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The Tropical Tree Crop Sector of Sub-Saharan Africa

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Featured Companies

Akesson's Organic Madagascar
Benso Oil Palm Plantation Ltd
Compagnie Fruitière
DekelOil Public Limited
Equatorial Palm Oil PLC
Feronia Inc
Groupe Blattner Elwyn
KKO International
Okomu Oil Palm Company PLC
Olam International
PalmCI SA
Presco PLC
Safacam
Satocao Lda
SIAT Group
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Socapalm
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Société Africaine de Plantations d'Hévéas
Société des Caoutchoucs de Grand Béréby
Société Internationale de Plantations d'Hévéas
Société Ivoirienne De Coco Râpé
Wilmar International

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Executive Summary

Sub-Saharan Africa has suitable conditions for the cultivation of the most important tropical ‘tree crops’ including Oil Palm, Natural Rubber, Coconuts, Cocoa and Bananas. Yet, with the exception of cocoa production, African production of these big tropical ‘tree crops’ is small relative to the output of the Asian producer nations: Indonesia & Malaysia in the case of palm oil, Thailand and Indonesia in respect of natural rubber, Indonesia and Philippines in respect of coconuts, and India, China and the Philippines in respect of banana production.

In all these segments, a distinguishing feature of African production is the bias towards production by the informal, smallholder sector. Within the smaller agro-industrial sector, the influence of European and Asian plantation companies is fundamental to the current structure of the industry, and it seems likely that the future shape of the sector will also be led by these companies. However, for investors, there are limited direct investment opportunities in businesses able to benefit from the growth in demand for African tropical ‘tree crops'. Those companies which have significant Africa based business operations, and which also have a stock market listing, are detailed herein.

Africa Tropical Tree Crop Market Size

Commodity	Africa Production Volume (mt) (FAOSTAT 2014)	World Production Volume (mt) (FAOSTAT 2014)	Average price between 2010 – 2017 ($/mt) (World Bank)	Estimated Market Value in Africa ($m)	Estimated World Market Value ($m)	Africa Market Value as a % of World Market Value
Banana ^	520,370	20,098,072	1004.0	522.5	20,178.5	2.6%
Cocoa *	3,525,000	4,692,500	2797.9	9,862.6	13,129.1	75.1%
Coconut Oil	108,602	3,106,474	1284.0	139.4	3,988.8	3.5%
Palm Kernel Oil	317,860	6,602,838	1171.8	372.5	7,737.3	4.8%
Palm Oil **	2,550,000	66,060,000	850.4	2,168.6	56,180.1	3.9%
Rubber	671,284	13,244,824	2515.4	1,688.6	33,316.2	5.1%
Total	**7,693,116.0**	**113,804,708.0**		**14,754.1**	**134,529.9**	

** ICCO August 2017 data*
*** Oil World August 2017 data*
^ Export tonnage only (FAO 2013 trading data)

Source: Hardman Agribusiness, Various

Palm Oil Production

Notwithstanding that the oil palm (Elaeis guineensis) is a native of West Africa, and that Africa was (during the first half of the 20th Century) the world leading producer of the commodity, Africa now contributes just under 4% of the global crop. The professional, agro-industrial sector (listed and privately owned) accounts for only around 350,000 ha planted, out of perhaps as many as 7.8m ha under cultivation across the continent (Hardman: *A Growth Story For Africa September 2011*). In a number of countries in Africa, small, private, but professionally planted and managed plantations established in the 20th Century, have been abandoned following civil unrest or regime change, resulting in land appropriations: in DRC for example, one operator reports there to be as many as 60,000 ha of abandoned, but formerly professional plantations, along the Congo River.

In contrast to the listed agro-industrial palm oil production sector in Asia with some 4.5m ha of planted plantations, the African listed peer group (with circa 201,600 ha planted) represents no more than 4.5% of its Asian counterpart. Moreover, while Malaysian and Indonesia export palm oil around the world, including to Africa, the African group produces less than 42% of the continent's requirements (2.8m mt out of 6.8m mt consumed). With lower productivity than Asia (1.4mt/ha CPO v 4.0 mt/ha), a feature of a smallholder heavy sector operating without improved planting materials and with sub-optimal agronomic practices, listed sector valuations are on average lower at $5,760 per planted ha for the African sector, compared with circa $20,000 / mature planted ha for the Asian names. Within the African average there are wide differences, with the Nigerian listed producers trading at close to Asian levels. This likely reflects the higher productivity of the Nigerian producers, with both the listed names directed by Belgian plantation owner operators, with deep experience of production in Africa. The ownership pattern of agro-industrial African palm oil production assets, is dominated by European and Asian industrial and investment entities. With African consumption of vegetable oil expected to grow by 6%-10% annually (Olam 2016), and trade deficits in palm oil growing in important producer nations such as Nigeria and Ghana, the presence of these large, professional producers from Europe and Asia, can be expected to result (over the medium to longer term), in increasing restructuring of the upstream sector, and the deeper integration of the sector along the entire value-chain.

African Natural Rubber

As with African palm oil production, the production of natural rubber is concentrated overwhelmingly in West Africa. It is the Ivory Coast that dominates the African rubber sector in terms of national output (46%-49% of total African production) and exports, a country that also dominates in the production of cocoa (more than 40% of the world crop), and it is the only net-exporter of domestically produced palm oil in Africa. African production represents about 5% of global production, notwithstanding excellent conditions for rubber production. The de-facto leader of the African sector is SIPH, which produces some 50% of Ivorian rubber, through its subsidiary SAPH (listed on the BRVM). SIPH, albeit listed in Paris, is largely under the ownership of SIFCA and Michelin. The SIPH group, owns and operates rubber plantations in Ivory Coast, Ghana, Liberia and Nigeria. With African production growth effectively stalled over much of the current decade, determined, ambitious leadership is required to drive production growth by area cultivated under professional management. There appear to be good opportunities for growth in the segment, with Liberia alone, a country rich in rubber production assets, a number of which are likely not operating to their full potential. The African production region trails the major production zones, with productivity (at 0.8 mt/ha) only 69% of the world average (1.2 mt). The professional agro-industrial sector is dominated by SIPH (52%), Socfinaf (25%) and SIAT (10%), but it is distinguished by the fact that a company, majority owned by an African entity, is the largest single player in the sector with interests across most of the leading African producer nations.

Africa Leads In Production of Cocoa

Cocoa, is the tropical tree crop for which Africa is best known: African production constitutes more than 70% of global output. As with the other tree crops, the production of African cocoa is hugely dominated by the smallholder production segment, accounting for perhaps as much as 90%-95% of total African output. Productivity has largely flatlined and is stuck around 0.5mt/ha across the region, albeit that there are pockets of greater productivity. Growth in output has been driven for many years, decades even, by expansion of the area planted, but there are obvious questions regarding the sustainability of this model.

The professional agro-industrial sector is very small indeed, led by Groupe Blattner Elwyn in DRC with some 1,500 ha of planted cocoa, Satocao on São Tomé e Príncipe, also with a concession of some 2,500 ha, KKO International, a French industrial plantation initiative commenced in 2011 and listed Paris and Brussels in 2015, also with circa 1,500 ha cultivated or scheduled for cultivation with cocoa, and Akesson's Organic Madagascar, with some 650 ha of fine flavour cocoa. There is increasing interest in African origins for fine cocoa after the recognition gained by cocoa produced in São Tomé and Madagascar. This has prompted some further consideration of Africa as a producer region for fine or flavour cacao, on commercial plantations.

Coconut Production

Like African cocoa production, the cultivation of coconuts in Africa is largely dominated by smallholder producers / family farms, in two significant regions: along the Indian Ocean coastal regions of Kenya, Tanzania and Mozambique and in West Africa extending from Guinea to Ivory Coast, Ghana and Nigeria. Productivity is low at 36% of the world average, with Africa producing only 3.4% of the global crop, yet boasting 9.4% of the global cultivated area. The Ghanaian and Kenyan governments have (from time to time), announced ambitious plans to expand production and the economic importance of the crop, but during our researches, we did not come across any notable professional producers, listed or private. The sector has a disease problem with Lethal Yellowing, which has severely damaged the Mozambique sector, but which is present and a threat across the continent. Smallholder farms are small at less than 5ha on average, and often planted with local tall varieties that are susceptible to Lethal Yellowing. Family farms are untutored in optimal agronomic practices and therefore generate low commercial yields.

African Banana Production

African production (West, Central and Eastern Africa) has been estimated by the FAO at circa 44% of the world crop of fruit bananas but a much lower 4.4% of the global plantain crop. The big African producer countries include Angola, Tanzania, Rwanda, Cameroon, Kenya and Egypt. Typically, Africa contributes approximately 7% of the global supply of bananas, with exports led by Ivory Coast, Cameroon and Ghana. In 2016, (according to http://worldstopexports.com/), Ivory Coast exported bananas with a value of some $370 million (assumed to be 3.1% of global market value), Cameroon exported bananas with a value of circa $338.1 million (2.9% of estimated global market value) and Ghana exported bananas with a value of some $65.3 million (0.6% of estimated global market value). Readers will note in the banana section of this report, that the leading suppliers out of Africa include Compagnie Fruitière – previously affiliated of the US food group Dole Inc, and the listed Belgian plantation company Sipef. As with the other tropical 'tree crops' (other than cocoa), Africa would appear to have the potential to be a larger supplier of bananas into the World market.

