

The U.S. Furniture Industry: Trends in Outsourcing and Emerging Certified Demand

Catherine Mater Mater Engineering

Catherine Mater is Vice President of Mater Engineering, Ltd., a forest products consulting engineering and markets research firm servicing worldwide clients for over 50 years. She is a recognized expert in value-added wood products manufacturing and marketing and she has assisted global corporations, governments, communities, and small processing operations in that field throughout North America, South America, Europe, and Asia. In 1991, Mater was contracted by the United States Forest Service to conduct America's first major marketing effort in non-timber forest products on national forest systems. In 1993, the President selected Mater to present at the historic U.S. Timber Summit, and again in 1995 at the White House Pacific Rim Economic Summit, on value-added wood products and special forest products. In 1997, Mater was selected as a Senior Fellow of The Pinchot Institute in Washington, D.C. for her leadership role in the U.S. in sustainable forestry policy and practices. She is a distinguished lecturer on forest policy and forest products development at Yale University, University of California at Berkley, and Pennsylvania State University, and she co-authored *The Business of Sustainable Forestry* recently published by The John D. and Catherine T. MacArthur Foundation.

Mater received a B.S. in Political Science and an M.S. in Civil Engineering from Oregon State University.

An overview of recent changes in the United States furniture industry:

Exports:

- Though US furniture exports dropped by 2 percent in 1999, they surged to 13 percent in 2000.
- US furniture exports to China have been growing by 43 percent annually since 1992.

Imports:

- US companies as a whole import more than 6 times the dollar amount of furniture they export to other countries.
- China leads furniture imports to the U.S., realizing a 42 percent increase in 2000 over 1999 values. This largely is due to U.S. companies outsourcing piece production to Chinese companies, with final assembly occurring back in U.S.

Outsourcing of manufacturing includes component production, full produced production and assembly.

Growth of outsourcing:

- In the U.S., outsourcing went from \$100 billion in 1996 to \$325 billion in 2000.
- Outsourcing of wood furniture between 1992 and 1995 increased from 14 percent to 16 percent.

Reasons for growth:

- Labor costs; \$14.24 per hour in the U.S. and .69 per hour in China.
- China also is more affordable in terms of labor training and retention.
- The US also has environmental regulations that can equal more than 25 percent of total operating costs, including safety conditions for workers and production requirements for dust control, air and water treatment, etc.

“Furniture Brands International, the St. Louis-based company that owns North Carolina manufacturers such as Thomasville furniture, Broyhill, and Hickory Chair, announced it won’t build any more furniture factories in the United States. What’s more, rather than build other factories in Asia, it will buy and re-brand from manufacturers already there.”

Raleigh News and Observer, February 12 2001

Growth in U.S. consumer demand for certified wood and wood products. An August, 2001 customer survey of US furniture-cabinet producers demonstrated that most want FSC products from major lumber and fiberboard suppliers--now or in the near future.

Strategic catalysts likely to accelerate demand for certified-wood furniture production in the U.S.:

- Policies favoring certification from public forestland managers, including state and federal governments, as well as Native American (Indian) nations.
- Certification of plantations specifically benefiting the furniture industry, e.g. hybrid poplar.

IKEA’s Procurement Policies for Wood Products

Magnus Löfmark

IKEA China

Magnus Löfmark works as the Forest Manager for IKEA Greater China, and since October 2000 he has been based at the IKEA Trading Office in Qingdao. He is responsible for carrying out IKEA’s Forest Action Plan and handles the external contacts within the Greater China region. Before joining IKEA, Mr. Löfmark held a position as system developer for Satellite Remote sensing techniques at Swedish Environmental Research Institute in Stockholm, Sweden.

IKEA's long-term goal is to source all of its wood from well-managed forests as verified by a third party, according to a company standard produced in cooperation with social, economic and environmental interests.

Because IKEA has been unable to secure sufficient wood that meets its ultimate standard--and because the company believes that it has a role in moving wood product suppliers towards that goal--it has developed a Four Step system for its suppliers...

