources (Yang et al., 2012, p. 186). Thirdly, marketization or outsourcing has also pervaded China's training sector; China appears to outsource capacity training but keeps value training in-house (Yang et al., 2012, p. 187). Yang et al. (2012) and Chin (2011)—discussed

below—were the first studies to shift their focus from party schools to other training premises in contemporary China. More importantly, they revealed that China's training structure consists of parallel and partially overlapping systems, hinting at the division of responsibilities and authority over training facilities and trainees.

At the beginning of the 21st century, the collapse of the Soviet Union and the unexpected survival of the Chinese Communist Party's regime prompted researchers to seek the causes of its 'resilience' (Oi, 2000; Nathan, 2003; Shambaugh, 2008). Under the catchy slogan "bringing the party back in" (Zheng & Brødsgaard, 2004), scholars turned their attention to party organization for finding explanations of how the Chinese party-state had managed to adapt to the new challenges brought about by socio-economic transformation. This interest was also derived from new insights in Soviet history which showed that a crucial factor of the Soviet collapse was internal state disintegration—that is, the loss of loyalty of state agents towards the regime. As it turned out, while international observers were analysing the causes of China's regime resilience, the Chinese Communist Party had previously started to thoroughly explore the reasons for the Soviet Union's atrophy (Shambaugh, 2008, p. 49) and put measures in place for preventing a similar fate.

The scholarly attention to the adaptive capacities of the party-state triggered a new wave of research on leadership training. In this strand of literature, cadre training is considered to be a crucial element of party building (Shambaugh, 2008) through which the Chinese Communist Party attempts to win the minds of its agents (Pieke, 2009a). However, this literature also shows that the Chinese Communist Party committed to modernizing leadership training and making officials fit for the new challenges ahead. In her research article, Émelie Tran (2003) argues that the Shanghai Municipality Party School is emblematic of the Chinese Communist Party's efforts to modernize its party-state administration. Charlotte Lee's (2015) study on party school training delivers new and greater detail on how the dictates of marketization have impacted the core political organizations of the Chinese Communist Party. Yet the idea of modernization does not imply that the party is willing to give up its political fundamentals. Gregory Chin (2011) contends that training is a method for reconciling the goals of socio-economic transformation and the preservation of Leninist principles of organization, as it aims to foster innovation and, at the same time, preserve the political fundamentals of party-rule.

The most comprehensive and, so far, most insightful volume on contemporary cadre training is Frank Pieke's (2009a) book, *The Good Communist: Elite Training and State Building in Today's China*, and his complementary articles published in international journals (Pieke, 2009b, 2009c). Using ethnographic research methods, Pieke analyses contemporary leadership training practices in a provincial-level party school. The data he amassed allowed him to paint a vivid and vital picture of the "life and work at party schools" (Pieke, 2009a, p. 81). For him, cadre training is central in the party's efforts to control its agents that populate the party-dominated public sector.

> [C]adre training is a strategic site, where the party not only imparts knowledge and skills needed of cadres. […] It also turns cadres into a ruling elite, whose whole composure expresses the mystique of the [Chinese Communist Party]'s power. (Pieke, 2009a, p. 19)

In one of his chapters, Pieke relays that the party school in Shilin Yi Autonomous County in Yunnan Province trains students in skills that are conducive for the promotion of local tourism, including Mandarin Chinese, computer skills, e-government, and English. Like Lee (2015), Pieke sees in the party school in Shilin an example of how the market economy affects China's socialist governance (Piek 2009a, pp. 136-137). What he overlooks, though, is that local training plays a role in (local) policy implementation. Pieke's (2009a) assessment is indicative, as the topic of cadre training has conspicuously remained outside scholarly debate on political

steering in China. That said, there is a widely accepted view among scholars that training serves as a communication system to bring higher-level mandates down to the local level (Schurmann, 1968; Shambaugh, 2008; Pieke, 2009a; Heberer & Trappel, 2013; Tsai & Dean, 2013) but the mechanisms of knowledge transmission and their discursive logics have been studied only insufficiently.

Wen Hsuan Tsai & Nicola Dean (2013) laid important groundwork in this regard and aptly illustrate that training is indeed an instrument to direct local policy implementation. In their article, the authors unpick the structures of study sessions from the Politburo at the central level down to the party committees at the township level and trace the vertical process of knowledge diffusion. Study sessions are organized in cooperation with the Policy Research Office which proposes possible topics for study to the Chinese Communist Party General Office, and the latter makes the final decision. The chosen themes are then disseminated to the party committees at all levels (Tsai & Dean, 2013, p. 96). Crucially, Tsai & Dean's (2013) research not only reveals the decision-making processes behind who decides what kind of knowledge should be diffused, but, more importantly, they evince that also in contemporary China study sessions are used to influence local policy-making and policy implementation to the extent that central priorities of specific policies are communicated through this system (Tsai & Dean, 2013, p. 104).

The aforementioned studies offer plentiful insights into the structures and practices of leadership training in past and present China, but they have their limitations. Firstly, so far studies, in particular those that focus on contemporary China, have limited their focus to party schools, academies of administration, and executive leadership training institutes under the authority of party organs. Therein, training is considered to be a critical feature of party organization and regime resilience serving the purpose of elite socialization and the professionalization of high-level administrators for handling the day-to-day affairs in a modern state administration. Operational knowledge discussed in literature is thus limited to administrative but not to specialized sector-specific skills. When it comes to sustainable development, the question of expertise becomes even more crucial as human beings are a significant factor in policy implementation. It has become an undeniable fact that human capacities are a prerequisite for meeting the challenges of sustainable development and it is, therefore, important to understand the structures and processes of knowledge transfer and identify their limitations. Secondly, although studies repeatedly point to training also as a form of communication channel through which the central government conveys its policy priorities to the local level, we still do not sufficiently understand how this communication process plays out. How does the regime link ideology and practice in knowledge transmission training and how is training devised as to put technical professional skills into the service of political goals and visions?

1.2 Towards a new theory of environmental governance

When I started to investigate how cadre training dealt with the issue of sustainability in early 2012, I found that party schools had inserted classes into their curricula touching upon the conceptual aspects of the Chinese Communist Party's new ideology of sustainability. These included the reading of central documents on the Scientific Development Concept, Harmonious Socialist Society, and Ecological Civilization. Other courses introduced local experiments as examples of the operationalization of these concepts in different places across China. Both course formats did not convey any specific technical skills or sector-specific knowledge, such as recent developments in forest disease control or in the use of Geographic Information Systems for detecting changes in soil composition. My participation in a 'high-end' training session for officials from a local Development and Reform Commission at People's University (人民大学) in June 2013 confirmed this observation and I started to wonder how training actually

helped local officials working at line departments to perform their concrete work duties. Sector-specific expertise is a critical aspect of local state capacity, as officials need to firstly translate abstract ideas into issue-based policies and, secondly, operationalize these programmes into practice in specific local contexts. The technical expertise of those who formulate and implement policies is as vital as the management skills of those who are responsible for the more procedural aspects of state administration.

On my first exploratory field trip to China in 2014, I asked informants where they underwent training which specifically conveyed knowledge and skills in environmental protection and resource management. I learned that as in Austria, where there are training facilities for the general administrative civil service (*Allgemeiner Verwaltungsdienst*) as well as for civil servants working in the judiciary, education, and forestry, officials in China undergo training in different 'systems'—in Chinese, *xitong* 系统. In addition to party schools and schools of administration, each functional bureaucracy maintains its own training facilities to provide on-the-job training and other opportunities of professional development for their employees. Skimming through the literature, I found that the Chinese party-state has been exerting significant efforts to professionalize sector-specific training for officials from the judiciary, police, and fire service (Yang, 2002; Zhang, 2009), while also engaging in numerous collaborations with national and foreign universities and international funding agencies. These observations raised a series of questions: If cadre training is an integral aspect of party-building and regime resilience, what role does sector-specific training have—other than human capital development—and to what extent it supports these objectives? How does training establish a connection between the more abstract aspects of the party's vision of sustainability and the more practical and technical aspects of its operationalization?