African Palm Oil Production Remains in The Shadow of Asia

The listed African palm oil producers have a combined market capitalisation (adjusted for group holdings) of some $1.1 billion, for a total production area of circa 377,830 mature planted ha, of which the proprietary area is estimated at approximately 280,000 ha. To put this data point into context, consider the operational capacity of the leading Asian operators:

- Sime Darby 602,732 ha of oil palm (98% in Asia)
- Golden Agri 385,997 ha nucleus (and 102,255 ha plasma)
- Felda Global Ventures 341,190 ha of oil palm
- KLK 205,472 ha of oil palm (mostly in Asia)
- Wilmar International 241,892 ha (90% in Asia)
- Astra Agro Lestari 233,382 ha nucleus (and 63,629 ha plasma)

The African sector has a long way to go before rivalling the productive capacity of Asia.

Listed African Palm Oil Companies

Company	Mature Planted Area (ha)	Immature Planted Area (ha)	Un developed Landbank (ha)	Total Proprietary Area (ha)	Out-growers (ha)	Total Current Prod. Area (ha)	Annual Prod. CPO (mt)	CPO (mt/ ha)
Benso Oil Palm Plantations	4,738	n/a	n/a	4,738	1,650	6,388	12,700	1.99
DekelOil Public Ltd	0	1,968	24,000	25,968	27,000	27,000	39,498	1.46
Equatorial Palm Oil PLC	5,000	2,606	14,394	22,000	n/a	5,000	n/a	n/a
Feronia	14,271	10,377	6,161	30,809	n/a	14,271	20,726	1.45
PalmCI (SIFCA)	35,316	n/a	5,027	40,343	147,613	182,929	259,976	1.42
Presco	12,565	4,335	21,335	38,235	n/a	12,565	35,555	2.83
Socfinaf	61,459	24,467	n/a	85,926	n/a	61,459	174,765	2.84
Okomu*	9,874	4,590	n/a	14,464	n/a	9,874	36,260	3.67
Safacam*	4,622	726	6,024	11,372	n/a	4,622	12,285	2.66
Socapalm*	31,827	1,074	23,083	55,984	n/a	31,827	95,644	3.01
SOGB*	7,195	276	n/a	7,471	n/a	7,195	35,277	4.90
Total (adjusted for group holdings)	**133,349**	**43,752**	**100,024**	**248,019**	**176,263**	**309,612**	**543,220**	**1.75**

**Socfinaf subsidiaries*

Source: Company Reports/ Hardman Agribusiness

A Significant Trade Deficit in Palm Oil

The total production area, owned and managed by professional plantation companies, including the listed operators is estimated to be in the region of 360,000 ha. This can be expected to produce circa 800,000 mt - of CPO annually. Another 2 million metric tonnes possibly, is produced by smallholders and private plantations below industrial scale. Total CPO production across Africa is difficult to gauge with confidence: diverse sources ranging from USDA and sector participants, put output at between circa 2.0 million mt and 2.6m mt. Oil World, in August 2017, projected total 2017 production at 2.55 million mt, while USDA projects 2.64m mt for 2017.

African Palm Oil Trade Balance

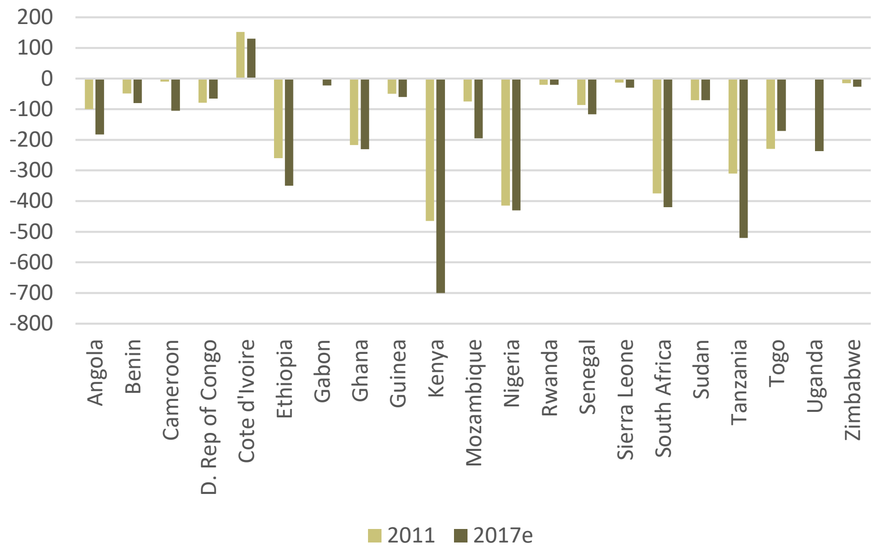
	2011 (000 mt)			2017 (000 mt) estimate			
Country	**Production**	**Consumption**	**Import**	**Production**	**Consumption**	**Import**	**Consumption Increase 2011 – 2017**
Angola	50	150	136	58	240	230	90
Benin	46	95	309	50	130	650	35
Cameroon	354	364	74	300	405	110	41
Democratic Rep of Congo	187	266	93	215	280	70	14
Cote d'Ivoire	371	219	64	415	285	100	66
Ethiopia		260	259		350	350	90
Gabon				*100*	*122*	*22*	
Ghana	448	665	226	520	750	330	85
Guinea	50	100	51	50	110	60	10
Kenya		465	532		700	730	235
Mozambique		75	73		195	195	120
Nigeria	970	1385	440	970	1400	450	15
Rwanda		20	17		20	20	0
Senegal	14	100	87	14	130	110	30
Sierra Leone	36	49	13	36	66	30	17
South Africa		375	401		420	450	45
Sudan		70	70		70	70	0
Tanzania		310	318		520	530	210
Togo	9	238	229	9	180	220	-58
Uganda				*23*	*260*	*237*	
Zimbabwe		15	15		27	27	12
Total	**2,535**	**5,221**	**3,407**	**2,760**	**6,660**	**4,991**	**1,057**

Source: USDA/Hardman Agribusiness estimates

The data in the table above imply that the continent relies on imports of some 5 million metric tonnes (mostly from Asia) to meet total annual consumption needs. In 2016, Olam International's, Mr Ranveer Chauhan, Managing Director & CEO, Palm and Rubber, noted (http://olamgroup.com/investor-relations/olam-insights/issue-12016-olam-palm-gabon-sets-benchmark-sustainable-large-scale-palm-plantation-africa/oil-palm-production-case-africa-gabon/) that vegetable oil consumption in Sub-Saharan Africa was running at some 8.5 million metric tonnes annually, of which about 75% was believed to be palm oil. This would suggest total palm oil consumption of 6.38 million mt (close to USDA 2017 estimate shown above).

Mr Chauhan also noted that vegetable oil consumption in SSA was expected to grow by 6-10% per annum from its current low base.

Crude Palm Oil Trade Deficit (000 mt)



Source: USDA, Hardman Agribusiness

The chart above details starkly the supply deficit across Sub-Saharan Africa and even the West African producer countries, with the single exception of Cote d'Ivoire. Significantly, that deficit is widening, even for producer countries such as Nigeria, Ghana and Sierra Leone.

African professional palm oil producers

Companies	Subsidiaries / Investment Vehicles	Countries	Landbank (ha)	Planted Hectares	Mature Hectares	Partners / Shareholders / Stake (%)	Market Listed	Potential / Existing Out-growers (ha)
African Agriculture Fund (Phatisa)	Goldtree Holdings	Sierra Leone	6,300	2,000				
	Feronia	DRC	See below					
DekelOil		Ivory Coast	26,363	1,968			London	27,000
Equatorial Palm Oil	Liberia Palm Development	Liberia	22,000 (+ 67,000 potential extension)	7,606		KLK (81.5% of LPD direct and indirct)	London	25,797
Feronia		DRC	107,301	24,648 (+ 6,161 ha post-mature planting)	14,271	CDC Group plc (67.37%), African Agriculture Fund (Phatisa) (26.04%)		
Groupe Blattner Elwyn	Busira Lomami Orientale	DRC	4,103	3,075	2,650			
	C.C.P. - Lisafa		4,302	2,400	2,400			
	C.C.P. - NDEKE		2,618	1,559	1,344			
	S.C.C. - Binga		11,326	2,587 Palm; 3,173 Rubber; 117 Cocoa	1,899 Palm; 2,983 Rubber; 117 Cocoa			
	S.C.C. - Bosondjo		7,029	2,435 Palm; 757 Rubber; 360 Cocoa	2,085 Palm; 637 Rubber; 360 Cocoa			
	Total		**29,378**	**12,056 (Palm)**	**10,378 (Palm)**			
Norpalm AS	Norpalm Ghana Ltd	Ghana	4,500	4,000		Norpalm AS (68.6%)		
Olam	Olam Gab Sarl	Gabon	325,395	84,667 (including other crops)		Olam (60%); Republic of Gabon (40%)		
	Sifca (Via Nauvu)		See below					

