A Legal Review and Analysis of China's Forest Tenure System with an Emphasis on Collective Forestland

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Abstract

China's forestland tenure has been undergoing a series of legal and policy reforms in recent decades. The gist of the reforms concerns forestland owned by rural collectives, which plays an increasingly important role in poverty reduction and improvement of China's eco-system. Twenty-five years of China's land reforms, the most remarkable rural land reform program in the world during the 20th century, have created a new rural land system. The new land system is characterized by a separation of usage rights between collective ownership of the land-- in which ownership of rural land, including collective forestland, is retained with the rural collective—and individual rights to the land, allocated to farming households through a contracting process. However, while reforms of collectively-owned, arable land have made remarkable achievements, bringing hundreds of millions of Chinese farmers out of poverty, forestland reforms conducted in the 1980s and 1990s did not achieve parallel results.

Piece-meal changes in government policies on forest tenure and the lack of clear, legal rules governing forestland rights appear to be the primary reason for undesirable results of the forestland reform. With the adoption of the 1998 Forest Law, the 1998 Land Management Law and, more importantly, the 2002 Rural Land Contracting Law, and the promulgation of a series of administrative rules on forest-related issues, farmers' rights to collective forestland and forests are beginning to be regulated by law rather than by policies. Under existing laws and regulations, forest farmers have virtually perpetual rights to collective forestland, allocated to them as "private mountains", and 30- to 70-year rights to collective forestland contracted to them as "responsibility mountains" through a legally mandated household contracting process. However, these two types of forestland rights are different in terms of transferability, mortgage feasibility, ownership of trees and the right to harvest trees.

Extensive desk research and fieldwork reveals that farmers' forestland rights are far from complete, secure and marketable. First, collective ownership of forestland is ambiguous, with no legal definition of who in the community actually controls the land and which collective entity possesses ownership rights. Second, farmers' rights to collective forestland are transferable, but remain subject to various undesirable or unnecessary restrictions, while rules governing transfers appear to be more favorable to large-scale transactions. Third, the mortgage feasibility of such rights is uncertain because of conflicting legal and policy provisions regarding their eligibility. Fourth, the farmers' right to benefit from forestland usage is seriously restricted due to regulatory takings with virtually little or no compensation in exchange, and a discretionary and non-participatory process with respect to logging control. Moreover, serious flaws exist in regard to the registration of forestland rights, state expropriations, and dispute resolutions.

Further legal and policy reforms are needed to tackle these issues. In particular, control of collective forestland should be legally vested with all members-- rather than within the "social elite" in the community-- and such ownership rights should be, in general, vested with the villager group. Second, special restrictions imposed on the transferability of individual forestland rights should be lifted. However, new rules should be in place to restrict transfers of collectively-managed forestland by collective entities to non-villager entities (e.g. representative committee resolution, auctioning process, etc.). Third, there should be unified rules on forestland rights, allowing such rights to be mortgaged for loans for forest development in combination with necessary measures to reduce the risk of foreclosure. Fourth, further legislative reforms are needed to address the hardships sustained by farmers as a result of regulatory seizures and logging restrictions.

Introduction

In China, collectively owned forestland¹ and state-owned forestland account for 57.55% and 42.45%, respectively, of the country's forest landmass,² and perform an important role in the country's ecological improvements. Because most of the collective forestland is located in remote areas where access to non-forest opportunities is limited, farmers' livelihoods are largely dependent on incomes generated from forest production.³ However, due to changes in laws and policies governing collective forestland tenure since the founding of the People's Republic of China, this valuable resource has yet to become a driving force for poverty reduction in remote rural areas.

Based on extensive desk research and fieldwork in three provinces, this paper will review and analyze the development of the Chinese regulatory frameworks that govern forest tenure. Special attention will be paid to farmers' rights to collective forestland and forest products, and a particular focus is given to the current legal regime on farmers' tenure rights to forestland. Section I briefly reviews the history of communist law-making on forestland tenure. Section II discusses various aspects of the current regulatory regime on usage rights to collective forestland and ownership rights to trees, with a set of recommendations for policy and legal reforms on important issues surrounding these rights. Section III examines the policy and legal background for state expropriations and logging. Section IV draws a conclusion that further legal reforms on collective forestland rights are needed to build a harmonious society under the rule of law. Section V is an appendix containing the findings of fieldwork conducted in Guangxi, Fujian and Sichuan provinces from August to October 2006.

I. Historical Background

Pre-1949 Communist Laws on Forestland Rights

Since its founding in 1949, the Chinese Communist Party was keenly aware of the problem of landlessness that faced Chinese farmers. Consequently, the party constantly placed land reforms as one of its top priorities in the fight against the Nationalists for control over China. Soon after it established its first administrative region in northern Jiangxi Province in the early 1920s, the Chinese Communist Party promulgated its first land law, the Jinggangshan Land Law. This document set up the basic framework of communist land legislation: confiscation of land from landlords and distribution of the confiscated land to peasants with little or no land.⁴ With respect to confiscated forestland, the law required that tea gardens and firewood hills be distributed to landless farmers equally, while reverting previously landlord-owned timber forests and bamboo forests to government ownership.⁵

With the expansion of the communist controlled area, the Land Law of the Soviet Republic of China was adopted in 1931. Unlike the Jinggangshan Land Law, the Soviet China Land Law expanded the scope of forestland distribution to include bamboo forests, and limited government control of forestland to only "big forests."⁶ However, big forests were categorized as a common resource managed by the government for public use by peasants.⁷ Further, it emphasized that the confiscated land be "distributed among poor and middle peasants"⁸ and that "all temple land and other public land shall be granted to peasants without condition."⁹

The most important communist land law before the founding of the People's Republic of China in 1949 was the Platform of Chinese Land Law adopted at the CPC's national land conference on September 13, 1947. For the first time in its history, the Chinese communists declared that China would adopt "a land system of land to the tillers."¹⁰ In order to fulfill this objective, the platform provided that (with the exception of large forests, irrigation projects, large mining sites, large and contiguous tracts of grassland and wasteland, and lakes) all land confiscated from landlords, and the land traditionally owned by communities, shall be distributed among all rural residents and owned by individuals.¹¹ Additionally, large forests would be managed by the government and all other forestland would be distributed to farmers in a way similar to the distribution of arable land.¹² The regulations promulgated by regional communist governments took a flexible approach to the allocation of distributable forests. For example, the complementary measures issued by both the North-East Liberation Regional government and Shanxi-Hebei-Shandong-Henan Border Regional Government allowed distributable forests to be either allocated among all farmers equally or jointly managed through a joint share mechanism.¹³

The pre-1949 communist legislation on forestland had three distinctive features. First, from the very beginning, Chinese communists tended to distinguish large and contiguous forestland from smaller and more fragmented forestland. Although the communist legislation did not explicitly claim government ownership of large forestland, it clearly ruled out private ownership of this resource. At the same time, however, the legislation did allow the distribution of other categories of confiscated forestland for private ownership. Second, the development of communist legislation on forestland appeared to be moving toward an expansion of distributable forestland for private ownership and limiting government control to large and contiguous forests. Third, perhaps in view of the unique features of distributable forestland, the legislation did not require allocation to farmers. Instead, it gave local peasants discretion as to whether to allocate such forestland for private ownership and individual management.

Regulatory Framework on Forestland Between 1950 and the Household Responsibility System

On June 28 of 1950, the Chinese communist government promulgated the first land law applicable to all parts of China (except Taiwan, which was then governed by the Nationalists who had fled the mainland after their defeat in China's civil war). The Land Reform Law of the PRC embodied the major provisions of its precursor, the platform on land allocation and land ownership. This new law provided that China

adopt a "peasant land ownership system."¹⁴ The land confiscated from landlords, except for that owned by the state in accordance with this law,¹⁵ shall be allocated to poor peasants "fairly, rationally and uniformly for them to own."¹⁶ The law also stipulated that all landowners be allowed to freely manage, sell and lease their land.¹⁷ With respect to forestland ownership, the law took a prudent approach. It followed the pre-1949 legislation in distinguishing large forests and distributable forestland by announcing that large forests and forestland under intensive farming with advanced equipment and techniques, shall be owned by the state, but managed and operated by the original owners.¹⁸ As for the other types of forestland, the law required an equal allocation among peasant households in the community for private farming. However, if such an allocation impeded management and operation, local governments should "democratically manage it and reasonably operate it" based on local traditions.¹⁹ It did not explicitly state who should have ownership of such land, but appeared to be in favor of state ownership.

The Land Reform Law also authorizes regional people's government²⁰ to promulgate implementation rules, taking into consideration local circumstances.²¹ The Measures of the Mid-Southern Military and Administrative Committee on Implementing the Land Reform Law approved by the State Council and promulgated by the Committee in 1950, deserves noting. The Measures provided that forests which benefit the general public, such as those for anti-flooding, anti-sandstorm and anti-draught, shall not be allocated to individual farmers.²² The Measures also prohibited abusive cutting or reclamation even if the land were allocated to individual households.²³

However, private ownership of forestland, together with private ownership of arable land, did not last long. Soon after the completion of rural land reforms, the Chinese government introduced the concept of collective farming following the Soviet Union's example. In 1955, the Central Committee of the Chinese Communist Party issued the Decision on Agricultural Cooperation, formally launching the movement to collectivization. With respect to privately owned forestland, the decision categorized forest industry as a sideline production²⁴ and specified that collective management of forestland was "appropriate" for state control, while allowing private management of the forestland that was not.²⁵ Unfortunately, the decision did not define the word "appropriate," giving local governments a great deal of discretion over the interpretation of the term. In general, the decision did not touch the nature of private ownership of forestland. It required negotiation with the original owners on absorbing such land for collective management through lease or installment payment.²⁶

Collectivization through legislative measures took place in 1956 when the National People's Congress' Standing Committee passed "The Charter of Agricultural Production Cooperatives."²⁷ Although the charter did not legally change private ownership, it established the creation of public ownership of rural land as its goal for collectivization.²⁸

According to the charter, all land, including forestland, owned by members of the cooperative "must be submitted to the cooperative for uniform use."²⁹ Each member is allowed to keep no more than 5% of the village's average landholdings per capita as private plots.³⁰ With respect to trees, the charter only permitted private ownership of sporadically grown trees; orchards, bamboo forests, tea gardens, and mulberry gardens had to be submitted for collective management.³¹

Such cooperatives were soon converted into collectives. Accordingly, the nominal private ownership of farmland under the cooperative system was transformed into formal collective ownership only three months later when the Third Plenary Session of the National People's Congress passed "the Charter of Advanced Agricultural Production Cooperatives" in June of 1956. The Charter explicitly stated that collective members "must transform privately owned land, draft animals, and large farm equipment and other major production means into collective ownership."³² Private plots were absorbed into collective ownership; individual households, however, were allowed to retain ownership of the residential land.³³ Despite problems with farm management and production incentives, the collectivization campaign proceeded rapidly. By the end of 1958, the agricultural collectives had been abruptly merged into Rural Peoples' Communes. Approximately 90 percent of the rural population became commune members within half a year.

From an ownership perspective, the fundamental characteristic of the commune was a virtual abolition of the vestiges of private property. The commune acquired sole ownership of all property except for foundation plots, which were announced as collectively owned in 1962. Under this system, none of the farmers had an individual stake in arable land or forestland; they worked together on the land receiving pay for time spent in the field. The communes effectively severed farmers from their land.

The collectivization campaign leading to giant communes proved to be a huge disaster to China's agriculture and people. Grain production declined substantially over three years, starting in 1959, and leading to perhaps the planet's worst famine of the twentieth-century.³⁴ Having realized the grave consequences of a commune system that had completely strangled farmers' incentives for farming, a mild reform in an attempt to reduce the size of collectives was conducted in the early 1960s. The Central Committee passed the Revised Regulations on Rural People's Commune (commonly called the Sixty-Article Regulation) in 1962. The regulation attested that the production team, the lowest of the three-tiered collective ownership system, be the "basic accounting unit"³⁵ "for at least 30 years,"³⁶ and designated the production team as the owner of all collectively-owned arable land³⁷ and most collectively-owned forestland³⁸ located within its geographical boundaries. For the forestland owned by the commune and the production brigade, the production team should in general have the right to manage and operate such forestland.³⁹ With respect to individual rights to forestland and trees grown on collectively-owned forestland, the Sixty Article Regulation provided that:

The production team may allocate the "appropriate amount of firewood mountain as "private mountain" for member households "to operate ... for a long term without change."⁴⁰

- Sale and lease of such private mountains are not permitted.⁴¹
- Trees on such private mountains and house plots are "owned in perpetuity" by individual commune member households.⁴²
- Trees sporadically grown on non-private mountains may also be designated as owned by member households.⁴³
- Cutting of any tree anywhere must be approved, and cutting of one tree must be replaced by planting three trees.⁴⁴

The significance of the Sixty-Article regulation is that it stopped the course of escalation of the scale of the collective entity by introducing administrative mergers and reinstating the level of collectives closest to the farmers. Specifically, the production team became the basic accounting unit responsible for all operational activities within the collective's geographical boundaries. With respect to property rights, the regulation established the rule that collective ownership of land must be exercised at the production team level; use rights to some of such team-owned land may be allocated to collective members as "private plots" or "private mountains" for individual household farming. It also reinstated private ownership of trees on the land to which farmers had use rights. The regulation functioned as the basic framework of collective farming and land ownership until the de-collectivization campaign in the late 1970s and early 1980s.

Legal Reforms on Forestland under the Household Responsibility System

Although Chinese farmers got some breathing space under the Sixty-Article Regulation, the fundamental nature of collective farming brought China's rural economy to the edge of collapse. In 1977, per capita grain production in China was lower than that of 1956.⁴⁵

With the death of Mao Zedong, the new, reform-minded leadership (collectively called the second generation of China's leadership), headed by Deng Xiaoping, began to explore ways to bring rural China back on track in the late 1970s. Encouraged by the experience with private farming on individually-owned plots, as permitted under the Sixty-Article Regulation,⁴⁶ a group of poor farmers in Anhui Province were driven by the need for survival and invented a land contracting system in which collectively-owned land was contracted to participating farmers for private farming. In return, these farmers were committed to meeting the collective demands for grain quotas, with taxes and fees assessed based on the quantity of the land allocated to each participating farm household.

This new form of private farming, later called the Household Responsibility System, or HRS, was characterized by the separation of use rights to land from ownership of land. Under the HRS system, the collective entity would continue to hold ownership while use rights to the land would be allocated to members of the collective for individual farming. The new land system immediately demonstrated its huge advantage over collective farming, and received strong support from central leaders. By 1983, virtually all arable land had been allocated to individual households, usually on a per capita (though sometimes on a "per worker") basis, and more than 20 years of collective farming had finally come to an end.⁴⁷

Greatly encouraged by the successful experience with the HRS on arable land farming, the Chinese government conducted similar reforms on the collective forest tenure system in order to motivate farmers to invest in tree planting and forest management in the early 1980s. The forest tenure reform was also characterized by the separation of use rights from collective ownership of forestland. Slightly different from the arable land reform, the forestland reform was initially conducted by allocating small parts of collective forestland to individual households as "private mountains," and contracting the majority of collective forestland to these households as "responsibility mountains." By 1986, more than 70% of all collectively-owned forestland had been allocated and contracted to farmer households.⁴⁸

In the early 1980s through the 1990s, the Chinese government promulgated a series of policy documents and enacted the first Forest Law, by laying down a regulatory framework on farmers' rights to forest and forestland. These policy documents included:

- <u>Decision on Several Issues of Forest Development (1981)</u>. The Decision was designed to stabilize rights to forest and forestland, to designate private mountains and to ensure the forest production responsibility system. It required part of the collective forestland, (usually the land with few or no trees), to be designated as "private mountains" and allocated it to farmer households for a long-term. Trees on private mountains and house foundation plots would be owned by farmers who possessed use rights to the land; and these ownership rights to trees would be inheritable. With respect to other forestland with standing trees, the Decision took a different approach. It required that such land be contracted either to villager groups, households, or individual farm laborers, as "responsibility mountains" for an unspecified term.⁴⁹ However, the Decision was silent on who should own the trees growing on the land. The Decision also called on issuing forest certificates to affirm ownership rights to trees and use rights to forestland. As to the harvesting of trees, the Document introduces a cutting permit system, requiring all cuttings to be approved by a cutting permit issued by local governments, regardless of ownership of the trees.
- <u>State Council's Notice on Implementing Forest Production Responsibility System (1981).</u> The Notice reiterated the principle of forest reforms and called for speeding up the process of

implementing such reforms. It further urged local governments to take a more flexible approach in designating private mountains and allocating them to farmer households based on their needs and management capabilities. For the land already forested, the Notice reiterated the importance of contracting such land to households, for a term of 5-20 years. The contracting households would get a share once the trees were harvested.

- <u>No. 1 Document of 1984</u>. The landmark Document No. 1 lays down the foundation of the present Chinese rural land rights system. It formally ratifies the separation of land use rights from ownership by requiring that collectively owned land be contracted to farmer households for a term of 15 years. For projects with a long production cycle and of development nature, such as fruit trees, forests, denuded hills and waste lands, the document permits a longer contract period. To encourage farmers to grow trees, the No. 1 Document institutes a principle of "whoever plants the tree, owns the tree" and permits inheritance of the trees planted.
- <u>The Forest Law of 1984</u>. The 1984 Forest Law legalized the individual possession of forestland use rights and required issuance of a forest rights certificate to affirm individual rights to forest and forestland.⁵⁰ While permitting private ownership of trees on private mountains, house foundation plots and contracted wasteland,⁵¹ the law instituted strict restrictions on harvesting privately-owned trees; only trees grown on foundation plots could be cut freely.⁵² The law did not provide any rule on other issues relevant to farmers' tenure rights.
- <u>The Central Committee and the State Council's Directive on Strengthening Collective Forest</u> <u>Management and Resolutely Curtailing Abusive Cutting in Southern Provinces (1987)</u>. The Directive represented a sharp turn in government policies with respect to farmers' rights to forestland. It prohibited contracting remaining collectively-managed forestland to individual households as responsibility mountains. For the land that had been contracted out, the Directive required that the land be put under unified management by individuals designated by township or village collective. With respect to trees growing on the land, the Directive promoted joint harvesting, joint regeneration and joint afforestation. Although the Directive did not explicitly require taking back of the collective forestland already contracted out to individual households, it expressed a change of course favoring collective management of responsibility mountains.
- <u>The State Council's Document No. 23 on wasteland development (1996).</u> The Document permitted the contracting, leasing and auctioning of usage rights to wasteland for a term up to 50 years. Under the document, the holder of such rights may transfer his or her rights to wasteland through inheritance, assignment and contribution to joint stock companies in exchange for shares of joint stock. It also allowed mortgage of wasteland rights for loans. With respect to who should enjoy the fruits of wasteland development, the Document clearly sanctioned the principle of "whoever develops wasteland should benefit from such development," and explicitly stated that the developer of wasteland acquires ownership of trees and other products growing on the developed wasteland. However, the Document was silent on whether the cutting of trees planted by the developer on wasteland should be subject to the cutting permit restriction.

Looking back at the development of a regulatory framework on forest tenure rights during the first 20 years of de-collectivization under the HRS, several points are worth noting. First, farmers' rights to forest and forestland were regulated predominantly by policy directives rather than by laws. Second, under these policy directives, farmers received rights to some categories of collective forestland, but these rights were not clearly defined in terms of their nature and scope. For example, except for wasteland contracted to farmers, the documents were silent on the transferability of "private mountains" and "responsibility mountains." Third, although these documents upheld a principle of "whoever plants tree, owns the tree," such ownership was, in practice, meaningless when the harvesting of trees was subject to unbridled restrictions on cutting. Fourth, changes in forest policies on farmers' forestland rights have created uncertainty, thus, further undermining the strength of these rights.