In analsing the role of cadre training in the central government's quest to make development more equitable and environmentally sound, I draw on a multidimensional concept of ideology. The Chinese Communist Party's ideology is a unified system of abstract meanings for which the party declares exclusive authority (Hermann-Pillath, 2005, p. 13) and which it "use[s] to create its own organization and to achieve its goals" (Schurmann, 1971, p. 19). Constructs such as the Scientific Development Outlook, Harmonious Society, and Ecological Civilization are explicit and authoritative expressions of the Chinese Communist Party's ideology of sustainability, which it wants to see reflected in concrete policies formulated and implemented by functional bureaucracies. Analytically, I distinguish between symbolic and operational aspects of ideology (Free & Cantril, 1967). While symbolic ideology refers to "general, abstract ideological labels, images, and categories" (Jost et al., 2009, p. 312) (i.e., the abstract ideological constructs), operational ideology pertains to "more specific, concrete, issue-based opinions" (Jost et al., 2009, p. 312) (i.e., sector-specific policies). Since ideology is a constituting element of regime legitimization, state organization, and policymaking in China (Schurmann, 1971; Holbig, 2006, 2010; Marinelli, 2017; Noesselt, 2017), the party has to make sure that symbolic and operational aspects of ideology are coherent and reflect each other.

> Without pure ideology, the ideas of practical ideology have no legitimation. But without practical [operational] ideology and organization cannot transform its *Weltanschauung* into consistent action (Schurmann, 1971, p. 23).

For the operationalization of its ideology, the Chinese Communist Party relies on a broad range of agents who work in different positions in the 'administrative units' (行政单位) and the 'public service units' (事业单位) of China's party-state administration. Generally, I address them as 'agents' or 'officials' in terms of a professional group, including cadres, civil servants, and all sorts of technical and administrative personnel for whose training party and government organizations share responsibilities. Analytically, I distinguish between two types of agents.

While 'operationalizers' refers to officials with decision-making power pivotal in making policies that reconcile economic, social, and environmental interests, 'implementers' include all those agents who support the administration to "translate words of policy statements […] into action" (Kaufman, 2006, p. 4).

To avoid the emergence of a paradox between the symbolic and operational aspects of ideology, the Chinese party-state must bring its agents to think about, and act on, sustainability as prescribed in the framework of symbolic ideology. I argue that training is a political instrument whose structure and function must be construed in the above-described relationship. Training communicates the general and sector-specific political directives and conveys the technical means for converting policy statements into practice. By translating symbolic into operational ideology, training not only influences the thought patterns of officials but also prescribes their framework of action, and so becomes a steering instrument in China's political system.

1.2.1 The methodology of exploring training

In tackling the role of training in the central government's efforts to operationalize the Chinese Communist Party's ideology of sustainability, I raised several questions in the research process: How does the sector-specific training of functional departments structurally relate to cadre training in party schools and academies of administration? How has this training structure developed over the course of history? How are policy directives transferred from the central to the local level via the training system? To what extent and with what means does training, understood as a knowledge transfer process, create a connection between the more abstract ideas of ideology and technical skills? Does sector-specific training enhance local problem-solving capacities?

To answer these questions, I decided to explore the training of officials in China's forestry bureaucracy. The choice of my case study was based on a series of theoretical and methodological reflections. Firstly, according to Jason Seawright & John Gerring (2008, p. 294), a case study must be representative as it "seeks to elucidate the features of a broader population." At the same time, the case must be distinctive enough in order to find "useful variation[s] on the dimensions of theoretical interest" (Seawright & Gerring 2008, p. 296). Since training structures are replicated in all line departments, the State Forestry Administration exemplifies these structures, although forestry training distinguishes from that of other line departments, the political portfolio of the State Forestry administration is quite special.

Therefore secondly, as many other bureaucracies, the State Forestry Administration must find ways to reconcile economic and ecological or environmental objectives; however, since forests are multifunctional resources, the challenge to substantially improve both economic and environmental outcomes together lies in the centre of the forestry bureaucracy's political portfolio. According to Alica Robbins & Steven Harrel (2014), conflicts of interests emerge primarily in three areas: the improvement of livelihoods in rural areas, the rehabilitation and conservation of ecological services, and the increase in economic output of those sectors that are dependent on timber production (i.e., forest industry and the construction sector). The task of the State Forestry Administration is to manage the competing interests of the state, market, and societal stakeholders.

Thirdly, forestry has a comparatively long history in China. The multiple services of forests have always been of vital interest to the state and a core issue for China's rulers (Elvin, 2008), whereas their management is a relatively recent phenomenon that traces back to the period before 1949. On these grounds, the case study allows for tracing the evolution of the training structure from a historical perspective. Historical analysis is not only key to understanding how training is organized and managed in contemporary China. More importantly,

forests used to be a critical natural resource for national economic development during early state development and the Reform Era. This approach changed significantly at the end of the 1990s when the central government prompted a radical shift from resource exploitation to resource protection. This policy change allows for an analysis of how training has been employed to pursue a value change within China's administration.

The findings of this book are based on a variety of data gathered by using multiple qualitative research methods, including document analysis (e.g., official government documents, yearbooks, newspaper articles, research articles, etc.) and expert interviews (33) that I conducted in three rounds of fieldwork between 2014 and 2016. My interviewees comprised cadres from forestry administration and other bureaucracies at five different levels of China's state administration (i.e., centre, province, prefecture, county, and township), Chinese scholars, current and former staff of the National Cadre Academy of Forest Management, and international experts involved in forest projects and human capital development in China. In addition, I participated in one training session at People's University in July 2013, and in order to gain a comparative perspective on forestry training, I conducted site visits at three leading forestry research and training facilities in Austria.

The semi-structured expert interviews were based on a guideline that I had prepared in advance taking into consideration theoretical reflections such as central-local relations and the conflicting goals of economic development and environmental/ecological protection. Due to the heterogeneity of my informants and their varying insights into, and experiences with, training processes, the interview guideline was handled flexibly and adapted according to the interviewee and interview context. As fieldwork is part of a learning process, the guideline was also subject to changes that resulted from experience and knowledge accumulated in this process (*Prozesshaftigkeit*) (Liebold & Trinczek, 2009, p. 40). The interviews that I was able to register were transcribed, while off-the-record exchanges were summarized; I complemented both with field notes about my observations and reflections before, during, and after the interview.

In order to protect my sources, I anonymized names and references in the text. The entire data material was coded and analysed with the support of atlas.ti, a software programme for qualitative data analysis. Although I started my research with some preliminary theoretical reflections, I used an inductive approach for the analysis of my data. After the first round of open coding, I looked for the relationship between my initial codes in the second round of coding (axial coding). These relationships referred to causes and consequences, conditions and interactions, strategies and processes (Neuman, 2011, p. 513). In the third phase of selective coding, I identified the most significant themes which eventually laid the groundwork for the structure of this book.

1.2.2 Contribution and relevance of this study

My study challenges the view in extant literature which sees cadre training as a feature of regime resilience insofar as it fosters socialization of political elites and provides training in 'secular' knowledge to promote innovation (Shambaugh, 2008; Pieke, 2009; Chin, 2011; Yang et al., 2012; Lee, 2016). These studies limit their focus on training of political elites in party schools and executive leadership academies but refrain from exploring more closely the role of on-the-job training provided by bureaucracies that formulate and implement sector-specific policies. Consequently, they fail to capture the structure and function of training in its complexity.