African professional producers cont…

Companies	Subsidiaries / Investment Vehicles	Countries	Landbank (ha)	Planted Hectares	Mature Hectares	Partners / Shareholders / Stake (%)	Market Listed	Potential / Existing Out-growers (ha)
nv Siat sa	Presco Plc	Nigeria	38,744	16,812	12,565	Siat (60%)	Lagos	
	GOPDC Ltd	Ghana	14,153	8,505		Siat (100%)		13,000
	Siat Nigeria Ltd	Nigeria	16,000	2,000 (have been replanted)		Siat (100%)		
	Total		**68,897**	**27,317**				
Sifca	Palm CI	Ivory Coast	40,343	40,343	35,316	SIFCA (52.51%); Nauvu (25.50%); BRVM (21.99%)	BRVM Abidjan	147,613
Sime Darby		Liberia	220,000	10,401 Palm; 107 Rubber	9,305	Sime Darby (100%)		To develop 44,000 ha
Siva Group	Sierra Leone Agriculture	Sierra Leone	35,000	5,000		Biopalm (95%), which is 100% subsidiary of Siva Group		
Socfinaf (Socfin 58.85% Subsidiary)	Socfin Agriculture Company Ltd	Sierra Leone	17,724	12,319	3,002	Socfinaf (85.0%)		
	SOGB	Ivory Coast	34,712	7,471 Palm; 15,861 Rubber	7,195 Palm; 10,616 Rubber	Bereby-Finances (73.16%) which is 87.06% subsidiary of Socfinaf	BRVM Abidjan	
	Plantations Socfinaf Ghana Ltd	Ghana	18,429	5,044 Palm; 643 Rubber		Socfinaf (100%)		
	Okomu Oil Palm Company Plc	Nigeria	33,113	14,464 Palm; 7,335 Rubber	9,874 Palm; 4,345 Rubber	Socfinaf (66.12%)	Lagos	
	Socapalm SA	Cameroon	58,063	32,901 Palm; 2,079 Rubber	31,827 Palm; 1,666 Rubber	Socfinaf (67.46%)		
	Safacam	Cameroon	15,529	5,348 Palm; 4,157 Rubber	4,622 Palm; 2,968 Rubber	Safa (68.93%), which is 100% subsidiary of Socfinaf		
	Brabanta	DRC	29,540	6,169	4,939	Socfinaf (99.8%)		
	Agripalma Lda	Sao Tome	4,917	2,210		STP Invest Belgique (88%), which is 100% subsidiary of Socfinaf		
	Total		**212,027**	**104,343 (Palm)**				

African professional producers cont…								
Companies	**Subsidiaries / Investment Vehicles**	**Countries**	**Landbank (ha)**	**Planted Hectares**	**Mature Hectares**	**Partners / Shareholders / Stake (%)**	**Market Listed**	**Potential / Existing Out-growers (ha)**
Twifo Oil Palm Plantation Limited		Ghana	5,939	4,234		Unilever Ghana		1,913
UOC	Sipef-CI	Ivory Coast	5,535	5,535		UOC (100%)		
Verdant Fund LP	Golden Veroleum	Liberia	350,000	4,500		Golden Agri		
Wilmar International	Sifca (Via Nauvu)		See above					31,284
	Benso Oil Palm Plantation (Wilmar Africa Ltd)	Ghana	6,799	4,738		Wilmar Africa Limited (76.6%)		
	Bidco	Uganda	8,500	6,500		Wilmar (39%)		4,700
	Wilmar (Nigeria)	Nigeria	30,000 e	12,000				
	Total		**45,299**	**23,238**				
Zampalm		Zambia	20,238	2,911		IDC (90%), Zambeef (10%)		
Total All Industrial Plantations (Palm only)			**1,591,515**	**352,521**				

Source: Company Reports, Hardman Agribusiness

The combined production area of the listed operators is little more than 10% of the dominant listed Asian sector, which has more than 3.7m ha of mature planted area. In valuation terms, the African listed names have an average capital market value per mature planted / proprietary hectare of only $5,760. This compares with circa $20,000 per mature planted ha for the Asian sector. The data for the African names are widely varied with Presco and Okomu (both Nigerian listed), and SOGB, valued at some $20,000 per mature planted ha, while Feronia (DRC) and Equatorial Palm Oil (Liberia), both of which are still in development, are valued at closer to $3,000/ha. Palm CI (Ivory Coast), the largest producer of palm oil within the group (and with a large 3rd Party supply element to its business), is valued at circa $4,300 per planted mature ha. The lower average value for the African production sector reflects: lower productivity relative to the Asian sector; the still relatively under-developed nature of the sector, a development profile during this century that has been characterised more by disappointment than success, and higher country specific risk.

A Traditional European Influence…

There is a significant European plantation company bias to the ownership of the listed names, with only Palm CI majority owned by African interests. The Luxembourg listed Socfinaf (majority owned by Socfin), originated in Belgium and it controls Okomu and SOGB, while the Belgian private company, SIAT, owns the controlling stake in Presco. SIAT operates a combined palm oil estate of 27,300 ha across West Africa. The UK investment group, CDC owns 67% of Feronia, but it is notable that the South African fund manager Phatisa's African Agriculture Fund owns another 26%. Geographically, the most diverse operator is Socfinaf which is present in all of: Nigeria (Okomu), Ivory Coast (SOGB), Cameroon, Ghana, Liberia, Sao Tome, Sierra Leone, DRC and Liberia. The major operators, listed and unlisted, are predominantly active in Nigeria, Ivory Coast, Ghana, Liberia, and Cameroon, although Olam International has some 50,000 ha, in the Republic of Gabon.

…and a Growing Asian Influence

The Malaysian listed plantation company KLK, is one of only two Asian operators represented within the listed African plantation company names, with a direct stake of some 63% in Equatorial Palm Oil (AIM listed, but operating in Liberia). Wilmar (Singapore listed) has an indirect stake of 19.9% in PalmCI, and indirectly it also owns circa 47% in BOPP (Ghana). BOPP (Benso Oil Palm Plantations) which owns and operates 4,738 ha of proprietary plantations in Ghana, is controlled by the refinery operator Wilmar Africa (with a stake of almost 77%), a partnership between Wilmar and SIFCA (controlling shareholder of PalmCI).

Other listed Asian plantation company interests in African plantation ventures (although not listed) include:

- Singapore listed commodities trader, Olam International, originally a Nigerian business, owns 60% of a Joint Venture with the Republic of Gabon with more than 50,000 planted ha of oil palm plantations in Gabon. Additionally, it is a 50% JV partner (with Wilmar) in the Nauvu investment vehicle which since 2007 has owned some 25.5% of PalmCI, the leading Ivorian palm oil producer.

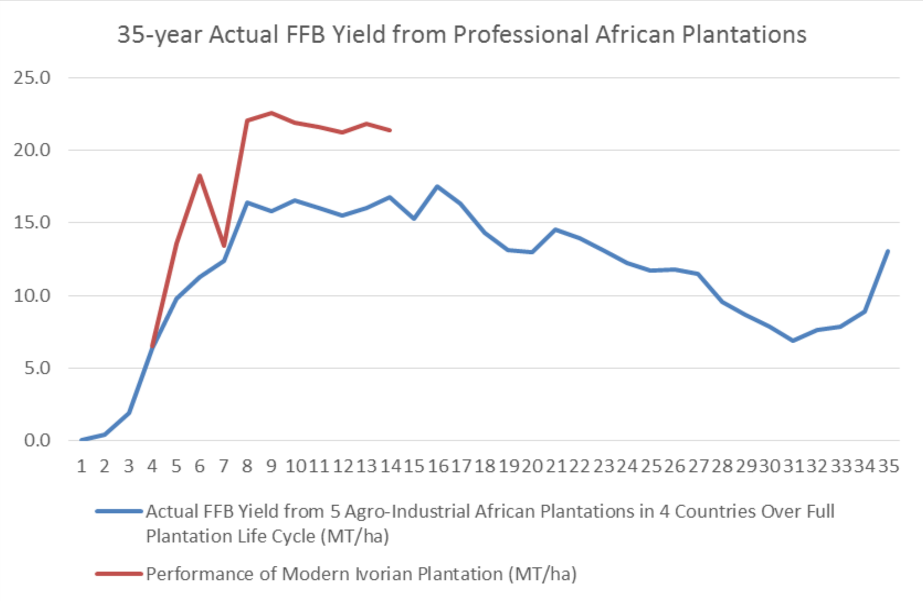
- Golden Agri (also Singapore listed), via Verdant Fund LP, indirectly has control of the Golden Veroleum plantation in Liberia which expects to end 2017 with 20,000 ha planted. On the Company's website, it stated it has planted 4,500 hectares so far.

- Sime Darby (Kuala Lumpur listed) operates some 10,000 ha in Liberia (a far cry from the 50,000 - 220,000 ha, first considered back in 2009).

Relatively Low Average Productivity

Productivity, as compared with Asian averages is lower for the African group. This is partly attributable to the defined 3 month dry season, partly to the influence of out-grower production within the mix, often reliant on unimproved planting materials, and to lower investment in the continent's production assets. While the Asian sector averages more than 4.0 mt/CPO per ha (Wilmar has recently reported 5.2 MT per hectare in 2Q17 (2Q16: 3.9 MT per hectare) as the effects of El Nino eased), the African names are estimated to produce an average of circa 2.2 mt/ha. (see chart below). The relative immaturity of operations amongst names such as Feronia (DRC), Equatorial Palm Oil (Liberia) and DekelOil (Ivory Coast), also partly explains the lower African productivity. There are however exceptions: SOGB and Okomu (both Socfinaf) and Presco (SIAT), are achieving Asian style production levels.

African Productivity



Source: Hardman Agribusiness

For developers of new palm oil production businesses in West Africa there are significant challenges and risks:

- the region has had a turbulent and troubled political history
- infrastructure in many countries is amongst the worst in the world
- land rights and land laws are complex, confusing and compromised by inadequacy of mapping and land registration
- the West African climate is not as favourable as the South East Asian climate for best in class productivity
- contractor services for many trades and functions either do not exist or are in desperately short supply
- funding within the region is often difficult and expensive to access.

