How Chinese forestry is coping with the challenges of global economic downturn

Q. Ma, J. Liu and W. Du

China's domestic economic stimulus package aims to encourage consumption of wood and wood products; raise investment in afforestation, reforestation and protection of natural forests; and support forest enterprise through reduced taxes and other benefits.

he global financial crisis is creating severe challenges for Chinese forestry, and especially for small and medium-sized wood-processing enterprises. Exports of forest products, domestic demand for forest products and timber prices have dropped sharply since 2008. Some small and medium-sized forest enterprises have closed down (SFA, 2008a).

The Chinese government has adopted a financial and monetary stimulus policy to cope with the crisis. Measures in the forest sector include increasing investment and expanding domestic demand to create a favourable environment for enterprises to develop and to respond to the challenges. This article discusses the impact of the financial crisis on China's forest industry and the strategies and concrete actions taken by the forest sector.

A SECTOR OF RAPID GROWTH

The forestry sector in China has developed rapidly along with the fast overall growth of the national economy. The total output value of the sector reached US\$180 billion in 2007. The average growth rate of production in the forestry sector, including primary, secondary and tertiary industry, was 20.6 percent per year from 1997 to 2007 (SFA, 2008b). China has become a leading country in the production, consumption, import and export of forest products in general and is the world's top exporter of wood-based panels (FAO, 2009) and wood furniture (UNECE and FAO, 2008). The scale of the country's forest industry has also expanded; more than 15000 forest enterprises now have at least US\$730 000 of annual sales each (Jia, 2009).

The economic development of forestry in China has greatly depended on external trade; timber imports have increased by on average 30 percent per year over the past ten years. In 2007, China imported around 37 million cubic metres of logs as well as wood pulp, waste paper and other paper and wood products equivalent to about 180 million cubic metres of logs; these imports accounted for 47 percent of China's total wood consumption (SFA, 2008a). The import and export of China's main forest products amounted to US\$63 billion in 2008 (US\$27 billion of imports and US\$36 billion of exports), accounting for 35 percent of the total output of the forest sector. In total trade value of forest products, China ranked second in the world after the United States of America (SFA, 2008a).

IMPACTS OF THE FINANCIAL CRISIS

Since the second half of 2008, the negative impacts of the international financial crisis have overlapped with accumulated problems caused by the overwhelmingly rapid expansion of the forest industry. An objective look at the economic situation could assist governments and enterprises in formulating appropriate policies and actions.

Decreased trade

The world economy is in recession as a consequence of the financial crisis. United States and European purchasing power has decreased drastically. The construction industry, which has been a major consumer of forest products, experienced a severe downturn. The United States dollar has continued to

Qiang Ma is a Ph.D. candidate in the School of Forestry Economics and Management, Beijing Forestry University, Beijing, China, and is Forestry Officer in the Forest Economics and Policy Division, Forestry Department, FAO,

Jinglong Liu is Professor in the School of Agricultural Economics and Rural Development, Renmin University of China, Beijing, China. Wenxian Du is a Ph.D. candidate in the same school depreciate against the Chinese yuan. All these factors have direct impacts on China's trade in forest products.

China's foreign trade in forest products rose by 9.6 percent in 2008. However, the growth rate decreased by 12.9 percentage points (i.e. by 57 percent) from 2007. The import value of forest products grew 14 percent, and their export value rose 6 percent. The total trade value of major forest products represented 2.5 percent of the national total in 2008, dropping 0.18 percent from 2007 (China Customs, 2009).

Imports of logs and wood-based panels and exports of wooden furniture, plywood and wood flooring are the most significantly affected by the current economic crisis (SFA, 2009). All went down in both volume and value except for furniture, whose export value increased slightly (3.1 percent) because of price increases from 2007 to 2008. Wooden furniture is among China's most important forest product exports;

The economic crisis has caused a drop in exports



in terms of export value, it accounted for 30.7 percent of the total national value of major forest products in 2008. But for the first time in the past ten years, furniture export volume declined notably (14.4 percent) because of reduced imports by the United States, Japan and European countries. The growth rate of furniture export value fell by 18.6 percent (China Customs, 2009). China's imports of roundwood (the main forest product import over the past decade) decreased for the first time in 2008, by 20.3 percent compared with the same period in 2007.