II. Current Legal and Policy Framework on Forest Tenure

Two important consequences resulted from the use of policy, rather than formal and more specific laws, in setting and communicating land tenure rules. First, the land tenure rules as provided in policies have not always been clear and have been subject to arbitrary implementation and enforcement by local officials. Second, successful implementation of policies on tenure rules ultimately depends on whether these rules can be judicially enforced. Without appropriate laws that embody the spirit of the policies, violation of farmers' land rights will not be deterred by any compulsory judicial force and, therefore, cannot be appropriately redressed in time.

Having observed poor or nonexistent implementation of policy measures and their objectives by local authorities, the Chinese government began to consider protecting farmers' rights to land, including forestland, through the rule of law rather than "rule of policy." However, in the Chinese context, where rule of law is developing gradually, government policies are still playing an important role in forestland reforms. Some of these policies have even moved one step ahead of existing laws in securing farmers' forestland tenure. This section will review and analyze all pertinent laws and central policies concerning farmers' forestland rights.

Collective Ownership of Forestland

China's Constitution provides that land located in rural and suburban areas, except for that stipulated as state-owned in accordance with law, is owned by rural collectives.⁵³ Based on this constitutional provision, rural collective land ownership is further defined under the 1998 Land Management Law (LML) in article 10:

Peasant-collectively-owned land that is collectively owned by village peasants in accordance with law shall be operated and managed by the village collective economic entity or villager assembly; where peasant-collectively-owned land is owned by two or more rural economic entities within the village, such land shall be operated and managed by each of such rural collective economic entities or villager groups; where the land is already collectively owned by peasants of township, such land is operated and managed by township collective economic entity.

It appears that this legal construction of collective land ownership is intended to confirm the pertinent rules under the 1962 Sixty-Article Regulation that determined rural land ownership as three-level ownership (commune, production brigade and production team) with the production team as the basic owner.⁵⁴ However, such provisions, at best, reinforce the notion that the land located within a specific geographical area is owned collectively by the community living within such geographical boundaries; serious ambiguities exist as to the definition of this collective land ownership structure.

The new Property Law, adopted in March 2007, defines collective ownership as joint ownership by all members of the community.⁵⁵ This is a great improvement because it clears up a long-standing ambiguity as to who in the community should own collective land. However, this provision can be, at best, interpreted as every member of the collective having an indivisible share of ownership to an unidentified area of land located within the community. The law does not answer the fundamental question of who should actually control and exercise ownership rights to the land within a geographical area. Under such legal ambiguities, collective land, including collective forestland, could be interpreted as controlled either by all members of the community, or by all households of community, or by a group of administrative elite of the community, or even by the government.

Failure to legally identify the control rights to collective property tends to lead toward two consequences as far as forestland is concerned. First, it could encourage the abuse of these legal ambiguities by collective cadres by enabling them to act virtually as the owner themselves. There are numerous empirical examples and reports where collective cadres took back the forestland allocated to farmers as private mountains or responsibility mountains and transferred it to non-villager contractors without even notifying the farmers.⁵⁶ In this type of violation, collective cadres behaved as if they exercised power

as the owner of the village's land, and farmers were not aware they should collectively own the land or how to exercise any control over such transactions. Second, the absence of clear legal rules on who should control collective forestland tends to enable the local government to act as the owner by compelling villages to adopt mass distribution of large tracts of collective forests to individual households without farmers' consent. Our fieldwork conducted in Yunnan province in 2001 indicates that such local government behavior has led to a vast reduction of forest coverage.⁵⁷

Ambiguities exist even as to the specific entity responsible for collective ownership of the land. This ambiguity has created a power vacuum in which various entities (production teams or villager groups; production brigades or administrative villages; or communes, now townships) often exercise ownership rights to the same subject property. Existing Chinese law on rural land ownership permits coexistence of all three levels of collective assumption of ownership rights, but it fails (at least on its face) to identify any collective level as the primary owner of rural land. In this regard, modern Chinese laws are not even as functional as the 1962 Sixty-Article regulation which clearly specifies that the lowest level of the collective (the production team, the predecessor of the present-day villager group) is the owner of the land located within its geographical boundaries.⁵⁸

This prevailing ambiguity invites violations of villager groups' property interest in land, including forestland. Of all three levels of the collective, the villager group has the least power and is most vulnerable to arbitrary decisions by upper-levels of collective and government agencies. Because the village group is not explicitly empowered to exercise its ownership rights over the forestland within the group, it cannot legally contest and challenge the attempted assumption of ownership or actual conduct of violations of its property rights by upper-levels of the collective or even government agencies. Moreover, since there is no clear rule with respect to what collective level owns the collective forestland, all possible owners may assert "ownership rights" when there are economic benefits associated with the land, such as the allocation of proceeds from selling collective forest products or from transferring collective forestland to non-villager contractors. However, when farmers' land rights are violated by external forces, no collective entity may stand up in defense of farmers' land rights with the excuse of an absence of clear legal authorization to do so.⁵⁹

Summary Recommendations

It is clear that legal ambiguities surrounding forestland ownership and control negatively impact collective ownership rights as well as individual farmers' use rights to collectively owned forestland. We offer a two-pronged recommendation concerning collective ownership. First, joint ownership of forestland by all members of the collective should be clearly reinforced as joint ownership of indivisible property interest in collective forestland, which includes joint exercise of ownership rights. The collective economic entity or any other organization that currently acts, usually via the associated cadres, as "owner" of collective land should be a representative or an agent acting on behalf of all joint owners in the community with clear authorization of all joint owners. The collective entity itself does not have a property interest in forestland (nor, *a fortiori*, do the collective cadres); it is merely a management body created to better protect property interests of all joint owners of the land.

Such joint exercises of ownership rights require that the power to decide whether to adopt household contracting of collective forestland be vested within all members of the collective, free of government pressure. Unlike arable land, household management of forestland may be difficult and inefficient in some places because of the remoteness of its location and the high labor cost per unit of forestland on individual households to manage its small forestland holdings. If all joint owners of the forestland in the community decide to adopt collective management through a democratic and participatory process, no external pressure should be imposed on the community to physically allocate collective forestland under household management.

As to which level of the collective should be designated as owner of the forestland, we recommend that collective forestland ownership be explicitly established under the law with the villager group, the level closest to-- and probably most responsive to-- farmers. Currently, the three levels of rural collective

structures still exist.⁶⁰ However, as a result of rural administrative reforms, the township has been largely phased out with respect to owning and controlling collective land except for, perhaps, the land that was used for township enterprises and township public facilities. The villager group, on the other hand, has lost administrative capabilities due to a streamlining of collective management in order to reduce farmers' financial burdens in support of administrative functions which used to exist at the villager group level. Thus, the administrative village and collective economic entities established at the administrative village level, have assumed the power to control most of the collectively owned land to which villager groups should have ownership rights under the Sixty-Article Regulation.

There are several reasons why collective forestland ownership should be clearly and unambiguously established at the villager group level. Villager groups are more likely to understand the interests and land conditions of their constituent farmers than either administrative villages or townships. Households within the villager group are also more likely to share common interests concerning forestland use and maintenance. Although most, if not all, villager groups may not have the administrative capacity to exercise ownership duties, this should not be an excuse for denying them ownership rights to the property that lies within the villager group's (or natural village in some places) boundaries. There may be two ways to tackle the lack of administrative functions at the villager group level. First, villager groups can be empowered and administratively equipped to perform ownership duties, with the assistance of government land agencies. Second, villager groups could delegate strictly defined powers of exercising ownership duties to the administrative village through legal means, such as power of attorney. It should be made clear, at the time of such a delegation, that collective entities at the administrative village level should only act under explicit authorization when performing any ownership duties beyond those specified in the power of attorney; any conduct beyond this scope of authorization would be deemed void by operation of law. If such conduct results in damages to the owners' interest in land, administrative villages should be subject to civil penalties or even criminal penalties if they are found to act maliciously Such a power-of-attorney document should be centrally drafted and promulgated or or corruptly. spelled out in legislation.

As for collective control and management of forestland, it should be noted that forestland has distinctive features as compared with arable land. For example, forestland is usually far away from village residential quarters, and it may present practical difficulties for effective management by individual households. Second, because each household usually has small forestland holdings, designating a full-time forest manager to take care of a small quantity of forestland located away from home may not be cost-effective for farmers. Third, with strict restrictions on tree cutting and even a complete logging ban, individual farmers may not have incentives to well-manage their forestland even if their land rights are secure.

Because of these distinctive natures of collective forestland, we recommend that decisions on whether to contract collective forestland to individual households or hold it under collective management be rested with local communities. That is, let farmers decide what to do with collective forestland through a full and transparent participation process.

Individual Use Rights to Collectively-Owned Forestland

As discussed above, China's collective forestland reform in the 1980s was intended to motivate individual Chinese farmers to invest in forest development and management. However, whether farmers are willing to make such investments, especially the investments that require continuous inputs for a long term before realizing returns on investments, depends to a considerable degree upon whether the holder of rights to the forestland has secure tenure.

Land tenure security may be defined as an individual's confidence in his rights to a particular piece of land, free from external interferences and for a term long enough for the person to recapture all the benefits of the person's investments, either in use or upon transfer to another holder.⁶¹ Based on this definition, farmers' secure tenure can be measured both qualitatively and quantitatively in three aspects: (1) breadth, which measures the scope of farmers' land rights, including but not limited to, the right to

possess, the right to use and benefit from land, the right to transfer land rights through inheritance, exchange and market transactions, and right to mortgage; (2) duration, which indicates the period that a right-holder may exercise such rights; and (3) assurance, which measures the certainty of the breadth and duration of the rights held.⁶²

The nature of individual rights to forestland

The first law to recognize farmers' individual rights to collective forestland was the 1984 Forest Law. Except for a general statement that individual use rights to forestland and ownership to forest products are protected under the law,⁶³ it did not provide any meaningful rules regulating such rights. The revised Forest Law, which was adopted in 1998 and is currently in force, reiterates this general statement, but again, provides no substantive rules governing the nature, length and scope of farmers' individual rights to forestland. It was not until 2002, when the Rural Land Contracting Law (RLCL) was adopted, that farmers' rights to collective forestland were meaningfully regulated by law. Under the RLCL, farmers' land rights are categorized as "contracting and operation rights" to all categories of farmland, including arable land, forestland and grassland, and to wasteland. Contracting and operations rights to collective forestland are allocated to individual rural households in the village through a process of household contracting for a term of 30 years or longer.⁶⁴ The new Property Law adopted by the National People's Congress in March of 2007 carries this spirit even further by allowing renewal of the year-specific land contracts upon the expiration of the contract term.⁶⁵ For wasteland that is not suitable for household contracting, non-household contracting may be adopted in granting use rights to wasteland to any individual or entity for a term determined through auction, bidding or negotiation, collectively called nonhousehold contracting.⁶⁶

The central policies promulgated after the RLCL have led to even more reform-oriented rules concerning farmers' forestland rights. In 2003, the Central Committee and the State Council jointly issued "Decisions on Speeding up Forest Development" (Document No. 9 of 2003). Under this Document, allocated "private mountains" should be used by farmers "for a long term free of charge" and cannot be taken back compulsorily.⁶⁷ With respect to "responsibility mountains" contracted to farmers in the 1980s, the Document emphasizes stabilizing the contracting relationship. It requires automatic extension of the existing contract for a term stipulated by law upon the expiration of the contract even if the original contracting process has some defects.⁶⁸

The nature of farmers' rights to collective forestland has not been clear until the adoption of the Property Law, which explicitly defines farmers' rights to farmland, including forestland, as usufructuary property rights.⁶⁹ This landmark definition is expected to provide better and more functional protection of farmers' land rights. As compared with obligatory rights (or contract rights), usufructuary property rights have several important features. First, such property rights are established and governed by law; in contrast, obligatory rights are derived from various sources such as contracts, and governed by the contracts that create these rights. Second, usufructuary rights apply to all persons and legal persons, while obligatory rights can be asserted only against the specific person who is the party to or the source of the obligatory rights if both rights exist on one item of property at the same time. Fourth, usufructuary rights are generally suitable for registration with the authorities – and sometimes required to be registered – while obligatory rights are rarely subject to registration. As we know, registration in itself helps to strengthen the security of property rights.

The scope of individual rights to collective forestland

The Property Law defines property ownership as the right to possess, use, benefit from and dispose of a property.⁷⁰ With respect to the scope of forestland use rights, both China's Constitution and the 1998 Land Management Law permit transfers of these land use rights.⁷¹ It was not until the RLCL that the scope of farmers' land rights, including forestland rights, had been legally defined. Under the RLCL, farmers' land rights included "rights to use, profit from, and transfer land contracting and operation rights, and the right of autonomy over production and operations, and disposition of products" and "the

right to receive the corresponding compensation" for the land taken by the state or collective for non-agricultural purposes.⁷²

On the right to land transactions, the RLCL further states that farmers' land rights "may be transferred [to other village households], leased [to non-village households], exchanged, assigned, or transacted by other means in accordance with law".⁷³ Although the law does not spell out what "other means" includes, it is widely interpreted as any means not explicitly prohibited under the law.⁷⁴

It is important to note, however, that such broad permission on transactions of rural land rights appears to be subject to restrictions provided by the 1998 Forest Law when the subject matter is forestland rights rather than arable land rights. ⁷⁵ Under the 1998 Forest Law, of the five categories of forestland,⁷⁶ use rights to only timber land, firewood land and economic forestland may be transferred or contributed to a joint stock company in exchange for shares of stock.⁷⁷ Transfers of use rights to other categories of forestland are expressly prohibited.⁷⁸ In other words, farmers' rights to allocated private mountains, responsibility mountains, or auctioned wasteland are not transferable once the land has been designated for either ecological or special purposes.

With respect to the breadth of farmers' forestland rights, the greatest restriction is that imposed on the right to benefit from using forestland. Such restrictions are manifested in two forms. First, ownership of trees on certain categories of forestland is not entirely clear. Under the 1998 Forest Law, farmers own the trees planted on private mountains and on developed wastelands.⁷⁹ However, the law is silent on who owns the trees growing on allocated or contracted responsibility mountains. Although Document No. 9 promotes a principle of "whoever plants the tree, owns the tree"⁸⁰ that severs the ties between ownership of trees and categories of land, this policy document does not have legal force. Moreover, even under the broadest interpretation, the document's principle grants farmers ownership rights to the trees that they planted, but it remains unclear whether this ownership structure may be extended to the trees naturally growing on responsibility mountains or existing before such responsibility mountains were allocated or contracted to them.

Another type of restriction is imposed on the harvesting of trees. Under the 1998 Forest Law, even if private ownership of trees is ascertained and the land is held by individual households as private mountains or responsibility mountains, harvesting of such trees is strictly prohibited where the land is designated as an ecological protection forest or a special purpose forest.⁸¹ For trees growing for other purposes, such as firewood, timber or for economic incomes, cutting is permitted upon approval by the county's forest administration and evidenced with county-issued cutting permits.⁸² Only the cutting of trees growing around houses or on private arable land is exempt from such restrictions.⁸³

Mortgage of forest rights and forestland rights

Access to credit is an important factor in boosting farmers' ability to make long-term investments in forestland. Unless a farming family has sufficient liquid resources for such investments, it must secure medium-term or long-term credit. At the same time, financial institutions may turn down farmers' application for loans unless they can present a secure property right that can be pledged as collateral for loans.⁸⁴

Land is a preferred form of collateral when land rights are secure and transferable. Lenders prefer collateral that is easy to appropriate and, in the case of loan default, does not easily lose value due to theft or damage, cannot be concealed, and can continue to benefit the borrower. Land satisfies all of these conditions. Unfortunately, the mortgage of forestland rights is seriously restricted under Chinese laws.

Under existing Chinese laws, only the mortgage of rights to wasteland is explicitly permitted upon collective approval;⁸⁵ the mortgage of "use rights to arable land, residential plots, private plots, private mountains and other collectively-owned land" is prohibited.⁸⁶ Thus, any mortgage agreement that includes rural land contracting and operations rights as collateral is treated as null and void.⁸⁷ Although

the law does not clearly state whether trees may be mortgaged, it permits registration of tree mortgages, implying the legality of tree mortgage.⁸⁸

Document No. 9 of 2003, widely recognized as the policy guidelines for the current collective forestland reforms, categorically permits mortgage of forests and forestland use rights, without distinctions between wasteland and forestland.⁸⁹ In the spirit of the Document, the State Forest Bureau promulgated the Trial Measure Registration of Forest Resources Assets in 2004, apparently expanding the scope of permissible mortgage. Under the Measure, use rights to timber land, economic forestland and firewood forestland, which are permitted for transfers under the 1994 Forest Law,⁹⁰ are eligible for mortgage regardless of whether they are wasteland or developed from wasteland.⁹¹ It further requires that where forest trees are mortgaged, use rights to forestland growing with these trees be mortgaged at the same time.⁹² Because existing laws appear to permit tree mortgage, the provision on combined mortgage could be interpreted as a de facto permission of mortgages of all kinds of forestland rights, subject to legal restrictions on the mortgage-ability of land rights. However, the Measure allows the mortgage of trees planted on residential plots and allocated private mountains even if they are not evidenced with a forest certificate or not registered,⁹³ implying a permission of use rights to such land even though they are not mortgage-able under the 1995 Guaranty Law.

The Measure explicitly prohibits the mortgage of collective forestland rights obtained through household contracting,⁹⁴ perhaps in consideration of existing legal restrictions on the mortgage-ability of collective land rights as prescribed under the 1995 Guaranty Law. Such prohibition, while understandable, is in effect to benefit large contractors of collective forestland who acquire use rights through non-household contracting, such as direct purchase or lease use rights from collective entities. Farmer households who usually have much less access to credit for forest development are kept outside the door of mortgage.

Propelled by the reform initiative contained in Document No. 9, provinces pioneering the new round of forest reforms have made local rules permitting the mortgage of use rights to virtually all contracted forestland.⁹⁵ In Fujian Province alone, the amount of mortgage loans with forestland rights held as collateral is currently at the level of 2.6 billion RMB.⁹⁶ While the spirit of Document No. 9 and the state and provincial governments' endeavors on mortgage-ability of forestland rights are welcome, there appears to be an inherent conflict with existing laws governing mortgage.

Obviously, because of the legal prohibitions on the mortgage-ability of forestland rights, farmers' ability to invest in forest development is seriously impeded, thus negatively impacting the realization of the government's objective of motivating forest farmers to better develop and manage forests through giving farmers individual rights to forestland.

The assurance of individual rights to collective forestland

Of the three components of tenure security, assurance is of equal importance as breadth and duration because it conveys to the rights-holders a confidence about their land rights free from external interferences. Without this threshold assurance, land rights would be meaningless, no matter how long the period or how broad the scope, for the rights-holder in terms of his or her nominal entitlement. In China, the biggest threat to farmers' confidence in their rights to collective forestland comes from frequent changes in government policies and practices concerning farmers' forestland rights, and from collective discretionary taking-back of farmers' forestland rights and contracting them to non-villager companies.