To assure that suppliers are meeting IKEA's standards, the company demands that suppliers must:

- secure that the previous supplier in the supply chain agrees with IKEA's demands;
- make information about the origin of the wood available to IKEA within 48 hours
- file the information in records for at least 12 months;
- be able to show how any non-complying wood is kept separate from wood for IKEA's products if a supplier also produces wood below IKEA's minimum standards;
- accept reviews of the wood supply chain either by IKEA or a third party appointed by IKEA;
- check all suppliers of wood products once a year, use supplier questions about wood supply chain and do random audits of wood supply chains.

IKEA's Step 1—a supplier's "entry ticket":

- The solid wood must not originate from intact natural forests (INF) or high conservation value forests (HCVF) unless independently verified as coming from well-managed sources. Currently, only FSC certified forests meet this IKEA standard.

IKEA's Step 2—a supplier's minimum demands:

- The origin of the solid wood must be known. The supplier must be able to state from which region within a country the wood originates.
- The solid wood must be produced in compliance with national and regional forest legislation and other applicable laws.
- The solid wood must not originate from protected areas unless independently verified as coming from well-managed forests
- The solid wood must not originate from plantations established after November 1994 by replacing intact natural forests.

IKEA's Step 3—meeting the company's own standard:

- **4Wood** is an IKEA Forest standard (IFS) developed and maintained by IKEA. The forest management is audited against a standard including indicators that describe the transition from level 2 towards level 4.

IKEA's Step 4-- compliance with an official standard:

- Today, only FSC is recognised as a Step 4 standard.

IKEA will work with any supplier that is working to progress to Step Four but recognizes that the transition from logging to sustainable forest management takes time and effort.

Certification in Asia and Smartwood Certified Forestry
Walter Smith
Smartwood

Smartwood, a program of the Rainforest Alliance, is the longest established forestry certifier in the world. Operating worldwide, it is an independent, not-for-profit entity accredited by the Forest Stewardship Council (FSC).

The FSC is an independent, not-for-profit entity that sets international standards for responsible forestry. Balancing environmental, social and economic interests, the FSC provides worldwide accreditation for forest product certifiers such as Smartwood.

Forest Management Certification Standards

- 10 principles for Forest Management Certification
- Certification of FM in Asia

SmartWood – 5 (China - 1 Pending), SGS – 6, SCS– 1, SA - 1

Chain of Custody (COC) certification allows clear tracking from forest to final product

- Chain of Custody (COC) certification in Asia
 - Smart Wood CoC – 21 (China - 6)
 - SGS CoC – 35 (China - 9)
 - SCS CoC – 9 (China - 2)

Why do companies get certified?

- Market Share
- Access to new markets
- Represents company image/goals
- It is the right thing to do

www.smartwood.org

Panel : Status of Certification in Asia and the Next Steps to Establish Certification
Rod Taylor
WWF

Rod Taylor is the coordinator for the World Wide Fund for Nature's (WWF) Forest Futures program - a new regional initiative to achieve sound use of production forest in Asia and the Pacific. Rod started his career as a lawyer in Australia. His forest experience began in Papua New Guinea, where he worked for five years negotiating agreements and drafting regulations governing the use of forests and reefs. He has since worked on forest policy issues in the Solomon Islands, Indonesia and Nepal. He joined WWF International in 1998 and worked as the Coordinator of the WWF/World Bank Forest Alliance before taking up his current position early in 2001.

World Wide Fund for Nature (WWF) is the world's largest conservation organization, with a goal of reversing the degradation of our planet's natural environment and helping to build a future in which humans can live in harmony with nature. WWF's Forest Futures/ Asia Pacific is a regional initiative aimed at achieving sound use of production forests in Asia and the Pacific.

What does certification offer?

- Market incentive for responsible forests. European and North American retailers are asking first for legal and then for certified products. A number of companies support certification and are members of buyers' groups. Slowly the paper and panel product sectors are also becoming interested in certification.
- A management tool. The certification process improves management and efficiency, and thus may lower costs.
- Better management at lower cost to the public. Certification offers more flexibility than governmental "command and control" methods.
- Possible application to non-timber products such as bamboo and coconuts.
- Opportunities to bring together a variety of stakeholders, such as companies and social and environmental interests, to make policy advances. This is particularly valuable to WWF and its mission.

Although many tropical producers genuinely want to improve performance, they don't have the expertise to do so, and auditors are not permitted to give technical assistance.