Unbalanced market

Domestic roundwood demand is lower than supply, causing lower prices of raw materials and wood products from month to month. The domestic property market remains depressed, resulting in reduced demand for processed wood products. The reduced price of timber has not stimulated demand, and the supply backlog continues to grow. Between August and November 2008, average roundwood prices in the provinces of Jilin and Shandong decreased notably - poplar by 4.4 percent, birch by 15.3

percent, larch by 15.2 percent and eucalyptus by 12.3 percent. The price of eucalyptus in Zhangzhou, Fujian Province, fell 25 percent, from US\$95 to \$72 per cubic metre, between September and December 2008. The price of poplar veneer fell 16.7 percent, and the price of eucalyptus veneer declined 12.1 percent during the same period. The export price of wood-based panels fell 25 percent and the export price of wooden flooring fell 30 percent from January to October 2008 (SFA, 2008a).

Slowed production and closures

With the cooling of market demand, production has fallen in the wood processing and wood-based panel, wooden furniture and pulp and paper industries. These products accounted for about 48 percent of the total gross added value of the forestry sector in 2008; therefore their slowed pace of development has great impact on the value of the sector. For the first ten months of 2008, China's wood processing industries suffered a total approximate loss of US\$5 billion (Global Wood, 2009). The reduced export prices of wood-based panels and wooden flooring have caused many processing and exporting enterprises to close or temporarily stop production (see Box opposite). About 20 percent of flooring enterprises are facing difficulties in surviving. More than 50 percent of plywood businesses and nearly 65 percent of primary wood processing enterprises have stopped production, creating a state of semi-shutdown in China (SFA, 2008a). In addition, about 7 000 furniture enterprises were reported to have closed from January to October 2008 (ITTO, 2009).

Exchange rate fluctuations

Exchange rate fluctuations have had impacts on enterprise efficiency. The United States dollar and the euro are expected to depreciate further in 2009, while the Chinese yuan is expected to appreciate. Because of the depreciation

Slowdowns and shutdowns: some statistics from Guangxi Province

In 2008, prices of major forest products decreased by about 15 to 20 percent in Guangxi Province. Some 30 to 40 percent of eucalyptus-based plywood enterprises ceased or slowed production because of poor sales. Pine-based plywood enterprises stopped producing, with the exception of a few large businesses producing more than 10 000 m³ per year. In the peeled veneer industry, about 300 enterprises (45 percent of the total) closed down. The rosin industry is in a slump because of shrinking raw material resources and prices; in the second half of 2008, rosin production was reduced by 30 to 40 percent compared with the same period of the previous year (Forestry Department of Guangxi Province, 2008).

of the United States dollar, the export value of the China Jilin Forest Industry Group Co. Ltd, which was US\$75 million in 2008, will be reduced by US\$5 million in 2009. Exchange rate fluctuations resulted in losses of US\$2.3 million in income in 2008 for Xinyuan Wood and Forest Hill Wood of the Yanbian Forestry Corporation (Forestry Industry of Jilin Province, 2009).

Economic and social impacts

The effects of the crisis in the forest industry are having wider repercussions for the economy and society. In key State-owned forest regions, forestry accounts for a large proportion of the local economy. Disruption of development in the forest industry has been affecting other related industries, and local economic development has slowed down as a result.

The financial crisis has also had negative impacts on forest dwellers' livelihoods and on social stability. Industry closures and slowdowns have resulted in drastic unemployment and thus in local social instability. Reduced income and decreased purchasing power have restrained increases in consumption. The consequent decrease in internal demand has also inhibited social development in forest areas.

FACING THE CHALLENGES

The State Forestry Administration is taking a number of measures to increase

investment, stimulate domestic demand and provide a more favourable environment for forest enterprise.

The central government rapidly provided a supplementary investment of US\$530 million in the fourth quarter of 2008, focusing on projects to protect the natural forests and to establish forest plantations designated for environmental protection, including afforestation and reforestation of 2.6 million hectares. The newly increased investment is expected to boost local and communal input by US\$1.4 billion, to provide jobs for about 1.2 million rural workers every year and to employ former farm-

ers returning to forest areas from cities (SFA, 2008a).

