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INVEST SALONE

INSIGHTS

# Oil palm in Sierra Leone

With many negative environmental consequences relating to the expansion of oil palm production in South East Asia, attention has turned to Africa as a potential location for future sustainable expansion. Africa is also a major consumer. This Insights leaflet identifies potential development and investment opportunities in both the traditional and commercial sectors.

## Industry snapshot

The oil palm sector in Sierra Leone is an important contributor to the economy and a major source of livelihoods. The sector presents significant opportunities for foreign commercial investors, as well as for linking smaller producers to commercial supply chains and expanding exports from the traditional sector. The "dura" (red) oil palm variety is endemic to Sierra Leone. Together with the introduced "tenera" (yellow) variety, it can be found across the country in wild groves, small plots and in commercial plantations. The sector is dualistic between the small-scale traditional and the large-scale commercialised sub-sectors. There are many differences between the two but the most significant lies in the much higher level of productivity in the commercialised sub-sector.

### Traditional

The traditional sector is extremely important within the rural economy. One estimate suggests that it accounts for over 10% of GDP.[1] There are innumerable small stands of palm; mostly these are semi-cultivated with minimum input resulting in very low yields of 300–2,000 kgs of fresh fruit bunches (FFB) per year.[2] Even when tenera is planted it is generally of poor stock, often grown from seed. Nevertheless, the sheer volume of palms across the country means that palm oil FFB are generally available for small-scale processing at low cost. Such processing is widespread, producing unrefined crude palm oil (CPO) that is valued for cooking across West Africa. The traditional processing method is crude with a poor extraction ratio (oil:fruit – circa 11–16%).

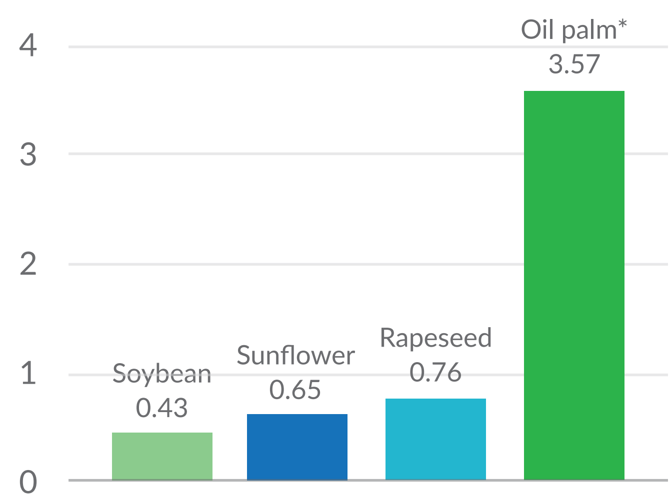
There is a complex marketing system for this product with intermediaries and variations in product (e.g. red versus yellow). This includes trade across the border to Guinea. Further cottage industry processing of CPO into soap is common, with this product also marketed throughout the country and across the borders. The growing of palm, and particularly the processing (especially for women), provides important sources of livelihood in rural areas.

## Commercial

Palm oil has become the dominant vegetable oil in world markets with production increasing from around 10 million tonnes in 1990, to over 70 million tonnes in 2020 (sevenfold in 30 years). No other crop delivers anything like the productivity in oil that palm oil can (Figure 1). With many negative environmental consequences from this expansion in South East Asia, attention has turned to Africa as a potential location for future sustainable expansion. Africa is also a major consumer.

In Sierra Leone, there have been a number of attempts to develop commercial plantations of oil palm, generally with little success. However, recently the sector picture has become much clearer with two main players emerging in cultivation and production of CPO, and another two establishing refineries for downstream processing (Table 1).

Figure 1. Average crop productivity




*for both palm oil (3.22 tonnes/ha) and palm kernel oil (0.35 tonnes/ha)

Table 1. Commercial plantations and CPO production capacity in Sierra Leone

| BUSINESS | FARMS | PLANTATION AREA (HA) | MILL CAPACITY | NO. OF OUTGROWERS* |
|---|---|---|---|---|
| Planting Naturals; Natural Habitats; Goldtree Group | Six – (SLA – Port Loko, Matru; WAA2 – Zimmi, Goldtree, NedOil; – Yele – SOP Sierra Organic) | 9,531* | 1 x 20 FFB tonnes/hour<br>1 x 3 tonnes fruit/hour | 12,400 |
| SAC (SOCFIN) | Pujehun | 12,349 | 2 x 30 FFB tonnes/hour | 0 |
| | | TOTAL **21,880** | | |

* This area includes a range of conditions from fully mature well managed plantations to recently acquired areas in need of considerable rehabilitation.

