

Bouncing back

This year, Gabon is set to produce record yields of natural rubber – placing the country leaps ahead of several of its African competitors. No wonder the growers are jumping for joy...

AS DAWN BREAKS on the province of Woleu-Ntem in the north of Gabon, the rubber plantations begin to fill with activity as the tappers arrive for work. From first light until mid-morning – when the cool hours of the day speed the flow of the sap – tapping takes place. Using long hooked knives, the tappers move silently from tree to tree, skilfully piercing the bark of each one to allow the bright white latex-filled milk to flow into cups placed below the wound.

This year, Gabon's cup is set to runneth over. In 2007, this Central African country will produce its biggest yield of this precious commodity. Close to 15,000 tonnes of high-quality natural rubber is expected to be processed, packaged into bales and then exported across the globe to be transformed into Michelin, Bridgestone and Firestone tyres and other products.

World rubber consumption is at an all-time high – driven, says the Food and Agriculture Organisation, “by solid growth in motor vehicle production and the strong global economy”. China and India are among the biggest consumers with their hunger for new cars and demand for industrial rubber products such as hoses, belts and gaskets.

More than 60 per cent of natural rubber is used for tyres, the major driving force behind the commodity's continuing demand. So far,

technology has found no way to replace the role of natural rubber with its synthetic equivalent in pneumatic tyres. Indeed, tyres requiring high-resistance qualities, such as those used on aeroplane landing wheels, tend to have the highest natural rubber content.

Annual global natural rubber production was 6.8 million tonnes in 2000 and is projected to reach 7.9 million tonnes in 2010. The top producers are Asian, headed by Thailand, Indonesia and Malaysia, with China and India also boasting healthy outputs. Latin America is also a producer – Brazil and Guatemala being the two principal suppliers. In Africa, several countries also farm natural rubber. Those with the highest yields are the Ivory Coast, Liberia, Cameroon and Nigeria. Outside Gabon, the other producers are Ghana, Guinea, the Democratic Republic of Congo and Malawi. Thanks to Gabon's growing yields, it is set for the first time to overtake these latter countries in 2007.

War of the worlds

Rubber production in Gabon dates back to the early 1940s when the French colonial powers began planting in earnest in response to the Second World War. In 1941, France urgently needed to find an alternative source of natural rubber as Japan had invaded its rubber-producing colony of Vietnam, and huge quantities were required for the war effort, especially for the tyres of military vehicles.

Rubber production in Gabon tailed off post-independence until 1981 when the government established the agro-company Hévégab in a bid to diversify national agricultural production. By 1998, Hévégab was producing 10,000 tonnes of natural rubber, but a year later disaster struck when world prices for rubber collapsed by almost a quarter. This, combined with mismanagement, saw production slump to a mere 1,000 tonnes by 2003 and Hévégab lose its lucrative supply contract with Michelin.

Privatisation, however, has proved a life-saver, re-injecting energy into this depressed industry, and brought much-needed jobs and investment into the north of Gabon. Today, Gabonese rubber has sprung back to life, thanks to the hard work and investment of Siat Gabon, the Belgian-based agro-industrial group that has taken over the flailing state-owned rubber company.

Siat, which stands for Société d'Investissement pour l'Agriculture Tropicale, also has interests in Ghana and Nigeria where it cultivates 23,000 hectares of palm oil plantations. It responded to the Gabonese government's privatisation exercise in 2003 by taking on three agro-industries, namely Agrogabon, an 8,000-hectare palm oil business, Sogadel, a 100,000-hectare cattle farm, and Hévégab.

Hévégab, admits Siat Gabon's deputy managing director Marie Vandebeek, was an attractive acquisition for a strategic reason. →

“COLLECTION AND WEIGHING POINTS HAVE BEEN ESTABLISHED AROUND THE PROVINCE AND PRICES PER KILO PAID TO THE SMALL-HOLDERS SET IN LINE WITH GLOBAL MARKETS”

“We’re dependent on world market prices for palm oil elsewhere in our business and we wanted to diversify and not put all our eggs in one basket,” she says. “Rubber allowed us to do this and to bring in foreign currency too.”

By the time Siat Gabon took up the reins, Hévégab’s production had virtually ceased and the plantations had been abandoned. “We started by clearing plantations and re-equipping the trees for tapping,” says Ms Vandebecq. “We also had to restore or rebuild the workers’ housing, schools and clinics, plus update the supply of water and re-install electricity.”

Siat Gabon’s main rubber plantations are located on two sites in northern Gabon. The biggest plantation is situated across 5,500 hectares outside the town of Mitzi. Here, four residential worker communities of around 700 permanent and 300 contracted staff are based. Further north is the town of Bitam where another 2,500 hectares are cultivated.