To boost farmers' income, the State Forestry Administration has also introduced a key measure promoting investment from the central budget of the Forest Ecological Benefit Compensation Fund, established in 2001. In 2008, 46.6 million hectares of public-benefit forests were incorporated into the compensation scheme, with investment of US\$500 million from the fund's central budget. This investment included US\$290 million for 26.5 million hectares of collective forests, benefiting 20 million families and 70 million forest farmers.

The State Forestry Administration will assist with the alleviation of some of the problems faced by forest enterprises in China. The first measure is to continue the policy of reimbursement of the value-

As one means of providing jobs, the Chinese Government is boosting investment in forests, including establishment of protective forest plantations (mangrove nursery for coastal protection, Hainan Province)





Enterprises using wood processing residues and small-diameter wood will benefit from reimbursement of value-added tax (eucalyptus residues processed into chips for use in pulp and paper production)

added tax (VAT) for producers, which has rebated nearly US\$14.4 million annually to forest industry enterprises. Industries producing products using wood processing residues and smalldiameter wood also benefit from the same tax policy. The second measure is to aid forest industries by lending with reduced interest rates. In 2008, a total of US\$1.26 billion was loaned with a reduced interest of US\$60 million in total. In 2009, US\$4.5 billion will be loaned with the interest rate reduced by 2 percentage points; the US\$90 million of reduced interest will be paid from the State budget. Third, the import of seeds and provenances of plants and animals to be used as propagation material was exempted from the VAT on imports. In 2008, a total of about US\$3 million was exempted (SFA, 2008a).

The State Forestry Administration is also taking some measures to stabilize wood product exports. A main measure is to increase the rates of the export tax rebate for 117 wood product items. These items include bamboo products, wood-based panels and flooring products, for which the export tax rebate increased from 5 to 9 percent. The rebate

for furniture products increased from 11 to 13 percent. The rebate for some paper products was increased from between 0.5 and 11 percent to 13 percent. The government is also negotiating with

importing countries such as the United States, Japan and the European Union (EU) to improve market access for forest products.

Finally, local governments and enterprises are taking various measures to increase capacity to cope with the challenges of financial crisis, such as enhancing the raw material base, promoting new technology and expanding domestic and international markets, for example through increased product quality and value added (see Box below). To reduce market risks, the use of both domestic and foreign capital to develop both markets is encouraged.

Pizhou's government pushes development of panel industry

Pizhou City in Jiangsu Province is one of the four main centres of wood-based panel processing in China. It has more than 3 000 wood processing enterprises and more than 2 200 downstream production lines, which are worth US\$2.3 billion in output value. In response to the economic slowdown, the city government has taken a variety of measures to enhance the area's international competitiveness and its capacity to mitigate risks.

First, the city has strengthened its industrial raw material base through rapid expansion of the local forest area. In early 2009, Pizhou had a total of 2.8 million cubic metres of poplar stocks, which guarantee the sustainable development of the local forest industry.

Second, the leading enterprises are supported by new technology. The city government has implemented strategies to accelerate technology development and expand the scale of production, to develop large-scale forest industry as a driving force of the economy.

Third, the city has worked to keep its international market and to expand the domestic market. Pizhou is the source of up to 70 percent of national wood-based panel exports. To maintain international cooperation, the city government has set up representative sales offices and established selling agent relationships with companies in France, Germany, the Republic of Korea and the United States, as well as ten export ports. The government is expanding the domestic market by establishing new sales offices in 12 large and mid-sized cities and by setting up 40 Web sites for small and medium-scale enterprises to strengthen the exchange of market information on wood-based panels.

Source: ITTO, 2009.