Planting Naturals is focused on production and export of organic CPO and has been consolidating palm areas from earlier initiatives to develop a supply chain for their mill at Goldtree. They have also acquired two outgrower initiatives at NedOil which has its own small mill and at Goldtree. SAC is a subsidiary of SOCFIN, one of the world's largest palm oil companies. When their plantation reaches peak production, it could produce as much as 65,000 tonnes of CPO annually from the farm (FOB value circa US$45 million). This is probably more than the rest of the country produced in 2020.

At the end of 2019, two new CPO refineries were commissioned. Jolaks (300 MT CPO per day) and The Kissi refinery (100 MT CPO per day). At full production these facilities could process over 100,000 tonnes of CPO per year. Sourcing this is a major challenge with local sourcing from SOCFIN and Goldtree supplemented with imports from Liberia and Indonesia. Refined vegetable oil is being produced, as well as laundry soap, and both companies plan to expand into a broader range of products using stearin (e.g. condensed milk, cosmetics and soaps), as well as palm kernel oil.

The dualism within the sector delivers a massive productivity divide. In terms of land productivity, at the low end is the traditional sector, with a yield of 500 kgs of FFB per ha and a 16% recovery rate; one hectare delivers just 80 kgs of CPO. At the other end of the scale is the commercial sector with a yield of 23 tonnes of FFB per ha and a 22% recovery rate; one hectare delivers 5,060 kgs of CPO (63 times higher).

The situation with labour productivity is harder to estimate. Nevertheless, with almost no capitalisation in the traditional sector, labour productivity will be very low in comparison to the commercial sector with large-scale mills and the use of mechanised equipment for field work.

# The opportunity

## Commercial FDI investment

The SOCFIN investment in SAC has demonstrated that commercial palm oil is a viable proposition in Sierra Leone. The proviso for replication is that this model requires a deep experience in palm oil and a very large patient investment, as break-even for a new plantation of this type is at least seven years. Nevertheless, the opportunity is there to attract another large-scale FDI investor.

## Connecting small producers to commercial CPO supply chains

With a large need for CPO from the refineries and the possibility of selling into the organic supply chain, palm oil cultivation is a viable option for small-scale producers depending on their location and access to milling. If the oil palm asset can be developed through the planting of good quality varieties and the provision of support services, then this could be an excellent crop for farmers.

## Traditional CPO for cooking, soaps and cosmetics

Within the traditional sector, in relation to producing local CPO for West African cuisine (without selling into mainstream commercial CPO supply chains), there are opportunities to develop more formal linkages to export markets, selling well-branded products to the diaspora and beyond through specialised outlets and e-commerce. This requires meeting international food quality standards through improved local processing and packaging. There is a market for palm oil and associated artisan products which is currently supplied to varying degrees by West African producers. A few entrepreneurs have exported small volumes to the UK but to scale this business, support is needed all along the supply chain to meet the key requirements for the markets.

# What will it take?

## Identifying land

The SOCFIN investment in SAC identified optimal land for oil palm in southern Sierra Leone. The land leasing process was problematic and has taken years to resolve. To attract another major oil palm company, land will be key as well as the investment process. The government has been working to develop the Agricultural Investment Approval Process (AIAP). However, the process is not up and running and a number of regulatory and legal reforms are needed. As well as having a clear process in place, the government will need to be proactive, identifying potential land with interested communities and clearly setting out the incentives that an investor could receive. Some of the other palm oil companies, such as Sime Derby, have undertaken initial scoping in Sierra Leone but have not decided to invest yet.

## Giving farmers access to finance

**Outgrower schemes** – These are defined as a business model through which a company works with small-scale farmers to buy their produce and usually provide services to them to support production. The nature of the relationship between the company and the small-scale farmers may vary from very intensive partnership to a loose arrangement for purchasing produce and supplying some inputs on credit. There are two outgrower schemes in Sierra Leone that have been running for several years (NedOil and Goldtree). Both have now come under the control of Planting Naturals with plans to switch to organic production. However, neither have managed to support farmers achieve anything close to commercial productivity.

Private companies will not be interested in supporting farmers at their own cost, but they may be willing to partner with a government or other donor, offering technical support and inputs, and guaranteeing to buy the produce. If land acquisition requires a commitment to work with smallholders, then outgrowers may be integral to the development of a core plantation.

**Externally financed smallholder schemes** – With external government or donor funding and direct support, farmers can establish high-yielding plantations. This approach is currently under way in Sierra Leone through the EU-funded Boosting Agriculture and Food Security (BAFS) programme implemented by Solidaridad. In these cases, the challenge is to ensure that productivity is maximised through skills transfer and input provision, but also that there is a market outlet. This again suggests that a partnership with a commercial operator, at least of a mill, is essential.

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[1] Agrifutura/European Commission (2019) *Palm Oil Value Chain Analysis in Sierra Leone*, Value Chain Analysis for Development, No. 11.

[2] Various estimates from reports and stakeholders.

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### Contact Invest Salone

Invest Salone has been working with a range of stakeholders in the oil palm sector and is in an ideal position to facilitate partnerships. Please contact us if you would like more information.

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