



Oiling the wheels of the economy

The versatile oil palm is part of life in Gabon where its fruits are transformed into oil, foodstuffs and soap. Given the world's clamouring for biofuels, it could in the future become an even more valuable commodity in the country's efforts to diversify away from hydrocarbons

TAKE A DRIVE into the provinces of Gabon and dotted along the roadsides, framed by the country's ubiquitous dense tropical forest, you'll find stalls piled high with huge bunches of freshly-picked palm fruits.

These glistening scarlet fruits are the basis of the delicious national dish of Gabon: *Le poulet Nyembwe* (chicken in nyembwe sauce). Nyembwe means palm oil in the local Myéné language and the spicy sauce, with its distinctive vivid-red colour, is made from the crushed flesh of the palm fruits and the beta-carotene-rich palm oil, and then zinged up with cayenne and chilli pepper.

Often on offer too is palm wine, an alcoholic drink made from the fermented sap of the tree. Much appreciated and known in Gabon as *toutou*, it plays an important role in local ceremonies such as birth celebrations and weddings.

Palm oil is the most traded vegetable oil in the world, with 40 per cent of the market. The reason is the crop's copious output – oil palm is the most productive oil seed on the planet. A single hectare of oil palm can yield nearly 6,000 litres of crude oil. In comparison, soybeans and corn – crops also heralded as top biofuel sources – generate only 446 and 172 litres per hectare, respectively.

Little wonder then that the prolific oil palm, which grows so abundantly on these fertile soils, is part and parcel of Gabonese life. Nor that it is playing such a growing and lucrative role in its diversifying economy to boost the country's GDP with the production of refined vegetable oil, palm kernel oil and soap.

The company behind this dynamic industry is Siat (Société d'Investissement pour l'Agriculture Tropicale), an agro-industrial group with headquarters in Brussels. In 2003, it responded with enthusiasm to the Gabonese government's →



From left: oil palm plantations surround employees' accommodation at Makouké; a fresh block of Pursavon, a Savon de Marseille, arrives from the production line ready for packaging. Next year, Siat Gabon will be launching an elegantly packaged and upmarket toilet soap as part of its Pursavon range; the recently upgraded palm oil refinery

privatisation exercise by taking over Agrogabon, then a poorly-performing palm oil concern. It also acquired Sogadel, a 100,000-hectare cattle farm, and Hévégab, a rubber-production concern in the north of the country.

Siat was the obvious choice as the winning bidder – its \$5.6 (€4) million capital is founded on oil palm. In Ghana, it exploits 20,000 hectares of plantations as well as a further 9,000 hectares in Nigeria.

Managing director Pierre Vandebecq is an old-style and enterprising businessman who began his career in Africa in the Democratic Republic of Congo, managing rubber, cocoa and coffee plantations for a Belgian company, reaping commercial and agronomic know-how along the way. He purchased his initial oil palm company in Nigeria in 1991 – the first of what was to become a crop of successful acquisitions across West Africa.

His Ghanaian company, the Ghana Oil Palm Development Corporation, has grown to become one of the most successful in the region by working with some 700 outgrower farmers and specialising in organic products.

"Oil palm is the basis of our company," says Marie Vandebecq, his daughter and deputy managing director of this family-owned business. She spent her childhood in Nigeria "surrounded by oil palm trees. Now they are just as much part of my life here in Gabon," she says. Her sister Helena, an agronomist, is the group's operations director in Brussels.

Today, Mr Vandebecq divides his time between Brussels and Gabon although earlier this year he further expanded Siat's portfolio with the purchase of a 7,000-hectare rubber plantation in the Ivory Coast. "This was a strategic decision," explains Ms Vandebecq. "It makes sense for us to diversify in Africa to minimise our country risk."

Next year, the plan is to open Siat Gabon to share ownership with an initial private offering on the recently launched Central African Stock Exchange in Libreville. Right now, the Siat group has a 92 per cent ownership, with the German development bank Deutsche Investitions und Entwicklungsgesellschaft mbH (DEG) and the Belgian bank Société Belge d'Investissement International (SBI) having taken 5 and 3 per cent of shares in Siat Gabon, respectively. "We want to float up to 40 per cent in total," says Ms Vandebecq.