The book is an essential contribution to our understanding of political processes in contemporary China. Firstly, it not only corroborates the findings of other researchers that ideology continues to "prescribe behaviour" (Schurmann, 1971, p. 38-39) in contemporary China, but also reveals how the process of prescription unfolds. Secondly, my historical analysis shows that the combination of teaching ideology and 'secular' knowledge is not, as purported in the

literature, a product of the Reform Era. Instead, training was envisioned as a bureaucratic means of governance already during the revolutionary period in the 1930s and 1940s, and the contemporary structure was established during the early state development in the early 1950s. Thirdly, training is critical in creating an intricate association between the more general ideological concepts of (sustainable) development promulgated in party documents and the concrete policy proposals implemented by functional bureaucracies. Hence, it is part of constructing the meaning of sustainable development. Finally, the training structure not only addresses 'cadres' but accommodates personnel working in a great diversity of fields and positions in China's modern party-state administration. By inscribing roles and determining expectations or responsibilities in the processes of operationalization and implementation, training gives direction of thought and action to participants, and so becomes a means to organize governance.

Since I selected China's forestry administration as a case study, the book also adds findings to the research in the field of environmental governance. As a policy area, professional development in China's forestry administrations faces drawbacks that are similar to other policy fields, such as fragmentation, budget constraints, and lack of coordination. These drawbacks undermine the administrative capacities of local forestry authorities in responding to current challenges of natural resource management, and concurrently the central government's goal of promoting sustainable forest development. The dogma of leadership in Chinese Communist Party ideology and the central government's ambiguous relationship with rural China contribute to hampering the party-state's problem-solving capacities where they are most needed.

1.2.3 Audience

My book is located in the interface of political theory, comparative politics, and environmental governance, addressing a broad academic and non-academic—but specialised— readership that is interested in political processes and environmental issues in contemporary China. More specifically, the theoretical debate presented in Chapter Two relates to the concerns of researchers and students in the fields of regime politics and comparative politics and is, therefore, suitable for course use in classes on Chinese politics. Historians will find much of interest in Chapter Three, as it complements the historiography of China's cadre training with a fresh perspective on the political drivers of institutional change. The case study on China's forestry administration ties in with research on environmental governance in China, thus addressing a readership with an interest in sustainable development and natural resource management. Chapter Four addresses a purely academic readership; focusing on modes of environmental governance, it unravels the processes of training as a steering instrument in China's (forestry) governance approach. Chapter Five exposes empirical findings of training practices in China's forestry administration. The meticulous analysis of the organization of professional development in China's forestry administration will surely garner the attention of experts and practitioners in the fields of forest management and public administration. Finally, Chapter Six explains how the training structure of China's party-state administration links with state-led knowledge transfer processes between the Chinese party-state and rural society. The chapter is suitable as a resource for classes on rural development, but also speaks to readers outside academia with a concern for rural organization in China.

The book is a revised version of my PhD thesis. I strongly reduced processuality—a detailed description of the research process and analysis—to enhance the readability of the whole text. However, as I hope that also PhD and Master students will consult my book for their research projects, I left some methodological reflection for inspiration at the beginning of each empirical chapter.

1.3 Structure of the book

I organized this book into seven chapters, including the introduction and conclusions. Each of the empirical chapters starts with brief vignettes that allow the readers a glimpse into my fieldwork experience and how these experiences influenced the course of my research.

Following this introductory chapter, ***Chapter Two*** presents the argument that regime legitimacy in China depends on the party-state to turn the Chinese Communist Party's propagated values into consistent actions. Training is a critical instrument in the party-state's efforts to avoid the emergence of a paradox between symbolic and operational aspects of ideology. It operates at two dimensions: Horizontally, training translates symbolic ideology into operational ideology; vertically, abstract and general ideas are translated into concrete and specific directives of thought and action. Training pursues a higher degree of responsiveness of local government agencies toward central mandates and promotes a value change toward a more balanced development model. In its function of human capital development, training aims to increase administrative capacities by fostering the problem-solving capabilities of two types of officials: Operationalizers have decision-making power and are pivotal in the formulation of policies that could transform development from lavish economic growth and resource extraction toward a balanced model that reconciles economic, social, and environmental interests. Implementers are those staff who support the administration in the planning and implementation of policies.

Chapter Three suggests that training in China's party-state administration is better described as a complex, multi-layered structure composed of several training systems under the aegis of the different party and government organizations. Party and government departments at the central and local levels share the duties of training operationalizers and implementers at all levels of China's party-state administration. The historical analysis reveals that the combination of teaching ideology and sector-specific knowledge is not a product of the Reform Era but can be traced back to the revolutionary period and early state development. As a matter of fact, the genesis of forestry training and related institutions dates back to the early 1950s, and their progress was part of state-building efforts. Parameters for both symbolic and operational ideology have changed over time, shaping the multi-layered structure and the capabilities imparted by the system.

Chapter Four analyses the structures and organization of training in the State Forestry Administration, explaining how responsibility and authority is parcelled out from central to local forestry authorities. As a consequence of the fragmentation of China's bureaucracy, forestry authorities face a series of challenges that ultimately undermine systematic human capital development. The chapter also shows that training takes place across diverse spatial environments ranging from the premises of educational institutions such as party schools, cadre academies, cadre schools, vocational schools, colleges, and universities, to alternative places such as guesthouses or seminar hotels, outdoor spaces, and demonstration farms. These places offer a diverse set of training programmes with different objectives that can roughly be distinguished in four idealtypes.

Chapter Five focuses on the discursive level of forestry training and substantiates the claim that an essential function of training is to create an association between symbolic and operational ideology and maintain their mutual contingency. By emphasizing language formalization as a specific feature of political processes in China, the chapter analyses training plans as a part of the communication between party and government, as well as between central and local authorities. It demonstrates that training is not a mere instrument for the dissemination of information and knowledge related to ecological modernization. Instead, it is a vital part of the construction of this vision. Training is a process of translation from the symbolic, abstract, and

general into the operational, concrete, and specific. General directives on cadre training formulated in central Chinese Communist Party documents find expression in specific training programmes for forestry personnel from the State Forestry Administration. By ascribing roles and determining expectations and responsibilities in the processes of operationalization and implementation, training gives directives of thought and action, and so becomes a means to organize forestry governance.

Chapter Six shows that knowledge transfer in China's forestry administration does not stop at the lowest level of state administration. Technical extension service is an institutional extension of the party-state's training system in the context of state-society relations, through which grassroots officials provide technical training to forest farmers for promoting sustainable forest management. While cadre training is a political instrument which makes sure that central ideas about development and related skills are conveyed to cadres, the extension service is a political instrument through which street-level bureaucrats transfer this knowledge to local farmers on behalf of the party-state. Therefore, the organization and implementation of the extension service follows the same principles as cadre training. Situated at the far right end of the symbolic-operational continuum, technical extension service conveys practical and technical knowledge to farmers within the framework of symbolic ideology. As with cadre training, technical extension service prescribes the roles of farmers in the process of operationalization and tries to solidify them through training.

Chapter Seven summarizes the book's findings and offers a conclusion. The multidimensional concept of ideology exposes the functions of the overall training structure in the context of party-government relations, where it translates abstract parameters of development into sector-specific policies, and the function of the individual systems in the context of central-local relations, where training joins other political instruments to increase the responsiveness of local agents to higher-level mandates. The supremacy of symbolic ideology requires officials to gain a thorough understanding of the party's ideology of sustainability. Yet at the same time, the necessity of operational ideology expects them to acquire sector-specific capabilities, so that they can formulate policies and take concrete political action that operationalizes the abstract principles and directives of the Chinese Communist Party's (symbolic) ideology of sustainability.

The conceptualization of training and its structure were developed at an early point in the history of the Chinese Communist Party. Since then cadre training politics have greatly been influenced by the cyclical patterns of 'letting go' (放) and 'tightening up' (收)" (Baum, 1996) in administrative reforms, as well as by political discourses about what kind of human capacities are more conducive to the Communist and later the Socialist cause. The exploration of human capital development in the State Forestry Administration's training systems shows that compartmentalization and resource constraints lead to inefficiencies and hinder coordination. Administrative fragmentation and China's dual leadership-model are the main reasons for variations in training provision across regions and undermine system-wide human capital development. These issues are exacerbated by the high importance the Chinese regime gives to symbolic ideology. The distribution of training budgets favors those institutions whose training addresses higher-level officials, particularly leading cadres, and those training institutions which are under the authority of party organizations. In the meantime, grassroots organizations struggle to accomplish a myriad of tasks while lacking the financial and personnel means to do so. As long as the party-state neglects to channel its resources to where human capital development is needed most, it will continually struggle to come up with viable solutions for sustainable forest management.