What response can be made?

- WWF and others are focusing on development of producer support groups.
- Scandinavian outdoor furniture makers created the Tropical Forest Trust to assist forest managers in the Asian area to achieve certification.

What should the global forest industry expect from conservation groups in the future?

- Protestations if governments and industry try to develop "rules of the game" behind closed doors.
- Solutions-oriented dialogue.
- Efforts to increase demand for green timber and fiber in:

- Japan, a wealthy country that should be able to express a demand for such product as do North America and Europe; and
- China, which re-exports a large amount of wood product to green-sensitive countries.
- Some willingness to create leeway for producers who are trying to improve performance.

Generating Demand for Certified Forest Products in Hong Kong

Joyce Y. S. Lam

World Wide Fund for Nature-Hong Kong

Joyce Y. S. Lam joined the World Wide Fund for Nature Hong Kong (WWF HK) in August 2000. The project for which she has main responsibility as Program Officer focuses primarily on the sourcing and promotion of certified timber. The project also requires participation in the establishment of a Forest and Trade Network (formerly known as the Buyers' Group) in the East Asia region, covering countries and areas such as Hong Kong, mainland China, Taiwan and South Korea. Lam graduated from the Chinese University of Hong Kong in 1999 with a bachelor's degree of Social Science in Geography.

Some facts about Hong Kong's timber supply:

- Hong Kong has no production forest, and therefore is totally dependent on imported timber.
- Hong Kong imports approximately 7.6 million cubic meters of timber annually.
- Timber is imported mainly from Malaysia, Indonesia, China, Germany, and the United States.

Currently, demand from overseas markets drives certification development in Hong Kong, but the construction and government sectors are potential internal markets.

In the construction sector, the Hong Kong Building Environmental Assessment Method, a voluntary and independent certification of the overall environmental performance of Hong Kong buildings, rewards the use of Forests Stewardship Council (FSC) certified timber, but as of yet no building has been given such credit. In a similar vein, a Hong Kong University building won an international award for its environmentally friendly structure, but certified wood was not used in the building.

It is official policy of the Hong Kong government to enhance environmental performance and the government now releases an annual environmental report. Hong Kong Housing Authority is currently examining procurement practices to decide whether to apply environmental criteria in selecting materials and services.

[EcoWood@sia](#), created by WWF, is in the process of being established in Hong Kong. Its goal is to develop a region of responsible forestry in East Asia, with a sufficient supply of certified timber from major source countries like Malaysia and demand for certified

forest products from heavily consuming regions like Hong Kong. This Forest and Trade Network will involve a variety of stakeholders such as importers, manufacturers, timber and timber products retailers, the construction industry and government agencies.

Forest Certification in China

**Dr. Zhu Chunquan, Forest Programme Officer
WWF China Program Office**

Before Dr. Zhu Chunquan joined World Wide Fund for Nature (WWF) as the Forest Programme Officer, he worked for ten years with the Chinese Academy of Forestry (CAF). Dr. Zhu received his Ph.D. from Northeast Forestry University in 1991. In addition to publishing more than 30 papers and one translation work, he was one of the key writers and editorial members of *Forestry Action Plan for Chinese Agenda 21*, *National Report for the Sustainable Forestry Development of China and Modern Forestry of China*. He is a board member of the Chinese Society of Forestry and a member of the Scientific Committee of the Chinese Society of Forestry, the Chinese Society of Ecology, the Chinese Society of Plant Physiology, the Chinese Poplar Council and the Ecological Society of America.

Certain factors indicate that China is increasing its involvement in forest certification. For instance, the State Forestry Administration created a Quality, Standards and Certification Division in 2001. Additionally, a National Working Group was created in 2001 in cooperation with WWF and the World Bank.

Export demand for furniture and other timber products is the main driving force for certification in China. In 2000, these exports valued more than US\$ 3 billion. Although there has been little domestic push for certification, companies such as IKEA and B&Q are beginning to increase demand by opening businesses in China.

Although currently there are no certified forests in China, an application to the Forest Services Council (FSC) was submitted in 2000 on behalf of a forest located in Zhejiang. The assessment is due in April 2001.

In addition, by the end of June 2001, 17 export-oriented Chinese companies were certified by the chain of custody (COC).