As reported above, the State Council issued the Decision on Several Issues of Forest Development in 1981, calling for the allocation of hills with few or no trees to individual households as private mountains and contracting collective forestland to various entities, including farmer households, as responsibility mountains. The document itself did not specify who should own the trees on responsibility forestland, leading to abusive cuttings and drastic reduction of forest coverage.⁹⁷ To stop such abusive cuttings, the Central Committee and the State Council issued the Directive on Strengthening Collective Forest Management and Resolutely Curtailing Abusive Cuttings in Southern Provinces in 1987, prohibiting

contracting to individual households as responsibility mountains and promoting unified management of such responsibility mountains that had already been in the hands of individual households. To implement the new central policy, local governments launched corrective programs and took back farmers' responsibility mountains and even allocated private mountains, resulting in widespread uncertainty about farmers' rights to collective forestland.⁹⁸

The RLCL makes a decisive step in securing farmers' rights to farmland, including contracted forestland. Under the RLCL, farmers' contracted land shall not be taken back within the contract period unless: (1) all members of a farmer household move to cities and change their household registration into urban status, ⁹⁹ or (2) the farmer household voluntarily surrenders in writing its landholdings to the collective entity.¹⁰⁰

Document No. 9 of 2003 reiterates the central government's intent to secure farmers' rights to collective forestland. It emphasizes the stabilization of contracting relationships with respect to collective forestland contracted to households as responsibility mountains, and prohibits the collective seizure of land that has been allocated to households as private mountains.¹⁰¹ Clearly, the central government is very committed to secure tenure for forest farmers.

Conveyance of collective forestland rights to non-villagers

Under the RLCL, all rural land should be contracted out to village households except for land that is not suitable for household contracting, such as waste mountains, waste gullies, waste hills and waste riverbeds, collectively called wasteland.¹⁰² Accordingly, the law articulates different rules governing transactions of the land subject to household contracting and the land subject to non-household contracting. With respect to transactions of collectively-owned rural land (including forestland) to non-villager entities, including corporations engaging in forest production, the RLCL permits a collective landowner to convey its wasteland to non-villager individuals and entities through competitive bidding, auction and public negotiation¹⁰³ upon consent by two-thirds of villagers and the approval of the township government.¹⁰⁴ For these types of transactions, the collective entity is the party to the transaction¹⁰⁵ since the land has not been contracted out to individual farmer households.

For forestland that has been contracted to farmer households, however, a different set of rules applies. In order to safeguard farmers' interests in land from being violated by local officials through compulsory land transactions, the RLCL emphasizes the principle of "equal consultation, voluntariness and with compensation",¹⁰⁶ and prescribes farmers as "the party to any transactions of" rural land use rights, including forestland rights, that are obtained through household contracting.¹⁰⁷ Under the RLCL, the farmer contractor has the right to decide whether to transfer his or her contracted land to a third party,¹⁰⁸ and any compulsory transactions¹⁰⁹ or transactions under the pretext of a "minority submitting to the majority" is strictly prohibited.¹¹⁰ If a farmer decides to transact his or her contracted land to a third party, including a non-villager individual or entity, he or she should sign the transaction contract with the third party, reaching agreement on all necessary terms of the contract.¹¹¹ Because farmers are parties to such transactions, the law explicitly prohibits local officials to "intercept or reduce" the proceeds from such land transactions.¹¹²

Clearly, under the RLCL, a non-villager entity may obtain use rights to collective land for forest production in one of two ways. First, it may acquire use rights to collective wasteland through competitive bidding, auction or public negotiation and signing a conveyance contract with the collective land owner subject to the consent of two-thirds of villagers and the approval of the township government. Second, if it is interested in any non-wasteland that has been contracted out to village farmers, it must negotiate with each of the rights-holders on all contracting terms, sign a transaction contract with each of them and pay proceeds to those farmers rather than to the collective entity. Any such contract reached through compulsion or administrative interference would be deemed illegal and, thus, void under the law. The Supreme Court's interpretation of the RLCL clearly states that where the collective entity transacts to a third party the land that has been contracted to a farmer, such a transaction contract shall be deemed void and the third party should return the land to the farmer and pay damages, if any.¹¹³

It is not entirely clear though whether a non-villager entity can acquire collective forestland with existing forests that are under collective management and not physically contracted to individual households directly from the collective entity. However, a careful reading of relevant provisions of the RLCL casts a serious doubt on the legality of such direct transactions between the collective landowner and the non-villager entity. First, the RLCL envisions two ways of collective land contracting - household contracting and other forms of contracting – and only permits direct transactions of wasteland (subject to additional procedural restrictions) that is not suitable for household contracting. The legislative intent is clear: all non-wasteland is suitable for household contracting even if it is still under collective management. Second, since the forestland with existing forests is suitable for household contracting, the collective entity should either continue holding it under collective management or contract it out to village households.

Document No. 9 of 2003 also sheds light on the issue by providing guidelines for the reform of collective forestland that is currently under collective management. Under the Document, collective management may be continued if villagers are satisfied with it. However, even if collective management continues, property rights to trees and land should be allocated to villagers in the form of shares of stock. For forestland sporadically growing with trees, individual household contracting is permissible upon the payment of reasonable fees to the collective entity. Only wasteland may be contracted directly to non-villager individuals or entities.¹¹⁴ Clearly, even the most recent central document on collective forest reforms appears not to allow direct transactions of collectively managed forestland between the collective entity and the non-villager entity.

Documentation and registration of forestland rights

Written documentation of farmers' land rights tends to strengthen farmers' confidence about their property and enhances the transparency and predictability of the ownership system. Thus, the stimulation of investment and facilitation of land market development becomes more feasible.¹¹⁵ However, it should be noted that "documentation and registration" are usually distinct steps and operations: a farm family or individual is given a document which specifies certain rights with respect to certain land; information in that document may or may not also be entered (simultaneously with or shortly after the document's issuance) into a common, and regularly updated repository of such information called a land register. Theoretically, where both steps occur, any positive results that are found (say, greater investment in the land, or greater land market activity or market value) could be the result of the documentation alone, or principally traceable to the incremental effect of registration. ¹¹⁶ The available research literature, however, rarely attempts to make any distinction between the impact of documentation and the incremental impact of registration, perhaps because most cases that have been studied appear to involve issuance of land-rights documentation that is also being registered. China is perhaps exceptional in embodying a large-scale issuance of documentation that has not been placed in any common repository that functions as a land registry.

Chinese legislation appears to have recognized the benefits of documentation and registration for collective ownership. The 1998 LML provides that the collective land owner (e.g., the villager group) may apply to register its ownership with the People's government at the county-level for affirmation of its ownership; the evidence of such ownership is the county-issued ownership certificate.¹¹⁷ The law further states that once registered, in accordance with law, ownership will be protected from infringement by any unit or individual.¹¹⁸

With respect to farmers' land rights, LML requires the collective entity in the capacity of the contract issuing party to issue land contracts to farmer households.¹¹⁹ However, the LML does not provide any legal requirements or guidance on the specific content or formalities of land contracts. Moreover, it is simply silent on the registration of farmers' land rights. The RLCL fills this gap.

The RLCL reiterates the LML requirement for the collective issuing of land contracts to farmer households.¹²⁰ To avoid a wide variation in farmers' land contracts, RLCL establishes a set of minimum

core requirements for all such contracts¹²¹ and a parallel set of necessary elements for contracts of transactions involving rural land use rights.¹²² In addition, the RLCL mirrors legal requirements for documenting collective land ownership by requiring that the county-level government issues a land rights' certificate to farmers to affirm such rights.¹²³ To reinforce the validity of the land rights contract, the RLCL provides that the land contract becomes effective on the date the contract is created, and farmers obtain land rights on the date the contract takes effect.¹²⁴

The 1998 Forest Law also requires the county-level government to register individually owned forests and individually used forestland and issue forest certificates to confirm these rights.¹²⁵ It provides that the rights are protected by law against any infringement by any unit or individual.¹²⁶ In order to streamline and unify the process of registering forest-related rights, the State Forest Bureau promulgated the Measure of Forest and Forestland Rights Registration in 2000. The Measure authorizes county-level forest administration to conduct the registration of rights to forest and forestland.¹²⁷ Under the Measure, the registration agency (county-level forest administration) must register forest rights and forestland rights, and the People's government of the county-level or above must issue a forest certificate to confirm such rights once the rights-holder provides: (1) accurate information concerning the location, boundaries, area, types of trees and number of trees; (2) lawful documentation evidencing such rights; (3) evidence of no disputes over such rights; and (4) attached sketches indicating landmarks.¹²⁸ Although neither the Forest Law nor the Measure indicates what constitutes "lawful documentation" that would qualify for registration, it is widely agreed that forestland contracts should constitute evidence of documentation.

One outstanding feature of the Measure is its requirement for a nation-wide uniform format of the forest right certificate.¹²⁹ Based on this requirement, the State Forest Bureau designed a green-cover booklet called "The People's Republic of China Forest Rights Certificate". This is a 14-page document, designed by the State Forest Bureau, with detailed information concerning the nature and extent of farmers' rights to forestland and forest products. The certificate has a 10-digit serial number capable of delivering a unique identification to each of 200 million rural households in China, suggesting that the design is intended to create a national system for registering forestland use rights.

The certificate contains a five-page land information table, with each page carrying the following information for each parcel of forestland:

- 1. Name of the owner of the forestland parcel (collective entity)
- 2. Name of the holder of use rights to the forestland parcel (individual farmer)
- 3. Name of the forests or forest products owner (individual farmer)
- 4. Name of the forests or forest products user (individual farmer)
- 5. Location of the forestland parcel (four directions)
- 6. Total area of that parcel
- 7. Species of the trees on that parcel
- 8. Number of trees
- 9. Duration of use rights to the parcel
- 10. Ending date of the use rights term
- 11. Name of the agency that fills the table and the seal of that agency (county forest bureau)

One of the unique features of this forest certificate is its designated page for a map or a sketch of the forestland parcels. Unlike most certificates to arable land rights, we found during our fieldwork of twenty years, that in certificates where the page for arable land description is limited to the parcel's four directions (north, south, east and west), the forest rights certificate actually contains a page specifically designed for attaching a map or sketch of each of the forestland parcels.

The certificate carries the "State Forest Bureau Forest Rights Management Seal," suggesting a higher authoritative nature of the document than the seal of a local government. Moreover, except for carrying relevant legal provisions on forestland rights and forest rights, the certificate does not contain any provision permitting or requiring land readjustment.

One remaining legal issue concerning the documentation and registration of farmers' individual rights to forestland and forests is the type of registration system that China should adopt for registering farmers' forestland rights. Although all pertinent laws governing forestland require the county government to register farmers' forestland rights and issue forest rights certificates to affirm those rights, it is not entirely clear whether this registration system should be based on a deed recording system, a title registration system or somewhere in between.¹³⁰ The fundamental difference between a deed record and a title registration lies in the degree of administrative vetting and ultimate force of the materials subject to registration. Under a deed record, the registry only produces non-conclusive evidence of the ownership or holdership; the interested party needs to do his or her own investigation to verify the status of the property. In contrast, a title registration creates conclusive evidence and assurance that the person on the register is the legal holder of the rights in guestion. In practice, many systems are hybrids, for example, holding the transferee to knowledge of what he or she would have learned if they had inspected the property on the ground. Each of these two systems has its own advantages and disadvantages. The current registration system for urban real estate in China appears to have adopted title registration. Considering the unique situation with respect to rural land rights, such as creation of land rights at the time of contracting rather than registration,¹³¹ the existence of an enormous number of parcels, tremendous costs expected to be associated with a pure title registration system and the lack of adjudicative capability at the grass-roots level, it appears desirable for China to adopt a hybrid system tailored to meet farmers' needs while maintaining a certain degree of integrity and uniformity for the whole country with respect to the nature of the registration system.

Dispute resolution

One of the brightest spots of the RLCL is its well-crafted provisions on dispute resolution channels and the remedies available for farmers when their land rights are violated. As to the mechanism for dispute resolution, the RLCL provides farmers with four options: consultation, mediation, arbitration and direct filing of a lawsuit with the people's court.¹³² On remedies for aggrieved farmers and penalties for violators of farmers' land rights, the RLCL provides a series of very clear and strong rules prohibiting local officials from violating farmers' land use rights including taking back the farmer-contracted land and recontracting it to others. Remedial measures, such as monetary damages and restitution, and equitable remedies to forestall or reverse the illegal action, are now available to aggrieved farmers when their land rights have been violated.¹³³

However, whether these rules on dispute resolution are applicable to disputes concerning forestland rights and forest rights is not entirely clear. The 1998 Forest Law requires exhaustion of administrative reviews before a complaint can be filed with the court.¹³⁴ The Measure on Resolution of Disputes Concerning Forest and Forestland Rights promulgated by the State Forest Ministry (the predecessor of the State Forest Bureau) in 1996 even authorizes the people's government of various levels as the only agency to handle such disputes.¹³⁵ Both LML and the Administrative Review Law adopt a similar approach by requiring administrative review before disputes can be heard by judicial institutions.¹³⁶ Apparently, there is a potential conflict of law concerning farmers' right to appeal when the disputes are over forest and forestland rights.

China's Legislation Law provides that where there is a conflict between a new legal provision and an old legal provision on the same subject matter adopted by the same law-making body, the new provision prevails; or where there is a conflict between a special provision and a general provision adopted by the same law-making body on the same subject matter, the special provision prevails.¹³⁷ The RLCL was adopted after the LML and the Administrative Review Law. Even if the language of the RLCL with respect to farmers' access to court is interpreted as a conflict with the existing requirement for exhaustion of administrative reviews under LML and the Administrative Law, the RLCL provisions should prevail.

However, where the subject matter of a dispute is forest rights or forestland rights, which law should be the controlling law? While it is desirable to resolve this potential conflict through additional legislation or judicial interpretation of the RLCL and the 1998 Forest Law, there is a strong presumption that the RLCL should prevail over the 1998 Forest Law. From a legal perspective, farmers' forestland rights are derived

from the forestland that farmers contracted through the contracting process as stipulated under the RLCL, and thus any disputes concerning such rights should be governed by relevant provisions of the RLCL. The dispute resolution provisions under the 1998 Forest Law, however, address a broader area of disputes, including disputes between the state and the collective and between different collective entities. Therefore, the RLCL should be the controlling law when the subject matter of the dispute is contracting and operational rights to forestland.

From a public policy perspective, the RLCL is more functional and effective than the 1998 Forestland Law in addressing disputes concerning farmers' forestland rights. While administrative review may be useful when disputes are essentially a boundary dispute between individual farmers, it would make little sense when the collective entities and local governments are parties to land disputes and the review agency has a stake in the dispute. Allowing aggrieved farmers to choose to directly go to court without exhaustion of administrative review under the RLCL is undoubtedly a great improvement upon farmers' right to appeal, and is expected to help farmers get fair and just hearings by impartial judicial institutions.

Another issue with respect to effectively addressing farmers' grievances under the present legal framework is arbitration of land rights disputes created under the RLCL.¹³⁸ It is not entirely clear whether a mechanism to address forestland rights disputes already exists, or whether local governments plan to establish one within their jurisdictions. The RLCL potentially creates a channel of arbitration because of the concerns of ineffective handling of disputes between farmers and collectives or the government through consultation and mediation, and for the huge caseload of local courts that may prevent them from hearing farmers' complaints promptly. While the intent is welcome, the reality appears to be worrisome. The biggest problem with this mechanism created under the law is that there are no rules governing the operation of such an arbitration board. Although China's Arbitration Law provides operating rules for arbitration, it specifically states that these rules are not applicable to the arbitration of rural land contract disputes.¹³⁹

Summary Recommendations

With the unfolding of a new round of collective forest reforms, further legislative reforms are needed to address the remaining issues concerning individual forestland rights. We offer the following legislative recommendations:

Make additional rules governing transactions of forestland rights to non-village individual or entities.

Although existing laws are crystal clear with respect to the protection of farmers' interests with regard to transactions of contracting forestland rights to a third party, there is a legal vacuum concerning transactions of collective forestland under collective management. Currently, Document No. 9 calls for speeding up forest development and, consequently, an increasing number of non-villager individuals and corporations, including foreign companies, are acquiring collective forestland either for harvesting timbers or for growing trees for paper-making and other wood products.¹⁴⁰ Many of these deals were reached between collective cadres and the acquiring entities without consulting farmers. Failure to make appropriate rules governing such transactions will inevitably endanger farmers' interests in collective forestland and may also cause the acquired rights to be insecure because of their uncertain legal status.

As discussed above, although there is no clear rule on transactions of collective forestland under collective management, both the RLCL and Document No. 9 express a strong intent that collective forestland should be either held under collective management or contracted to village households for free or for fees. This intent should be expressed in legal language through additional rules. In other words, the collective entity should be explicitly barred from selling or leasing use rights to collective forestland to non-villager individuals or entities. Non-villagers should be generally encouraged to acquire wasteland for reforestation or other forest development programs. However, if non-villagers are indeed interested in collective forestland, whether it is contracted to village households or not, they must sign a separate transfer contract with each contracting household in the village or obtain agreement by all members of the collective who have a property interest in collectively-managed forestland.

Embody the mortgage provisions under Document No. 9 into law.

Under Chinese law, farmers are not legally permitted to mortgage their forestland rights for loans to finance their development of forest and purchase of additional forestland rights. As the experiences of many developed economies have consistently demonstrated, access to credit is an essential factor in farmers' ability to make long-term, productivity-enhancing and income-generating investments on their land. In the United States, for example, 70 percent of the credit extended to new businesses stems from mortgaging real property rights as collateral for loans.¹⁴¹

Although Document No. 9 clearly demonstrates the central government's willingness to eliminate legal prohibition of mortgage of collective forestland rights, such policy guidelines are not judicially enforceable. Moreover, given the current level of outstanding loans with forestland rights as collateral and further development of mortgage of forestland rights in provinces conducting forest reforms, the continuing illegality of mortgage of forestland rights creates a huge risk for financial institutions making such mortgage loans. It is of the utmost urgency to legalize forestland rights mortgage so that farmers may have better access to financial resources for forest development; in turn, banks may be better protected in seeking remedies through judicial means when mortgage loans are defaulted upon. Thus, we strongly recommend that the prohibition of mortgage of farmers' forestland rights under the 1995 Guaranty Law be repealed, or that the Chinese legislature embody into law the mortgage provisions under Document No. 9.

However, allowing farmers to mortgage their forestland rights alone is not sufficient. Mortgage always comes with the possibility of foreclosure if the debtor defaults on the loan for which the forestland rights are pledged as collateral. The existing legal prohibitions surrounding the mortgage-ability of farmers' forestland rights grows out of legislative concerns over farmers' permanent loss of their land rights to the mortgagee due to foreclosure, thus forcing them into a state of "landlessness." Such concerns are addressable, based on international experience with the mortgage of rural land, through additional legal measures and improved banking practices.¹⁴² The Chinese government may, at least, consider the following legal measures to reduce the potential risks of foreclosure that may be triggered by mortgage.

- Only authorize state banks, at least initially, to engage in mortgage lending, or to obtain foreclosure.
- Upon default of a mortgage loan, the bank must give an advance, written notice to the defaulting mortgagor informing him of its possible consequences. The mortgagor should have a reasonable period of time (for example, no less than 90 days) to cure the default before any foreclosure proceedings can begin.
- Establish "homestead"-type exemptions to foreclosure on certain forestland where farmers' survival and maintenance are largely dependent on forest production. For example, a formula such as "a mortgagor household must be allowed to keep sufficient forestland to produce a household income equivalent to average annual income from forest production in local area."
- Require foreclosure to be made by judicial sale and prohibit banks from accumulating holdings of
 foreclosed forestland. A bank can buy it if it is the highest bidder, but it must assign the land
 rights or lease most of the remaining period of the land rights within a set period, such as three
 years. A court might then be permitted to extend this period by up to, say, another three years if
 the local market in use rights to forestland is not yet developed. (However, there should be less
 of a need for such extension if, as suggested above, the disposition can be either by outright
 assignment or by lease of a majority of the remaining period of the foreclosed land rights.)