The oil palm activity in Gabon is located in the Moyen-Ogooué province around Lambaréné and Makouké. Here it consists of 6,500 hectares of mature oil palm plantations, a palm oil and palm kernel mill with a processing capacity of 30 tonnes of fresh fruit bunches an hour, a soap factory with a production capacity of 5,000 tonnes a year and a refinery and fractionation plant able to process 50 tonnes of oil a day.

Treetop crops

Around 1,000 permanent and temporary workers are employed. All are housed and supplied with free electricity and water, as well as a contributory health insurance scheme through which they receive medical care at the company's on-site health centres.

Harvesting the heavy bunches of palm fruits, each one weighing on average 12 kilograms, still has to be done by hand. Long poles with knives attached are used to reach to the tops of the trees that grow up to 10 metres high.

"Nowhere in the world has mechanisation of the oil palm crop become possible. Palm trees are just too tall," explains Christian Amoh Otu, the company's head of agriculture. The peak season for harvesting is September

to January. "It follows the rainy season in Gabon," says Mr Amoh Otu. "Rainfall is the determining factor." The oil palm does well in Gabon with its warm, wet climate.

"It's not quite as high-performing as in Asia, the world leader in oil palm production," he adds. "There they don't have marked seasons and can get up to 20 tonnes of oil per hectare, but it still performs strongly here in Gabon with up to 14 tonnes per hectare."

The oil palm used is a Benin variety developed by the respected French agricultural research unit CIRAD which supplies Siat Gabon with seed nuts for nursery seedlings.

The core product is oleine, marketed as Cuisine 'Or, a popular refined palm cooking oil, all 5,000 tonnes of which are swallowed up by the domestic market. Around 1,000 tonnes of a crude unrefined palm oil, marketed as Palma, are also produced. "This bright-red oil is popular with the West African immigrant community here. It is an essential part of their cuisine," says Ms Vandebecq.

The oil palm is the only fruit that can give two types of oil. The palm oil comes from extraction of the flesh of the fruit while a lauric palm kernel oil is derived from the hard nut at the fruit's core. This palm kernel oil, which has a similar chemical structure to coconut oil, is used for making soap.

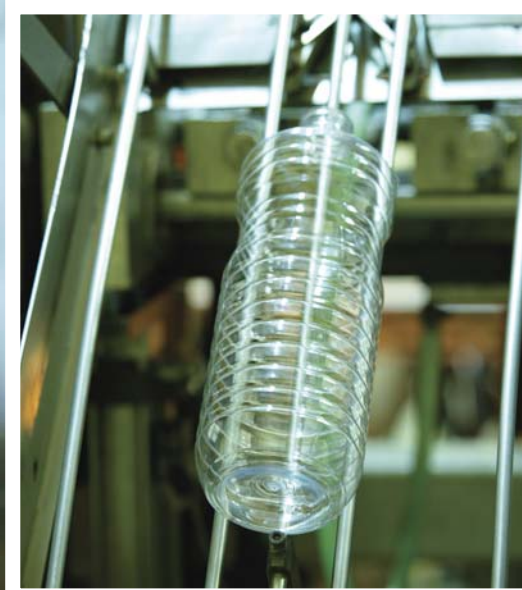
Siat Gabon manufactures a Savon de Marseille – a pure soap made from palm kernel oil, stearine, fatty acids, salt and caustic soda. Its Pursavon range comprises three product varieties: unfragranced, fragranced with citronella, and in sturdy blue bars used for household purposes such as washing clothes.

A total of 2,000 tonnes are produced and sold both on the domestic market and exported to the Republic of Congo and Angola. Next year, a new range of elegantly →



SARAH MONAGHAN, SIAT GABON

Bottles of refined palm cooking oil emerge from the processing plant to be boxed and then distributed to shops and supermarkets across Gabon. Inset: upgrades to the processing plant will allow Siat Gabon to manufacture all its own bottles



wrapped, luxury toilet soap is set to be launched onto the African market, thanks to a new packaging plant under construction. This innovation will follow a raft of investments that Siat Gabon is making following a \$14 (€10) million loan from the African Development Bank (AFDB).

