



# THE PINCHOT LETTER

News from the Pinchot Institute for Conservation

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## Forest Policy Capacity-Building Workshop in China

The Pinchot Institute recently partnered with the Auburn University School of Forestry and Wildlife Sciences and the USDA Forest Service Office of International Programs to conduct a week-long forest policy capacity-building workshop for forestry leaders from 35 of China's provinces and state forestry enterprise groups. The workshop was held in Haikou in Hainan Province. China is the largest and fastest growing national economy in the world today, and its rapid transformation from a primarily agrarian to industrialized economy, is placing enormous pressure on forest resources in China, and exacerbating the problem of illegal logging in many neighboring countries. The workshop focused on building an enduring institutional, legal and policy framework to support sustainable forest management, and provide guidance to policymakers in China regarding community-based forest stewardship, establishment of private property rights, management of public forest reserves, watershed protection, biodiversity conservation and self-sufficiency in domestic wood supply.

The end of China's Cultural Revolution in the late 1970s ushered in a period of political and economic reform that has transformed China into one of the most robust market-driven economies in the world. At a time when the U.S. economy strug-

gles to come close to a four percent increase in Gross Domestic Product,<sup>1</sup> China's GDP has hovered near nine percent for the past decade, and reached 9.9 percent in the fourth quarter of 2003.<sup>2</sup> At the recent World



Minshan Mountain. Photo by Colby Loucks.

Economic Forum in Davos, Switzerland, Vice Premier Huang Ju pledged that China would quadruple its current GDP within the next 15 years (to more than US\$4 trillion). This surge in economic growth has had profound social implications in China. During the past two decades, more than 200 million people have

migrated from rural areas to China's cities, and an additional 300 million people are expected to follow them during the next two decades.<sup>3</sup> It is expected that as many as 22,000 new cities will develop in China in the next 20 years, each with a population in excess of 100,000 people.<sup>4</sup>

This rapid economic expansion also has had a profound environmental effect on China. Two-thirds of China's cities have air quality below World Health Organization standards, the highest of any large country in the world. Ten of the most polluted cities in the world are in China. The water in five of China's largest rivers is polluted enough to cause skin diseases from touching it, and water supplies for half the coun-

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*Leadership in Forest Conservation Thought, Policy and Action*



try's population—600 million people—are contaminated with animal and human waste.

Supplying the raw material for such economic growth has taken its toll on China's natural resources, and those of neighboring countries as well. China is now the second largest consumer of timber in the world. Natural Forest cover has fallen by half in the past two decades.<sup>5</sup> Forests and grasslands alike have given way to encroaching deserts, which are estimated to be expanding by several hundred thousand square kilometers

each year during the 1980s and 1990s, faster than anywhere in the world including sub-Saharan Africa. This loss of forests and grasslands also had its effects on China's native biodiversity. Fully one-quarter of all the species listed by the Convention on International Trade in Endangered Species (CITES) are native to China, and an estimated 15–20 percent of China's native animal and plant species are listed as threatened or endangered.<sup>7</sup>

An important though tragic turning point came in 1998. Massive

floods on the Yangtze River, which stretches across China from the Tibetan Plateau in the west to the China Sea on the east, inundated 52 million acres of farmland and other productive bottomlands, killed more than 3,000 people, and caused an estimated US\$20 billion in economic losses. The single most important cause of this catastrophe was the clearing of much of the forest in the upper reaches of the Yangtze watershed, where forest cover had declined from nearly 40 percent in the 1950s to 10 percent by 1998.<sup>8</sup> The Chinese government responded quickly, imposing

## ABOUT THE PINCHOT INSTITUTE

Recognized as a leader in forest conservation thought, policy and action, the Pinchot Institute for Conservation was dedicated in 1963 by President John F. Kennedy at Grey Towers National Historic Landmark (Milford, PA)—home of conservation leader Gifford Pinchot. The Institute is an independent nonprofit organization that works collaboratively with all Americans nationwide—from federal and state policymakers to citizens in rural communities—to strengthen forest conservation by advancing sustainable forest management, developing conservation leaders, and providing science-based solutions to emerging natural resource issues. Further information about the Pinchot Institute's programs and activities can be found at [www.pinchot.org](http://www.pinchot.org).

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a total ban on logging in the upper watersheds of the Yangtze and Yellow Rivers. A National Forest Protection Program (NFPP) was also enacted in the wake of this disaster, establishing a new forest policy throughout China. Its major purposes are:

- ✿ To restore natural forests in ecologically sensitive areas
- ✿ To plant forests for soil and water protection
- ✿ To increase timber production in forest plantations,
- ✿ To protect existing natural forests from excessive cutting and
- ✿ To maintain the multiple-use policy in natural forests<sup>9</sup>

The effect on timber harvest levels in natural forest areas was immediate. The 1997 harvest level of 32 million cubic meters fell to 14 million cubic meters by 2000 and is expected to continue dropping. On the other hand, timber harvest from forest plantations is expected to rise quickly. More than six million hectares of marginal crop and pasture land is to be reforested within 10 years. Plantations are being established on an additional 39 million hectares of degraded forest land. Under the more decentralized government established during the reform period, much of the responsibility for carrying out these provisions of the NFPP will fall to the provincial governments with the central government, through the State Forestry Administration, providing technical and financial assistance. This includes:

- ✿ Education and technical training in all aspects of forestry, from basic forest regeneration and ecological restoration techniques at the local level, to programs for provincial leaders aimed at strengthening the institutional framework for program delivery.