Draft forestland registrations regulation in light of the best international experience and China's own characteristics.

Although all pertinent laws require forestland rights to be registered with forest administration at the county level, there is no functional rule on important issues, such as the force of registration, adjudication of disputes before registration and compensation and penalties for erroneous registration. The Measure

of Forest and Forestland Rights Registration promulgated by the State Forest Bureau merely sets forth procedural rules governing the process of registration. On the other hand, unlike arable land, forestland rights in China are documented with a well-designed forest certificate, laying down a foundation for establishing a functional registration system. Providing specific language for this regulation is beyond the scope of this paper. However, we offer the following general recommendations with respect to its drafting:

- Create a hybrid system that considers the need for uniformity¹⁴³ and the particular status of forestland rights, as well as balances the avoidance of burdensome title searches under a deed registration system and tremendous initial cost associated with title registration. Such a hybrid system should provide conclusive evidence of the specific holder of the land rights, but forestland rights should be clearly classified as being created at the time of contracting rather than at the time of registration. Failure to register does not alter the nature of the land contracting relationship. Therefore, it should impose on the potential transferee a duty of inspection of the property at issue.
- Initial registration should be systematic and free. Subsequent registration should entail extremely low transaction costs.
- Land information carried by such a registration system should be open to the general public, and any person interested in such information should have unbridled access to it.

Revise dispute resolution provisions under the 1998 Forest Law based on RLCL.

As discussed above, the dispute resolution provisions under the 1998 Forest Law and other forest management regulations require administrative review of disputes before they can be filed with courts. Such a requirement for exhaustion of administrative means does not only impede farmers' access to impartial judicial institutions for resolving disputes, but also appears to be in conflict with relevant provisions under the RLCL, the governing law with respect to farmers' contracting and operation rights to all rural land, including forestland.

It is of utmost urgency to revise the dispute resolution provisions under the 1998 Forest Law so that farmers can lodge law suits, if they so choose, when they believe that their forestland rights are violated without waiting for the decision of administrative review. Even though disputes over farmers' forestland rights should be governed by the RLCL because they are primarily acquired through village contracting, the inconsistency between the RLCL and the 1998 Forest Law creates an unnecessary practical problem for the application of law when the case is filed with a court.

The RLCL provides farmers with arbitration, a new mechanism for resolving land disputes, including disputes over farmers' forestland rights. However, almost four years have passed since the adoption of the law, and there have been no rules promulgated for governing this device. Since arbitration might be widely used because of its accessibility as compared with courts, the Chinese government should consider as a priority drafting and promulgating relevant rules governing the arbitration of forestland disputes.

We offer several principles in drafting such rules:

- Impartiality should be the key to success of the operation of the arbitration board. While it is desirable to set up this arbitration board as an organization independent of existing administrative agencies, there might be practical and financial difficulties in establishing an independent device. Rules to ensure impartiality should be in place to provide guidance on the performance of the arbitrators. For example, there should be rules on conflict of interest, on the farmers' selection of an arbitrator from the arbitrator pool, on the arbitrator's gualifications, etc.
- Procedures should be simplified. To ensure accessibility, the arbitration board should be run by a set of procedural rules much more simplified than those that govern the operation of traditional courts. Procedural rules should include informal procedures with respect to filing for arbitration, simplified requirements for production of evidence (for example, in the case of a non-villager entity contracting of collective forestland, the aggrieved farmer should not be required to

produce the transfer contract because the contract is likely to be kept by the village collective), and responsiveness to farmers' request for arbitration to avoid lengthy reviews.

Some legal aid functions may be desirable. When farmers seek arbitration to resolve land disputes, most (if not all) of them may not have any knowledge about arbitration. The rules should also impose an affirmative duty on arbitrators to assist the parties (meaning, in particular, farmers, as the likely less-knowledgeable party) in understanding relevant laws and regulations concerning their land rights, interpreting arbitration rules, filing request for arbitration, informing them of advantages and disadvantages of seeking arbitration and informing them of any additional channels for resolving the dispute if they are not satisfied with the arbitration decision.

III. Forestland Taking and Logging

Compensation for Physical Expropriation and Regulatory Takings of Forestland¹⁴⁴

With the rapid economic development and urbanization taking place in China in recent years, farmland has been lost at a rapid pace. In addition to this physical loss of land, forest farmers have suffered from regulatory takings that institute a complete logging ban on the logging of collective forests in some ecologically fragile areas. This section will review the laws and policies on compensation for physical expropriation of forestland for non-agricultural purposes as well as regulatory takings of forestland for ecological and environmental protection and provide recommendations for further reforms.

Compensation laws on physical takings

Under China's land expropriation laws, provincial governments are authorized to make compensation standards for forestland takings "in reference of" national standards for arable land as prescribed in the 1998 Land Management Law.¹⁴⁵ China has an approach of farmer compensation for arable land seizure based on the original use of the land taken and determines such compensation according to a set of statutory standards. The current legal requirement for compensation for the expropriation of agricultural land consists of three components: (a) a compensation for loss of land set at six to ten times the average annual output value of the land for the three years prior to the requisition, (b) a resettlement subsidy set at four to six times the average annual output value, and (c) compensation for structures and standing crops (both annual crops and perennial crops such as trees) to be determined by provincial governments.¹⁴⁶ The compensation law further caps the sum of compensation with a loss of land and resettlement subsidy at 30 times the average annual output value for the preceding three years if the statutory standards are not sufficient to maintain farmers' original living standards.¹⁴⁷

However, these already low standards for arable land expropriation do not apply to forestland takings. Although the enabling clause of the LML requires provincial governments to adopt forestland compensation standards in reference to arable land standards, a review of existing provincial regulations on expropriation of collective forestland suggests that most provincial compensation rules appear to treat forestland as inferior to arable land in terms of compensation. There are generally two approaches used to determine compensation standards. One is a multiplier of the average annual output value of adjacent arable land (rice paddy or dry land), and the other is a multiplier of the average annual output value of the forestland subject to expropriation. The following table is a glimpse of compensation standards for forestland by some of the provinces.

| | Arable-land-based | Forestland-based |
|----------|---|--|
| Zhejiang | 4-7 times annual output value of arable land ¹⁴⁸ | |
| Jiangsu | 8-12 times average annual output value of adjacent arable land for orchards and other forestland generating constant incomes; 6-10 times average annual output value of adjacent arable land for other forestland¹⁴⁹ | |
| Guizhou | 6-8 times average annual output value of dry land for orchards, nurseries and other forestland generating constant incomes; 2-5 times average annual output value for timber land, bamboo forestland and bush land¹⁵⁰ | |
| Fujian | 60-70% of 8-10 times annual output value of arable land for orchards and other forestland generating constant incomes; 40% of 8-10 times annual output value of arable land for other forestland ¹⁵¹ | |
| Anhui | | 4-6 times output value of timber production for timber land; 6 times average annual output value of the land for nurseries and forestland generating constant economic incomes; 2-3 times output value of timber production for ecological protection forestland 70-90% of output value of timber production for firewood land and other forestland |
| Yunnan | | 3-5 times of market value of growing timber stock for timberland; 6 times of annual output value of the trees in their maturity for orchards, bamboo forests and other forestland generating constant economic incomes; 6 time of annual output value of the land for nurseries¹⁵³ |

In addition to compensation for loss of land, provincial governments are also authorized to promulgate standards for compensation for loss of trees. In general, compensation for timber trees is determined based on the market value of the tree's lumber stock times a discount rate. For example, the Anhui standard is 10-20% of market value of the tree's lumber stock for trees with a diameter of 20 cm or more and 60-80% for trees with a diameter of 5-20 cm.¹⁵⁴ In Jiangsu, the standard ranges from 10-20% of market value of the tree's lumber stock for mature trees to 60-80% for young trees.¹⁵⁵ The Guizhou standard appears to be more reasonable. Only mature timber trees are compensated at a 50% discount

of market value of the tree's lumber stock; for young trees and mid-aged trees, compensation is one or two times the market value of the tree's lumber stock.¹⁵⁶

For trees that generate constant economic incomes, compensation standards are usually set based on the annual output value of the tree or the total cost of planting and management if the tree has yet to generate output. One exception is the Jiangsu approach, which pays for the transplant cost or cost of labor and capital in planting and management of the tree if not transplantable.¹⁵⁷ Again, Guizhou Province has a higher compensation standard for economic trees. While most of the other reviewed provinces adopt a formula of two times the annual output value for economic trees,¹⁵⁸ Guizhou requires four times the annual output value for trees in maturity.¹⁵⁹

Several points here are worth noting. First, none of these reviewed provincial compensation laws contains the general principle of restoring farmers' livelihoods as articulated in the LML in setting compensation standards. Perhaps because of ignorance, provincial lawmakers did not consider forestland rights to be as closely relevant to farmers' wellbeing as arable land, resulting in much lower standards in compensation for the loss of forestland and trees. This is particularly unfair to farmers relying on forestland for a living. Second, because of the lack of general guidelines for making compensation standards for forestland, provincial governments appear to have acted on their own in choosing the parameters for calculating compensation and deciding on the multiplier of the selected parameter. Although the LML requires reference to national standards for arable land when making provincial rules on compensation for non-arable land, it appears that this requirement was largely ignored. Third, the discretionary power possessed by provincial governments through the enabling clause of the LML seems to facilitate a "Balkanization" of provincial rules on forestland compensation, leading to great variances of provincial standards on compensation for forestland and trees. Fourth, although it is not entirely clear how these compensation standards were derived, there seems to have been no input from forest farmers when the standards were made. For example, Guizhou Province bases compensation for loss of orchard land on the adjacent annual output value of arable dry land, but orchard land is usually more productive and, therefore, has a higher value than dry land producing grains. Another example is a nearly-universal approach adopted by these provinces in discounting market value of trees when determining compensation for loss of trees.

In addition to problems particular to forestland and standing trees, the inherent defects of China's general expropriation laws also have implications on the expropriation of forest properties. First, compensation for expropriating rural land for either public interests or any commercial purpose is subject to statutory limits which are usually well below what is needed for restoring farmers' livelihoods. The Rural Development Institute's recent 17-province survey found that more than 65% of farmers whose village's land had experienced state expropriations were not satisfied with the compensation received.¹⁶⁰

Second, no Chinese laws or government policies provide any guidance on the valuation of land to be expropriated. Determination of compensation is thus based on the average output value of the land regardless of farmers' investment in land, location of the land, potential best use of the land, local demand for such land, market price for agricultural products that the land is producing and other factors that typically determine the value of farmland.

Third, Chinese land compensation laws explicitly cap the compensation for loss of land at a maximum of 10 times of annual output value, leaving virtually no legal basis for farmers to demand a higher compensation, or a compensation that dispossessed farmers are willing to accept. In the meantime, the government is authorized to sell use rights to expropriated land to commercial interests at a market price that is, in most cases, several times higher even than the maximum compensation paid to dispossessed farmers.

Realizing the serious defects of its expropriation legislation, the Chinese government has taken some policy measures to improve its regulatory framework, notably, the State Council's Document No. 28 of 2004. The Document re-emphasizes that compensation be determined based on the principle of preventing farmers' living standards from being lowered as a result of the land expropriation. It

specifically requires that local governments allocate part of their revenue from granting state-owned land use rights to farmers if the maximum sum of land compensation and resettlement subsidies is still insufficient to restore dispossessed farmers' livelihoods. However, the Document focuses on arable land takings; it is not entirely clear whether the new policy guidelines apply to the expropriation of collective forestland.

Regulatory takings

Having experienced unprecedented flooding in 1998, the Chinese government realized the direct link between natural disasters and the worsening ecological situation caused by uncontrolled illegal cuttings. In response, the central government initiated the Natural Forest Protection Program (NFPP) in 1998. This program had five goals: (1) to restore natural forests in ecologically sensitive areas, (2) to plant forests for water and soil protection, (3) to increase timber production in forest plantations, (4) to protect existing natural forests from excessive cutting, and (5) to maintain the multiple use policy in natural forests.¹⁶¹ The NFPP includes 17 provinces and autonomous regions, including the upstream regions of major river systems like the Yangtze and Yellow Rivers, which covers more than 61 million hectares of existing natural forests.¹⁶² The majority of NFPP forestland is collectively owned. In Guizhou Province alone, collective forestland accounts for 90% of all NFPP forestland within the province.¹⁶³

The most drastic measure of the NFPP program was the introduction of a complete cutting ban in NFPP areas, rendering collective forestland within the NFPP zone virtually economically worthless. Although the 1998 Forest Law mandates creation of the State Forest Ecological Benefits Compensation Fund, this fund is used solely for "planting, management and protection of trees" within ecological forests.¹⁶⁴ No Chinese law has formally addressed the issue of compensating property owners for government acts which do not physically take the property, but which deprive the property owner of his or her right to benefit from the property through laws and regulations.¹⁶⁵

Government acts that usually involve a regulatory measure for environmental, ecological and public benefit concerns are legally termed *regulatory taking*. Traditionally, takings only occur when the government exercises its eminent domain to physically expropriate private property for public needs or uses. Compensation is required for such physical takings. The underlying principle is that any government act that benefits the public as a whole should not disproportionately affect individual private property owners. With enhanced environmental awareness, more and more countries, especially those with a developed legal system, resort to rule of law to contain environmental and ecological deterioration. Such environmental laws sometimes negatively affect an individual's interest in his or her property. Regulatory takings law has thus been developed to address the issue of the virtual or functional loss (but not physical loss) of the property sustained by private individuals as a result of the government's regulatory act. Over the past 30 years, U.S. jurisprudence has created a set of rules, collectively called *regulatory takings law*, to tackle this relatively new legal issue. These rules may have an instructive value for China in its development of regulatory takings law on its road to rule of law.

In physical takings law, the underlying principle for regulatory takings law is to protect property owners from being negatively affected in a disproportionate way by the government's acts. In this sphere, once a government's regulatory act is deemed a regulatory taking, the affected property owner is entitled to just compensation¹⁶⁶ defined as the fair market value of the property.

Under U.S. regulatory takings law, a government's regulatory action may be viewed as a regulatory taking that requires compensation when the regulation completely deprives an owner of all economically viable use of his or her property, unless the relevant property law independently restricts the intended use of the property, such as by creating a nuisance.¹⁶⁷ That is to say, if the regulation tends to wipe out all economic benefits of a private property owner for the common good of the public and this wipe-out is not intended in property law, it may be a regulatory taking. To determine whether the regulation wipes out all economically viable use, a court will look at two factors: first, whether the regulation destroys almost all the value of the property in a manner justified by a sufficient public interest, and, second, whether the regulation leaves a reasonable return on the owner's investment.¹⁶⁸

China's NFPP appears to fall within the scope of the legal concept of regulatory taking.¹⁶⁹ First, forest farmers within the designated area of NFPP, especially those who rely on harvesting timber for a living, will not make economically viable use of their contracted forestland.¹⁷⁰ Their livelihood may be endangered by the logging ban. Second, forest farmers initially contracted forestland and invested their labor and capital in planting trees in anticipation of the returns on such investments when the trees are mature for cutting. Because of the logging ban, their investment-backed expectation may be completely destroyed.¹⁷¹ Third, the NFPP was initiated long after collective forestland was contracted to individual farmer households, and such household contracting of forestland was accompanied by the policy statement that "whoever plants tree, owns the tree." Such ownership appears to be economically meaningless when subsequent government action declares that forest farmers cannot derive economic benefits from their ownership.

It should be noted that the central government's launch of the NFPP program and establishment of the logging ban are out of a legitimate concern for the general public; it is clearly in the public interest to reverse the trend of ecological deterioration and soil erosion. The question is, then, whether the cost of such regulatory action that benefits all citizens of the country should be borne by forest farmers who happen to live within the NFPP areas. Moreover, the NFPP program is implemented largely in remote mountainous areas where farmers' livelihoods are primarily dependent on forest production. As compared with grain farmers in the plains, these forest farmers in the NFPP areas are more prone to poverty and more economically vulnerable. It appears to be more socially unfair to require them to bear the property loss as a result of the NFPP program.

Summary recommendations

1. Embody the central guidelines on takings reform into compensation law governing expropriation of forestland and introduce a replacement value concept in determining compensation for farmers' losses of forestland rights and forest rights.

As discussed above, the lack of guidelines for provincial legislation has led to a "Balkanization" of provincial compensation standards concerning farmers' forestland rights and forest rights in government expropriations. The provincial legislature's uncharted discretion under the enabling clause of the LML tends to encourage local government in making lower compensation standards than they would have if they were required by national law to meet certain threshold parameters. Therefore, it is of utmost urgency to infuse forest-related laws with the new central guidelines articulated in Document No. 28 of 2004: restoring farmers' original living standards and ensuring their long-term livelihood.

The threshold requirement for restoring forest farmers' original living standard is to replace what these farmers have lost due to state expropriations. That is, the compensation value should be sufficient to replace these farmers' livelihoods. The new central leadership's increasing awareness of the tremendous negative consequences of "urban-biased development at all costs" and refocusing on improvement of farmers' livelihoods appears to present a prospect (no matter how slim it is at this juncture) for developing a compensation standard that is leaning toward replacement of not only monetary value, but also functional and utility value, of the land lost to expropriations. In other words, compensation should include replacement of most, if not all, possible benefits that the lost land conveys to dispossessed farmers. For forest farmers, the primary items for replacement are their forestland rights and trees growing on their forestland.

The prerequisite for adopting this kind of replacement value approach is full and informed participation by affected forest farmers. While land expropriation is compulsory, the determination of the land's value should not be compulsory under the replacement value approach. Under this mechanism, the process of determining compensation for a loss of assets is essentially four-steps. First, an independent assessment should be conducted to assess what benefits dispossessed farmers would have to give up directly from the loss of land. Second, there should be an independent survey on what affected farmers are willing to accept with respect to compensation. Third, based on the information from the assessment and survey, the government expropriating agency will make an initial determination of the land's value and propose it to the farmers who will be dispossessed in tandem with their collective entity. Fourth, a negotiation

process begins where a willing buyer (the state) makes an offer to the collective landowner and the affected farmers who may or may not be willing to accept the government offer. The outcome of such non-compulsory interactions should be an agreement on compensation for land expropriation at or close to replacement value of the land to be taken.

Existing Chinese compensation laws governing forestland and forest expropriation adopt an approach of setting a numerical ceiling on multipliers of annual average output value of the land to be taken in determining the compensation level. This practice is clearly at odds with the willing-to-accept concept. The first step for reforming China's compensation standards related to forestland is to abolish this ceiling approach and replace it with a minimum approach.¹⁷² We must bear in mind, however, that using a multiplier of annual average output value to determine compensation in exchange for the forestland to be seized, has been widely implemented for many years, and it would be difficult, if not impossible, to completely remove it from the valuation process. One idea to overcome this obstacle would be to tailor the willing-to-accept concept to fit the particular Chinese context, by substantially increasing the level of statutory multiplier standards and use these standards as minimum benchmarks rather than as a maximum ceiling. This benchmark standard should be equal or similar to the replacement cost, subject to modification based on rebuttal evidence.