Dr. Zhu also discussed major constraints for certified timber in China, including a lack of domestic demand, a lack of knowledge about forest management and certification, a lack of local certifiers and the costs of certification.

For instance, the direct cost of paying a certifier is very high in China. It is compounded by the indirect costs of developing and changing forest management practices.

The main benefits of certification for China include increased market share in international markets, increased benefits for local communities and environmental improvements.

Several forces make it likely that certification in China will expand. The combination of support from the Chinese government and Non-Governmental Organizations (NGOs), along with the growing international demand for certified products, will likely increase China's level of FSC certification in the short term and foster a national FSC-based scheme in the long term.

Market Demand for Certified Wood products: Company Perspectives

Demand in the United States

Paul Fuge

President, Plaza Hardwood

Chairman, Certified Forest Products Council

Paul Fuge is President of Plaza Hardwood, Inc., and managing partner of Sylvania Certified, LLC. An early proponent of Forest Stewardship Council (FSC) certification, he has been involved in the sustainable forestry business since 1972, when he founded the Local Lumber Company to explore the economic viability of lesser-known species and character grades of lumber abundant in the forests of New England. Since then his business interests have continued to center on sustainable approaches to forest products. Fuge graduated from Yale University in 1968. He is the past chairman of the National Wood Flooring Association Environment Committee and is currently chairman of the board of the Certified Forest Products Council based in the United States.

Fuge commented that demand from the United States for Chinese furniture has increased significantly, with imports to the U.S. increasing 37 percent over 2000 levels.

Increasingly, U.S. manufacturers are forming alliances with Chinese partners to stay competitive in a global market place.

For these companies, certification provides a tool for market access and a long-term strategy for marketing and quality control. It also differentiates a business from its competitors.

There are also other hidden advantages of certification, including:

- enhanced opportunities for quality control;
- commitment to high technical standards;
- supply chain problem solving with partners;
- greater loyalty from customers; and
- greater timber utilization for higher profits.

Some hidden dangers of certification are:

- mismatch between supply and demand;
- illusion of premium prices;
- lack of distribution channels; and
- requirement of personal commitment from senior management.

However, Fuge said that in his experience, there is a trend toward equivalent prices for equivalent material. He also detailed some special opportunities associated with certification, such as the availability of technical and marketing assistance paid for by governments and foundations.

There is also a lag by US companies, which is providing opportunity for Chinese companies to gain a foothold.

There is a commitment to more efficient timber utilization, resulting in greater long-term profitability. Additionally, U.S. retailers are seeking a reliable supply from certified forests based upon known inventories. International furniture retailers are opening stores in China, which is helping to establish relationships with large U.S. and European retailers. This may lead to future business.

Fuge listed some drivers behind the certification movement, such as:

- architects, specifiers and their clients;
- major retailers the World over, e.g. B& Q and Home Depot;
- practitioners of corporate responsibility; and
- national and international manufacturers of wood products, e.g. IKEA.

Market Demand for Certified Wood products: Company perspectives:

Demand in Europe:

Tom Judge

Kingfisher Asia Limited, HK

Tom Judge is the Quality Assurance Controller for Hong Kong's Kingfisher Asia Limited (KAL).

The U.K.'s B&Q Do-It-Yourself is the operating company that has led other Kingfisher companies into policies of sourcing certified timber whenever possible. Companies that follow these policies are not associated with illegal logging or deforestation and they are able to assure customers that all wood products come from well managed forests.

Additionally, they are able to retain employees who wouldn't want to work for a company that is chopping down forests all over the world.

Judge stated that "Without B&Q the certification movement wouldn't be where it is today."

In 2002 and 2003, Kingfisher intends to more than double its direct sourcing from China, greatly increasing its needs for manufacturers and suppliers of timber. Because none of

its timber comes from China at present B&Q's intent is to work with Non-Governmental Organizations (NGOs) to promote sustainable timber development in China. Recognizing that small companies face greater challenges in reaching certification standards, B&Q wishes it to be known that it is committed to work with anyone committed to certification. Currently, B&Q is working with vendors to develop sustainable timber products.

In addition, B&Q will open fifty-eight stores in China over the next five years. The company has introduced its own FSC brand flooring in its Shanghai store.

