

China is counting on imported wood as a major source of fiber supply in the modernization of its languishing paper industry to close the gap between vision and reality. Still, the huge market with tremendous growth potential is facing severe problems.

The "Beijing Review" reported in June 1999 that according to estimates by experts annual sales in the Chinese paper industry will be amounting in the coming 15 years to about CNY 400 billion (the equivalent of roughly US\$ 47 billion). This would correspond to about 40% of total world paper consumption.

This vast potential does not just represent an economic opportunity, however; it is also causing the Chinese paper industry enormous problems, while the Beijing government has to tackle the logistic challenge of finding a way to meet the growing demand for high-quality paper from the 1.25 billion people in China.

The development of a modern paper industry is therefore one of the specific economic goals that are being pursued in the "Middle Kingdom". The cabinet of the Chinese government headed by Prime Minister Zhu Rongji has given political priority to the systematic restructuring of the national paper sector in the current 10th Five-Year Plan (2000 - 2004).

Restructuring is absolutely essential as most of the paper machines in China were at the technological level of the 40s and 50s. The daily output of thousands of mills rarely exceeds 10 to 15 tons on average.

Poor technical equipment, a small choice of products of low quality, low economic efficiency, excessively high water and energy consumption, high environmental pollution and an enormous amount of overcapacity have been the main reasons for this development, which has resulted either in bankruptcies or in the closure on government instructions of thousands of small and medium-sized paper mills and producers throughout the country.

Xie Rongquan, Vice-President and Secretary General of the "China Packaging Technology Association" (CPTA) comments: "2000 paper mills have already been closed, but there are a further 6.900 paper mills in the country that produce less than 3800 tons of inferior-quality paper every year."

According to statistics compiled by the UNCTAD/GATT International Trade Center, all the paper and board products exported from China in 1995 amounted to US \$ 355 million. These exports were offset on the other hand by imports of US \$ 1.7 billion. In volume terms this negative balance of trade amounted to paper imports of 4.5 million tons in 1997 and 5.75 million tons in 1998. Imports of pulp alone amounted in 1996 to almost 1.47 million tons: 51% came from the USA, 15% from Indonesia, 14% from South America and 12% from Russia. This corresponds to an increase of 78% over 1995!

Due to the lack of suitable wood materials for the obtainment of fibers multiple downcycling and poor-quality fibers, like wheat straw, Longxu grasses, reeds, bamboo and hemp, are mainly used in China. Production of paper on a non-wood basis amounted to about 14 million tons in 1996 alone, which corresponds to 75% of global production in this sector.

Paper based on wood pulp has held just 14% of the Chinese market up to now, a low level by comparison with the average of about 93% found in industrialized countries.

To improve the general quality of the paper produced and to meet the demand for top-quality paper grades, China is depending on imports. Today, China imports about 260 ton/day of pulp from Russia. At an average price of about CNY 5000 (US\$ 580) per ton, the pulp trade is a lucrative business for both sides. This is the reason why the Chinese government has reduced the import duties for pulp from 2% to 1% this year in recognition of the key role this product plays. In contrast to these huge imports, China - which is after all the third-largest consumer of pulp in the world - was only able to export 7.000 tons in 1996.

Huang Runbin, Secretary-General of the "China Technical Association of the Paper Industry" estimates that fewer than 200 paper mills with the latest, international-standard machines, that are supposed to produce solely high-quality paper grades on the basis of wood fibers in the country represent only 10% of all the paper mills in the country.

The "State Light Industry Bureau" predicts high growth potential for China's paper industry in every respect: the Chinese are consuming more paper than ever before in their history - and there are no signs as yet of an end to this boom. While a per capita consumption of only about 6 to 7 kg per year was recorded up to the 80s, this figure soared to 24 kg in the course of the 15 years up to 1996 (see illustration 1). Although a similar increase has been observed in other Asian countries, too, such a large rise in paper consumption is having dramatic overall consequences in view of the large size of the Chinese population.