The replacement value approach should also be introduced in the valuation of trees to be expropriated. As reported above, none of the provincial standards for either timber trees or economic trees that generate annual economic incomes reflects the replacement value of trees. It is even more problematic and unfair to forest farmers to discount the market value of their timber trees in determining compensation. We recommend following the standards for tree compensation:

- <u>*Timber trees:*</u> Since there is a developed market for timber, its market value should be the gauge for determining the compensation amount. The current method of valuing timber trees based on their market value adopted by most provinces is acceptable, but forest farmers should receive full market value of timber trees rather than the value after a discount. For young timber trees, the standard should either be total costs (labor and capital) incurred by planting and managing trees, through the time of the expropriation, or the full market value of the trees, whichever amount is higher.
- <u>Economic trees</u>: Existing provincial standards are 2-4 times the annual output value for mature economic trees. It is not clear what the scientific or market basis is for setting this level of multipliers, but it appears to be unreasonable, especially for economic trees that can bear fruits for more than 10 years. It is recommended that the valuation of perennial crops be based on the crop's income-generating capacity for its remaining economic life, minus the cost savings for the remaining years. For example, if a mature orange tree with 10 years of remaining fruit-bearing capacity is to be cut at year 5 due to state expropriation, the compensation should be the output value of the remaining 5 years minus the costs of maintaining such a capacity. For a young economic tree expropriated before reaching its fruit-bearing age, the compensation could be either the total cost of planting and managing it or the transplanting costs.
- 2. Establish a rational regulatory takings law in light of international experience.

The absence of compensation offered to farmers when they are prevented by government regulations from using their land for economic benefits, is unfair to forest communities and inconsistent with Party objectives. Additionally, the lack of regulatory takings law will discourage forest farmers to invest in forest development because they will never know whether and when the government will ban the economic use of their land. It is abundantly clear, however, that they will not get compensation if that occurs. In order to achieve the goal of building China into a harmonious society that treats all citizens equally and motivates forest farmers to implement ecologically oriented programs, China needs its own law on regulatory takings that will require the government to pay compensation to affected forest farmers when such taking occurs, according to the standards as recommended above.

Drafting a regulatory takings law for China is beyond the scope of this paper. However, several points should be taken into account when this law is on the legislative agenda. First, based on international legislative and judicial experience, it seems prudent to define regulatory takings narrowly and make distinctions between regulatory taking and the state's police action. Many government regulatory actions are intended to reduce or eliminate foreseeable harm to the general public, which may interfere with the property owners' economic use of the property. These regulations should not be treated as a regulatory taking solely because the property's economic use is restricted. For example, a regulation banning the use of forestland as a campground for wildfire concerns may not constitute a regulatory taking because wildfires are a public harm; it is explicitly stated in existing property law that the property owner should not use his property to harm others. Second, when determining whether a regulatory action is a regulatory taking or merely the government's performance of its duty to contain potential hazards, the touchstone should be whether the action amounts to elimination of all economically viable uses of the property, that is, whether forest farmers can functionally use their forestland to generate economic incomes other than through the harvest of trees. A reduction of incomes from forestland as a result of the logging ban may not trigger regulatory taking as long as other economically viable use of the land is available, such as eco-tourism. Third, economically viable uses should be defined against the Chinese context. The NFPP and other similar programs are often implemented in poverty-stricken areas where the average income level of forest farmer households is already below national average and there is not a sufficient market for non-timber products. Even though non-logging businesses such as eco-tourism are conceivable, for poor forest farmers they are merely a moon on the water without substantial capital investment. Therefore, any non-logging endeavor gualified as an economically viable use must be realistic and practical in local areas.

Logging Restrictions

Like many countries in the world, China has policies to regulate logging. The 1998 Forest Law is the controlling law on logging restrictions. Chapter Five of the law provides the following guiding rules:

- Based on the principle that the overall consumption rate of timber stock should not exceed the growth rate, the state establishes an annual logging quota (ALQ). Each province, prefecture and county is thus allocated a certain amount of ALQ in a top-to-bottom manner.¹⁷³
- The State Council draws up a timber production plan each year, which should not exceed the ALQ. ¹⁷⁴
- Except for "scattered trees" on farmers' private mountains or around farmers' residential houses, all logging must be endorsed with an appropriate logging permit, which is typically issued by the Forestry Bureau at the county level or above. ¹⁷⁵
- A forestry bureau should not issue logging permits that exceed its allocated ALQ. ¹⁷⁶

The process of determining the ALQs with respect to collective forests consists of two steps. First, each provincial jurisdiction submits to the State Council its application for the ALQ based on a compilation of applications filed by all counties within the province. Second, after reviewing provincial applications, the State Council approves the ALQ for each province, which is valid for five years.¹⁷⁷ In Dec. 2005, the State Council approved a new ALQ plan for the Eleventh Five-Year Period that governs the timeframe from 2006-2010.¹⁷⁸ The State Forestry Administration (SFA) was the main agency in charge of establishing the new ALQ plan. After receiving and balancing the proposals from all jurisdictions, and considering the past ALQ plans and present conditions, the SFA drafted a plan in 2005 that was later accepted by the State Council. The new ALQ plan¹⁷⁹ contains several notable features:

- The five-year overall quota is 248 million m³, an 11% increase from the preceding five-year quota.
- In the past, a quota was allocated under multiple categories: commercial timber, farmers' selfconsumption timber, firewood timber, etc. Such a classification resulted in confusion and abuse as the definitions of each category lacked clarity and precision. Under the new ALQ plan, the overall quota has been divided into only two categories: a quota for commercial timber (158

million m³, a 36% increase from the previous five-year plan) and another for non-commercial timber (90 million m³, a 23% decrease from the previous five-year plan).

• Bamboo production and logging is not covered by the national ALQ. It is decided by each province individually.

In the case of commercial timber forest which was artificially planted in or after 2000 and now reaches a certain scale, the forest owner needs to, according to applicable rules, draw up a "forest management scheme" that proposes a logging schedule and harvest amount. After the provincial-level forestry bureau approves the scheme, the proposed logging will automatically become permissible.¹⁸⁰ The proposed logging amount will be counted separately and deemed acceptable as long as it is within the provincial ALQ. Moreover, when the quota for artificially planted commercial timber forest in any given year is used up, additional logging is permitted by using the logging quota allocated for natural forest or ecosystem-protection forest.¹⁸¹

In addition, the logging of timber forest developed by foreign investments must not exceed the approved ALQ and must be approved by logging permits from provincial-level forestry bureaus.¹⁸²

When an individual (or organization) needs a logging permit, he or she needs to file an application with the responsible forestry bureau along with supporting documentation, including a forestland rights certificate, a timber logging scheme authorized by higher level government, a logging work-plan, and a certificate for the reforestation of the previously logged location. For state forest farms, the application is filed with and processed by the county forestry bureau. For forest areas owned by rural collectives, farmers or rural co-ops, the application needs to be confirmed by forestry stations at the township level and then filed with the county. In addition to other requirements, the applicant must show that he has completed his reforestation obligation for the past year.

With respect to logging restrictions on collective forests, the fundamental problem is the discretionary process used to determine ALQs and to allocate logging permits within approved ALQs. Except for the authorization of government agencies at various levels to decide on ALQs and allocate logging permits, current law does not require or even encourage farmers' participation in this process, nor does it avail to them any means to contest the government-set ALQs. Farmers are the primary stakeholders of collective forests and would be affected most by any ALQ set for them. This top-down process has put farmers completely in the dark when their property rights to benefit from farming on their forestland are at stake. Without proper channels to voice their concerns, farmers are more likely to resort to illegal cutting that would hinder the achievement of the ALQ objective of protecting China's collective forests.¹⁸³

Second, there are no publicly announced parameters for setting ALQs and granting cutting permits. In most developed countries, cutting permits are granted based on an assessment of the impacts of proposed cutting on the environment, in accordance with a variety of publicized standards. For example, in Washington State, USA, a review of applications for cutting permits is conducted by assessing the potential impacts on forest soils, fisheries, wildlife, water quantity and quality, recreation, and scenic beauty.¹⁸⁴ The United States Supreme Court has held that before an agency can issue a logging permit, it has to conduct an environmental analysis pursuant to the National Environmental Policy Act and provide notice and opportunity to comment to those affected by the proposed logging.¹⁸⁵ In China, however, there are no publicized rules concerning the standards used to grant or reject logging permits, resulting in a non-transparent and discretionary process in reviewing applications for logging permits.

The absence of publicly-known parameters also facilitates "rent-seeking" by officials with the power to review applications for logging permits. Because the demand for logging far exceeds the allocated ALQ in most areas, forest owners and developers have to compete fiercely for the limited quota. As a result, bribery and corruption appear to be fairly common, which further compromises the integrity of the ALQ system.

Third, unlike forest owners in countries with a developed legal system, farmers in China virtually have no right to appeal when their application for a cutting permit is denied. In the U.S., both owners of private

forestland and users of federal, public forestland may appeal the denial of logging permits to an independent appeals body or to a level of forest authorities higher than the forest agency making the denial.¹⁸⁶ If the appellant is not satisfied with the decision made by the appeals body, he or she may lodge a lawsuit contesting the decision within a limited timeframe. In China, however, there is no such process available to farmers. Although the 1998 Forest Law contains a provision on dispute resolution, the appeal process is limited to handling disputes over ownership of trees and rights to forestland.¹⁸⁷ Disputes over logging permits are not part of the appeals process.

Summary Recommendations

China has to independently assess and evaluate the effectiveness of the ALQ system. The official overall quota is <u>248 million</u> m³ for the years 2006-2010; however, logging without a quota is at the level of 75 million m³ per year.¹⁸⁸ It appears that the SFA should examine why and how the policy has been failing. The need for environmental conservation and the demand for timber products must be reconciled, as China's economy continues to expand while significant environmental problems due to excessive logging persist in many parts of the country.

The first step to reforming China's ALQ system is to make the process transparent and participatory. With respect to collective forests, the determination of ALQs should be derived through a process in which farmer stake-holders are invited to voice their needs and concerns. ALQ plans made by each county and, subsequently, submitted to the provincial forest administration, should be a result of balancing various needs voiced by all forest communities.

Second, to facilitate farmers' meaningful participation and to restrain the advancement of self-interest, the government should make and widely publicize the functional (and preferably quantifiable) standards adopted in reviewing individual application for logging permits. Such standards will also play an educational role in making farmers aware of what could be cut upon approval and what could not.

Third, China needs to reform its dispute resolution system to allow farmers to appeal the denial of their application for a cutting permit, and widely publicize this new process among farmers. This new dispute resolution channel should be independent from the agency that makes the decision on farmers' applications. Moreover, farmers should be widely aware of the procedures that govern the appeals process, especially those farmers who largely rely on forest production for a living. Transparency is the key to avoid misuses or manipulations of the process. Given the economic gains that the reviewing officials might enjoy personally, it is logical that the awarding process might become rigged behind closed doors. In the end, big developers or ones with close connections to permit issuing agencies, may get what they want (at a certain price), while small farmers may be excluded and denied by the process. A drastic improvement of transparency in processing applications for cutting permits and in reviewing appeals and complaints should be institutionalized.

IV. Conclusion

The ongoing reforms of collective forestland are paving the way for securing farmers' property rights to forestland in line with China's goal of building a harmonious society. However, this new round of reforms is, to a large extent, driven and guided by the policy directives of the central government. Having been defined and characterized as property rights under the new Property Law, farmers' rights to collective forestland should be better protected and more functionally regulated under the law. Further legislative reforms are imperatively needed to reinforce the collective forestland reforms as well as to facilitate the establishment of rule of law in the countryside. After all, a society without rule of law cannot be harmonious at all.

V. Appendix (Fieldwork Findings)

Guangxi (Aug. 2006)

Background

Stora Enso is a Helsinki-based company producing publication-quality paper, packaging boards and wood products. In 2005, Stora Enso was the world's largest pulp and paper producer in terms of production capacity. The Finnish state is its largest shareholder.¹⁸⁹

Guangxi Zhuang Autonomous Region ("Guangxi") is a province located in southern China, with a population near 49 million. Guangxi is a mountainous region, with a subtropical climate. In 2005, GDP per capita of urban residents reached RMB 8,916 (approximately USD 1,114 dollar), while GDP per capita of rural residents was RMB 2,494 (approximately USD 312 dollar).¹⁹⁰ Important crops in Guangxi include rice, maize, and sweet potatoes. Cash crops include sugar cane, peanuts and tobacco.

Stora Enso first began to lease forestland in 2002, in an effort to plant eucalyptus trees in two prefectures within southern Guangxi-- Beihai and Qinzhou. As of March 2006, Stora Enso had leased a total of 34,000 hectares of forestland, increasing its landholdings at a fast pace with the eventual goal of 150,000 hectares. The company is also at an early stage of establishing a large-scale paper mill in Beihai, Guangxi.

Once the land is acquired through leases, Stora Enso typically hires independent contractors to plant (and later to care for) its eucalyptus trees. The tree planting, contracted to migrant workers, first started in 2003 and is an ongoing process as more forestland is added to the company's portfolio. Seedlings were initially bought from the open market; now, the company operates its own nursery. It takes about 6-7 years for eucalyptus trees to mature, and thus the first round of logging will likely occur in 2009-2010. During interviews, company officials indicated that they do not expect any problems in obtaining logging permits from the local forest management authority.

Leasing Forestland

Generally speaking, the rights to forestland are held by three different types of people or organizations: state forest farms, collectives and individual farm households. State forest farms and collectives typically enjoy the complete ownership rights to forestland. In the final case, collectives (typically production groups or natural villages within an administrative village) granted and "contracted" the use rights of forestland to individual farm households for a certain period of time (30-70 years, according to the 2002 RLCL). Besides leasing land directly from state forest farms, Stora Enso has acquired forestland use rights in four ways, as described below.

Leasing land from individual farm households

Where a collective has allocated and contracted forestland (mostly hilly land) to individual farm households, Stora Enso often chooses to negotiate and deal with farmers directly. The final contractual arrangement takes two forms.

In the first form, Stora Enso signs a contract directly with an individual farm household. This typically applies when the household possesses relatively large areas of forestland and has no disputes concerning boundaries or rights. The rent payment generally goes to farmers through direct deposit to their bank accounts. Typically a rent payment is made every 1-3 years and, even though the transaction costs seem relatively high, the company actually prefers this method because the rights pertaining to the land are clear and every household has a written contract. Therefore, the chance of future disputes is small and there is no need to get the contracts stamped by various administration levels.

The second form seems to be the preferred manner of leasing land from farmers. Here, the negotiation is done at the production group or natural village level, and the contract would be signed by Stora Enso and the natural village committee/production team, or a representative selected by the consenting farmers. An attachment to the contract contains each farmer's signature of consent with his or her fingerprint. The rent payment normally goes to the bank account of the natural village committee or the designated representative, and then is distributed to individual farmers.

Leasing land from collectives

When forestland is not allocated to farmers, it remains collectively-owned by villages or productionteams. Stora Enso has obtained a large amount of forestland from these groups.

In this situation, the collectives typically follow the procedures set out by the Rural Land Contracting Law requiring that two-thirds of "village representatives" approve the leasing of forestland. However, the statute does not define "village representatives." The company and local officials argued that because many farmers do not reside in their villages regularly due to jobs in cities, it is unrealistic to ask every villager to be a "representative." Consequently, a representative, often the head of household, is chosen from each household to vote for the transactions. The fieldwork reveals that the RLCL requirement has been satisfied in most cases in this way.

One of the tricky issues here is that a collective is not considered a legal person under the law and cannot open a bank account by itself. Money initially was passed through the township forestry office. From this year forward, however, rent payments will go directly to the villages. Stora Enso requires that the lessors have a bank account where rent can be directly deposited, so it is common for one individual farmer to be chosen as the collective's agent who receives money through his or her personal bank account.

A collective signs a contract with Stora Enso and keeps an original copy. Individual households typically do not know about the details of the contract. Rent income is typically distributed per capita, but there are minor variances among different villages.

A snapshot of Da Chong village

Da Chong has 12,000 mu (roughly 800 hectares) of forestland in total, 4,000 of which was allocated to individual households in 1982-83, while the rest is owned and operated by village or production collectives.

Stora Enso first came to this village in 2003 and managed to lease about 1,300 mu (86 hectares) of forestland. Because forestland allocated to households is relatively small and fragmented, more than 75% of the leased land comes from collectives.

At that time, production teams held meetings to inform villagers of the proposed transactions, including information on rent (42 yuan per mu per year, roughly 5.25 USD per 1/15 hectare per year) and lease terms (30 years). Approximately 60-70% of all heads of household initially consented, although they worried that the 30-year lease term might be too long. After further convincing from village cadres, nearly 100% of all heads of household agreed to the lease and placed their fingerprints on the contract. Field interviews with farmers indicate that the rent payment of 42 yuan was indeed delivered to the hands of farmers. Future rent payments will be paid annually.

Stora Enso's large-scale leasing of forestland and corresponding investments have driven up the rent considerably. For example, a developer from neighboring Guangdong province recently approached the village of Da Chong and negotiated a lease involving 200 mu of hilly land for 20 years. The annual rent is 88 yuan per mu (11 USD per 1/15 hectare) per year, almost tripling the price of Stora Enso's rent only one year ago. More important, the developer paid the entire rent for the 20-year term in one lump sum upfront. The developer is using the land as a cassava farm.

Leasing land from private "middlemen"

In Beihai, before Stora Enso initiated its lease agreement in Da Chong, there were a small number of people (especially village officials) who had leased relatively large amounts of forestland from their fellow farmers. They, in turn, rented the land to Stora Enso. The rent mark-up by the middlemen seemed to be low, often ranging from 5-10 yuan¹⁹¹ per mu¹⁹² per year.¹⁹³

Even though Stora Enso may obtain a large amount of land in one deal, there are often disputes or uncertainties regarding the rights connected to the land because the lease with Stora Enso is dependent upon the previous lease with a number of other farmers. The company requires that all disputes be resolved before a formal contract is executed.

Leasing land from government "middlemen"

As indicated by Stora Enso, the Beihai Municipal Government is in the process of establishing a company called "Beihai Forestry Investment Company," to act as the governmental middleman in forestland leasing. Such a move is reportedly a fulfillment of the Beihai Municipal Government's early promise that it would exercise its governmental power in helping Stora Enso obtain large amounts of forestland (300,000 – 400,000 mu). The company will lease forestland from multiple sources (individual households, collectives, state forest farms), and then rent the land as a package to Stora Enso.

From a purely economic point of view, this governmental middleman may save significant transaction costs for Stora Enso. However, Stora Enso is seemingly aware of the problem that small farmers may be coerced into renting their land to the government. As a matter of fact, governments in various regions of

China have set up "commercial" entities, exercising their political clout by maximizing their own profit margin to the detriment of the local people. Therefore, it is unclear at this moment how Stora Enso will cooperate with the local government while making sure that the plentiful Beihai farmers are fairly treated in the process.

Documentation & Lease

The following section discusses the three most basic aspects of a lease used by Stora Enso. Please refer to Attachment #1 for a sample contract.

1. Validity of rights

New forest-land-rights certificates have not been issued at all in Guangxi. It appears that in many parts of the province, when the value of forestland increases, there are frequent boundary disputes arising between collectives, between farmers, or between collectives and farmers. A majority of collectives received documentation (old certificates) in the 1950s or early 1980s, but only 20-30% of them still possess them today. Moreover, a multitude of encroachments or undocumented transactions have occurred in the past decades. Thus, disputes involving boundaries have become increasingly common.

In the absence of land documents, ownership and use rights of forestland are confirmed by administrative means. The fieldwork found that three levels of the local administration (villager group, administrative village and township) had affixed their official stamps to acknowledge the validity of the rights and boundaries at issue.

2. Pricing

Stora Enso generally makes a preliminary lease offer based on the general characteristics of the land, such as the levelness of the land, the soil grade, the fragmentation of parcels, and the facility of transportation.

Based on fieldwork and materials, the annual rent per mu is as follows:

- 40-60 yuan per mu per year for flat land
- 25-35 yuan per mu per year for gentle-slope land
- 10-25 yuan per mu per year for steep-slope or inferior-soil land
- The average rent is 25 yuan per mu per year

Even though the rent will be adjusted based on the official inflation index published by the National Statistics Bureau, there were a number of interviewed farmers indicating that the rent levels were too low, given the fact that the land value had increased considerably in recent years.¹⁹⁴

If trees are already planted on the land, there is a separate fee paid for the value of these existing crops, which will be removed in the case of planting eucalyptus trees.