However, as the chart above demonstrates, productivity can be managed by professional plantations in West Africa to very acceptable commercial levels.

Palm Oil Sector Company Profiles

Benso Oil Palm Plantation Ltd

Benso Oil Palm Plantation Ltd (BOPP) went public in September 2004 on the Ghana Stock Exchange. 76.63% owned by Wilmar Africa, (a refinery joint venture between Wilmar International and the Ivorian SIFCA Group), the minority of 23.27% is believed to be held by local investors.

- Wilmar announced in September 2014 that Benso Oil Palm Plantation Limited (BOPP), has become the first mill in Ghana, West Africa, to be awarded the certification for sustainable palm oil production, in accordance with the rigorous standards of the Roundtable on Sustainable Palm Oil ("RSPO").
- With this certification, BOPP's mill has the capacity to produce approximately 12,700 metric tonnes of certified sustainable palm oil (CSPO) and 3,200 metric tonnes of certified sustainable palm kernels (CSPK) annually from its supply base of about 6,388 ha in Ghana, of which about 25% is operated by smallholders.
- Operating a similar strategy to PalmCI and DekelOil, the BOPP affiliated smallholders are committed to sell their Fresh Fruit Bunches (FFB) to BOPP. BOPP provides technical support to the farmers. BOPP requires that smallholder farmers maintain their farms in accordance with BOPP's standard operating procedures, under the supervision of BOPP managers. BOPP allocated the plots to the farmers who were then involved in the planting and maintenance of the farms. The annual yield of these farmers is currently of 14/15 tonnes of FFB per hectare. The farmers are responsible for harvesting while BOPP ensures the collection/weighing and transport to the mill.

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	BOPP.GH
Price (GHS)	5.65
12m High (GHS)	5.70
12m Low (GHS)	2.08
Shares (m)	34.8
Mkt Cap ($m)	44.7
EV ($m)	42.6
Free Float (%)	23.27%
Market	Ghana Stock Exchange

Company Information	
Non-Exec Chairman	Ishmael Yamson
Managing Director	Santosh Pillai
General Manager & Executive Director	Samuel Awonnea

Key Shareholders	
Wilmar Africa	76.63%

Land Use (ha)	
Palm Oil Plantations	4,738
Smallholder Plantations	1,650

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	19.00	15.47	17.19
Gross Profit	4.23	3.31	5.51
Net Income	2.07	2.17	4.05
Gross Margin %	22.3	21.4	32.1
Net Margin %	10.9	14.0	23.6
Revenue / mature planted hectare ($/ha)	4,010.1		
Total Equity	12.94	15.92	17.67
Debt/ Equity	n/a	n/a	n/a
EV/ EBITDA (LFY)	19.50		
ROE %	14.0	5.4	25.0

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	DKL.L
Price (GBp)	11.6
12m High (GBp)	15.8
12m Low (GBp)	10.3
Shares (m)	344.2
Mkt Cap ($m)	47.5
EV ($m)	69.7
Free Float (%)	58.9%
Market	London AIM

Company information	
Non-Exec Chairman	Andrew Tillery
CEO	Youval Rasin
CFO	Shai Kol
Executive Director	Lincoln Moore

Key shareholders	
Youval Rasin	16.2%
Miton UK	15.9%
Yossi Inbar	5.4%
Shai Kol	3.6%

Land Use (ha)	
Landbank	25,968
Small Holder Plantations	27,000
Immature Planted	1,968

DekelOil Public Limited

DekelOil, founded in 2007 and listed on AIM in 2013, owns 100% of a large-scale palm oil operation located in the Ivory Coast (CI). The company, as well as having its own maturing plantations, focuses on buying in FFB from some 5,000 local smallholders, who operate on approximately 27,000 hectares of oil palm plantations. The company announced a maiden dividend of 0.17p, on the back of a year of substantial increases in both production and sales.

- DekelOil has 1,968 ha of company owned maturing plantations at Ayenouan, as well as a fully computerised nursery with a capacity to handle 1 million seedlings, which supplies seedlings to both the company's estates as well as the local smallholders. The World Bank subsidises these seedlings to aid the development of 10,000 ha of smallholder oil palm plantations in the region. It is anticipated these smallholders will become new trading partners with DekelOil, increasing the amount of FFB processed annually.
- DekelOil's mill, commissioned in 2011, operates two lines which can process 30 tonnes of FFB/hour each and is currently operating at 70% of capacity. A 60t/day kernel crushing facility is also in operation at Ayenouan and the group has recently started producing both palm kernel oil and palm kernel cake. Sales vary; some to a major refinery in the CI, exports to bordering countries and sales via the commodity trade.
- DekelOil announced in July 2017 that it has formally commenced operations at Guitry, a second 100% owned palm oil project, where it has secured rights over 24,000 ha of brownfield plantations. Development capital over the next year is not expected to exceed $250,000 but the group will look to finance the majority of the project from a partner. Both a nursery and a mill (15-30t/hr), will be constructed. Furthermore, an application for tax breaks, parallel to the one at Ayenouan, will be submitted.
- In May 2017 Dekel announced that it had entered into talks with Norpalm AS over a potential acquisition of all of, or the majority of its shares in Norpalm Ghana Ltd. Norpalm AS holds 68.6% of Norpalm Ghana, a vertically integrated palm oil owner and operator with around 4,000 hectares of mature palm plantations in West Ghana. Norpalm Ghana operates a 30 tonne per hour mill, which also purchases fresh fruit bunches from local small holder producers. In addition to the revenues it generates from selling approximately 15,000 tonnes of CPO into the domestic Ghanaian market, NGL also operates a palm kernel oil press which produces approximately 2,000 mt of PKO. Dekel stated that it is looking to become a leading palm oil producer across the region.
- DekelOil is a member of the Roundtable for Sustainable Palm Oil and expects to receive accreditation within the next 12 months.

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	29.37	26.00	13.23
Gross Profit	7.33	6.03	2.19
Net Income	1.49	0.13	(3.40)
Gross Margin %	24.96	23.19	16.55
Net Margin %	1.19	n/a	n/a
Total Equity	11.70	4.82	2.63
Debt/ Equity	1.84	4.26	13.45
EV/ EBITDA (LFY)	14.07		
ROE %	4.1	(10.2)	(151.4)

hardman agribusiness

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	PALO.L
Price (GBp)	2.75
12m High (GBp)	4.20
12m Low (GBp)	1.60
Shares (m)	356.3
Mkt Cap ($m)	13.3
EV ($m)	13.0
Free Float (%)	35.8%
Market	London AIM

Company information	
Non-Exec Chairman	Michael Frayne
Executive Director	Geoffrey Brown
General Manager	Sandy Barblett
Non-Exec Director	Lee Oi Hian

Key shareholders	
Kuala Lumpur Kepong	62.9%
Blakeney Management	11.7%
Lee Guo Zhang	4.8%
Legal and General	3.3%

Land Use (ha)	
Landbank	22,000
Expansion Area	67,000
Planted Mature	5,000
Planted Immature	2,606

Equatorial Palm Oil PLC

Listed in London and majority owned by Kuala Lumpur Kepong, Equatorial Palm Oil PLC (EPO) is a palm oil producer with operations in Liberia. 2016 was a year of 're-assessment and decision making', as High Carbon Stock Assessments were carried out, and operations were brought back online following the Ebola epidemic. The group was named 'concessionaire of the year 2016' by 'The Inquirer', a leading Liberian newspaper. It recently had its tax and duty-free allowance extended for a further five years.

- EPO is part of a joint venture with KL-Kepong International Limited, a subsidiary of Kuala Lumpur Kepong Berhad (KLK); one of the largest palm oil producers in the world (2016 - revenue $4bn, market cap $5.8bn). They jointly own Liberian Palm Developments (LPD) and both subscribed for US$7.5m of new equity in LPD in December 2013.
- EPO announced on the 5th September 2016 it had signed a loan agreement with KLK Agro, another subsidiary of KLK, for up to US$30m. This is in addition to a loan of US$20.5m announced in January 2015, which has already been fully drawn down.
- The *Palm Bay Estate* has a concession of some 13,000 ha, as well as expansion areas totalling over 20,000 ha, of which 50% is set aside for out-grower programmes. The *Butaw Estate* has a concession of some 9,000 ha, with expansion areas totalling 47,000 ha, of which 16,000 ha are set aside for out-grower programmes. 7,606 ha (as of June 2017) have been planted since the project commenced in 2011, with some 5,000 ha now mature. In 2016, the group announced the construction of a 60 mt/hr mill at the Palm Bay estate and this is expected to come online in the second half of 2018.
- EPO has made a strong Corporate Social Responsibility (CSR) theme, central to its activities. The out-grower program is one example, additionally it has made significant investments in infrastructure as well as helping construct both a local school (for some 500 children) and health clinics on both estates.
- EPO currently employs over 670 staff and is on the way to becoming one of Liberia's largest employers in the agricultural sector
- EPO, through KLK, is a member of the Roundtable on Sustainable Palm Oil (RSPO), and the company maintains a commitment to 'zero deforestation'.