Panel: The Supply of Certified Wood: Why and How Companies Certify Sino-Forest Corporation/Sino-wood Partners, Ltd.

Tu Farlay

Environmental Management Manger for Sino-Forest Corporation

Tu Farlay is the Environmental Management Manager for Sino-Forest Corporation focused on implementation of EMS (Environmental Management System) and FMS (Forest Management System). Mr. Tu is the leader of the Forest Stewardship Council (FSC) Team for Sino-Forest Corporation. He has 10 years of working experience in Shenzhen and Hong Kong as an environmental engineer, senior engineer and consultant. He graduated from China's Tsinghua University with a Masters Degree specialized in Environmental Engineering.

Sino-Wood Partners, Ltd., is a publicly held corporation that in 2000 began implementing a Forest Management System for its plantations, utilizing the principles and criteria of the FSC. These plantations cover approximately one million mu (15 mu = 1 ha) located mainly in three provinces in Northeast China.

Currently, Sino-Wood aims to complete a certification pre-assessment by the end of 2001 or beginning of 2002.

Sino-Wood's global marketing strategy is based on:

- opportunities offered by WTO;
- use of advanced technology for the plantation industry;
- strategy of green trading based on complying with international standards; and
- emphasis on both environmental protection and quality control.

Those who favor certification efforts in China must introduce and spread ideas about environmental protection and forest management. Additionally, they must address the increased costs of producing certified timber, including: auditing costs, which vary by certifying institution, and required changes to management systems. Management costs can be up to 40-50 percent of a company's operating system, largely due to necessary additional training and stakeholders' compensation.

However, increased certification in China will help to increase the professionalism of management teams. It also will help to increase businesses' competitive power through better marketing, pricing, efficiency, financing, promotion, relationships with stakeholders and indigenous peoples and better labor relations.

Why Companies Go Green?

Kevin Rose

Fletcher Challenge Forests (FCF)

Kevin Rose of Fletcher Challenge Forests (FCF) is based in New Zealand and manages the export and market development team for his company's lumber business in the Asia Pacific region. Rose has worked for FCF for eight years. During 1998 and 1999, before working in New Zealand, he was general manager of the company's steel JV in China, which was New Zealand's largest JV in China at that time worth approximately US\$50 million. Because China has no history of local standards or certified models such as FSC, there are likely to be problems with various economic, social and health and safety levels, as well as management of small and scattered plantations.

. In 2000, Rose managed a start-up joinery manufacturing and distribution business in South America. He has an MBA, as well as a bachelor's degree in wood processing technology. Rose speaks fluent Mandarin, having attended university in China during the mid-1980s.

FCF is a publicly held company located in New Zealand with a core business of tree planting, forest management, harvesting, processing and distribution of solid wood products and logs in the Pacific Rim and North America. It employs 2500 people and has 300,000 ha of pine plantations.

All of FCF's forests are certified by the Forest Stewardship Council (FSC).

A significant portion of FCF's processed product has achieved Chain of Custody (COC) certification. This is a process by which the source of wood is verified and tracked along all stages of production until the product reaches an end user. Because China has no history of local standards or certified models such as FSC, there are likely to be problems with various economic, social and health and safety levels, as well as management of small and scattered plantations.

Because China has no history of local standards or certified models such as FSC, there are likely to be problems with various economic, social and health and safety levels, as well as management of small and scattered plantations.

FCF decided on FSC certification for several reasons, including:

- demand by key markets and customers such as Home Depot and Lowes;
- requirement for certification to do business in many places;
- greater environmental credibility for its products;
- to position itself as a leader in the New Zealand and global forest industry; and

- to ensure that there will be forests in the future.

As the result of FCF's move toward certification, the company has been required by the FSC to consolidate existing management practices rather than making major changes. Additionally, a rigorous FSC process forces FCF to examine a wide range of issues and requires more emphasis on areas such as research and development, wildlife management, management of native vegetation areas and biodiversity. COC certification also requires a high level of control in areas such as log and product segregation, log marking, processed product labeling, export and domestic documentation.