Chapter 4: Training in China's State Forestry Administration

Figure 2 National Cadre Academy of Forest Management
Source: taken by the author during fieldwork

On 3 November 2015, I embarked on a 90-minutes ride from the central Beijing to Huangcun Xidajie in the city's southern outskirts, where I had an appointment for an interview at the National Cadre Academy of Forest Management (国家林业局管理干部学院)—the central-level training institute of China's State Forestry Administration (Figure 2). When I arrived at the metro station, I exited onto a dusty road and my lungs immediately filled with heavily polluted air. Looking around, I could not spot a single tree or grassed area. I took a right turn and walked along the road in search of the academy. When I finally stood in front of the main gate, I stared up at the huge grey non-descript building with a spacious courtyard. To the left and right sides were two neatly cut green lawns with some fir trees planted on them and at its centre, a screen placed on top of a stone monument welcomed participants to a training seminar on the development of China's forest industry.

Director L. came to pick me up from the entrance and together we entered the grey building. We walked along a similarly grey corridor with office doors on each side into Director L.'s office. At the far end of his office a table with two computers was placed right next to the window. The room smelled of smoke. Director L. was a very kind looking man in his 50s who offered me some hot tea and a seat on a mouldy, old couch next to the door. On the opposite side of the room an old scarlet-red metallic cupboard stood against the wall. Although I was somewhat familiar with administrative offices in China, the lack of an atmospheric environment in a place where forestry cadres were supposed to learn more about forests was bewildering; especially because it stood in a stark contrast with my earlier visits to two Austrian Forest Training Institutes. Both were located in breathtaking surroundings, nestled amongst forests, lakes, and mountains. Inside, the training institutes were packed to the rafters with posters, samples of wood items, and stuffed animals in display cabinets. Both institutes made use of an adjacent machinery park and an exercise forest for training purposes. At one of the institutes, the director had welcomed me into a wood-panelled office in which his basset hound had occupied an imposing position on the floor (we had to step over him to reach the desk and seats).

The dog, so the director had explained to me, was not only an authority in his office but also in the field, as he was a trained sniffer dog specializing in forest parasites.

With this contrast in mind, I started my interview with Director L., wondering how the learning environment at the National Cadre Academy of Forest Management shaped Chinese cadres' relationship with their subject of study and what it can tell us about the governance of natural resources in China.

Divided into three parts, this chapter delves into the institutional and organizational aspects of forestry training[29] as an example of sector-specific training in China. The first part focuses on the structures of training governance, expounding how training responsibilities are parcelled out between different authorities along the vertical and horizontal planes of China's forestry bureaucracy. The second part then taps into the organizational landscape and spatial aspects of forestry training, introducing the diverse spaces where forestry training takes place at the central and local level. The third part, finallz, analyzes the challenges to human capital development in China's forestry bureaucracy revealing how fragmentation creates regional disparities and undermines system-wide improvements in human capital development.

4.1 The structures of training governance

4.1.1 Manageing forests in China

Depending on the basic category, the literature most commonly categorizes six forest regions in China that are distinguishable by their climatic conditions: Northeast, Northwest, Southeast, Southwest, South Central, and North China Plains.[30] These regions are home to eight forest biomes with 23 major forest types that range from tropical forests in the South and boreal forests in the North, to wetlands along the Eastern coasts and to grassland and deserts in the far West (Dai et al., 2011, pp. 1067-1068).

Forest land is classified as either state-owned (国有) or collectively owned (集体). State-owned forests are natural areas, reserves, and some plantations managed by (state-owned) logging enterprises, forest farms, and nature reserve agencies that oversee forest management and protection (Liu, 2001, p. 240). Collective forests are plantations and second-growth forestlands of townships, administrative villages, or individual village households that employ different management models, including contracts, leases, and shareholding cooperatives. The ratio of state, collective, and private forests has changed from 42:38:21 during the period between in 2003 to 38:18:44 in 2008 (He et al., 2020, p. 5). Their distribution varies in geographic terms. While the Northeast features high concentration of state forests (86 percent), collectively (25 percent) and individually managed (66 percent) forests prevail in the South (He et al. 2020, p. 6). State-owned forestland accounts for 124 million ha of the national total, whereas collectively and privately managed forests comprise 186 million ha of the national total (National Forestry and Grassland Administration, 2018). However, due to low stocking levels, collective forests comprise only 45 percent (13.6 billion m³) of the total forest volume (Yi et al., 2013, p. 826).

Up until March 2018, the State Forestry Administration was a body for specialized economic administration under the State Council. Its portfolio comprised drafting and supervising the implementation of forest laws, regulations, and international conventions and the management, organization, coordination, and guidance of policy areas encompassing forestry industry,

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[29] Since party schools are sufficiently analysed in the extant literature (Shambaugh, 2008; Pieke, 2009a, 2009b, 2009c; Lee, 2015), this book refrains from a more detailed discussion of the structures and contents of party school training.

[30] Cold temperate zone; II: Mid- temperate zone; III: Warm-temperate Zone; IV: Subtropical zone; V: Tropical zone; VI: Plateau climate zone (Dai et al., 2011, p. 1067).

forest resource development and conservation, and biodiversity protection. More specifically, the administration was responsible for the following tasks:[31]

1. The protection, development, and supervision of forests and wetland resources and the implementation of the national forest development strategy (reforestation, greening, mountain closure, fire prevention and disease control, supervision of license-based logging, transportation of timber and bamboo, carrying out the national forest resource inventory and compiling statistics, etc.).
2. The protection of biodiversity and the control of import and export of endangered species (fauna and flora).
3. The management of forest land and forest rights, state-owned forest enterprises, as well as the development of the forestry industry and the wood products industry.
4. The guidance on cultivation of commercial forests (timer, economic, fuelwood, herbal medicine production, bamboo forests, and forests for special purposes) and landscape forests.
5. Guidance on forestry science and technology, education, and foreign affairs.
(State Forestry Administration, website)

Figure 3: Organigram of the State Forestry Administration (before March 2018)
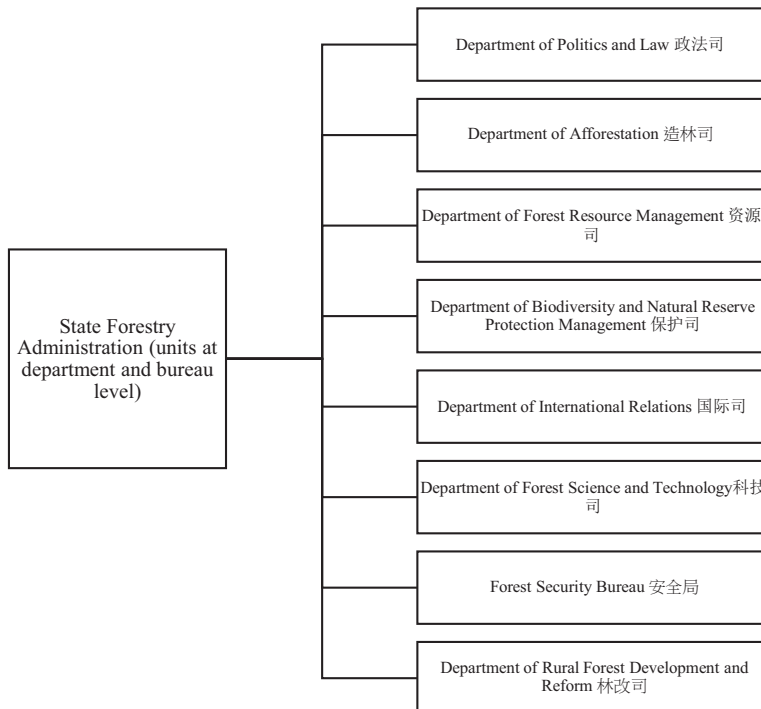
Source: Compiled by the author, information drawn from the website of State Forestry Administration (State Forestry Administration, National Forestry Organizations).