The entire rubber crop is processed at the factory at Mitzi which has a production capacity of 40 tonnes a day. The ‘cup rubber’, as it is known, is washed to remove impurities and then granulated before being flattened, baked and cut into 35kg bales. These are checked for quality, density and viscosity in the site laboratory, before being packed into

crates and transported by lorry to Gabon’s main port at Owendo for onward shipment to Rotterdam, Bilbao and The Hague.

This factory is now being expanded and fitted with state-of-the-art Malaysian computer-controlled machinery which will raise production to more than 60 tonnes a day by this summer. “We’re so happy Siat Gabon is investing in this modern factory. It means many more years of work for us,” says Franck Ondo, the factory manager.

Room to grow

Out of a total 8,000 hectares, some 2,500 hectares are smallholdings owned and cultivated by village farmers. These vary in size from plots of just four hectares to bigger ones of 100 hectares. Breathing new life into these smallholdings has been one of Siat Gabon’s biggest challenges. With the collapse of world rubber prices and that of Hévégab, their owners had deserted the plantations and left the jungle to encroach.

“Many had given up hope and were on the point of cutting down the trees,” says Christian Edou Mints, head of village production. He and his team tackled this by carrying out awareness campaigns in all of the villages.

“We tried to explain to the smallholders that what they had was worth cultivating and

we’d provide all the materials for tapping – the knives, cups and wires – as well as the technical know-how they needed, and then, after that, we’d buy all their yield too,” he says. “A high-paying cash crop like rubber has to be good for them: they’re not going to make the same kind of money growing bananas or manioc.”

One of the problems that Mr Edou Mints encountered was that many of the smallholders were by now elderly. “Some said they no longer had the physical energy to toil on their plantations,” he explains, “so we’ve worked with them to try and overcome this.”

A good example is that of three elderly owners who own adjoining four-hectare smallholdings just outside Mitzi. With Siat Gabon supplying encouragement and equipment, they have joined forces and now employ two young labourers to work the 12-hectare site. “They are making money for the first time in years,” says Mr Edou Mints.

Close by, a young man has inherited his smallholding from his late father. “When Hévégab went down, Dad and I abandoned it,” he says. “I went to work as a driver for a forestry company and our rubber trees weren’t touched for years. Now I’m tapping the trees again and making decent money. It’s good to be working for myself; I feel more in control.” →



HEVEA BRASILIENSIS

THE RUBBER tree, *Hevea brasiliensis*, is native to the Amazon region and is a quick-growing perennial that reaches 25 to 30 metres in height. It has a straight trunk and soft bark. With its requirement for a hot, damp climate, it grows only in the ‘rubber belt’, an equatorial zone that stretches around the world.

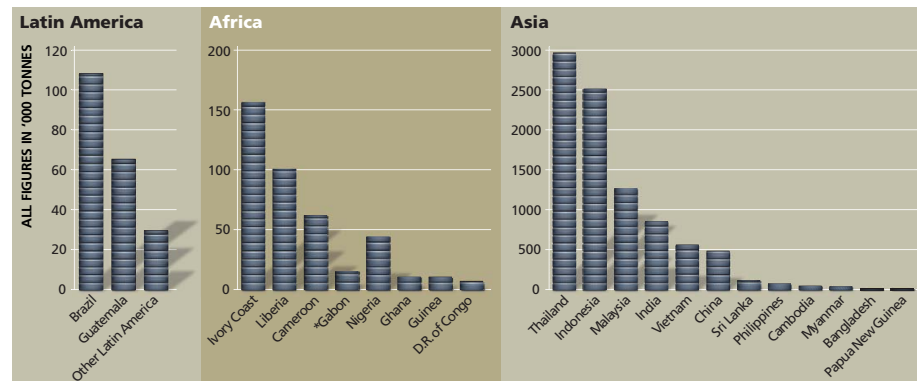
Although the rubber tree may live for a hundred years or more, its economic life period in plantations is only around 32 years.

Tapping a rubber tree is delicate work. It cannot begin until the tree is seven years old and has a trunk diameter of 50cm. Tapping always begins in the cool of dawn and stops at about 11.30am when the sun’s heat slows the flow of the sap. Tappers have to be trained for several weeks to use the curved cutting tool which allows them to shave the bark to a depth of exactly 1.8mm – too shallow and the latex-carrying sap will not emerge; too much and a scar will form that will mean that the sap cannot be accessed in future.