Rose said he believes that certification is more than a passing phase. He quoted an FCF employee who said that gaining FSC certification is "more than a rigorous process based on standards and principles and more than being awarded a certificate, it is a lifestyle for all those involved - a key part of our business culture."

Introduction to Panel: Ensuring Sustainable Supply of Quality Wood: Company – Community Partnerships
Michael Conroy
Ford Foundation

Michael E. Conroy is a program officer working in the environment and development field at the Ford Foundation. His current work focuses on strengthening the ability of local communities to understand, influence, and take advantage of global processes, and to receive compensation for negative consequences that may occur. He focuses on supporting advocacy-led certification systems that can serve as market-based mechanisms to encourage and reward superior corporate social and environmental performance. They also can combat inferior social and environmental practices that globalization could produce. Prior to joining the Ford Foundation in 1994, Conroy taught economics at the University of Texas at Austin for nearly 25 years. When he left Texas, he was a Professor in the Economics Department, Associate Chairman of the Department, and director of the Latin American Economic Studies Program. His principal areas of teaching and research included regional and urban economics, Latin American political economy, and the global economics of sustainable development.

Michael Conroy introduced the three case studies on the panel by highlighting three reasons for paying attention to local community links to forests:

- community rights in countries which are the principal sources of wood for Chinese production, e.g. Russia, Papua New Guinea, Indonesia, Malaysia;
- declining volume of supply in principal source countries; and
- opportunity for sourcing from communities in China.

Case of Community Production and Door Manufacture for Export to Do-It-Yourself Retailers:

Eva Fernandez

Puertas MonteAlban, Mexico

Eva Fernandez is the General Coordinator for the Chain of Custody (COC) program at Puertas MonteAlban, promoting the Forest Stewardship Council (FSC) certification with the community and the company's international sales manager. Fernandez worked for two years for the Secretary of Commerce and Economics of Oaxaca, and for the Secretary of Public Relations of Oaxaca. She received a degree in business and corporate training from North Dakota State University and studied business administration at Oaxaca's College of Technology in Mexico.

Puertas MonteAlban has produced and sold doors for over 30 years. The company operates four sawmills, maintains 6,000 workers in Oaxaca City and uses a maximum of 30,000 cubic meters of pinewood annually. The company generates US\$2 million in annual sales, with 45 percent from domestic sales and 55 percent from international sales.

The Mexican state of Oaxaca, where Puertas MonteAlban is located, has a population of 3 million. About 60 percent of the population is located in rural areas. Although Oaxaca's official language is Spanish, there are nineteen native tongues spoken in the rural areas.

All of Oaxaca's forests are owned by indigenous and native communities, which received the legal right to own and manage their forests in 1989.

Although native communities initially used wood only for family needs, 20 percent of all wood produced by the communities is now sold. Seventy-nine percent of Oaxaca's communities own sawmills. There are 50 native communities with a level of socio-economic success, with 32 of them supplying pine to Puertas MonteAlban and five of them certified by FSC. Puertas MonteAlban pays an additional 15 percent for the certified wood. In addition, the company helps with community activities such as road development, temporary employment; technical support and capacity development, as well as development of schools and recreation.

According to Fernandez, Puertas MonteAlban buys certified wood and is working on a Chain of Custody (COC) certification project for several reasons, including:

- better prices on international market;
- international market demand;
- concern about forest conservation; and
- means of protecting and supporting indigenous communities.

The concept of certification is new in Mexico and it is hard to convince producers, native communities and consumers to participate.

Labor costs provide another challenge. Mexican labor is about \$2.20 per hour compared to China's rate of about .69 per hour. However, on the positive side, Mexico has smaller transportation costs to the U.S. market.

Case of Company - Community Partnerships in Canada

Dr. Gary Bull

University of British Columbia

(Presented by Michael Conroy in Dr. Bull's absence)

Gary Bull is an assistant professor at the University of Columbia. He is currently researching contemporary issues in forest management, such as carbon accounting, certification, wood procurement policy, First Nations of Indigenous Peoples, and Information Technology aspects of supply chain management. Bull is involved in several international forest initiatives, including the Global Vision for Forests 2050, and the Food and Agriculture Organization of the United Nations study on reduced-impact logging, and the Healthy Forest Advisory Board for Lowe's Corporation. He has a background in both forestry and economics, receiving his Bachelor's degree in forestry, his Masters degree in natural resource economics from University of British Columbia and his Ph.D. in forestry from the University of Toronto.