Financial Summary ***(Source: Eikon Thomson Reuters)***

(USD Million)	2016	2015	2014
Revenue	0.19	0.00	0.00
Gross Profit	n/a	n/a	n/a
Net Income	(1.28)	(1.39)	(1.14)
Gross Margin %	n/a	n/a	n/a
Net Margin %	n/a	n/a	n/a
Revenue / mature planted hectare ($/ha)	n/a		
Total Equity	29.3	30.68	32.16
Debt/ Equity	0.00	0.00	0.00
EV/EBITDA (LFY)	n/a		
ROE %	(4.3)	(4.4)	n/a

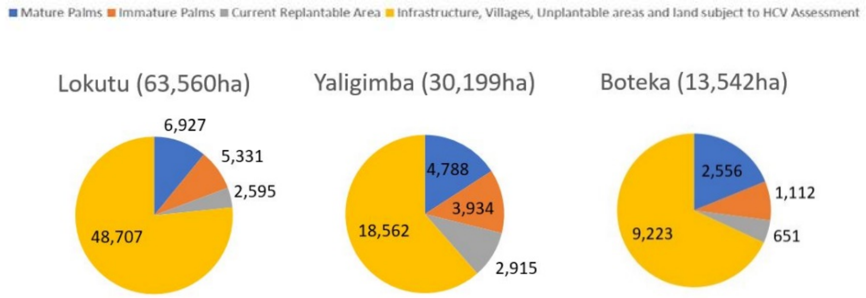
These data will become more meaningful when the company begins producing revenues from cpo production (commencing circa 2H2018).

Agribusiness

Source: Eikon Thomson Reuters

Feronia Inc

Feronia owns the majority stake (83.37%) in Plantations et Huileries du Congo (PHC); a DRC company (formerly owned by Unilever), consisting of three oil palm plantations producing CPO, PKO and other by-products. The remaining 16.63% is owned by the Government of DRC. Feronia has been successful in attracting substantial investment funding (circa $140m since 2009), most recently from CDC Group Plc and the African Agriculture Fund of Phatisa. The company is targeting to be cash positive by 2018.



Market data

EPIC/TKR	FRN.V
Price (CAD)	0.24
12m High (CAD)	0.30
12m Low (CAD)	0.08
Shares (m)	346.9
Mkt Cap ($m)	68.3
EV ($m)	105.6
Free Float (%)	2.3%
Market	Toronto

Company information

CEO	Xavier de Carniere
CFO	David Steel
COO (DRC)	Raymond Batanga
Managing Director	Pierre-Antoine Couvreur

Key shareholders

CDC Group Plc	67.37%
African Agriculture Fund (Phatisa)	26.04%

Land Use (ha)

Total Concession Area	107,301
Total Plantable Area	30,809
Mature Planted	14,271
Immature Planted	10,377

- Lokutu has a 15t/hr mill and produces CPO and PKO. Feronia has recently installed a new fibre powered boiler to reduce Lokutu's reliance on fossil fuels to produce electricity. Yaligimba has a 23t/hr mill and produces CPO and PKO. Boteka, the smallest plantation, has a 10t/hour mill and produces CPO.
- Installation of fibre powered boilers at Yaligimba and Boteka will be coming online over the next 6-9 months. These three boilers will reduce annual heavy fuel consumption by 2,000 tonnes per year. This installation will help reduce the fuel bill by approximately $3m in Yaligimba, the most fuel dependent plantation.
- The bulk of the crude palm oil produced by Feronia is sold to two major customers in the DRC, both with significant refinery capacity of circa 100,000 mt pa: Marsavco and PalmCo SARL. Marsavco claims to have the largest state-of-the-art refinery in DRC, based in Kinshasa.
- Strong CSR ethic: Feronia has created some 8,000 jobs, it paid US$10.2m in wages & salaries in 2016, it is the primary healthcare provider for some 150,000 people living within and around its concessions, it supports 95 schools, and it has drilled 33 boreholes and rehabilitated water supplies for the communities.

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	16.51	10.92	10.83
Gross Profit	(3.05)	(3.43)	(4.78)
Net Income %	(9.88)	(24.95)	(20.27)
Gross Margin %	n/a	n/a	n/a
Net Margin %	n/a	n/a	n/a
Revenue / mature planted hectare ($/ha)	1,156.9		
Total Equity	34.64	24.70	42.14
Debt/ Equity	0.79	1.78	0.23
EV/EBITDA (LFY)	n/a		
ROE %	(24.7)	(50.9)	(30.9)

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	OKOMUOOI.LG
Price (NGN)	64.01
12m High (NGN)	82.03
12m Low (NGN)	36.0
Shares (m)	953.9
Mkt Cap ($m)	195.2
EV ($m)	199.9
Free Float (%)	33.9%
Market	Nigeria

Company information

Managing Director	Graham Hefer
CFO	Alain Mary

Key shareholders

Socfinaf	66.1%

Land Use (ha)

Total Palm Oil Plantations	14,464
Mature Palm Oil	9,874
Immature Palm Oil	4,590
Total Rubber Plantations	7,335
Mature Rubber	4,345
Immature Rubber	2,990

Okomu Oil Palm Company PLC

Okomu was established in 1976 as part of a government initiative to rehabilitate palm oil production in Nigeria, and to address the country's growing vegetable oil deficit. Socfin then acquired Okomu when it was privatised in 1990, and today Socfinaf, Socfin's holding company for its African investments, owns 66% of Okomu, with the remainder listed on the Nigerian Stock Exchange.

- Okomu operates 33,113 ha of concession area over three sites. The group has 14,464 ha of oil palm plantations and 7,335 ha of rubber plantations, employing some 3,500 people. It operates a 60t/hr FFB crushing mill and a palm kernel crushing plant on the same site.
- Okomu produces 'Banga Palm Oil', for the local market. The company is believed to sell all its production within Nigeria, a net importer country of palm oil and palm oil products.
- Okomu operates buffer zones around rivers and wildlife corridors, and maintains patrols to monitor the estates for illegal hunting and logging. Okomu also supports the Okomu National Park, a nearby forest block of 1,000km^2.
- The company achieves very high gross margins relative to the other African producers; only Presco (also Nigerian) is as profitable.

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	56.3	49.3	52.4
Gross Profit	39.4	29.0	25.4
Net Income	19.2	13.3	9.4
Gross Margin %	70.0	58.8	48.5
Net Margin %	34.1	26.9	17.9
Revenue / mature planted hectare ($/ha)	3,892.4		
Total Equity	55.9	60.6	127.0
Debt/ Equity	0.16	0.31	0.08
EV/EBITDA (LFY)	7.74		
ROE %	33.7	15.0	6.8

hardman agribusiness

PalmCI SA

PalmCI was created out of PalmIndustrie, a state-owned group created in 1969 and privatised in 1997. SIFCA took control of PalmCI in 2008 and now owns 52.5%. The Nauvu joint venture, comprising Olam and Wilmar, owns 25.5% of PalmCI, with another 22% of the shares trading on the Abidjan stock exchange.

- PalmCI manages 40,343 ha of oil palm plantations over 10 integrated farm units and 11 sites which provides 40% of its FFB. This is alongside its partnership with some 32,000 out-growers who manage 133,000 ha of mature smallholder oil palm plantations. All fresh fruit bunches are processed by PalmCI which has an annual milling capacity of 2.1m mt. The group also operates a palm kernel crushing facility.

- The group is involved in the upstream production of crude palm oil and all its production (circa 260k mt of CPO) is sold to Sania, another subsidiary of SIFCA, which sells refined palm oil products through its brands; Dinor, Dora, St Ave, Delicia and Palme d'Or, throughout the ECOWAS region.

- PalmCI works in a close partnership with local out-growers, supervising and supporting planting of their land. Seedlings are provided by the PalmCI nursery. PalmCI also supports the harvesting process on its out-grower estates and transportation of the FFB to the company's mills.

- PalmCI fixes prices monthly according to market conditions and guarantees this price to its farmers; the group is involved in out-grower production at every stage.

- Gross margins for PalmCI are below the levels of the two listed Nigerian operators, reflecting the influence of the large out-grower production element and perhaps the wholly integrated nature of its operations.

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	PALC.CI
Price (XOF)	10,100.0
12m High (XOF)	14,495.0
12m Low (XOF)	9,250.0
Shares (m)	7.7
Mkt Cap ($m)	143.7
EV ($m)	193.6
Free Float (%)	22%
Market	Abidjan, Ivory Coast

Company information

CEO	Jean Louis Kodo

Key shareholders

SIFCA	52.5%
Nauvu JV	25.5%
BRVM	22.0%

Landbank (ha)

Company Owned	40,343
Mature Plantations	35,316
Immature Plantations	5,027
Smallholder Plantations	147,613
Smallholder Plantations (Mature)	132,938

Financial summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	189.8	192.0	254.8
Gross Profit	88.7	79.1	124.4
Net Income	7.0	(0.8)	20.2
Gross Margin %	46.7	41.2	48.8
Net Margin %	3.7	n/a	7.9
Revenue / mature planted hectare ($/ha)	5,374.3		
Total Equity	130.5	128.3	155.1
Debt/ Equity	0.39	0.67	0.59
EV/EBITDA (LFY)	4.21		
ROE %	5.2	(0.6)	11.9

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	PRESCO.LG
Price (NGN)	55.20
12m High (NGN)	76.95
12m Low (NGN)	38.05
Shares (m)	1,000
Mkt Cap ($m)	178.5
EV ($m)	198.4
Free Float (%)	40.0%
Market	Nigeria

Company information	
Chairman	Pierre Vandebeeck
General Manager	Felix Onwuchekwa Nwabuko

Key shareholders	
SIAT Group	60.0%
Nigerian (Institutional and private)	40.0%

Landbank (ha)	
Total Landbank	40,400
Total Planted area	16,900
Planted Mature	12,565
Planted Immature	4,335

Presco PLC

Presco, which is listed on the Nigerian Stock Exchange, is a fully integrated Nigerian palm oil production business with some 16,900 ha of planted oil palm plantations. It is 60% owned by the private Belgian plantation group, SIAT Group. SIAT owns more than 40,000 ha of palm oil plantations across West Africa and some 22,000 ha of rubber plantations, also mostly in West Africa. SIAT also holds majority stakes in Ghana Oil Palm Development Company (GOPDC), Siat Gabon (rubber and cattle), and Compangnie Hévéicole de Cavally and Compagnie Hévéicole de Prikro in Ivory Coast (rubber production).