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[31] As a consequence of the reforms of March 2018, the portfolios of the State Forestry Administration and the State Grasslands Administration were merged into one agency under the Ministry of Natural Resources.

Until 2018, the broad portfolio was shared by nine vice-ministerial level (administrative) agencies at the central level (see figure 3 on page 71) and several directly subordinated public service units, including the National Cadre Academy of Forest Management and the State Forestry Press, which assume important functions in the administration's sector-specific training. While the former arranges training for forestry staff, the latter produces relevant training material. The structure of the central-level units is replicated at the local level. However, units and their portfolios tended to be merged further down the administrative levels (State Forestry Administration, National Forestry Organizations).

Forest policies of all types in China are grounded in the sensitive relationship between central control and local flexibility (Goodman, 1986, p. 3), as uneven distribution, varying physical characteristics, changeable climatic conditions, and varying management responsibilities compel central authorities to consider variations in the formulation of policies, and the demands on local forestry authorities regarding policy implementation. This dynamic also applies to the governance of forestry training.
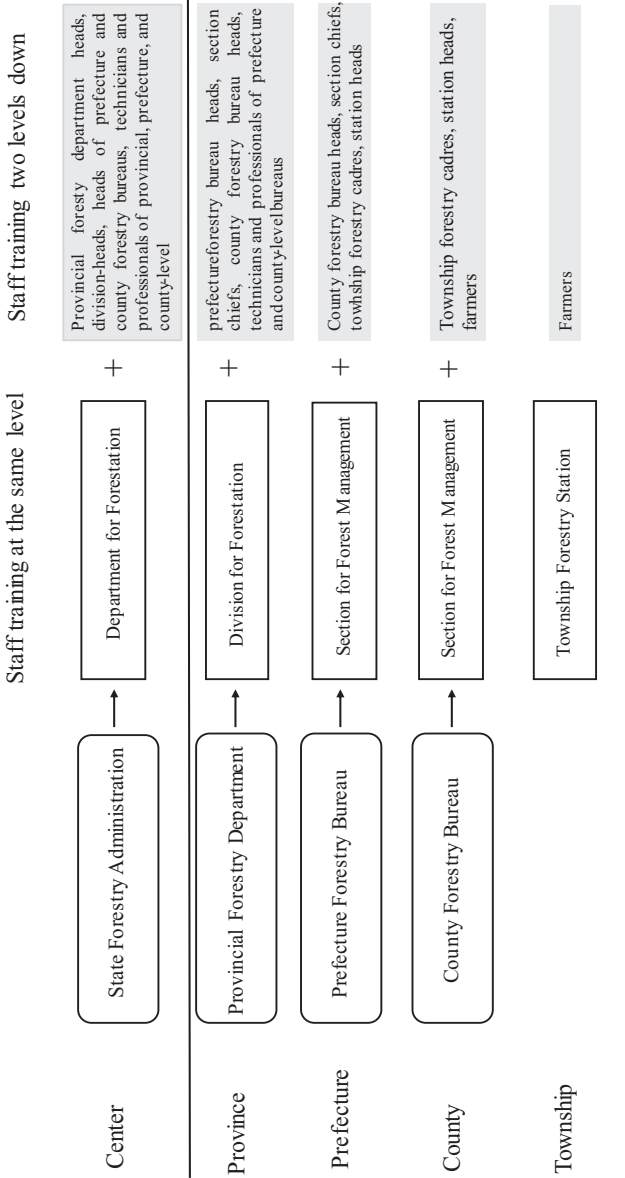
4.1.2 The principle of shared responsibility

The governance of forestry training is closely linked with the structure of forestry administration, its portfolio, and the division of labour between the individual administrative and public service units. Authority and responsibility is entrusted to forestry authorities along vertical lines (纵线) (i.e., forestry authorities) from Beijing down to the county-level and along horizontal lines (横线) (i.e., units or divisions) of each administrative level (Huang et al., 2010, p. 22). In Chinese official documents this form of organization is termed *fenji guanli fengong zeren* (分级管理分工责任), loosely translated as parcelling out management authorities and dividing training responsibilities (see figure 4 on page 73). This management system was first proposed in the *Ministry of Forestry Trial Methods for Strengthening the Management of Cadre Training* (林业部关于加强干部培训管理暂行办法) (Ministry of Forestry, 1995) and later enshrined in *Some Opinions on Gradually Strengthening Forestry Education and Training* (国家林业局关于进一步加强林业教育培训工作的若干意见) (State Forestry Administration, 2001a).

Vertically, training authority is parcelled out to four administrative divisions: centre, province, prefecture, and county. Each level supervises the training of its own staff and trains forestry cadres within its jurisdiction. This means that the State Forestry Administration at the central level organizes training for central-level staff and key cadre groups from across the country (primarily leading cadres). Provincial forestry departments (厅) arrange training for members of staff in its department-level divisions (处) and for cadres from the provinces' prefecture and county forestry authorities. Prefecture forestry bureaus (局) train the staff in their sections (科) and cadres working at the county and township level. County forestry bureaus (局) organize training for cadres at the county-level sections (科) and for forestry cadres that work at forestry organizations at the township-level (站). Furthermore, the forestry training system also reaches beyond the state, addressing societal actors involved in forest development. Township cadres, supported by their county offices, provide 'forestry technical extension services' (林业技术推广), carrying out all sorts of training activities with farming communities (see more in Chapter 6).

Forestry authorities at all levels of administration devise their own training plans according to the following planning procedure. Each year the State Forestry Administration issues a list of training programmes that are going to take place within the same year.

Figure 4: Parcelling out Training Responsibilities

	Staff training at the same level		Staff training two levels down
Center	State Forestry Administration → Department for Forestation	+	Provincial foresty department heads, division-heads, heads of prefecture and county forestry bureaus, technicians and professionals of provincial, prefecture, and county-level
Province	Provincial Forestry Department → Division for Forestation	+	prefectureforestry bureau heads, section chiefs, county forestry bureau heads, technicians and professionals of prefecture and county-level bureaus
Prefecture	Prefecture Forestry Bureau → Section for Forest Management	+	County forestry bureau heads, section chiefs, towhship forestry cadres, station heads
County	County Forestry Bureau → Section for Forest Management	+	Township forestry cadres, station heads, farmers
Township	Township Forestry Station		Farmers
Village			

Source: Compiled by the author, previously published in Marinaccio (2019, p. 797)

Announcements of the individual training programmes are issued in due time, and local forestry authorities then then select cadres from their jurisdictions to participate in the central-level training programmes. The same procedure applies to the provincial level where—after the provincial forestry department releases the information on what, when, and where a specific training is going to take place—prefecture and county-level forestry authorities select participants to complete the training. As the units within the forestry authority have a professional relationship with their superior units, higher levels give directions on training but do not have any decision-making authority with regard to the training programmes organized by lower-level bureaus. Therefore, local forestry authorities retain a high degree of autonomy over where, what, and how they organize training for their staff.

Although training authority over cadres follows the above-described two level-down principle (i.e., provincial departments train prefecture and county cadres, prefecture bureaus train county and township cadres, etc.), the centre regularly convenes cadres from sub-provincial units for training programmes in its central-level training institutions. These cadres predominantly hold leadership positions in prefecture-level and county-level forestry units. Recently, the National Cadre Academy of Forest Management has also begun to create distance-learning courses for forest station heads from the township-level. The reasons behind the centralisation of training responsibilities lies in what Kenneth Lieberthal (1992) coined as 'fragmented authoritarianism' in China's political-administrative system and the resulting power relations between central and local authorities.