Stora Enso claims that the impact on farmers' income is minimal, on the grounds that, before the lease, much of the forestland was not fully cultivated or utilized and thus generated only a modest amount of income. The UNDP study confirms that, in this case, where farmers lease land directly to Stora Enso, the rental income constitutes a considerable addition to the annual income of the family.¹⁹⁵

3. Length of lease term

Stora Enso is obviously interested in longer-term leases in order to reduce the business uncertainties and assure the security of their investments. For this reason, virtually all contracts in one country were valid for a period of 30 years. However, because many farmers believe that they might need to use their

forestland for other purposes or that the rent is too low if it is fixed for 30 years, the length of the lease term has been reduced to 20-25 years in many areas.

Issues and Concerns

1. Lack of documentation of forestland rights

Guangxi province has not issued any new certificates to collectives or farm households despite the central government's requirements. The majority of old documentation issued in the 1950s or early 1980s has been lost. Therefore, whenever a transfer of rights is proposed, there will be considerable uncertainty regarding the identity of rights-holders and boundaries. This could not only discourage further business investments but also trigger disputes and confrontations among various interested parties.

Accordingly, it is utterly important for the Guangxi local government to take steps in starting the issuance process in the near future. The certificate to be issued must be consistent with the national standards and regulations so that its content and format contain all essential and necessary information. The certificate should record the owners and use rights-holders of land and trees in one document. It should also allow security interest created in collateral transactions to be recorded. Last but not least, it should contain a directional map that identifies property boundaries.

2. Local government: friend or foe?

It is clear that Stora Enso's leasing of such large amounts of forestland from different sources could not be accomplished without a strong backing by the local governments of Beihai and Guangxi. The local governments have a vested interest in Stora Enso's endeavor because their lease has generated rental income, created new jobs and improved the local economy. It is not clear how much direct mandate or implicit encouragement the local governments have given to lower-level or village officials in support of Stora Enso's leasing activities. It suffices to say that Stora Enso has benefited greatly from its close relationship with local governments.

Surely, there are lingering questions about how small farmers are treated in this process. For example, if Stora Enso negotiated directly with individual farmers, it would be impossible to lease so much forestland while insisting upon a uniform 30-year term for the entire county. Moreover, a majority of involved farmers were verbally informed of the length of the lease and the rent, but they have never seen a copy of the contract, much less fully understood the implications of a document filled with legal jargon. Therefore, even though the fieldwork does not reveal evidence of widespread coercion, there is a concern as to how well-informed and consensual the farmers are during the process.

Such a concern becomes a real problem when the Beihai government serves as the middleman for setting up the Beihai Forestry Investment Company. As we have seen in other parts of China, such an entity possesses considerable political power and could place significant "pressure" on citizens to agree to otherwise unacceptable, illegal or even unconscionable deals. Stora Enso should be aware of these risks and take action to ensure that farmers with little bargaining power receive a fair deal.

3. Fulfillment of the two-thirds approval requirement

When a collective decides to lease land to Stora Enso, Article 48 of the Rural Land Contracting Law (RLCL) requires that two-thirds of farmers or farmer representatives approve the transaction. This procedural requirement is meant to protect the properties owned collectively from being sold or dealt away by a few village cadres. This again concerns voluntariness on the part of farmers. If a transaction is consummated without satisfying this requirement, the contract could be deemed as void if challenged in a court of law.

In reality, the two-thirds approval requirement is not regularly fulfilled as far as land rights are concerned. This is due to the fact that village cadres have an incentive to make a deal with outsiders

without notifying or seeking consent from farmers so that the money can be used (or misused) without being subject to public scrutiny.

This requirement seems to be fulfilled in most of the cases in Beihai, but it will take much more on-theground fieldwork to confirm this impression. The UNDP study with a much larger sample size shows that the two-thirds voting requirement was satisfied in approximately 30% of the surveyed cases. ¹⁹⁶ This figure is troublesome because the voting requirement is the procedural safeguard installed to ensure that individual farmers' interests are protected from abuses or manipulation by village or township officials. As the Beihai government plays an increasingly active role in the process, there should be independent monitoring to enforce the law. Stora Enso should also take steps to encourage that the required voting takes place. A Sample Copy of Forestland Leasing Contract Used by Stora Enso

Party A: <u>Villagers' Committee of Caimu Village</u> Party B: <u>Guangxi Stora Enso Forestry Ltd.</u>

In order to support the smooth implementation of the Integrative Project of Forest, Pulp and Paper in Guangxi, Party A hereby agrees to contract out forestland with clear and definite ownership or use rights to Party B, to establish a fast-growing and high-yield paper-making raw material forest base. In accordance with the Law of the PRC on Forest, the Law of the PRC on Land Management, the Law of the PRC on Agriculture, the Law of the PRC on Rural Land Contracting and relevant provisions set forth in regulations, as well as on the basis of mutual consultation, the parties hereby agree as follows:

- 1. Location: <u>along Jiugeyong to Yanglan and Shipaopo within the scope of Hongchao Reservoir</u> (for details, see the boundaries displayed on the attached map)
- 2. Size: the total area is <u>1,500</u> mu. The actual contracting area is <u>mu</u>, excluding <u>mu</u> of other land not suitable for forestation.
- 3. Term: <u>30</u> years, starting from <u>Sep 24, 2004</u> and ending on <u>Sep 23, 2034</u> (or the term specified by the appendix of this contract).
- 4. Time for forestland delivery: Party A shall deliver the aforesaid forestland to Party B for use no later than <u>Nov 1, 2004</u>. Prior to this, Party A shall remove the fixture as soon as possible (except for facilities in the forest area); Party B shall be entitled to dispose of the fixture not removed by Party A after the execution of a land-delivery receipt.
- 5. Fee: RMB <u>32 yuan</u> per mu per year (calculated according to the actual area). The fee in the first year shall be paid according to the actual use time after land delivery on the basis of each month. The remaining fee shall be paid on the basis of each year. Party B shall directly pay or entrust the <u>township government</u> to pay the fee to Party A prior to <u>June 30</u> of each year.
- 6. The appendices attached hereto are an inseparable part of this contract and should have equal legal force with this contract. The appendices include: 1) further explanation with respect to forestland contracting; 2) copy of "forest (with mountain boundary) rights certificate" of forestland or related documentation of the People's Government at the county level; 3) sketch map with boundaries specified; 4) GPS survey map; 5) approval reached at village collective's meeting and representatives' signature log; 6) land-delivery receipt.

Party A:

Party B:

Approving parties: Forestry Bureau of the county (stamp) Forestry Station of the township (stamp) The township government (stamp)

Representative: Representative: Representative:

Fujian (Oct. 2006)

Yong'an is a county-level city, located in western Fujian province (southeast of China). Yong'an has a total population of more than 340,000 with a mountainous territory of more than 2,900 square kilometers. About 83% of all land is covered by forest (mainly bamboo and eucalyptus trees), totaling 3.82 million mu. Before the forestland rights reform, over 90% of forestland in Yong'an was owned and managed by collectives (villages or village teams).

In June 2003, Fujian province began a reform that allocated (or "contracted") collectively-owned-andoperated forestland to individual rural households. The collectives remain the owners, but each and every household is entitled to operating, managing, and profiting from the forestland for specific period of time (typically 30 years). According to official reports, over 98% of collectively-owned forestland in Fujian has been distributed in this manner. As a result, the total forestry value produced by Fujian increased from 72 billion yuan in 2003 to 92 billion yuan in 2005.

In particular, farmers in Yong'an earned about 2,200 yuan on average from their forestland in 2005, more than 40% of their total income. There are more than 60 family forest farms or forest-farm cooperatives in Yong'an, a majority of which operate more than 1,000 mu of forestland.

After the initial success of the distribution of forestland to farmers, Yong'an went one step further by creating new rules and institutions to improve the marketability of forestland rights and forest products. One of the key features of this system was to allow and encourage the use of forest products as collaterals for commercial loans.

Distribution of Forestland

The essence of the Yong'an reform is to dismantle the collective ownership system and to allocate parcels of forestland to individual farm households. In return, farmers pay a certain fee for the rights obtained (typically 10-40 yuan per mu per year). In this way, farmers will enjoy significant freedom in managing their forest resources and will derive great economic benefits. It appears that the majority of collectively-owned forestland has been allocated to households in an equitable manner (based on the size of households).

How much forestland each household receives depends on the size of the collective — the average is 33 mu per household according to our fieldwork. More than 91% of the interviewed farmers indicated their strong support for the reform and felt that the distribution had considerably increased their assets and their interest in making mid- to long-term investments in forestland.

However, there are several issues to be noted:

- In approximately 25% of the interviewed villages, the manner of distribution has been inconsistent and inequitable, favoring only the village officials and their inner circles. The distribution scheme should be discussed and approved by two-thirds of the villagers, according to the 2002 Rural Land Contracting Law. But, in practice, such a procedural requirement was ignored occasionally. Instead, a handful of village officials decided on the distribution plan without seeking advice or approval from villagers. As a result, better forestland (mature trees, good soil, gentle slope, continuous large parcels, easy accessibility) is allocated to village officials themselves or their relatives and close associates.
- A substantial amount of forestland (often of high quality) previously owned by collectives is directly leased or assigned to outside businessmen or companies, without first being distributed to farmers. Consequently, villages retain all rental income without sharing it with members of the collectives. A few village officials have gained financially from these deals, and such practices should be rigorously investigated and prohibited.

Forestland Rights Certificates

According to the Yong'an government, farmers were issued forestland rights certificates starting from 2003. Currently, more than 95% of farmers have received such certificates. However, random surveys and interviews conducted by researchers show that many certificates are in the hands of village officials, yet to be distributed to individual farm households. The authors believe that the issuance rate should be around 60-70% at this moment.

The fieldwork in Yong'an reveals that the issued certificates comply with the existing laws and regulations. It typically includes the following information:

- 1. Certificate serial number
- 2. Holder of forestland ownership rights
- 3. Holder of forestland use rights
- 4. Holder of forest or forest products ownership rights
- 5. Holder of forest or forest product use rights
- 6. Location of forestland
- 7. Forestland identification number
- 8. Land area
- 9. Primary tree types
- 10. Tree count
- 11. Term of forestland use rights
- 12. Expiration date of forestland use rights
- 13. Land descriptions
- 14. Sketch map (1:10,000 ratio)
- 15. Names of all right holders of forestland (in case of joint ownership)
- 16. Issuing agency and issuing date, and stamped by Yongan Forestry Bureau.

In an actual certificate, "holder of forestland ownership rights" (#2) is usually the collective, and the rights-holder of the other three (#3, #4, #5) are the individual households receiving the allocation. Such a certificate is based on the format recommended by the National Forestry Administration, and all necessary information has been filled in. Accordingly, the certificates issued in Yong'an should be considered one of the best in the country.

Forest Industry Elements Market

Yong'an's Forestry Bureau established a "Forest Industry Elements Market" (FIEM), the first of its kind in China, to serve as an intermediary for forestland rights transfers, certificate issuance, mortgage and loans, and forest product promotion. The Yong'an government also created a unique financing company that makes loans to forest farmers based on forestland rights certificates, working closely with the FIEM. Therefore, a forest farmer can actually leverage his or her forest resources to make investments in other areas, turning the forestland into a "green bank."

The total amount of loans made to farmers in Yong'an in 2005 reached nearly 100 million yuan, 20% of which was made based on forestland rights certificates. Moreover, the growth speed of the financing market has been over 15% during the last three years. Accordingly, many farmers or farmers' co-ops have taken advantage of this trend to expand their mid- to long-term investments in forestland. That said, one must realize that farmers or co-ops with relatively large amounts of forestland (over 200 mu) are the usual beneficiaries of the mortgage system, while the majority of farm households do not understand the concept of mortgage, much less its utilization.

Anyone who wishes to obtain such a loan must go to FIEM and file an application along with the certificates. FIEM then conducts an appraisal of the forestland at issue and a simple credit check of the applicant(s). If everything is in order, FIEM will keep possession of the certificates and issue a loan. The certificates will be returned promptly once the loan is paid in-full and in accordance with the financing agreements.

FIEM also serves as an auction platform for farmers who wish to transfer their forestland. The public auction occurs twice a month and any willing farmer may list his or her forestland for auction. The attendance at the auctions has been modest, but has attracted a number of developers/investors from other places. FIEM also facilitates farmers' applications for logging permits. Yong'an Forestry Bureau is the authority that decides on the logging quotas periodically and issues logging permits. FIEM helps

farmers to fill in the necessary paperwork and educates them about the process. It usually takes about one month to obtain a logging permit, if there is still quota available.

Other Private Transfers

In the case of a lease or an assignment of forestland rights among farmers, transactions can be consummated without the involvement of FIEM. As rights become more secure and long-term, one would suppose that transfers of forestland would become increasingly frequent. This seems to be the case in Yong'an.

Before 2003, farm households "owned" forestland ("reserved forest" or "reserved mountain") that was typically smaller than 10 mu. Because of the small sizes and the lack of proper rights-confirming documentation, there were rarely any transfers or transactions. Since the 2003 reform, the number of transfers has grown considerably, and as a result, a small number of farmers have now managed to lease or otherwise transfer large amounts of forestland by dealing with fellow farmers.

In all of the five villages visited by the authors, farmers report that there are two or three households that have leased more than 500 mu of forestland. The rent varies at different locations, ranging from 15 yuan to 110 yuan per mu per year. Lease periods are generally for 10-30 years, and written contracts are executed in most cases.

Overall Observations

The reform witnessed in Yong'an is undoubtedly a success, compared to the state of affairs before 2003. The old collective-forestland system suffered multiple problems in regard to management, investment, profitability, and sustainability. As a matter of fact, a large portion of forestland was left to the hands of nature because many collectives simply lacked the funds and resources to make use of it. In this reform, farmers have received forestland as well as relatively secure tenure rights as evidenced and confirmed by certificates. Even though farmers are not technically full owners, these present rights are great incentives and motivations for them to maintain forestland as though it were their own. As compared with farmers' arable land rights, these forestland rights are relatively secure, long-term and marketable. It is no wonder that these farmers have begun to make mid- to long-term investments in the land, and many of them have reaped significant benefits. This is a continuation of the Household Responsibility System where arable land was distributed to individual households by the collectives in the late 1970s and early 1980s. Again, it is a positive experiment and should be further carried out.

Nevertheless, there are measures that need to be taken in order to resolve a few remaining problems:

- <u>Complete the issuance of forestland rights certificates</u>. According to the rapid rural appraisals, one-third of farmers have not received proper certificates. The root of the problem appears to be that many of the "missing" certificates are kept at the village level for dubious reasons (e.g. a few village officials are reluctant to lose their control over village forestland). The format and content of the existing certificates are satisfactory, and the first task should be the issuance of certificates to the remaining households.
- <u>Establish a forest fire protection and insurance mechanism</u>. Before the reform, a collective may call up all the villagers to fight a forest fire. However, after the distribution of forestland, most individual households lack the resources to minimize their risk exposure to forest fires. Most interviewed farmers do not appreciate the grave danger and potential for destruction of forest fires. Given this circumstance, the government, in partnership with forest farmers, collectives and private sectors, should set up a proper mechanism aimed at fire protection and insurance.
- <u>Reform the logging permit system</u>. Like elsewhere in China, the Yong'an Forestry Bureau maintains strict control of the issuance of logging permits. Without a permit, a farmer cannot

harvest and profit from his or her investments in forestland. In other words, the reforms of forestland tenure are incomplete if the government follows the traditional way of artificially restraining the issuance of logging permits without reasonable inquiries into economic and environmental realities.

Publicity on forestland rights and proper ways of transfers. As found during the fieldwork, none of the interviewed farmers knew anything specific about controlling laws and regulations on forestland rights. This is problematic when farmers face threats or challenges to their land rights in the future as they know little about their legal options and remedies. As transfers become more popular, it is necessary for them to understand the basic rules and to make informed decisions. The government should employ effective means (publicity cards or pamphlets, village meetings, etc) to educate farmers and improve their relevant knowledge on these important topics.

Sichuan (Aug. 2006)

We visited five farmer households in three counties, one forest businessman, one township official and a group of the Municipal Forest Bureau officials. Fieldwork findings and preliminary observations are as follows.

Security of Forestland Rights

In general, farmers' rights to forestland are sufficiently secure. Of all five farmers interviewed, none reported land readjustment conducted on their allocated forestland since the first round of land contracting in the mid 1980s. None of these farmers expected future land readjustment based on their past experiences of having no readjustments, even though two of them were not quite certain whether future readjustments would be entirely ruled out.

Although land readjustments on contracted forestland were not reported to have been conducted in these five villages, we did find collective taking-back of forestland that was then re-contracted to large-scale non-villagers. In one village we visited, collectives took back the land a few years after the land had been allocated to individual households as "private mountains" for firewood in mid-1980s, including more than 1 mu of the interviewee's forestland. One hundred-fifty mu of the village's forestland, sporadically growing with a variety of trees, was clear-cut before being re-contracted in 2000 to a relative of the village party secretary for a term of 30 years. The land is now grown with eucalyptus trees for a joint venture company that produces plywood products. Villagers are denied access to the land for firewood.

Collective cadres did not consult farmers before the decision was made; the interviewee was quite upset about the non-transparent process of re-contracting. Although he heard there was a contract fee of 2,000 yuan, villagers did not receive a penny.

Documentation of Forestland Rights

One of the impressive findings in Leshan was its system for documenting farmers' rights to forestland and forest products and issuance of this document. Of the farmers we interviewed, all produced a greencover booklet called "The People's Republic of China Forest Rights Certificate." This is a 14-page document, apparently designed by the State Forest Bureau, with detailed information concerning the nature and extent of farmers' rights to forestland and forest products. The certificate has a 10-digit serial number capable of delivering a unique identification to each of the 200 million rural households in China, suggesting that the design is intended to create a national system for registering forestland use rights.

The certificate contains a five-page land information table, with each page carrying the following information for each parcel of forestland:

- 1. Name of the owner of the forestland parcel (collective entity);
- 2. Name of the holder of use rights to the forestland parcel (individual farmer);
- 3. Name of the forests or forest products owner (individual farmer);
- 4. Name of the forests or forest products user (individual farmer);
- 5. Location of the forestland parcel (four directions);
- 6. Total area of the parcel
- 7. Species of the trees on the parcel
- 8. Number of trees
- 9. Duration of use rights to the parcel
- 10. Ending date of the use rights term
- 11. Name of the agency that fills the table and the seal of that agency (county forest bureau)

One of the unique features of this forest certificate is its designated page for a map or a sketch of the forestland parcels. Unlike in most certificates of arable land rights we found during our fieldwork of twenty years, where the page for land description is limited to the parcel's four directions (north, south, east and west), the forest rights certificate actually contains a page specifically designed for attaching a map or sketch of each of the forestland parcels. Of the five certificates that we saw, two actually have a detailed sketch indicating the boundaries of each parcel.

The certificate carries the "State Forest Bureau Forest Rights Management Seal", suggesting a higher authoritative nature of the document than a seal of local government. Moreover, except for carrying relevant legal provisions on forestland rights and forest rights, the certificate does not contain any provision permitting or requiring land readjustment.

In contrast, only one of the five farmer interviewees presented a farmland contracting and operation rights certificate. This farmland certificate was printed by the county government and carries the county government seal. Although this arable land certificate does indicate the 30-year term for farmers' land rights, there is a provision explicitly requiring a small land readjustment every five years.