- Presco has 16,900 hectares of oil palm plantations, 12,565 of which are mature, across three distinct estates. Additionally, the company has acquired the 17,000ha Sakponba estate in 2016. Sakponba is subject to HCV and EIA assessments ahead of development for production of palm oil and rubber.
- Presco's current processing capacity includes a 60 t/hr FFB crushing mill, a 60t/day palm kernel crushing plant and a palm oil refinery fractionation plant with a capacity of 100 t/day.
- The group employs 4,027 people. 428 of which are permanent staff and 3,599 are contract workers. Presco PLC won the Corporate Social Responsibility award for the agricultural sector for both 2016 and 2017, awarded by the Nigerian Agricultural Awards committee.
- Presco is characterised by very high gross profitability, as is fellow listed Nigerian operator, Okomu, owned by Socfinaf/Socfin. Both SIAT and Socfin are of Belgian origin.

Financial Summary ***(Source: Eikon Thomson Reuters)***

(USD Million)	2016	2015	2014
Revenue	61.54	52.84	55.37
Gross Profit	44.30	33.55	35.98
Net Income	85.12	11.74	31.47
Gross Margin %	72.0	63.5	65.0
Net Margin %	138.3	22.2	56.8
Revenue / mature hectares ($/ha)	4,897.7		
Total Equity	171.3	152.7	109.1
Debt/ Equity	0.12	0.22	0.14
EV/EBITDA (LFY)	7.38		
ROE %	52.7	7.8	22.4

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	CULKe.LU
Price (EUR)	17.98
12m High (EUR)	19.75
12m Low (EUR)	13.01
Shares (m)	17.9
Mkt Cap ($m)	381.6
EV ($m)	715.3
Free Float (%)	32.1%
Market	Luxembourg

Company information

Plantation Director / CEO	Luc Boedt

Key shareholders

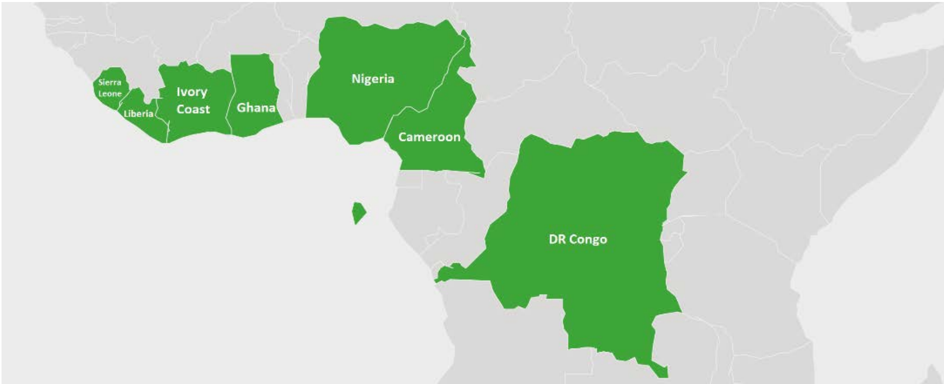
Socfin	58.9%
Vincent Bollore	9.0%

Landbank (ha)

Total Palm Oil Plantations	85,926
Total Rubber Plantations	48,273

Socfinaf S.A.

Socfinaf is a holding company listed on the Luxembourg Stock Exchange, with direct and indirect interests in both rubber and oil palm plantations throughout Africa. Socfinaf (African operations), alongside Socfinasia (Asian operations), is controlled by Socfin, which is also listed in Luxembourg with a market capitalisation of $510m and annual revenues of over €570m. Socfinaf has the widest spread of geographical assets amongst the African plantation companies.



Socfinaf Plantation Subsidiaries

Subsidiary	Location	Palm Oil (hectares)		Rubber (hectares)	
		Mature	Immature	Mature	Immature
Agripalma	Sao Tome	0	2,210	0	0
Brabanta S.A.	DRC Congo	4,939	1,230	0	0
LAC	Liberia	0	0	10,048	3,753
Okomu	Nigeria	9,874	4,590	4,345	2,990
PSG	Ghana	0	5,044	0	643
Safacam S.A.	Cameroon	4,622	726	2,968	1,189
Salala	Liberia	0	0	1,554	2,843
SCC	Cote D'Ivoire	0	0	*16,727*	0
Socapalm	Cameroon	31,827	1,074	1,666	413
SAC	Sierra Leone	3,002	9,317	0	0
SOGB	Cote D'Ivoire	7,195	276	10,616	5,245
Total		**61,459**	**24,467**	**31,197**	**17,076**
Total Planted Hectares		**85,926**		**48,273**	
Total Group Production (tonnes)		**195,391**		**110,054**	

Source: Company, Hardman Agribusiness

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	321.8	306.4	331.8
Gross Profit	141.0	108.5	142.4
Net Income	16.5	(23.0)	20.2
Gross Margin %	43.8	35.4	42.9
Net Margin %	5.1	n/a	6.1
Revenue / planted hectares (Oil Palm and Rubber) ($/ha)	2,397.9		
Total Equity	311.6	326.3	643.9
Debt/ Equity	0.69	0.54	0.56
EV/EBITDA (LFY)	9.19		
ROE (%)	1.7	(5.6)	(7.1)

Agribusiness
n/a

Market data	
EPIC/TKR	SAFACAM
Price (CFA)	34,000
12m High (CFA)	44,999
12m Low (CFA)	31,999
Shares (m)	1.2
Mkt Cap ($m)	76.8
EV ($m)	n/a
Free Float (%)	20.0%
Market	Cameroon

Company information	
CEO	Eric De Foresta

Key shareholders	
Safa	69%
Government of Cameroon	11%

Planted Hectares (ha)	
Mature Oil Palm	4,622
Immature Oil Palm	726
Mature Rubber	2,968
Immature Rubber	1,189

Safacam

Socfinaf holds a 100% stake in Safa, a holding company which in turn holds 69% of Safacam. Safacam cultivates both oil palm and rubber. Initial development of the plantation started in 1897, with the rubber factory opening in 1935. 1962 saw the creation of Safacam and in 1973 the company diversified into oil palm, alongside its sister company Socapalm, as the Cameroon authorities focused on reducing the country's palm oil trade deficit. At this point the state took an 11% stake in Safacam, with the remaining shares trading on the Cameroon Stock Exchange.

- The total landbank of the Dizangué plantation, Safacam's one location, consists of 15,529 hectares. 5,348 hectares of oil palm are planted, 4,622 of these are mature with a further 726 of immature hectares. 4,157 hectares are planted with rubber, 2,968 are mature and the remaining 1,189 are immature hectares.
- Safacam has a palm oil mill, a palm kernel crushing plant and a rubber factory (certified ISO 9001). In 2016, 12,285 tonnes of palm oil were produced as well as 5,671 tonnes of rubber. Production of both commodities was down y-o-y but corresponding revenues increased due to the group receiving better commodity prices during 2016.
- As of the 31st December 2016, Safacam had 2,200 permanent staff with some further 500 employees on temporary contracts. 33 health staff are employed to manage the 10 health centres in operation throughout the 14 villages on concession land.
- Parallel to Socapalm, DEG, the German Development Bank, has supported Safacam by joint financing social investments on the plantations in the areas of HIV-AIDS and education. Safacam is also a partner of the IECD (European Institute for Cooperation and Development) and CNEFAC (National Coordination of Family Farm Schools in Cameroon).
- A family farm school (EFA), supported by Safacam, accompanied by the IECD and overseen by CNEFAC, was opened on Monday 22nd of September 2014 with nearly 30 children from the Dizangué plantation region, only a week after a matching project was opened by Socapalm on its Kienke plantation.

Financial Summary ***(Source: Socfin Group Website)***

(USD Million)	2016
Revenue	19.4
Operating results	(1.5)
Net results	(0.6)
Net equity before result allocation	37.8
EPS (CFA)	n/a
P/E Ratio	n/a

Agribusiness	
n/a	

Market data	
EPIC/TKR	SOCAPALM
Price (CFA)	20,500
12m High (CFA)	22,500
12m Low (CFA)	19,999
Shares (m)	4.6
Mkt Cap ($m)	170.2
EV ($m)	n/a
Free Float (%)	11.0%
Market	Cameroon

Company information	
CEO	Dominique Cornet
Chairman	Michel Noulouwe

Key shareholders	
Socfinaf	67.0%
Government of Cameroon	22.0%

Planted Hectares (ha)	
Mature Oil Palm	31,827
Immature Oil Palm	1,074
Mature Rubber	1,666
Immature Rubber	413

Socapalm

Founded in 1968, as the Government of Cameroon tried to reduce the vegetable oil trade deficit, and privatised in 2000, Socapalm supplies nearly 70% of Cameroonian palm oil from its plantations, as well as a small amount of rubber. 67% owned by Socfinaf, its shares are traded on the Douala Stock Exchange in Cameroon. Socapalm owns 100% interest in SPFS (Société des Palmeraies de la Ferme Suisse), which produces approximately 6% of Cameroon's refined palm oil, sold under the Palm' Or brand.