According to Lieberthal, "authority below the very peak of the Chinese political system is fragmented and disjointed" (Lieberthal, 1992, p. 8). This fragmentation is owed to China's "dedicated bureaucracy" (Ma, 2017, p. 39) organized along vertical *kuai*-lines (快) between central and local functional agencies and horizontal *tiao*-lines (条) between functional agencies and their territorial level of government. Under the principle of 'dual leadership' (双重领导) a functional department at the local level has two superiors: its vertical superior agency and the government on the horizontal line (Ma, 2017, p. 39). Consequently, administrative units distinguish between leadership (领导) and professional (业务) relationships; while the former imply binding orders, the latter are based on non-binding instructions. As local governments have financial and personnel allocation authority, administrative units often have leadership relationships with local governments at the same administrative level (Mertha, 2005, p. 797), prioritising directives from local governments rather than those from their professional superiors.

In her research on party school training, Charlotte Lee (2015, p. 38) contends that the "within-locale authority relationship" is a double-edged sword with the effect that interests of local party committees are aligned with their schools. This generates strong incentives for fostering local development, rather than developing approaches that would improve "system-wide" development (Lee, 2015, p. 35). Similar developments play out in local forestry authorities which are also under the dual leadership of local governments and their superior units. Although departments do not entirely ignore the directives that are transmitted from the centre to the localities, since their evaluation is conducted by their local superiors, they pay more attention to the directives and targets of provincial cadre training plans and local development plans, as well as the focal targets of local forest development.

Local protectionism has been a major headache for the central government for a long time, as it undermines its capacities to lead, manage, achieve, and account for national development priorities. Centralization has been one response to cope with this issue. Since the early 1990s, the central government has gradually centralised regulatory and control mechanism in a host of policy fields, including cadre management (Burns, 1994; Mertha, 2005; Brødsgaard & Chen 2018). Besides recentralizing control over promotion and appointment, another way the centre hoped to break through fragmentation and local protectionism was by gradually increasing the scope of addressees of central training programmes. This also applies to officials working at

local Human Resource and Education Offices who formulate local training plans and devise training programmes (National Cadre Academy of Forest Management, 27 July 2010). By passing over the provinces and directly communicating its priorities and key understandings of policies to local cadres, especially those with decision-making power and supervision responsibility, the centre is trying against a scenario in which regional interests and development priorities leave their mark on or distort interpretations. One of my interviewees used the following parable to pinpoint the rationale behind this strategy:

> It's like the granddad who wants to educate his grandchild by passing over the father because he does not trust the father or thinks that the father cannot educate his son well enough (Interview Director W., 5 November 2015)

Although local forestry authorities largely retain authority over the planning of local training, they are still required to fulfil higher-levels' training mandates in the context of national policies. National policies, such as large-scale ecological rehabilitation programmes or forest tenure reform are managed by national coordinating agencies which are either installed or appointed for overseeing the implementation of the policy and its accompanying training measures. Training plans are set up at the central level and training mandates decreed to the local forestry departments of the designated regions and jurisdictions. The goal is to diffuse essential contents of the policy and foster understanding of its objectives. To prepare cadres for the upcoming task, training is arranged before the actual implementation work gets started:

> The Sloping Land and Conversion Programme actually started in 1999. So in 1998, the forestry authorities in Kunming, Yunnan organized training for lower-level government officials. This programme gives them a better understanding of the policy, and how to apply and implement it. As in 2005, we had a new policy, the forest tenure reform, there also, after the government had [embarked on] this policy, the provincial-level organized the training selectively for officials at the prefecture-level. Cadres from the provincial level come and tell cadres from lower administrative levels about the policy (Interview Forestry Expert H., 8 May 2014)

Horizontally, the training system is further compartmentalized, as individual units are responsible for organizing the training of their staff (at the same level and below). Each year the units submit their training applications to the Human Resource and Education Office (人事教育司/处) of their local forestry department or bureau and are then allocated training budgets. Units can also receive invitations for training programs organized by other party or government departments, for example the Environmental Protection Bureau or the Organization Department. Participation in the training of other line bureaucracies is optional, whereas training mandated by the Organization Department (组织部) or the Human Resource and Social Safeguarding Bureau (人力资源和社会保障局) is compulsory, and the forestry department is obliged to dispatch somebody to undergo the training. The decision regarding who participates depends on the topic of the training programme and the professional field of the cadre, and ultimate decision-making power resides with the unit heads (Interview Division-head. X., China, 19 December 2015). Further, units can commission another unit to conduct a training programme, for example when the localities lack expertise in the field. In this case, costs are shared by both units; while the commissioning unit covers participants' travel costs the implementing unit provides teaching personnel as well as board and lodge (Interview Division-head X., 15 December 2015).[32]

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[32] Local forestry authorities usually try to spread costs across the departments and bureaus that send their staff for training. As such, the costs which arise are shared and are not a burden on the budget of the provincial forestry department (Interview Division-head X., 8 December 2015).

In order to adapt training course contents to the practical needs of cadres, various forms of feedback mechanisms have been introduced to assess the training needs of local cadres. Forestry authorities at all levels amass feedback by distributing evaluation sheets at the end of training programmes, and through field research groups (调研组) that conduct surveys and adapt training provision accordingly. Due to the fragmented structure, not only training resources but also surveys and feedback from different forestry authorities are overlapping. The centre dispatches research teams across China to ascertain the needs of cadres at lower administrative levels (Interview Director L. 3 November 2015), and provincial forestry authorities and their units conduct their own surveys. One of my informants in Yunnan explained the process as follows:

> […] Before setting up our training programme, we first conduct some surveys. We send a questionnaire to the prefecture level forestry bureau and the nature reserve management bureaus and ask several questions about what subject, where, when, how many people. Something like that. […] When we design the contents of the programmes, we draw on the feedback we got from telephone calls or people who have come to our office and asked some questions. Then we realize which subjects they areeasily confused by, we explain these issues during the programme. And in every programme we have at least half a day for discussion. We divide people into different groups, depending on how many people are in the class. We sit in the group and we listen to them and what they discuss, then we can get some feedback from them: Do they still have problems enforcing the law or do they still have some questions about the law?
> (Interview Mrs. F., 14 December 2015)

Regarding the usefulness of these programmes my informant replied:

> […] I do see progress. For example, we receive phone calls from local people. After we give explanations [to cadres] during the training course, we get fewer phone calls on these matters.
> (Interview Mrs. F., 14 December 2015)

In sum, three factors influence the set-up of local training plans: higher levels' training assignments based on national policies that are transmitted via sector-specific training, local policy priorities and forestry authorities' deliberation of what kind of capabilities local cadres should enhance, and local cadres' suggestions and requests. Which of these factors prevail depends on the type of training programme. While local forestry authorities cannot shirk the implementation of training programs related to critical national reforms, ecological restoration programmes, such as the Sloping Land and Conversion Programme, or training mandated by the local organization department, they have considerable leeway in devising skills training for local cadres. As will be shown in the section 4.2.2 below, these programmes are oriented toward local development needs and for their provision, local authorities even resort to central authorities help for getting the necessary expert inputs.

4.1.3 Drawbacks of training management

Frank Schurmann (1971, p. 58) claims that a systematically structured organization has a similarly systematic flow of information. this begs the question to what extent this assumption matches the realities of training practices in China's forestry administration. When I embarked on my first round of fieldwork, my original plan was to analyse a closed cycle of training plans working from the central level down to the township level. However, I quickly realized that this endeavour was doomed to fail. One of my informants at the National Cadre Academy of Forest Management explained that the existence of training plans at the local level depends on the role of forestry in a specific region. Regions where forests have a minor importance in the local

economy do not issue plans at all because training classes are rarely organized (Interview Director L., 3 November 2015).