In the past, local and indigenous people in Canada had no say in forest management but now almost all timber companies and lumber mills, as part of normal business practices, engage with all stakeholders, including governments, Non-Governmental Organizations (NGOs) and local/indigenous people and communities. Canada is exceptional in that it is close to having its forests certified at a national level.

Partnerships with other entities are attractive to timber companies for several reasons, including:

- increased access to stable wood supply;
- reduced labor and management costs;
- and increased employee productivity;
- more effective dealings with social and environmental concerns; and
- improved access to the certified products market, which is the fastest-growing segment of the industry.

There are certain conditions that promote successful partnerships, such as:

- an appropriate legal framework within which communities and companies can function;
- national and provincial policies that encourage or require local stakeholder participation in forest management decisions;
- company recognition of local and aboriginal rights;

- company recognition of local communities' ability to effectively participate in forest management decisions; and
- an effective process for including all stakeholders, including environmental NGOs, local communities and indigenous people.

It also is helpful to foster change in management and employee attitudes, so that a recognition permeates the firm that these communities have a legitimate voice and claim to lands on which logging is taking place.

In order for companies and communities to develop the relationship that leads to all the benefits of community/company partnerships, it is essential for all parties to allocate the proper amount of time and resources to the effort.

A Proposal for Pilot Community Forest Certification: Developing a New Economic Model for Community-Based Forest Management and Utilization in Southern China

Changjin Sun

Chinese Research Center for Environmental and Ecological Economics (RCEEE)

Changjin Sun has worked as Interim Country Representative and Forestry Officer for World Wide Fund for Nature (WWF) China Program and as Officer of the Ministry of Forestry for the People's Republic of China. Dr. Sun has a Ph.D. in resource and environmental economics from the University of Illinois at Urbana Champaign in the United States.

Certified wood products are part of a new economic model involving production, processing and marketing in the overseas niche market. This new model provides for socially equitable and environmentally friendly business practices. It is also financially viable so companies, employees and governments will gain.

This new model aims to promote asset building for disadvantaged small forest owners and communities, revitalize traditional community-based forest management systems and demonstrate the compatibility of multiple goals, such as sustainable forest management, poverty alleviation and good business.

The pilot project involves a community forest of 50-70,000 *Mu* (15 *mu*= 1 ha) to produce 10,000 m³/year certified timber, five to seven certified processing mills and international distribution of the timber products.

The ideal site for the project features a rich forest for sustainable harvesting, a tradition of local forest management and a reasonable community governance infrastructure.

Project activities would focus on forest management, processing and marketing, establishment of a value chain, management, communication and dissemination.

Some benefits of the project include:

- 8 million Y/year gross value;
- 1.6 million Y/year value-added (20% price premium);
- 160 year/person (10,000 people);
- processing value and
- employment and tax benefits extra

The market in Southern China proves feasible due to low labor costs, increasing manufacturing capacities, the growing demand from large overseas Do-It-Yourself buyers and the emerging domestic interest in business.

In addition, regulatory frameworks are changing and technical capacities are growing. The region also has 100 years of rich tradition in managing integrated forestry and farming systems on a sustainable basis.

The government has shown strong support by limiting taxes and providing logging quotas. At the same time, mills are aligned for processing and overseas buyers are aligned for procurement.

Huangcao Township in Hunan was described as a possible site because it is rich in resources, particularly Chinese fir. There is also a long-standing tradition of community management. There is an encouraging local business environment, reasonable processing capacity and convenience to railroad transportation. However, there is also lack of market access and lack of capital for the project.

Investment Opportunities for Sustainable Forest Industry

Tessa Tennant

The Association for Sustainable and Responsible Investment in Asia (ASRIA)

Tessa Tennant is the Executive Chair of the Association for Sustainable and Responsible Investment (ASRIA), which she co-founded in 1998. Since 1997, she has focused on researching Asian companies for Socially Responsible Investment (SRI) portfolios and ASRIA is the world's first SRI fund for the Asia Pacific region. In 1988, she co-founded the U.K.'s first sustainable investment unit trust and has worked in the field ever since, most recently as Head of SRI Strategy for Henderson Investors. From 1993 to 1997 she was Chair of the U.K. Social Investment Forum and has served on environmental advisory panels for the U.K. Government and The Prince of Wales. She is a Board member of The Calvert World Values Fund, Washington D.C., and an adviser to the United Nations Environment Program's Finance Initiative.