- Socapalm's concession area totals 58,063 hectares over 6 separate sites. 32,901 hectares are planted with palm oil, of which 31,827 are mature and 1,074 are immature hectares. It has six ISO 14001 certified palm oil mills and in 2016 Socapalm produced 95,644 tonnes of palm oil. Socapalm also has 2,079 planted hectares of rubber; 1,666 mature hectares and 413 immature hectares.

- SPFS is Socapalm's 100% owned subsidiary and produces approximately 6% of Cameroon's refined palm oil, sold under the Palm' Or brand. It was established in 1974, with the refinery built in 1989. Since 2004, significant investment has been made to improve the refinery's performance. A biofuel production unit (stearin-based) was also opened in 2007, providing SPFS with sustainable fuel for its vehicles and generators. The refinery produced 1,473 tonnes of refined olein in 2016 and gives the Socfinaf group access to a larger portion of the palm oil value chain.

- As of the 31st December 2016, Socapalm employed 2,094 permanent staff, with a further 4,306 temporary staff and contractors. It has provided 11 health centres with 50 staff (doctors and nurses) to cater for the 11 villages located in its concessions.

- In a partnership mirroring its sister company Safacam, DEG, the German Development Bank, has supported Socapalm by helping to finance social investments on the plantations in the areas of HIV-AIDS and education. Socapalm, like Safacam, is a partner of the IECD (European Institute for Cooperation and Development) and CNEFAC (National Coordination of Family Farm Schools in Cameroon). A family farm school (EFA), supported by Socapalm, accompanied by the IECD and overseen by CNEFAC, was opened in September 2014 with nearly 40 children from the Kienke plantation region.

Financial Summary ***(Source: Socfin Group Website)***

(USD Million)	2016
Revenue	71.0
Operating results	18.1
Net results	4.5
Net equity before result allocation	119.4
EPS (FCA)	550.7
P/E Ratio	37.2

Groupe Blattner Elwyn

In addition to the listed palm oil producers detailed above, Groupe Blattner Elwyn, a private group with extensive plantation interests in the DRC, owns and operates some 12,500 ha of palm oil plantations.

Groupe Blattner Elwyn – Oil Palm					
Subsidiaries	**Province, District**	**Crop**	**Planted (ha)**	**Producing (Mature) (ha)**	**Oil Mills**
Busira Lomami Orientale (B.L.O.)	Tshopo District	Oil Palm	3,075	2,650	10 mt/hr
C.C.P. - LISAFA	Equateur Province	Oil Palm	2,900	2,400	7 mt/hr
C.C.P. - NDEKE		Oil Palm	1,559	1,344	5 mt/hr
S.C.C. BINGA	Equateur Province, Mongala District	Oil Palm	2,587	1,899	15 mt/hr
S.C.C. BOSONDJO	Equateur Province, Mongala District	Oil Palm	2,434	2,085	15 mt/hr
Total Oil Palm			***12,555***	***10,378***	

Source: Company Website

Olam International

Olam International operates a palm oil production platform in the Republic of Gabon extending to some 50,000 ha, which, (with the exception of some 6,340 ha acquired from SIAT Gabon), it has developed on greenfield sites, over the past 5-6 years. In October 2010, Olam signed a contract with the Republic of Gabon which at that time envisaged the eventual production of 1 million mt/CPO annually.

Olam established operations in Gabon in 1999. Subsequently, it has worked with the government to initiate a number of industrial and agro-industrial projects. The company has stated that it chose to invest in Gabon due to the country's political stability, a highly favourable agri-climate, and excellent logistics from the port of Libreville.

The company's website notes that Olam is developing 128,000 ha of palm plantations over 2 phases out of a total leasehold land bank of 300,000 hectares from which only suitable land is selected for both rubber and palm plantations; this includes area managed for smallholders' development. The Awala oil palm plantation achieved RSPO certification – the first for a new development in Africa – in August 2016, and the Mouila oil palm plantations are reported (on the Olam website) to be on track for certification in 2017. In July 2016 OPG bought palm oil assets from SIAT Gabon (palm plantation, mill, refinery and associated infrastructure near Makouke, Gabon) and a team is now in place to bring the entire operation into RSPO certification by 2019.

Additionally, Olam has a joint venture with the Republic of Gabon (49:51 ownership by Olam/RoG respectively) to develop co-operative smallholder farming and revitalise village agriculture in Gabon. A new company, Sotrader, is developing co-operative palm plantations under a traditional Asian nucleus/out-grower model and has completed the due diligence process for 30,000 planted hectares of palm in a predominantly savanna landscape in Ngounié Province, S. Gabon, close to the Olam Mouila plantations. Sotrader is also contributing to food security by creating village-based co-operative staple crop farming across Gabon, with more than 15,000 co-operative members enrolled and 134 cooperative land titles issued to members by July 2016.

Today, Olam produces a wide range of agri-commodities in Gabon, including palm oil, rubber and fertiliser. The company is also involved in the development of the Gabon Special Economic Zone (GSEZ) – a 1,126 ha multi-product special economic zone which combines industrial, commercial and port facilities.

As noted elsewhere in this report, Olam also has direct and indirect ownership in the palm oil production operations of the privately-owned Ivorian agri-holding group, SIFCA, and its palm oil operations: PalmCI (upstream plantations) and Sania (refinery and distribution). SIFCA is the controlling shareholder in PalmCI, one of the Africa's leading palm oil producers. Olam's investment in these is operations is held through the joint venture investment vehicle, Nauvu Investments, jointly and equally owned by Olam and Wilmar. Nauvu owns 25.5% of PalmCI, 50.44% of Sania and 27.06% of SIFCA itself. These investments have given Olam access to some 53,200 hectares of oil palm plantations in Ivory Coast, Ghana and Liberia, as well as circa 133,000 hectares producing palm oil under out-grower programmes in Ivory Coast. Additionally, via Sania, Nauvu has control of valuable consumer brands for palm oil products selling in Ivory Coast and across West Africa.

Olam International is listed on the Singapore Stock Exchange with a market capitalisation of some US $4.3bn. Olam is a globally integrated supply chain manager of agricultural products and food ingredients, Olam is active in 56 countries.

SIAT Group

The SIAT Group is one of the largest and most successful palm oil production businesses operating in Africa today with more than 27,000 ha of productive oil palm plantations under ownership across West Africa. The 'jewel in the crown' is thought to be the Nigerian listed operator Presco. Under SIAT's management, Presco has developed for a total of 17,000 ha are planted across the Obaretin, Cowan and Ologbo Estates. Additionally, in late 2011, the company acquired a total area of some 16,000 ha at Ologbo and Sakponba to develop further oil palm plantations. Acquired from the Rivers State Government, these were the assets of Risonpalm, substantially all under post mature oil palm plantations. A total of 2,000 ha have been replanted to date, according to the company's website. A new palm oil mill has been installed with a capacity of 60 tons of FFB per hour, and a kernel crushing plant with capacity for 60 tons per day.

In Ghana, the Group operates GOPDC, with a total of 21,500 ha of oil palm plantations being a mix of: nucleus (immature 1,200 ha / mature 6,600 ha) and out-grower plantations (immature 70 ha / mature 13,600 ha). GOPDC operates a mill with FFB processing capacity of 60 t/h and a 60 t/day palm kernel crushing facility.

Wilmar International

Wilmar International Limited, founded in 1991 and headquartered in Singapore, is the largest processor of palm oil in the world, with refinery capacity to process more than 50% of the global crop. The company is also one of the largest plantation operators in Asia with more than 230,000 ha of oil palm under cultivation. With a current market capitalisation of US$15.8bn, Wilmar is ranked amongst the largest listed companies by market capitalisation on the Singapore Exchange.

Ghana

Wilmar is the controlling shareholder in Wilmar Africa Ltd, a refinery operation in Ghana with capacity of circa 300,000 mt pa. Wilmar Africa is the controlling shareholder in Benso Oil Palm Plantations, detailed herein, with some 6,400 ha under cultivation.

Ivory Coast

As noted elsewhere in this report, Wilmar has direct and indirect ownership in the palm oil production operations of the privately-owned Ivorian agri-holding group, SIFCA, and its palm oil operations: PalmCI (upstream plantations) and Sania (refinery and distribution). SIFCA is the controlling shareholder in PalmCI, one of the Africa's leading palm oil producers. Wilmar's investment in these is operations is held through the joint venture investment vehicle, Nauvu Investments, jointly and equally owned by Olam and Wilmar. Nauvu owns 25.5% of PalmCI, 50.44% of Sania and 27.06% of SIFCA itself. These investments have given Wilmar access to some 53,200 hectares of oil palm plantations in Ivory Coast, Ghana and Liberia, as well as circa 133,000 hectares producing palm oil under out-grower programmes in Ivory Coast. Additionally, via Sania, Nauvu has control of valuable consumer brands for palm oil products selling in Ivory Coast and across West Africa.