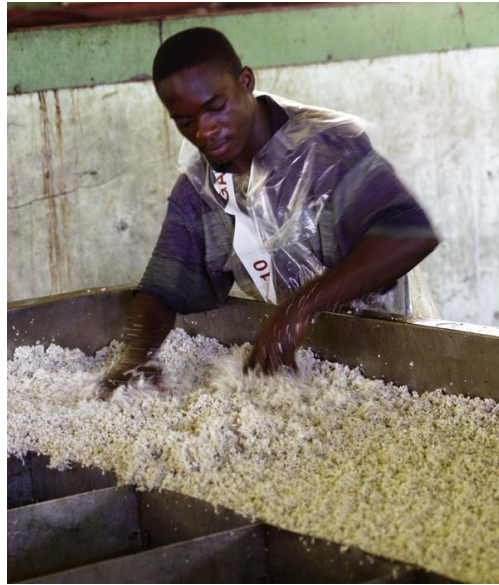
When the tree is scored correctly, the bright sap begins to pour immediately into a cup placed beneath a metal lip. The dripping stops after three hours as the sun reaches its peak. The liquid rubber is then left for five days to coagulate into a heavy wet lump that resembles mozzarella cheese before it is collected. Tapping takes place all year round, aside from one month when the deciduous rubber tree is left to rest as it passes through its natural process of leaf loss and regeneration.



WORLD PRODUCTION OF NATURAL RUBBER IN 2006



Source: International Rubber Study Group. *Figure supplied by Siat Gabon.



This spread, clockwise: The raw cup rubber is washed of impurities; then granulated to a popcorn-like consistency in preparation for being flattened into sheets; next it is moulded and baked into bales of a deep golden colour that are trimmed to weigh 35kg; the bales are wrapped and loaded onto pallets ready for export

Collection and weighing points have been established around the province and prices per kilo paid to the smallholders are set in line with global rubber markets, so these have increased by 25 per cent over the last year. At the Mitzi site alone, production by smallholders contributes to nearly 10 per cent of total yield, and this figure is expected to rise.

"We're now receiving the rubber from 1,500 hectares of plantations and we expect a 12 per cent increase on this next year to 1,750 hectares," says Bois d'Enghien, Mitzi estate manager.

Altogether, around 600 smallholders are working in partnership with the company. It is keen to see more smallholdings restored and

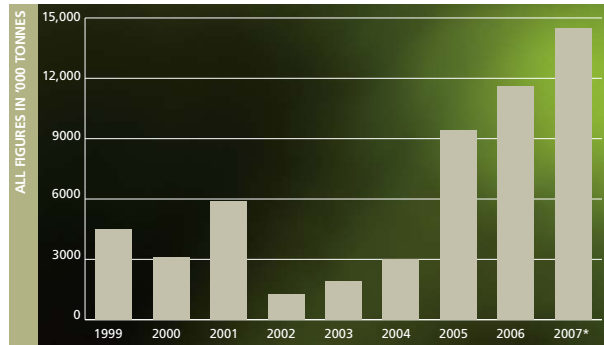
for more to be planted. "Now the younger generation is seeing the smallholdings' potential and getting interested in cultivating the rubber themselves," says factory manager Franck Ondo. "It would really help the villages round here if they all revived their smallholdings. We have the capacity to process their production in our new factory, so they are guaranteed a good income."

At another site near to Libreville at Kango, Siat Gabon is working with smallholders to prepare a further 2,000 hectares of plantations. This year, more than 100 smallholders here have attended workshops on tapping techniques and Siat Gabon is securing funding agreements with the African Development Bank to help establish the project.

Stimulating more local involvement like this can only be a good thing – for the economy and for the villagers, says Mr Edou Mintsa: "Every day I see the effects of the rubber money filtering through. In the Mitzi area, smallholders are buying new electricity generators, providing dowries for their daughters and putting new roofs on their homes," he says. "It's great to know we're having such a positive effect on their quality of life." ■

Sarah Monaghan

PRODUCTION OF NATURAL RUBBER IN GABON



Source: Siat Gabon; * estimated.

LOOKING BACK

IN PREHISTORIC times, the Aztecs and Mayans cupped natural rubber latex from *Hevea brasiliensis*, formed it into balls and played an early form of football. In 1496, Columbus brought back an Aztec ball and it so intrigued the Spanish king, Charles V, that he organised whole teams of players for his amusement.

Englishman Joseph Priestley was credited with the discovery of rubber's use as an eraser in 1770, hence the name rubber, and with the discovery that it was soluble in ether, rubber soon found applications in waterproof coatings, notably for shoes.

In 1823, the first rubberised Macintosh coat was made and named after its British inventor, Charles Macintosh. In 1843, Charles Goodyear, an American, discovered that if you removed sulphur from rubber and then applied heat, it would retain its elasticity. This process, called vulcanisation, made rubber waterproof and durable, and opened the door to the enormous market for rubber goods of today.

When importation of natural rubber from the East Indies was cut off during the Second World War, the United States was forced to develop the large-scale manufacture of synthetic rubber from petroleum products. Today, this accounts for about 60 per cent of the world's rubber production.