Registration of forestland rights is undertaken by the county forest bureau. When a transfer occurs, the transferee must register the transfer to affirm his transfer-in rights and be issued with a new forest certificate. According to the municipal forest bureau, registration of transfer-in rights must present the following documentations: (1) the forest certificate issued to the transferor or the evidence that proves the ownership or holder-ship of rights to the forestland subject to the transaction; (2) a transfer contract, which must be signed by the farmer household if the land was contracted to the household or be approved by two-thirds of villagers if the land is under collective management; and (3) evidence of the payment to the transferor. In addition, the application for registration must be publicly announced in local areas. If there is no counter-claim, the transfer-in rights will be registered and a new forest rights certificate will be issued to the transferee.

The Breadth of Farmers' Rights to Forestland

All five farmer interviewees reported that they have the unbridled right to transfer their forestland rights to any potential transferees, without any need for collective consent. When asked whether their descendants may inherit their forestland rights within the contract term, which is 50 years to 70 years depending on local rules, all five farmers gave a positive response.

However, when asked about their right to benefit from forestland allocated to them, answers were mixed. All farmers said they were permitted to gather firewood on their contracted forestland, apparently without any restrictions. However, they were not able to do so when their forestland rights were taken back by the collective and re-contracted to non-villager entities. As to whether they were able to cut the trees on the land, farmers' responses were also mixed. Only one farmer said he did not need a cutting permit if the tree was for self-consumption. The other four farmers reported that a cutting permit issued by the township forest station was needed even if for self-consumption.

Cutting Permits

For scale forest farmers or forest businesses, an application for a cutting permit is made directly to the county-level forest bureau. Small forest farmers must file their applications with the village collective entity first, and the village collective will report farmers' applications to the township forest station for review. The township forest station will then file the township application with the county forest bureau, indicating the quantity of timbers the township needs for the year. After the county review, each township will be notified of the total amount of permissible cutting within a given year, and will decide who will get what amount if the permissible quota is less than the application amount.

There are two types of cutting permits: a permit for self-consumption and a permit for commercial use. Only timber with a commercial permit can be sold and shipped out of the logging site. In general, farmers are able to obtain a cutting permit for self-consumption. However, it is very difficult for farmers to obtain a commercial permit, especially when the cutting quota approved by the county falls short of the application amount. All five farmers reported that they were usually unable to obtain a commercial cutting permit. Based on responses from the interviewed farmers and a forest businessman, there are a couple of reasons for farmers' failure to get a commercial cutting permit. First, the cost of acquiring a commercial permit is high, roughly 15 yuan per cubic meter (including the cost of entertaining the officials who are responsible for reviewing the application and issuing permits). Second, commercial permits are usually issued to timber dealers who have functional access to or a personal relationship with the officials of the township forest station. For example, in a township we visited in Leshan, all commercial cutting permits are controlled by two timber dealers who have access to the county forest bureau.

When asked whether they could file a complaint against the government denial of their application for a cutting permit, all five interviewed farmers responded "impossible." A typical explanation was that denial is a government act; farmers cannot do anything but obey the decision.

Sale of Trees

All five farmers reported that they could not directly sell trees to an end buyer. Instead, they had to sell trees either to timber merchants who had access to a cutting and timber shipping permit, or to a company affiliated with the forest bureau of the county. In Leshan, if timber is sold across a county line, the seller must have a cutting permit, a shipping permit and a selling permit. For an average farmer, it is almost impossible to obtain all of these permits.

However, all farmers appeared to have little problem with the system. The primary reason for this is the small forestland holdings they have and the small quantity of trees available for sale each year. Although they knew they could sell their trees for a higher price if they could obtain these permits, it would not be cost-effective to go through all procedures of permit application and review only for a few trees. All five individual farmers sold their trees to timber dealers.

In general, farmers receive proceeds from the timber dealer, with one exception. One farmer reported that according to the village collective's policy, 50% of incomes from selling trees would be retained with the village collective because it provided tree seedlings at the time of tree planting.

One company established within the Leshan Municipal Forest Bureau virtually monopolizes the sale of eucalyptus trees within its jurisdiction. The company signed a sales contract with a large foreign wood-product company and committed to supplying 70% of the wood company's demand for trees, most of which are eucalyptus. Because of its monopoly exercised through the bureau's administrative channels, farmers have no choice but to sell their trees to the company.

Collective Conveyance of Forestland Rights to Non-Villager Entities

We interviewed a businessman who had completed a transaction deal involving collective forestland. In this transaction conducted in 2004 in Muchuan County of Leshan Prefecture, 450 mu of collective forestland with standing trees was leased to him by the village forest farm¹⁹⁷ for a period of 15 years at a cost of 450 yuan per mu, for a total of 200,000 yuan. The land was afforested by villagers, with financial support from a World Bank loan in 1985,¹⁹⁸ under the government policy of "whoever plants tree, owns the tree." After the trees were planted, the land was contracted to a township leader for management, also financed by the subsequent World Bank loans made in 1992.¹⁹⁹ The term of this management contract was that 50% of the proceeds would be retained by this township official when the land was transferred.²⁰⁰ Therefore, when this 450 mu of village forestland was transferred to the businessman, the proceeds were split equally between the village and the township leaders. The village portion of the

proceeds was distributed among villager households based on the quantity of land afforested by each household.

The deal was first negotiated between the businessman, village head and the township leader; neither farmers nor farmer representatives participated in the negotiation and voiced their concerns. After an agreement on the terms of the transfer contract was reached, farmers were informed of the deal.

Because the land was afforested by villagers with planted trees, it is categorized as man-made forest (distinct from natural forests) that may be cut upon acquiring cutting permits, rather than natural forests that are subject to a complete logging ban. The county has two million mu of such man-made forests,²⁰¹ with a logging stock of 15-20 m³/mu after 20 years of growing, for a total logging stock of at least 30 million m³. Even at the current market price of 500 yuan/m³, the total value of the man-made forests in the county amounts to 15 billion yuan. When asked whether collective entities or farmers could harvest the man-made forests, one businessman gave a negative answer because cutting trees growing on remote mountains requires high investment, such as building simple roads and establishing cable lines for dragging timbers down the mountains, and both collective entities and farmers would not be able to finance such infrastructure investments.

The businessman told us that 70-80% of the county's collective forestland categorized as man-made forests were currently in the hands of government officials at various levels, through similar management contracts. If a business person was interested in certain tracks of such man-made forestland, he must first approach these officials, as he did for this 450 mu of forestland.

In response to our request, the businessman gave us an estimation of his costs, calculated based on per cubic meter of timber:

| Cutting and bringing timbers to the roadside | 90 yuan/m ³ |
|--|-----------------------------|
| Shipping timbers to the destination | 40 yuan/m ³ |
| Taxes and fees | 40-70 yuan/m ³ |
| Entertaining relevant officials | 15 yuan/m ³ |
| Costs in acquiring land | 70-100 yuan/m ³ |
| Total costs | 315-425 yuan/m ³ |

Even at the current market price of 500 yuan/m³, the farmer may generate a net profit of 75-185 yuan/m³. With a logging stock of 15-20 m³per mu, his leased-in 450 mu of man-made forestland would bring to him a net profit of 500,000 to 1.6 million yuan.

According to this businessman, starting from 2006, Muchuan County was designated as a pilot county by the province for "commercial cutting of man-made forests within natural forest conservation zone," and the annual quota for permissible cutting sharply increased from 20,000 m³ in 2005 to 370,000 m³ in 2006. This policy change, in combination with a huge profit potential, has attracted a lot of businesses from across the country, which have come to the county looking for the opportunity to acquire collectively-owned, man-made forestland.

The Municipal Forest Bureau confirmed that non-villager businesses are encouraged to transfer in collective forestland rights. The underlying reason is that the man-made forests are mature for cutting, but neither collective entities nor individual farmers are financially capable of cutting the trees, most of which are grown in remote mountainous areas with no access to roads. Although most of collective forestland in the municipality was contracted to individual households, the Bureau expected such household landholdings to be merged into fewer big timber companies in the future.

Preliminary Observations

1. Impact of secure forestland rights

In the villages we randomly selected, farmers' forestland rights are relatively secure. Except for one village where a compulsory taking-back of farmers' contracted forestland occurred in 2000, most farmers reported that their forestland had never been readjusted or taken back. They also did not expect that their forestland would be readjusted in the future. Such confidence about forestland rights has led to farmers' investment in forest production. All five farmers had planted trees on their contracted forestland.

There may be several explanations for farmers' confidence. Issuance of well-designed forest rights certificates appears to be the primary reason. All five interviewed farmers produced the certificate during interviews. The certificates we found contained current laws on protecting farmers' forest rights and forestland rights, and carried detailed descriptions of their forestland. With these documents in hand, potential violations could be easily thwarted because farmers can always present their land documents to defend their land rights.

2. Unfair cutting permit system

Existing mechanisms for administering cutting permits appear to be unfair to farmers in several respects. First, the current permit system adopts a top-down approach in which the cutting quota for a given geographical area is decided by the next-highest level of government. Farmers, who are perhaps the greatest stakeholder in the process of quota determination, do not have a voice. Second, with respect to farmers' applications, the cutting quota is allocated to townships in a wholesale fashion, apparently without any binding principles in issuing cutting permits, making it possible for the township forest station to make discretionary decisions about who will get what permit for how many trees to be cut. Third, such unchecked discretionary power tends to facilitate the "rent-seeking" activities of the township forest officials through "selling" commercial permits to a few timber dealers in exchange for economic benefits to the station or even to individual officials. Fourth, no appeal mechanism is available for farmers to contest the denial of their applications, even if such denials are unfair or an abuse of discretion.

3. Marketing of trees

One of the primary purposes of the fieldwork was to evaluate the practice of a reported model of forest production: company + farmers, in which the forest product company helps farmers in planting and managing trees and purchases trees from farmers to meet the company's demand for raw material. During the fieldwork, we did not find a single case where the company provided technical advice for farmers' management of trees. With respect to the marketing of trees, farmers almost exclusively sold their trees through timber dealers (government owned or privately owned) even though they knew a direct sale may generate higher income.

While recognizing the convenience to farmers provided by timber dealers who travel from village to village collecting timber, it should be noted that such a provision of convenience is backed by their exclusive access to commercial permits. Second, because of their virtual monopoly of the timber market, farmers' bargaining power over price would be substantially reduced, resulting in a lower sale price and thus lower farmer incomes from trees. On the other hand, since they apparently have exclusive control of the timber market, these timber dealers can also ask for a higher price to increase their profit margin when they resell timbers to the wood company.

4. Problematic transactions of forestland rights to non-villager entities

The most troublesome finding is perhaps the ongoing frenzy of re-contracting farmers' forestland rights to non-villager logging companies. First, the legality of such transactions is, at the very least, questionable. The Rural Land Contracting Law requires that transaction contracts involving farmers' rights to contracted collective land, including forestland, be voluntarily entered between farmers as the transferor and the transferee and signed by both parties. The transfer contract we saw did not conform to the legal requirements. In addition, the law prohibits any interception of the transaction proceeds by local officials, but in the transaction deal we found, a township leader intercepted 50% of the proceeds.

Second, even if such transactions were conducted in conformity with all legal procedures, it is important to note that farmers' agreement on the deals should be regarded as involuntary because of their inability to obtain cutting permits and to finance logging operations. That is, farmers are not willing to transfer their forestland rights out; it is what they have to do under these administrative and financial constraints.

Third, it appears that farmers lose economically in such transactions. In the total economic pie of 3,375,000 yuan (based on 450 mu of forestland with a logging stock of 15 m³ at a market price of 500 yuan/m³), the logging businessman would have a net profit of more than 500,000 yuan, the township leader would get 100,000 yuan for himself and the village farmers could jointly receive 100,000 yuan.

Fourth, local officials could derive huge economic benefits by sacrificing farmers' interest in man-made forests. According to the interviewed businessman, 70-80% of the county's man-made forests had already been contracted to local officials for management. If that were true and all of these management contracts were under similar terms (50% of transfer proceeds going to farmers and 50% retained with these officials), more than 300 million yuan would be retained by these local officials while two million mu of man-maintained forests were transferred to non-village logging companies for commercial cutting.

References

¹ By China's Constitution, land, including forestland, is either state owned or collectively owned. See CHINA CONSTITUTION, art. 10.

² Basis Information on Forestry in 2005 China (National Forestry Administration, 2006, available at: http://www.forestry.gov.cn/subpage/content.asp?lm_Tname=lygk&lmdm=1000&f_lmname=&id=2048

³ Guiping Miao and R.A. West, Chinese Collective Forestlands, Contributions and Constraints, INTERNATIONAL FORESTRY REVIEW, vol 6, 282-298 (2004).

⁴ The Land Law of Jinggangshan (December, 1928).

⁵ *Id.*, art 6. This was perhaps the first communist attempt to applying different ownership structure to different categories of forestland.

⁶ The Land Law of the Soviet Republic of China (November, 1931), art. 10.

⁷ Id.

⁸ *Id*., art 1.

⁹ *Id.* art. 6.

¹⁰ The Platform of Chinese Land Law, art. 1.

¹¹ *Id.* art. 6.

¹² *Id.*, art. 9.

¹³ Northeast Liberation Regional Complementary Measures for Implementing the Platform of Chinese Land Law (1947), art. 7; Shanxi-Hebei-Shandong-Henan Border Regional Complementary Measures for Implementing the Platform of Chinese Land Law (1947), art. 7.

¹⁴ The Land Reform Law of PRC (June, 1950), art. 1.

¹⁵ Several categories of land are listed as state owned under the Land Reform Law, which are: large tract of forestland, the land on which large irrigation facilities are erected, large tract of wasteland, large tract of salt producing land, mines, rivers, lakes and harbors. The large and contiguous tract of land for growing bamboo, fruits, teas and mulberries which was previously owned by landlords and farmed with advanced equipment and techniques shall also be converted to state owned land. *See id.* arts. 18 and 19.

¹⁶ *Id.* art. 10.

¹⁷ *Id.* art. 30. Unlike the Platform, which allows land lease "under certain circumstances," the Land Reform Law does not contain such restriction.

¹⁸ *Id.*, arts. 18 and 19.

¹⁹ *Id*., art. 16.

²⁰ A region was composed of several provinces. Regional people's government was abolished in mid 1960s when the Cultural Revolution began.

²¹ The Land Reform Law of PRC art. 39.

²² The Measures of the Mid-Southern Military and Administrative Committee on Implementing the Land Reform Law, art. 8.

²³ Id.

²⁴ Under Chinese agricultural terminology, all non-grain production is viewed as sideline production.

²⁵ The Central Committee of the Chinese Communist Party Decision on Agricultural Cooperation (1955), Section 5.

²⁶ Id.

²⁷ "The Standing Committee of the National People's Congress, the Decision on 'the Charter of Rural Production Cooperatives,'" *People's Daily*, March 18, 1956.

²⁸ The Charter of Rural Production Cooperatives, art. 1, states in part, "[c]ollectives shall uniformly use its members' land, draft animals and agricultural production tools, and gradually realize the goal of public ownership of these production means." *See also* the Decision of the Sixth Plenary Session (expanded) of the Seventh Central Committee of CPC on Agricultural Cooperation, People's Daily, October 11, 1955. The decision defined agricultural cooperatives as a form of semi-socialist organization in the transition to full public ownership of rural land.

- ³⁰ *Id.* art. 29.
- ³¹ *Id.* art. 18.

³² The Charter of Advanced Agricultural Production Cooperatives (1956), art. 13.

³³ *Id.* art. 16.

³⁴Fifteen to thirty million incremental deaths occurred, as agricultural production plummeted. *See* Susanne Weigelin-Schwiedrizik, *Trauma and Memory: The case of the Great Famine in the People's Republic of China (1959-1961)* (2003); Xizhe Peng, *Demographic Consequences of the Great Leap Forward in China's Provinces*, 13(4) Population & Development Review 639 (1987).

³⁵ The Central Committee of CPC Revised Regulations on Rural People's Commune [hereinafter Sixty-Article Regulation], art. 2. There are two versions of the Article-Sixty regulation. One is the 1961 version passed at the central committee's working conference in Guangzhou in June of 1961, and the second is the 1962 revised regulation adopted at the tenth plenary session of the Eighth Central Committee of CPC on Sept. 27 of 1962, which is no doubt more authoritative. The major difference between these two versions is that the 1962 revised regulation unambiguously vested collective land ownership with production team.

- ³⁶ *Id.* art. 20.
- ³⁷ *Id*. art. 21.
- ³⁸ *Id.* art. 12.
- ³⁹ Id.
- ⁴⁰ *Id*. art. 40
- ⁴¹ *Id.* art 21.
- ⁴² *Id.* art 40.
- ⁴³ *Id.* art 21.
- ⁴⁴ *Id.* art 12.

⁴⁵ C. Carter & Fu-Ning Zhong, *China's Grain Production and Trades* 5 (1998); *see also* N. Lardy, *Agricultural Reforms in China*, 39(2) J. Int'l Affairs 91 (1986).

⁴⁶ For a same amount of land, private plots produced five times more than collective farming land. *See* Du Runsheng, Zhongguo Nongcun Zhidu Bianqian (Transformation of China's Rural System) 112 (2003)

⁴⁷ Wu Xiang, Zhongguo Nongcun Gaige Shilu (Records of China's Rural Reforms) 172 (2001); *see also* Huang Qinghe, "*Review and Current Issues on the Rural Land Policy in China*," paper presented at the Proceedings of the International Symposium on Rural Land Issues in China 8 (Sept. 1992).

⁴⁸ Yin Runsheng; Jintao Xu; Zhou Li, Building Institutions for Markets: Experiences and Lessons from China's Rural Forest Sector, *Environment, Development and Sustainability*, Vol. 5, No. 3-4.

⁴⁹ As many as 50 million farmer households received responsibility mountains. See Zhang Kun, Issues Relating to the Reform of Forest Management in China, available online at http://www.fao.org/docrep/003/x6898e/x6898e03a.htm.

⁵⁰ The Forest Law (1984), art. 3.

⁵¹ *Id.* art. 22.

⁵² *Id.* art. 28.

⁵³PRC Const., art. 10.

⁵⁴ After the de-collectivization in late 1970s and early 1980s, the old collective structure –communes, production brigades and production teams – has been abolished, and its administrative functions have been assumed by township, villager assembly in administrative village and villager group, respectively. In present-day China, a township usually consists of more than 10 administrative villages. Each administrative village has several villager groups (in some places, villager group is also called natural village). Based on the Sixty Article Regulation, most of the land located within the villager group boundary should be owned by the villager group except for that traditionally used as common property of the administrative village, such as the land for village school. However, this type of ownership structure has never been legally clarified.

⁵⁵ The 2007 Property Law, art. 59.

⁵⁶ Sun Yan, Xu Jintao and Li Ling, Reforms on Forest Rights and their Impact on Forestland Management: Research Report on Forest Reforms in Jiangxi Province, Forestry Economics, August Issue (2006).

⁵⁷ RDI and CDS, China's Forestland and Grassland Use Rights: Fieldwork and Policy Recommendations (2001) (on file with RDI).

²⁹ *Id.* art. 17.

⁵⁸ The 1962 Sixty-Article Regulation, art. 21.

⁶⁰ For three levels of collective structure, see *supra* note 54 and the accompanying text.

⁶¹ Frank Place et al., "Land Tenure Security and Agricultural Performance in Africa: Overview of Research Methodology," *Searching for Land Tenure Security in Africa* 15, 19 (John Bruce & Shem E. Mighot-Adholla eds, 1994).

⁶² *Id.* at 20.

⁶³ The 1984 Forest Law, art. 3.

⁶⁴ Rural Land Contracting Law, art. 20.