However, when I inquired about training plans at the Provincial Department of Forestry in Yunnan—a province home to rich forest resources and China's most precious biodiversity hotspots—my local interview partner told me that the department did not issue any annual plans at all, due to irregular training activities and high variations from one year to the other. Some of the agencies will not organize any training in a given year, but they might arrange one or two training programmes in the following year. Working in this way, it does not make any sense to set up annual training plans (Interview Division-head X., 15 December 2015). Another informant confirmed this account, stating that training activities in the forestry administration across China are "not systematic but rather irregular" (Interview Professor Y., 8 July 2016). Besides this, the absence of training plans at the local level is also attributable to the fact that many local plans are poorly written or are just copied either from other provinces or from previous years. In order to avoid unnecessary scrutiny from higher levels, these plans are not published (Interview Professor X., 8 December 2015).[33]

My anecdotal evidence of these inconsistencies in the planning of cadre training at the local level accords with the findings of many other studies on central-local relations in the extant literature revealing that the flows of information are not as systematic as central regulations require or higher levels envision them to be. As such, the lack of planning provides clues about the structural realities of local forestry administrations, leadership priorities, training management, as well as the relationship between the central and local forestry authorities. Moreover, the example of Yunnan shows that the systemization of training practices at the local level is not necessarily linked with the relevance of forestry in the region, but a result of China's fragmented governance structure of training. Three detrimental effects that result from the fragmentation significantly undermines system-wide human capital building in China's forestry sector at the local level.

4.1.3.1 Regional disparities

The provision of training varies greatly across regions and jurisdictions. A determining factor of regional disparities in training provision is the financial allocation system of China's public administration that affects the capacities of local forestry departments not only to respond to higher levels' demands regarding human capital development but also to deliver necessary sector-specific on-the-job training that could facilitate and contribute to problem-solving by local forestry staff.

Training budgets are part of the overall budgets of local forestry authorities and are allocated by the Department of Finance of the local government. Local governments face financial constraints as they must render a large proportion of local revenues to the central government, even though they shoulder the greater burden of responsibility in terms of public service provision, such as education, healthcare, and natural resource protection. After they deliver the taxes to the central government, local governments are left with an allotment that only covers basic operating expenses (Wu et al., 2013, p. 12). Due to the mounting responsibilities of local governments, revenue-generating departments possess higher political leverage than departments that generate less revenue. Scholars agree that this state of dependency is highly problematic, as the *kuai*-relationship gives discretionary power to the local government for attaching varying political values to its government departments based on their revenue-generating capacities; at the same time, the financial allocation system diminishes the central government's influence on local policy implementation (Mertha, 2005; Wu et al., 2013; Kostka, 2014).

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[33] I suspected that my status as a young foreign researcher did not encourage cadres to provide me with the material I so desperately sought.

While forests as a natural resource enjoy a relatively high level of appreciation among both the government and Chinese society, forestry as an economic sector and as a profession has a comparatively weak status (Interview Mr. B., 7 July 2016). At the aggregate level, forestry accounts for only a small proportion of China's GDP. While agriculture contributes 9.5 percent to China's GDP, forestry accounts for a mere 4.2 percent (National Bureau of Statistics, 2015, p. 60). The Fujian, Hunan, Guangxi, Yunnan, Anhui, Guangdong, and Jiangxi provinces account for the highest gross output values in forestry (National Bureau of Statistics, 2015, p. 398) (Table 5). As a consequence, many local forestry authorities consistently lack resources and, in some cases, struggle for administrative survival (Interview Mr. B., 7 July 2016; Xiong in Zhang, 2008, p. 227).

Table 5 Gross output value of agriculture in 2014

	Total	Farming	Forestry	Husbandry	Fishery
1 Bio. Renminbi	10222.61	54771.5	4256	28956.3	10334.3
Percent	100	53.6	4.2	28.3	10.1

Source: National Bureau of Statistics (2015, p. 398)

Whilst some forestry authorities have a variety of educational and training institutions at their disposal, others lack critical infrastructure. In their study on training provision in national nature parks, Gao et al. (2013, p. 28) found that training budgets of most divisions across China are insufficient. Their survey shows that 65 percent of nature parks do not have any budget at all for providing sector-specific training to their staff, and parks that have funds available deem them inadequate. Only five percent of the sample under investigation agree that training budgets are sufficient. Also, many local forest organizations lack training personnel with expertise in areas where up-dated knowledge. According to Qiu Yezhen (2016, p. 32), the China Jilin Forest Industry Group (吉林森林集团) cannot provide training in specialized sectors, such as eco-tourism, capital finance, and security markets. This shortcoming is especially critical, since the recent expansion of the logging ban into state-owned forests in the Northeast compels the province to shift its focus from timber extraction to alternative revenue generation opportunities (see more on the ban in Sun, 2016; Marinaccio, 2020). Qiu (2016, p. 32) also points to an insufficient link between university training and the practical needs of the forestry administration, as university and college curricula do not meet the needs of China's current forest development. Consequently, in Yunnan, Sichuan, and Guangxi, graduates who start their appointment at the forestry administration have little expertise in sustainable forest management and forestry industry development. Furthermore, few graduates from forestry universities and colleges are inclined to work in forestry administration as civil servants or in forestry organizations and enterprises (Qiu, 2016, p. 32).

Against this backdrop, central authorities have started to mitigate disparities by raising funds for training projects that benefit local forestry departments and bureaus of disadvantaged regions. In addition, jurisdictions that are covered by the national forest development programmes receive their training budgets from direct transfers. However, these isolated measures do not contribute to a system-wide solution for the funding of human capital development.

4.1.3.2 Lack of coordination

In theory, the principle of local autonomy and compartmentalization ensures flexibility to local needs and a more effective transfer of specialized knowledge to officials that work in the diverse policy fields, including afforestation, planning, biodiversity protection, forest park management, etc. In practice, however, fragmentation results in two critical and interrelated shortcomings:

First, it undermines a long-term strategy for professional development exacerbated by the lack of coordination between department units and other relevant government departments. Second, it results in an unequal and insufficient distribution of training budgets within local forestry authorities.

As explained above, forestry authorities are in a leadership relationship with their local government—which has financial allocation power—and so receive their budgets from the Finance Department of the same-level government. The allocation of financial resources depends on the revenue-generating capacities of local functional departments (Wu et al., 2013) and the bargaining power between leaders of local functional line departments (Lampton, 1992). The same dynamics also apply to budget allocation within the functional department, and individual agencies' budgets depend on policy priorities and other relational factors. As a consequence, changing policy needs affect the provision of training in values and skills (Interview Mrs. F., 14 December 2015; Interview Division-head X., 15 December 2015). When one policy or field gains priority over others, training with regard to the first is suspended.

> […] We don't organize wildlife recognition training programmes every year. Like in one year we have the budget, so we plan it and do the training. Then the following year there might be something more urgent, so we put these priorities first and do not do any wildlife recognition training. (Interview Mrs. F., 14 December 2015)

Furthermore, the fragmented structure does not encourage coordination between agencies, let alone between different government departments (each *xitong* sets up its own training plans). Given the cross-cutting nature of forestry with other policy fields such as air, water, and soil protection, the compartmentalization is highly problematic. Training seminars with cross-policy or cross-departmental approaches are therefore the exception rather than the rule and must be organized by superior and more powerful agencies, such as the Department of Human Resource and Social Safeguarding and the Organization Department of the same-level government. This implies, however, that the organization of such training programmes relies on reform-minded and visionary leaders who (1) identify forestry as a paramount reform sector in their jurisdiction, (2) are aware of its cross-cutting nature, and (3) are convinced of the value of inter-departmental training for promoting sector-specific reforms.