Enterprises are increasing capacity to cope with financial crisis through measures to enhance the raw material base and promote new technology (vegetative propagation of young eucalyptus for high-productivity plantations)



DISCUSSION

The past rapid growth of Chinese production and trade was the result of multiple factors, including the low cost of labour, technological innovation and the development of complete production chains. However, since 2008 China has encountered some obstacles:

- non-tariff trade barriers, such as recently established EU regulations for wood and wood products requiring all the commercial companies in the production chain to submit documents certifying the legality of the raw material which entails additional costs to producers;
- enterprises' lack of confidence because of trade barriers and a rise in the price of raw material;
- shrinkage of domestic demand for wood and wood products, especially caused by the reduction of investments in fixed assets and real estate:
- increased costs of coastal land (where the majority of forest industries are located), environmental protection and labour benefits;
- greatly increased cost of labour.

The current economic crisis actually provides opportunities for the Chinese forest industry insofar as the domestic economic stimulus package is expected to generate consumption of wood and wood products and to provide benefits such as the continuous reduction of taxes and fees for forestry (e.g. the export tax rebate) and lower labour costs. This is thus a unique and strategic period for the Chinese forest industry to develop and become competitive in global markets. However, with trade in decline at present,

China will be pressed to maintain its increased share in the international market over a long period.

Therefore, the authors suggest a need to adjust the rapid growth of China's forest industry. The financial crisis can provide an opportunity:

- to improve technology, promote branding and increase the production scale of forest industry enterprises;
- to refine the physical distribution of the supply chain, for instance the closeness of processing enterprises to markets, since in the furniture industry, for example, transport is the greatest contributor to the cost of the end product;
- to transfer low value-added production chains to the country of origin of the raw material, in order to avoid the constraints of importing raw materials, and to encourage enhanced cooperation and coordination among enterprises (although it is crucial to adapt enterprises to advanced industrial production processes);
- to analyse the strengths and weaknesses of the forest processing industry – recognizing that while China

has been and will mostly likely continue to be a dominant country in the forestry sector, its exports cannot exceed its imports because China needs to meet domestic demand for roundwood and other primary products rather than seek significant export growth.

Furniture exports improved in March 2009 and showed positive growth compared with the same month in 2008 (China Customs, 2009). Although this may suggest that furniture has been one of the first industries to recover, the apparent recovery is the result of the factors mentioned above such as the export tax rebate policy, stabilization of labour prices, the decrease of international timber prices and the financial stimulus programme.

The crisis also provides a strategic opportunity for addressing problems of wealth distribution and poverty in forest regions, where poor living conditions include problems of transportation, education, health and culture. Salaries in State-owned forest regions are among the country's lowest, and more than half of China's poor population lives in forest areas. Over the long term, the large sums

invested by the government in forests and forestry to overcome the financial crisis will have a high return rate by increasing farmers' incomes, promoting farmer employment and maintaining social stability, while also improving the environment.

For example, in Jiangxi Province the total output of forestry in 2008 was US\$11.1 billion, with an average net income per farmer of US\$99.6, accounting for 14.9 percent of the province's average rural net income. Jiangxi Province had 6.8 million former farmers working in cities, but because of the economic crisis 1.2 million of them have returned to their rural homes since June 2008. Large-scale afforestation and reforestation programmes in the province have absorbed many of these returnees, including about 18 000 large and relatively wealthy forest households each with more than 3.3 ha of forests, and 130 000 returned farm workers (Hu, 2009). Increased investment in forestry by the central government has helped to reduce disparities in wealth distribution and local development.

CONCLUSION

The current economic crisis provides both challenges and opportunities for Chinese forestry. The domestic economic stimulus measures are expected to increase investment in forestry at both the central and local levels, and policies are being established to minimize the negative impacts of the economic crisis on forestry and to promote forestry development.

The economic downturn also provides unique opportunities for developing more sustainable approaches in forest management. The investments by central and local governments in forest plantations for environmental protection programmes and as a source of raw material for wood industry will help to rebuild natural assets. Furthermore, the establishment of forest plantations and improved management of forests will

directly contribute to climate change mitigation and adaptation efforts. Such investments provide a large number of jobs, which could absorb unemployed workers, specifically those returning from cities to rural areas, increasing their income and consumption. Forestry could contribute to economic renewal in unique ways, and could provide a turning point in converting China from a fast-growing economy into a green economy. •



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