Average paper consumption in China is about 35 million tons per year. An increase to just under 60 million tons is expected by the year 2010 (see illustration 2). Consumption of household paper and paper products (see illustration 3). alone is increasing 8% a year and will be reaching about 2.9 million tons next year, according to the "China Paper-Making Association". About 700 companies have specialized in the manufacturing of household paper products so far. Statistics reveal that almost 8% of total paper consumption in China is used for household applications.

The paper industry has been assigned a key role as one of the basic industries in the country's economy. Progress made in the development and industrialization of a country as well as the level of education of the population are measured - among other things - by its paper consumption. It goes without saying that this is more true of papers for the print media industry and board containers for packaging printing than it is of the consumption of toilet paper. According to reports by the magazine "Xinwen Chubao Bao" (Press and Publishing News), it can be expected that demand for paper and board packaging materials in China will be increasing by about 4 to 6% per year between 1995 and 2005.

Demand for high-quality office papers for printers, copying machines and fax machines is growing particularly fast. The "APRIL" Group ("Asia Pacific Resources International Holdings Ltd.") from Singapore has formed a strategic alliance with the Finnish UPM Kymmene Group in order to satisfy this high demand. An extremely modern paper mill is being built in the town of Changshu in the province of Jiangsu about 100 km north-west of Shanghai, involving investment of about US \$ 500 000. 350 tons / day of uncoated, chemical-pulp writing paper in weights of between 60 and 100 g are to be produced here in the near future for China's emerging communications industry.

The ambitious goals set by Beijing to upgrade the paper industry to the same level as in the Western world as quickly as possible are closely connected to the development of further key industries, such as the food processing industry. The economic success of many up-and-coming Chinese companies in the consumer goods field depends in turn on the development of innovative products that meet consumers' requirements.

The packaging of dairy products (yoghurt drinks, milk-based drinks or fresh milk) at "Shanghai Dairy Corp.", for example, has been converted to board-based solutions to an increasing extent since the beginning of the 90s. The classic glass packs have disappeared from shops, kiosks and market stalls almost completely following this move, which has almost revolutionary significance for China.

Further reasons for choosing the board solution instead of the plastic alternative were the better printing and finishing potential, its absolutely neutral effect on taste and - somewhere right at the end of the list - environmental benefits. Environmental awareness is growing slowly in China, but is still completely in its infancy by Western standards.

Since China has been able to maintain sustained, stable growth of more than 8% per year - in contrast to its neighbors that have suffered from recession - the enormous empire in the Far East remains a center of interest for foreign investors in spite of the crisis in Asia. Joint ventures like the one in Ningbo in the province of Zhejiang are therefore guaranteeing long-term material supplies to companies like the "Shanghai Dairy Corp.". The "China Paper Industry Group", the "Ningbo Light Industry Group" and a leading paper manufacturer from Singapore have invested a total of CNY 16 billion (US\$ 1.9 billion) in the biggest board production project in Asia. When the production plant has been completed in the year 2001, the mill will produce almost 1.5 million tons of high-quality solid and corrugated board grades per year.

As in many other areas of Chinese development it is, however, true of the paper industry as well that quality involves more than simply buying high-end machines abroad and then feeding them high-quality material. It is people who make the final product what it really is. Genuine quality awareness cannot be imposed on a nation - it is a slow process that must develop and grow from within the country itself. It would be an illusion to expect that China will be able to reach the quality level of the Western world within just a few years without any significant problems.

It will therefore remain an exciting business to observe the extremely fast process of development in the emerging paper industry in China at close quarters over the next few years. It is difficult to estimate whether the Chinese are barking up the right tree with their occasionally one-sided conviction that and how the economic lead held by the Western industrialized countries can be caught up wearing 7-league boots. The development of the Chinese paper industry into a modern technological sector that meets demanding marketing requirements will definitely be long and stony - and an end to it is not yet in sight.

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