Green shoots

The oil palm expansion project involves a big growth in production by establishing a new 4,250-hectare plantation and replanting 6,000 hectares of the 20-year-old less productive trees inherited from Agrogabon. "When these trees get old, they become too tall to harvest and their production slopes right off," says Ms Vandebecck.

Also underway is modernisation of the palm oil mill and kernel-crushing plant in Makouké; expansion of the capacity of the palm oil refinery in Lambaréné from 50 to 75 tonnes a day;

modernisation of the soap manufacturing plant and an increase in the capacity of the palm oil storage tanks in Lambaréné and Port Gentil by 3,000 tonnes.

A new bottling plant will allow the company to manufacture its own plastic bottles for its oils, sold in containers from 500ml to 20 litres. "Making our own bottles and containers makes much more sense – up to now, we've been importing them from Cameroon," says Ms Vandebecck. "They're bulky and moving empty bottles from one country to another is like transporting air in a commercial sense."

One of the latest improvements has had a knock-on beneficial effect for the environment. "We have just finished installation of a new boiler which recycles many of the by-products of the palm oil refining process," says Ms Vandebecck.

"The husks and fibres are burned to create high-pressure steam through which the freshly

harvested fruits are passed in a sterilisation and de-acidification process." This steam, she adds, is then recycled to turn turbines and produce almost all the electricity needed to run the palm oil mill.

Together, these investments are a massive undertaking and financial commitment, but the rewards should be high. "At a national level, this project is undoubtedly going to help Gabon expand its oil palm industry and produce more value-added products," says an AFDB spokesman. "It will also generate tax revenue for the state and help to generate foreign exchange earnings."

Right now, given Gabon's national push to diversify and broaden its economy away from hydrocarbons, a successful agricultural project like this one is just the kind of growth spurt it needs. ■

Sarah Monaghan

PALM OIL GLOBAL PRODUCTION

FIRST INTRODUCED to Malaysia in 1870 as an ornamental plant, the *Elaeis guineensis* tree is now a leading agricultural crop. Palm fruit oil is consumed worldwide in more than 100 countries and its by-products are used in many food applications.

Numerous Western edible products contain palm oil including baked goods, instant noodles, baby formula, cake mixes, breakfast bars, potato crisps, crackers and other snacks. Non-food use of palm oil and palm kernel oil includes soaps, candles, rubber processing, cosmetic products and fuel for cars with modified engines. The chances are that your toothpaste contains palm oil.

Since the oil yield of oil palm is so much higher than that of any other oilseed crop, demand for the oil is rising and is expected to climb further, particularly for use in biodiesel, a form of renewable energy that greatly reduces net emissions of carbon dioxide into the atmosphere.

Europe imports 2.7 million tonnes of palm oil a year for use as a vegetable oil in foods and soaps, and European consumption of plant-based fuels is expected to soar from around 3 million tonnes at present to more than 30 million in 2010, creating a boom in imports of palm oil which is cheaper than other biofuels.

The world's largest supplier and exporter of palm oil is Malaysia, producing about 47 per cent of global supply, followed by Indonesia with 36 per cent. Both countries are exporting large amounts to China. Today, almost half of Malaysia's cultivated land consists of oil palm. Worldwide production during the 2005-2006 growing season was close to 40 million tonnes, of which 4.3 million was in the form of palm kernel oil.

At \$885 (€623) a metric tonne, palm oil is competitive with conventional oil. In the future, palm oil prices are expected to fall further as more oil palm comes under cultivation and is channelled towards the global thirst for affordable biofuel. With cheap land, abundant labour and ideal climate, investors and developers are likely to be increasingly eyeing tropical Africa as a future major source of palm oil. Other African countries with large areas covered by oil palms include Guinea, the Democratic Republic of Congo, the Ivory Coast, Ghana and Cameroon.



SIAT GABON

MARTIN VAN DER BELEN