ASRIA is a membership-based, not-for-profit organization that seeks to mobilize Asia's capital markets around sustainable and responsible investment.

SRI has become sizeable on a global scale and it is now growing fast in North America and Europe. However, very little money from the Asia Pacific region has been put into SRIs, except in Japan. SRI investments have shown they can track, or even keep above, the market average. They also benefit from the growing public understanding that resources must be used sustainably.

Tennant highlighted some examples of SRI in forestry, such as companies that use sustainable sources, such as Kingfisher and Home Depot, as well as water companies that act as guardians to watershed catchment areas. She said SRI investors would be interested in a company such as Sino Forest Corporation, which is working toward FSC accreditation.

ASRIA's ongoing research demonstrates that consumers in Shanghai and Beijing are more concerned about environmental issues than those in Hong Kong, Singapore, and Taipei. Those investors proven most likely to invest in SRI are individuals in the caring professions. In Shanghai and Beijing, these investors have less than half the income of people with similar professions in Hong Kong and Taipei. Thus, those in Shanghai and Beijing are less likely to invest in the stock market. In China, SRI investments have been inspired in part by the Chinese government, which has been pushing the level of contributions into pension schemes. Because today's pension contributions are expected to pay off in 30, 35 or possibly 40 years' time, investment policies should focus on sustainability. In the U.K., France, and Australia, governments have adopted, or are considering, a legal requirement that pensions have a statement about their long-term environmental policy.

Investment Opportunities for Sustainable Forest Industry

N. Cinnamon Dornsife

Asian Development Bank

N. Cinnamon Dornsife the U.S. Ambassador and Executive Director of the Asian Development Bank (ADB). Ms. Dornsife is a senior manager, negotiator, strategist and advocate with over twenty years' experience in international banking, economic development and foreign policy, including over fifteen years' experience in the foundation/non-profit sector. Dornsife received a Masters degree in International Relations from the Johns Hopkins School of Advanced International Studies (SAIS), and a Bachelors' degree in Chemistry and Mathematics from Emory University.

The ADB is composed of 59 member governments, with major support from the United States, Japan and China.

It is capitalized with US\$43 billion, mainly invested in public sector projects, but there is US\$18 billion invested in 146 private sector projects.

Since 1977, the ADB has invested \$1.06 billion in loans and technical assistance to the forestry sector, but none of that activity has occurred since 1994. An ADB policy developed in 1994 calls for balance of production, promotion, participation and prevention of commercial logging in primary tropical moist forest. Indonesia's problems have resulted in the raising of standards for investments and lending in forestry in Asia. Therefore, the ADB's investments have had minimal positive impacts on forest loss and degradation.

Because the World Bank has a program with World Wide Fund for Nature (WWF) to promote certification, the ADB does not wish to duplicate these efforts. Instead, the ADB seeks to assist with capacity building and information dissemination once certification standards are set.

The ADB has increased its emphasis on good governance and anti-corruption, with its member governments strengthening one another's compliance. The ADB's Office of the General Auditor handles allegations of fraud and corruption in ADB-financed projects and among ADB staff.

Due to environmental problems, China has suffered estimated productivity losses due of \$13.9 to \$26.6 billion or 3.8 percent to 7.3 percent of China's 1990 Gross National Product. China is currently ADB's largest borrower. By the end of 2000, the ADB's cumulative net lending to China amounted to \$9.8 billion, and Technical Assistance worth approximately \$180 million had also been lent. The ADB's focus in China is on poor areas, such as in China's west.

The ADB is emphasizing new methods to promote innovation in helping to mobilize additional capital for Sustainable Forestry Management (SFM).

A consortium approach would use public/private partnerships. The different objectives of stakeholders' funds might offer special ecological and social attributes.

In addition, an Investment Promotion Entity (IPE) could help overcome barriers to investment, responding to the problem that there is not enough information on viable deals.