One best practice example was the training programme on Chongqing Urban Forest Construction (重庆城市森林建设) conducted in Chongqing between 2009 and 2011. The programme was part of a local policy promoted under the leadership of Bo Xilai (薄熙来) in 2008 and an outcome of a bilateral collaboration between the Chinese and the Swiss governments—the Sino-Swiss Management Training Programme—which had started back in 1993. Chongqing's municipal Organization Department functioned as the implementing agency but the brains behind the project was Chen Cungen (陈存根), the previous head of the municipality's Organization Department who was a trained forester.[34] The training gathered together officials from different government agencies involved in the implementation of the project, including the Forestry Department, the Policy Research Office, the Legislative Affairs Office, the Development and Reform Commission, the Transport Commission, the Finance Bureau, the Urban Planning Bureau, and others (Chen, 2010, p. 1). My informant from Chongqing, who had been a participant in the programme, explained why the training was so special and how it differed from usual training programmes organized within the forestry administration:

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[34] Chen Cungen holds a PhD from Vienna University of Life Sciences. In the 1980s, he was the first Chinese PhD student at the University of Life Science in Vienna and completed his PhD on forestry under the guidance of Professor Alfred Pitterle in 1987 (Interview Pitterle, Vienna, 27 March 2013).

> […] Usually training is conducted by the forestry department, you ask the forestry staff of 38 counties to come together and we have some lectures. This is [one form] of training. But the training [under the Sino-Swiss cooperation] was different. […] The training programme wanted to promote action-learning, so you should learn from your actions and you should take action after learning. In this kind of training we have set a very specific objective, namely, you have to solve the problems that occur in urban forest management. After one year we had to provide very specific guidelines on [problem-solving measures] we meet in urban forest development. After the first year, we produced this book [annotation: she shows me the book] that was a collection of essays written by the participants. The training programme is like a kind of project already, not just a simple training where you go, listen, and then you go back to your unit. [In] this kind of training we really had some kind of output. The output was these essays on different measures to solve these problems. In addition, we submitted a proposal to the local People's Congress, a legislative proposal. In other words, based on the results of this training programme, we made some proposals. (Interview Mrs. L., 21 May 2014)

She further emphasized that

> […] This kind of output is very unique, compared with other training programmes, because ordinary training would not have such an output. But this training programme was quite special, so we could achieve very good results. I also think that this cross-departmental training was a very good way for other departments to familiarize themselves with the problems we encounter in the forestry sector. (Interview Mrs. L., 21 May 2014)

In sum, two features made the training in Chongqing special: First, it gathered a series of officials from different government departments and in so doing, enhanced their coordination and understanding regarding other departments' sector-specificities. Second, instead of the traditional approach of transferring higher-level priorities and policy contents to cadres of subordinated government agencies, the training was output-oriented, aiming to help cadres to cope with the problems that arose during the policy implementation process. Although such training programmes enjoy great popularity among cadres and are better-suited for accompanying local reform, as with other innovations in China's state-led knowledge transfer (see for example Lee & He, 2014) they are an exception rather than the rule. A critical explanatory factor is the absence of an adequate incentive system.

4.1.3.3 Absence of leadership and accountability

The aforementioned example of the Sino-Swiss collaborative training programme reveals the crucial role of leadership in the implementation of innovative training schemes. According to research by Eva Witesman & Charles Wise (2012, p. 715), "public administrators are more likely to make training in governance skills available if they believe that those skills are necessary for reform." As administrative discretion determines which training is made available to civil servants and which is not, it can have a "meaningful effect on the speed and trajectory of administrative reform efforts" (Witesman & Wise, 2012, p. 711).

In China reform-minded leaders who espouse the belief that training is conducive to reform are an exception to the rule for various reasons. Cai Yongshun (2015, p. 99) shows that the political risk associated with institutional innovations is relatively high in China's state administration, as reforms are not necessarily conducive to promoting the careers of those who propose innovation. Whilst the implementation of innovative training schemes does not entail any big political risks, it is still costly in terms of time and personnel resources. Moreover, due to the lack of an adequate incentive system (i.e., cadre responsibility system), good performance in the organization of training does not influence promotion prospects; neither does it bring financial bonuses. Cai (2015, p. 100) points out that mainly the party secretary and government

heads hold enough power to overcome structural and financial obstacles to putting in place innovative training. However, if the organization of innovative training formats have only limited effects on career development, few party secretaries or government heads willingly expend energy on overcoming political obstacles, unless they are convinced that training would make a difference in terms of reform outcomes.

In fact, both Chinese literature on cadre training in the forestry department and government documents point to shortcomings in the formalization and systematization of training, and the lack of importance attached to training by decision-makers (Gao et al., 2013, p. 28). In the past, several studies suggested incorporating education and training as a performance target in the cadre responsibility system (Zhao, 2011a, p. 30).[35] In the cadre responsibility system local leaders are held responsible for achieving certain performance targets that are ranked in importance. Failure to meet priority targets—such as economic development, environmental protection, and social stability—can have negative effects on their career advancement (Edin, 2004; Whiting, 2004).[36] Yet since local government department leaders receive mixed signals—they are asked to fully implement binding work targets, but these demands are not always matched with a corresponding increase in financial resources—cadres make trade-off decisions and opt for those targets that are more conducive to them and their career (Kostka, 2014, p. 29).

Eventually, the *12th National Programme of Forestry Education and Training* (全国林业教育培训十二五规划) requested that forestry education and training work and scientific development had to be incorporated into the cadre evaluation system (State Forestry Administration, 2012a). Although provinces followed suit, the definition of the target—namely 'Gradually strengthening of the construction of human capital in forestry'—is divided into sub-criteria that can vary from one period to another and from one place to another. For example, in Fujian Province in 2016, human capital development referred to the resettlement of military cadres (Fujian Provincial Government, 2016). The evaluation system did not simply evaluate the number of former soldiers incorporated into administrative line departments, but also the communication of the plan to the lower levels of administration. The target was worth two points out of a total of 100.[37] In 2011 Jiangxi Province gave, in addition to the target of incorporating excessive rural workforce, four out of one hundred points to the target "urban forest policy project", a policy which had been launched in 2011 (Jiangxi Provincial Government, 2011). The target was assessed by enumerating expert knowledge transfer activities and on-the-job training organized in the same year.

Both measurement and the low value given to human capital development in the cadre responsibility system undermine its effectiveness as human capital development. Still, the incorporation of human capital development into the cadre responsibility system signals rising acknowledgment from the higher levels of the relevance of training for enhancing local administrative capacities. Nevertheless, in order to foster a strategy of human capital development and decrease regional disparities in the provision of forestry training, the incorporation of human capital development in the cadre responsibility system must be accompanied by sufficient funding of local forestry authorities and training institutions.

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[35] Afforestation targets are veto targets in the cadre evaluation system.

[36] Administrators of local party or cadre schools are also incorporated into the cadre responsibility system, and they are evaluated on their ability to meet the targets formulated in the training plans (see also Lee, 2015, p. 38).

[37] The evaluation sheets from provincial-level forestry departments for the year 2016 contained five work tasks that were subject to assessment: agriculture (18 points), village development (24 points), environmental protection (34 points), societal control (16 points), absorption of surplus rural labor (8 points) (Fujian Provincial Government, 2016).

In the early 2000s, the Chinese leadership officially acknowledged that the former development model, based on irrational economic growth, had brought prosperity for a few, while leaving behind a significant proportion of China's population. But the country's rapid development had also taken a huge toll on natural resources and the environment. Since then, China's leaders have pushed extensive reforms to move the country onto a sustainable path of development. While most studies have looked into the diverse hierarchical instruments of regulation, supervision, and punishment, few have recognized cadre training as a critical instrument to steer local political action and expedite a change of values at the party-state level. This book unpicks the complex and multi-layered structures of China's cadre training system, offering a new perspective on its function within the nation's political system. Taking forest management as its case study, the book reveals how the Chinese regime links ideology and practice in knowledge transmission and how training is devised to put technical professional skills into the service of political goals and visions. Based on a comprehensive set of qualitative data collected through fieldwork and textual research, the book also reveals the drawbacks of this training system, showing why it fails to foster the administrative capacities of local forestry authorities in responding to the current challenges facing natural resource management.

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