- ✿ Forest land allocation to either nature preserves or commercial forests, depending on location and characteristics; forest preserves are intended to protect watersheds and native biodiversity; commercial forests are productive areas managed for high-quality timber and other forest products.

- ✿ Resettlement of farmers displaced from marginal crop and pasturelands by conversion to forests, and retraining of forest workers displaced by logging bans in forest preserves.

- ✿ Contracts giving local people the right to manage and use the forest preserves for nontimber forest products such as mushrooms and ferns, thereby providing greater protection from fire and illegal tree cutting.

Under the new forest policy, the area of forest cover is increasing, and timber volume harvested from planta-

tions is projected to increase quickly. But even the most optimistic estimates of forest growth suggest that a continuation of the current high level of economic growth will result in a widening gap between China's demand for wood products and its ability to supply them. This has important implications for timber supply and prices in international trade in the forest sector. It has potentially more serious implications for illegal logging in neighboring countries throughout Asia, where China's insatiable demand for wood creates a powerful incentive for forest exploitation.

How can China accelerate the expansion of its forest resource base? How can China's forest sector develop in new directions that are more efficient and more sustainable over the long run? How can China protect its native biodiversity, water quality and other forest values while meeting a larger share of its own domestic wood demand? The answers to these questions seem to lie less in improving the science and technology of forest management, and more in the develop-

ment of appropriate institutional, legal and policy mechanisms to support sustainable forest management. China is still in transition from its former Soviet-style socialist doctrine of centralized planning, state and collective ownership of forest resources, and state-owned enterprises for wood processing and distribution. There are important opportunities to stimulate private investment in forests through clarifying private property rights, and improving the capabilities of the judicial system for protecting those rights. A more stable institutional and political environment, particularly at the provincial level, will also be key to reducing uncertainty and stimulating foreign investment in Chinese forest enterprises.

China's State Forestry Administration recently conducted a comprehensive review and evaluation of the new forest policy, to learn what is and is not working well, where the barriers lie, and what lessons can be learned. China will also be looking to other countries for models that can be incorporated into the further development of their own institutional, legal and policy framework for sustainable forestry.

In October 2004, Pinchot Institute President Al Sample, Auburn Professor (and Pinchot Institute board member) Daowei Zhang, and Forest Service forest policy specialist Douglas MacCleery were invited to conduct a forest policy workshop in Haikou, Hainan Province. The objective of the workshop was capacity-building for forest policy development primarily at the provincial level. Most of the 49 participants were key forest policymakers and emerging leaders in the State Forestry Administration and at the provincial forestry agencies. The workshop covered various forest policy tools (e.g., taxation, regulation, subsidies, landowner education and technical assistance), and provided a comparative overview of forest policy processes in the United States, Canada

and New Zealand. Various policymaking theories and forest policy cases were presented, and became the focus for vigorous interactive discussions.

Key differences between current forest policies in China and those in the United States served as the basis for several important insights for the participants and the instructors as well. Most of the provincial governments in China have strict limits on the timber volume that can be harvested on "private" lands (which are in most cases lands temporarily allocated to a family or individual by the local collective). Increased state investment in terms of subsidies for tree planting are effective only where forest farmers have property rights that guarantee they will "own the results." Forest farmers in China pay a combination of property taxes and severance taxes that are about double what most U.S. forest landowners pay, and have little or no voice in the development of tax policy relating to forests.<sup>10</sup> Frequent changes in forest policy, particularly at the provincial level, create uncertainty to leads to premature timber cutting and a lack of private investment in tree planting.

State forests in China are managed and used differently from the national forests in the United States. The state has responsibility for conserving and sustainably managing the forests, but they also harvest the timber to supply it to state-owned forestry enterprises—often very large and very inefficient sawmill operations. Goals and quotas create an incentive for the state to harvest as much wood as possible, creating a conflict of interest with their role in ensuring that harvesting does not exceed levels that can be sustained in perpetuity. One of the immediate goals that the workshop participants identified was the need to separate these two functions between two different entities.

China's forests, and its forest policymakers, still face some important

challenges. Policymakers in China are eager to learn from the experiences of other countries, particularly in developing the institutional, legal and policy framework for balancing forest protection with forest use and for meeting China's growing demand for wood products without contributing to illegal logging and unsustainable management of forests outside China. The ideas presented in the workshop certainly challenged the status quo in China, and helped policymakers to "think outside the box" in considering ways for China to achieve sustainable forest management and alleviate pressures on global forests.

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1. Bureau of Economic Analysis, National Income Accounts, <http://www.bea.gov/bea/dn/home/gdp.htm>. Accessed 2/27/05.
2. "China GDP Speeds Up; Pace Seen Continuing," *China Daily*, January 20, 2004.
3. Kurlantzik, J., "China's Blurred Horizon," *Washington Post*, September 19, 2004, p. B1.
4. Economy, E. 2004. *The River Runs Black: The Environmental Challenge to China's Future*. Ithaca: Cornell University Press.
5. *Ibid.*, p. 65.
6. *Ibid.*
7. *Ibid.*
8. China Human Development Report: Making Green Development a Choice. 2002. Stockholm: Stockholm Environment Institute and UNDP China.
9. Zhang, P, Shao, G, Zhao, G., LeMaster, D., Parker, G., Dunning, J. and Ginglin, L. 2000. China's Forest Policy for the 21<sup>st</sup> Century. *Science* 288(2135–2136).
10. Zhang, D. 2004. A comparative study on forestry-related taxes in China and U.S., Working Paper, School of Forestry and Wild Life Sciences, Auburn University.