- ⁶⁵ The 2007 Property Law, art. 126.
- ⁶⁶ RLCL, arts. 44 and 45.

⁶⁷ The Central Committee and the State Council Decisions on Speeding Up Forest Development (Document No. 9 of 2003), art. 13.

⁶⁸ Id.

⁶⁹ The 2007 Property Law, Chapter III.

⁷⁰ The 2007 Property Law, art. 39

⁷¹ PRC Const., art. 10; Land Management Law, art. 2.

⁷² Rural Land Contracting Law, art. 16.

⁷³ *Id.* art. 32. The law uses different terms to refer to leasing of land rights to a person who resides within the same village as the lessor does and leasing of land rights to a person who lives outside of the lessor's village. If the transaction occurs when both parties are within the same rural community that has collective ownership to the subject land, that lease is referred as "zhuanbao", which could be literally translated as "transfer the contract". In contrast, where the lessee lives outside of the community, the transaction is termed "chuzu", which is commonly translated as "lease".

⁷⁴ For example, gift.

⁷⁵ Under China's Legislation Law, where there is a conflict of law between a general law and a special law on the same subject matter, the special law prevails. See the Legislation Law, art. 83. Therefore, transactions of forestland rights should be governed by relevant provisions of the Forest Law.

⁷⁶ They are ecological protection forestland, timber (including bamboo) forestland, economic forestland (used for producing fruits, edible oil, beverages, food ingredients, industrial raw materials, and medicines), firewood forestland, and forestland for special purposes (such as natural reserves, national defense, scientific experiments). See the 1998 Forest Law, art. 4.

⁷⁷ *Id.* art. 15.

⁷⁸ Id.

⁷⁹ *Id.* art. 27. However, the law is silent on who owns the trees standing on allocated responsibility land.

⁸⁰ Document No. 9 of 2003, art. 15.

⁸¹ The 1998 Forest Law, art. 31.

82 Id. art. 32.

⁸³ Id.

⁸⁴ Access to credit is also important to the development of a market in land rights, especially in financing assignments or long-term transfers where a lump-sum payout is desired by the seller. These are socalled "purchase money mortgages," likewise unavailable in China for most categories of forestland. China's own experience in urban housing development indicates the usefulness of such purchasing money mortgage in urban housing improvement. As of the end of 2005, there were about 8.8 billion square meters of urban private houses in China, purchase of the bulk of which was financed through mortgages with a total outstanding balance of 1.9 trillion yuan. See "Report on China's Monetary Policy at http://news.Xinhuanet.com/fortune/2006for the First Quarter of 2006", available

⁵⁹ It should be noted, though, that administrative village has in practice functioned as owner with respect to villager-group-owned forestland in many places in China partly because of the lack of administrative capabilities at the villager group level. However, such exercise of owner-like functions, such as signing off contract to allocate rights to villager-group-owned forestland to individuals or outside entities, should not be seen as vesting ownership with administrative village. The administrator of an estate created by a deceased for the benefit of his child may also sign legally binding contracts to sell the estate due to the lack of civil capability of the child, but exercise of such functions does not alter the nature of the ownership.

06/01/content_4630202_4.htm; the Ministry of Construction, "Statistic Report on Urban Housing Construction in 2005," *China Construction Daily*, June 6, 2006.

⁸⁵ The 1995 Guaranty Law, art. 34.

⁸⁷ The Supreme Court Explanations on Application of Law in Hearing Cases Concerning Rural Land Contracting Disputes (2005), art. 15.

⁸⁸ The 1995 Guaranty Law, art. 42(3).

⁸⁹ Document No. 9 of 2003, art. 14. However, the Document permits mortgage to be conducted "in accordance with law", and perhaps should be interpreted as permitting that is, apparently

⁹⁰ The 1994 Forest Law, art. 15.

⁹¹ The Trial Measure Registration of Forest Resources Assets (2004), art. 8.

⁹² Id.

⁹³ *Id.* art. 9 (3).

⁹⁴ *Id.* art. 9 (6).

⁹⁵ Huang Jinaxin, Property Rights are the Core of Forest Reforms, Forestry Economics, June 2006.

⁹⁶ Chai Xitang, Collective Forest Reforms in Fujian Province, presentation at International Symposium on Collective Forest Reforms, Beijing, September 21, 2006.

⁹⁷ RDI and CDS, supra note 57.

⁹⁸ Sun et al, supra note 56.

⁹⁹ RLCL, art. 26.

¹⁰⁰ *Id.* art. 29. Document No. 9 of 2003 also allows the farmer to return his or her contracted responsibility mountains to collective if he or she is not willing to continue contracting such land. See Document No. 9 of 2003, art 13.

¹⁰¹ Document No. 9 of 2003, art. 13.

¹⁰² *Id.* art 3.

¹⁰³ *Id.* art. 3 and art. 44

¹⁰⁴ *Id.* art. 48.

¹⁰⁵ *Id*.

- ¹⁰⁶ *Id*. art. 33.
- ¹⁰⁷ *Id.* art. 34.
- ¹⁰⁸ *Id.* art. 34.
- ¹⁰⁹ *Id.* art. 33.
- ¹¹⁰ *Id.* art. 35.
- ¹¹¹ *Id*. art. 37

¹¹² *Id.* art. 35.

¹¹³ The Supreme Court's interpretation of RLCL, art. 6.

¹¹⁴ Document No. 9 of 2003, art. 13.

¹¹⁵ Feder, Gershon, & Feeny. Land Tenure and Property Rights: Theory and Implications for Development Policy, 5(1) The World Bank Economic Review 135 (1991). See also Jimenez E, Tenure security and urban squatting, 66 REStat 556 (1984); Alston L, Libecap G, & Schneider R, The determinants and impact of property rights: land titles on the Brazilian frontier, 12 Journal of Law, Economics & Organization 25 (1996); Besley T, Property Rights and Investments Incentives: Theory and Evidence from Ghana, 103 Journal of Political Economy 903 (1995); Carter M, & Olinto P, Getting institutions "right" for whom: credit constraints and the impact of property rights on the quantity and composition of investment, Agriculture and Applied Economics Papers, Staff Paper Series, University of Wisconsin-Madison (2000); Miceli T, Sirmans C, & Kieyah J, The demand for land title registration: theory with evidence from Kenya, 3 American Law and Economics Review 275 (2001); Lanjouw J & Levy P. A study of formal and informal property rights in urban Ecuador. 112 Economic Journal 986 (2002); Do QT & Iyer L, Land rights and economic development: evidence from Viet Nam, MIT (2002); Field E, Entitled to Work: Urban Property Rights and Labor supply in Peru (2002); Li Guo, Scott Rozelle, et al., Tenure, Land Rights, and Farmer Investment Incentives in China, 19(1) Agricultural Economics 63 (1998); Klaus Deininger & Songging Jin, Strengthening Property Rights in Transition: Lessons from Implementation of China's Rural Land Contracting Law, World Bank Papers (Feb. 2006).

⁸⁶ *Id.* art. 37.

¹¹⁶ And this might be different for different results: for example, documentation alone might suffice to give the farmer a sense of security of tenure that led to investments in land improvement, while registration might be essential to create a market for the land beyond the village itself, or to make the land mortgageable in the eyes of a would-be lending bank.

¹¹⁷ Land Management Law, art. 11.

¹¹⁸ *Id.* art. 13.

¹¹⁹ *Id*. art. 14.

¹²⁰ Rural Land Contracting Law, art. 21.

¹²¹ *Id*.

¹²² Rural Land Contracting Law, art. 37.

¹²³ Rural Land Contracting Law, art. 23.

¹²⁴ Rural Land Contracting Law, art. 22.

¹²⁵ The 1998 Forest Law, art. 3.

¹²⁶ *Id*.

¹²⁷ The Measure of Forest and Forestland Rights Registration (2000), art. 2.

¹²⁸ *Id.* art. 11.

¹²⁹ *Id.* art. 16. In contrast, there is no parallel legal requirement for arable land certificate. As a result, arable land certificates do not have a nationwide uniform design, leading to a wide variances in contents and formalities of the certificate, including provisions that directly violate existing laws on arable land. See Keliang Zhu et al, *The Rural Land Question in China: Analysis and Recommendations Based on a 17-Province Survey in 2005*, New York University Journal of International Law and Politics (forthcoming) (results of a survey covering 17 major agricultural provinces conducted by RDI in cooperation with Renmin University of China and Michigan State University).

¹³⁰ For distinctions between and discussions on these two types of registration system, see Tim Hanstad, *Designing Land Registration System for Developing Countries*, 13 Am. Univ. Int'l Law Rev. 649-702 (1998).

¹³¹ Article 22 of RLCL provides that land contracts become effective on the date of their formation and that farmers obtain contracting and operation rights at the time the contract becomes effective. Clearly, forestland rights, whether they are allocated as private mountains, contracted as responsibility mountains, or contracted through auction, are created at the time of the contract formation rather than subsequent registration.

¹³² Rural Land Control Law, art. 52.

¹³³ Rural Land Contracting Law, art. 54.

¹³⁴ The 1998 Forest Law, art. 17.

¹³⁵ The Measure on Resolution of Disputes Concerning Forest and Forestland Rights (1996), art. 4.

¹³⁶ See Land Management Law, art. 16; Administrative Review Law (1999), art. 30.

¹³⁷ The Legislation Law, art. 83.

¹³⁸ RLCL, art. 51 and art. 52.

¹³⁹ *See* Arbitration Law, art. 77.

¹⁴⁰ Our fieldwork in Guangxi Province conducted in August 2006 for this project found that one foreign company had acquired 34,000 hectares of forestland for its paper mill, a large chunk of which was collective forestland. In our fieldwork conducted in Sichuan at the same time, also for this project, we found a large number of private business people had swamped into counties for collective forestland that was already reforested with government funding.

¹⁴¹ J. Gates, *The Ownership Solution* (1998).

¹⁴² Improved banking practices include requirement for the potential mortgagee to produce business plans subject to the mortgagee's review and approval, credit and risk assessment, etc.

¹⁴³ China's urban land registration system is more or less tilted to a title registration system.

¹⁴⁴ China's land expropriation laws are seriously inadequate to protect farmers' interests in land and have aroused the attention of the central government and researchers both in China and abroad. See The Development Research Center and the World Bank, China: Land Policy Reform for Sustainable Economic and Social Development (2006). Problems associated with China's regulatory framework can be generally categorized by three aspects: unambiguous definition of public purpose under which state may take rural land for non-agricultural development, insufficient compensation for such takings and unfair distribution of land compensation between collective landowner and affected farmers, and inadequate procedural safeguards against violations of farmers right to notice, participation in takings process and appeal. While these problems exist in takings of collective forestland for non-agricultural development, a comprehensive review of such legal framework is beyond the scope of this paper. Therefore, this paper will focus on issues of compensation particularly to forestland expropriation. For a comprehensive review on regulatory framework governing rural land expropriation, see Roy Prosterman, Li Ping and Keliang Zhu, China's Regulatory Framework on Rural Land: Review and Recommendations (a paper prepared for the World Bank on file with RDI) (2006)

¹⁴⁵ The 1998 Land Management Law, art. 47. See also the State Forest Ministry "the Trial measure of Forestland Management" (1993), art. 25.

¹⁴⁶ The 1998 Land Management Law, art. 47.

¹⁴⁷ *Id*.

¹⁴⁸ Zhejiang Provincial Measure on Forestland Management (2005), art.39.

¹⁴⁹ Jiangsu Provincial Land Management Regulation (2003), art. 26

¹⁵⁰ Guizhou Provincial Measure on Compensation for Expropriation and Requisition of Forestland (2004), art. 7.

¹⁵¹ Fujian Provincial Measure on Implementing PRC Land Management Law (1999), art. 27.

¹⁵² Anhui Provincial Regulation on Forestland Protection and Management (2000), art. 33.

¹⁵³ Yunnan Provincial Measure on Forestland Management (1997), art. 15.

¹⁵⁴ Anhui Provincial Regulation on Forestland Protection and Management (2000), art. 33 (2).

¹⁵⁵ Jiangsu Provincial Measure on Implementing PRC Forest Law (2003), art. 22.

¹⁵⁶ Guizhou Provincial Measure on Compensation for Expropriation and Requisition of Forestland (2004), art. 8.

¹⁵⁷ Jiangsu Provincial Measure on Implementing PRC Forest Law (2003), art. 22.

¹⁵⁸ See Yunnan Provincial Measure on Forestland Management (1997), art. 16; Anhui Provincial Regulation on Forestland Protection and Management (2000), art. 33 (2).

¹⁵⁹ Guizhou Provincial Measure on Compensation for Expropriation and Requisition of Forestland (2004), art. 8.

¹⁶⁰ Keliang Zhu et al, *The Rural Land Question in China: Analysis and Recommendations Based on a 17-Province Survey in 2005*, New York University Journal of International Law and Politics (forthcoming) (results of a survey covering 17 major agricultural provinces conducted by RDI in cooperation with Renmin University of China and Michigan State University).

¹⁶¹ Zhang Peichang, Shao Guofan, Zhao Guang, Dennis C. Le Master, George R. Parker, John B. Dunning Jr. and Qinglin Li. 2000, China's Forest Policy for the 21st Century, in *Science*, Vol. 288, No. 5474.

¹⁶² Yao Shunbo, INNOVATED RESEARCH ON CHINA'S NON-PUBLIC FOREST INSTITUTIONS, 41 (2005).

¹⁶³ NFPP Office of the State Forest Bureau, Advance with the Times, Study and Solve problems, Improve Policies and Propel development of NFPP: Research Report on Policy Issues concerning NFPP, in Zhou Shengxian ed, CHINA'S SUSTAINABLE DEVELOPMENT: RESEARCH REPORTS ON FORESTRY STRATEGY, 69 (2002). ¹⁶⁴ The 1998 Forest Law, art. 8.

¹⁶⁵ There is a sign, however, that the Chinese government is beginning to recognize the concept of regulatory taking. In recently adopted Regulation on Compensation and Resettlement for Land Expropriation for Large-and Medium Sized Hydropower and Water Conservancy Projects (2006), farmers who are resettled to far-away locations due to such projects are entitled to compensation for their trees growing above the submerged line according to the compensation standards for trees in physical takings. See id. art.22.

¹⁶⁶ US Constitution, amend V.

¹⁶⁷ Lingle v. Chevron U.S.A. Inc., 2005 U.S. LEXIS 4342, *16 (2005).

¹⁶⁸ Penn Central Transp. Co. v. New York City, 438 U.S. 104, 124 (1978);

¹⁶⁹ It should be noted that if China develops its own regulatory law, it may be different from what it is in the US because of China's unique characteristics in terms of its culture, political context and social acceptance. However, the principles behind the US regulatory takings law appear to be applicable in China because Chinese takings law is intended not to make affected property owners worse-off, a principle similar to the rationale of the US regulatory takings law: government's regulatory action should not disproportionately affect property owners without just compensation. ¹⁷⁰ There may be an exception, however, for those forest farmers whose contracted forestland becomes a scenic forest park attracting tourists and generating tourist revenues as a result of the logging ban.

¹⁷¹ An old lady cried in front of a rural policy maker when a local forest bureau chief handed to her the forest right certificate and informed her of the designation of her contracted forestland as ecological forests. She sadly complained, "Why should I invest in forests in the first place if I were not permitted to cut what I planted?" See Chen Xiwen, Insist on Collective Forest Rights Reform and Push forward New Countryside Construction, FORESTRY ECONOMICS, June 2006.

¹⁷² Beijing Municipal Government has already this "maximum approach" into a "minimum approach". In its recently promulgated regulation on land expropriations, a "minimum protection price" is instituted in determining compensation and affected farmers may bargain for a higher compensation from this minimum protection price. See Beijing Municipality Regulations on Compensation and Resettlement for Land Expropriations (2004), art. 9 and art. 10.

¹⁷³ The 1998 Forest Law, art. 29.

¹⁷⁴ The 1998 Forest Law, art. 30. .

¹⁷⁵ The 1998 Forest Law, art. 32.

¹⁷⁶ The 1998 Forest Law, art. 33.

¹⁷⁷ The Implementation Regulation on Forest Law, art. 28.

¹⁷⁸ See news report at <u>http://www.wzforestry.gov.cn/Article/ShowArticle.asp?ArticleID=338</u>.

¹⁷⁹ Opinion on Forest Logging Quota for Various Regions during the Eleventh Five-year Period (National Forestry Administration, 2005).

¹⁸⁰ NOTICE ON THE ADJUSTMENT OF PLANTED TIMBER FOREST LOGGING MANAGEMENT POLICIES (SFA, 2002).

¹⁸¹ OPINION ON IMPROVING COMMERCIAL TIMBER FOREST LOGGING MANAGEMENT (SFA, 2003)

¹⁸² Article 33 of the IMPLEMENTATION REGULATION ON FORESTRY LAW. (State Council, 2000).

¹⁸³ According to the most recent comprehensive survey conducted by the SFA, approximately 75 million m³ of timber is logged without proper quotas every year. See news report at <u>http://www.people.com.cn/GB/huanbao/1072/3127573.html</u>.

¹⁸⁴ The WA Forest Practices Act, RCW 76.09.010.

¹⁸⁵ *Ohio Forestry*, 523 U.S. 730, 734

¹⁸⁶ For appeals of the denial of logging on private forestland, state rules apply, which may vary from one state to another. For example, in Washington State, the appeal may be filed with the Forest Practice Appeals Board, whose members are appointed by the Governor and confirmed by the State Senate. The appeals board is completely independent from the logging permit issuing agency, the Department of Natural Resources. For more information, see Washington State Forest Practices Appeals Board Environmental Hearings Office, "Your Right to be Heard" (2006) (an informational packet for those interested in appealing a decision of the Washington State Department of Natural Resources). For users of federal public lands, the appeal must be filed with the forest management agency at a level higher than the agency issuing the denial. See 36 C.F.R. § 251 (1989).

¹⁸⁷ The 1998 Forest Law, art. 17.

¹⁸⁸ See supra note 183.

¹⁸⁹ <u>http://en.wikipedia.org/wiki/Stora_Enso</u>.

¹⁹⁰ 2005 Annual Statistics Report of Guangxi, available at <u>http://www.stats.gov.cn/tjgb/ndtjgb/dfndtjgb/t20060320_402311900.htm</u>.

¹⁹¹ The current exchange rate is at 1 = 7.45 yuan.

¹⁹² 1 mu = 1/15 hectare.

¹⁹³ See also UNDP, ENVIRONMENT AND SOCIAL IMPACT ANALYSIS – STORA ENSO PLANTATION IN GUANGXI, CHINA (Feb. 2006) ("UNDP Report"), available at <u>http://www.undp.org.cn/downloads/otherlocal/FinalESIA.pdf</u>, p74-75.

¹⁹⁴ The UNDP study also states the same, because farmers were generally unaware of the inflation adjustments. See UNDP Report, supra note 193, 101-102.

¹⁹⁵ *Id.*, 93-94.

¹⁹⁶ See UNDP Report, p90.

¹⁹⁷ The land was not contracted out to individual farmer households during the first round of forestland reforms in early 1980s, but trees were planted by farmer households.

¹⁹⁸ The loan, initially made to the county, was used to cover the cost of tree seedlings, about 20 yuan per mu. However, because the county was designated as a poverty-stricken county, the loan was later paid back by the central government.

¹⁹⁹ This loan for management was also later waived by the central government due to county's status as a poverty-stricken county.

²⁰⁰ This township leader has a management contract with several villages for a total amount of 1,500 mu of afforested land.

²⁰¹ Although he did not know for sure how much of this two million mu of man-made forests is stateowned, he believed most of it is owned by rural collectives.