Nigeria

PZ Wilmar, formed in December 2010, is a joint venture between Wilmar International and PZ Cussons, in support of the Nigerian Government's Agricultural Transformation Agenda. PZ Cussons is an international consumer products group headquartered in the UK, with operations in Africa, Asia, the Middle East and Europe, and with a long presence in Nigeria. The parties announced two JVs in 2010, one in respect of a refinery operation which is 51% owned by Wilmar, and a branded consumer goods business, 51% owned by PZ Cussons.

In 2012, Wilmar acquired approximately 30,000 hectares of land in Cross River State for the development of oil palm plantations. The RSPO website indicates that in 2016, Wilmar was proposing to plant 2,369 hectares.

The Wilmar / PZ Wilmar plantation strategy is to rehabilitate neglected plantations and to invest in new planted productive capacity. The company's website indicates that 2 million oil palm seeds are now ready for planting, which would be sufficient for approximately 14,000 ha. Downstream, the JV is building a state-of-the-art palm oil refinery and packaging facility in Lagos State, with the object of producing high-quality, affordable cooking oil, under the brand Devon King's, and by the launch of a new premium quality brand (100% pure), Mamador, in tamper proof packaging.

Uganda

In 2002, Oil Palm Uganda Limited signed an agreement with the Uganda Government to undertake an integrated palm oil project in Kalangala District of Uganda. The Kalangala Oil Palm project was established in the spirit of a government initiative to increase domestic production of vegetable oils. The project is supported by IFAD and the World Bank with Bidco Uganda Limited (BUL) and Wilmar as investor partners. The BUL complex in Jinja, which has been in operation for 12 years, produces high quality palm oil products for both the local and export markets. The palm oil plantations, extending to some 8,500 ha, of which 6,500 ha are planted, are located on Ssese Island which is in an archipelago of eighty-four islands in the north-western part of Lake Victoria in Uganda. The islands are contiguous with the Kalangala District.

African Natural Rubber Production Lags the Asian Giants

While many regions and countries in West Africa are ideally suited for the cultivation and production of natural rubber, the reality is that Sub-Saharan Africa is a relatively minor producer in global terms, accounting for little more than 5% of the world crop.

Production of Natural Rubber 2010-2014

	Production (mt)					
	2010	**2011**	**2012**	**2013**	**2014**	**2014 % Of Total**
Thailand	3,051,781	3,348,897	4,139,403	4,305,069	4,546,260	34.3%
Indonesia	2,734,900	2,990,200	3,012,254	3,107,544	3,153,100	23.8%
Viet Nam	751,700	789,635	877,111	946,865	961,104	7.3%
India	862,000	800,000	900,000	900,000	940,000	7.1%
China, mainland	690,812	750,852	802,255	864,806	840,171	6.3%
Malaysia	939,241	996,210	922,798	826,421	668,613	5.0%
Philippines	130,430	140,500	110,750	444,818	453,052	3.4%
Guatemala	283,277	314,240	347,193	356,392	370,440	2.8%
Cote d'Ivoire	235,048	238,717	256,613	289,563	312,029	2.4%
Myanmar	112,079	149,627	161,800	174,100	194,900	1.5%
Brazil	133,981	164,498	177,088	185,725	192,389	1.5%
Nigeria	144,718	144,404	147,171	149,052	151,104	1.1%
Sri Lanka	152,990	158,198	150,600	130,421	113,112	0.9%
Top 13 Producers	**10,222,957**	**10,985,978**	**12,005,036**	**12,680,776**	**12,896,274**	**97.4%**
Other 16 Producers (including 8 African Producers)	303,674	299,909	325,916	325,174	348,551	2.6%
Total World Production	**10,526,631**	**11,285,887**	**12,330,952**	**13,005,950**	**13,244,825**	**100.0%**
Annual Change (%)		7.2%	9.3%	5.5%	1.8%	
African Production As % Global	**5.4%**	**5.1%**	**5.0%**	**5.0%**	**5.1%**	

Source: FAOSTAT, 2017

The rubber producing countries in Sub-Saharan Africa, or West Africa more precisely, are led by Cote d'Ivoire, producing circa 2.4% of global output, and more than 49% of total African production.

Cote d'Ivoire is without doubt Africa's leading country for plantation culture: it is the only exporter in Africa of home produced palm oil, it is the world's largest producer of cocoa at 40% plus of the global crop, and it is the leading producer of natural rubber in Africa and the 9th largest in the world. Within Cote d'Ivoire, it is SAPH, a subsidiary of the Ivorian plantation holding company SIFCA, which is the largest single producer in Africa with annual production of more than 120,000 mt, and a proprietary planted area of some 22,000 ha.

African Rubber Production

Country	Production (mt)	Export (UN Comtrade) ($m)
Cote d'Ivoire	312,029	784.0
Nigeria	151,104	92.9
Liberia	75,371	157.0
Cameroon	55,769	124.0
Gabon	23,161	33.3
Ghana	22,427	42.1
Guinea	15,897	46.5
Democratic Republic of the Congo	11,714	17.7
Congo	2,305	5.8
Central African Republic	1,509	n/a
Total	**671,286**	**1,303.3**

Source: FAOSTAT, Hardman Agribusiness, UN Comtrade

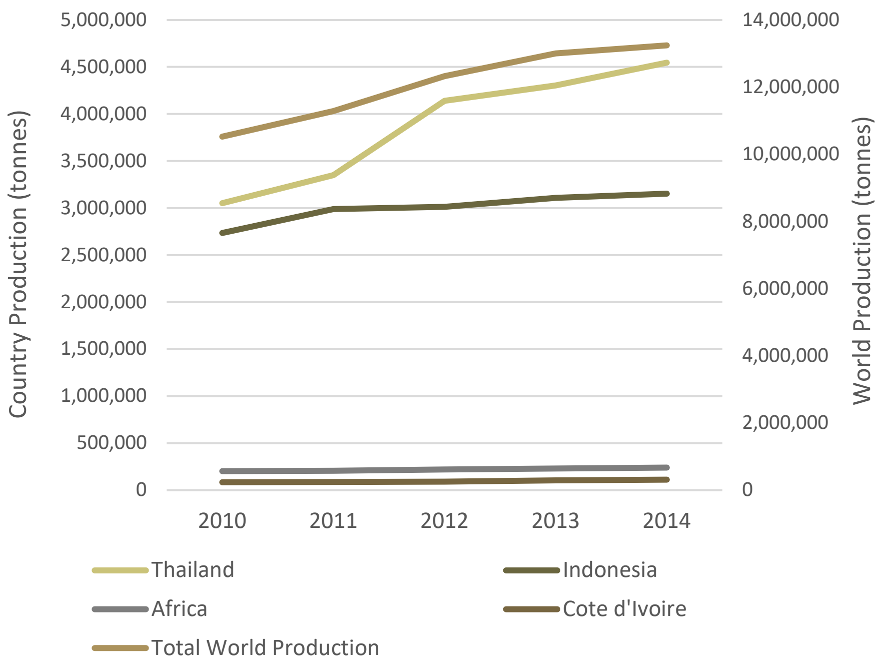
Nigeria at a little under half the production of Cote d'Ivoire, and then Liberia, (itself about half the size of Nigeria), occupy second and third positions respectively.

Societie Africaine de Plantations d'Heveas (SAPH), the Ivorian lead producer, is controlled by the Ivorian private group SIFCA, through the (erstwhile) Paris listed SIPH. On 6th June 2017, Michelin (through its subsidiary CFM) and SIFCA announced a joint bid for the minority holdings in SIPH. The current position appears to be that CFM / Michelin owns 33.6% of the share capital in SIPH, and 30.8% of the voting rights, while SIFCA owns 55.6% of the share capital and 62.9% of the voting rights. Minority investors now own only 10.8% of the share capital and 6.3% of the voting rights.

Described as a 'friendly offer' the intention of the parties (Michelin and SIFCA) was stated as an intention "to strengthen their ties and raise their stake in SIPH". The rationale given:" the increasingly important role that West Africa is playing in global natural rubber production", is not supported by the global production data. The SIFCA/Michelin alliance occupies a powerful position within the African rubber sector, and it is well-placed to expand both organically and by way of acquisition, should significant assets become available.

While SIFCA/Michelin may have concluded that West Africa has an increasingly important role in rubber production, world growth has been driven fundamentally by output increases by lead producer Thailand, as demonstrated by the chart below. By contrast, Africa's productivity has, looking that the data in the chart below, flat-lined, over the review period.

Natural Rubber Production, world and specific countries



Source: FAOSTAT, Hardman Agribusiness

While Africa currently, is a relatively small region of rubber production in world terms, there is considerable scope to increase production. The region trails the major production zones in terms of productivity at only 69% of the world average yield per hectare, and less than 40% of the levels of number 4 and 7 producers, India and the Philippines respectively.

African Rubber Production

Country	Production (mt)	Harvested Area (ha)	Yield (t/ha)
Cote d'Ivoire	312,029	189,703	1.64
Nigeria	151,104	362,716	0.42
Liberia	75,371	96,000	0.79
Cameroon	55,769	57,832	0.96
Gabon	23,161	15,635	1.48
Ghana	22,427	27,350	0.82
Guinea	15,897	11,300	1.41
Democratic Republic of the Congo	11,714	50,600	0.23
Congo	2,305	2,572	0.90
Central African Republic	1,509	1,301	1.16
Total/Average	**671,286**	**815,009**	**0.82**

Source: FAOSTAT and Hardman Agribusiness

Within the African region, Ivory Coast leads on productivity with 1.64 mt/ha, for a 34% improvement on the world average. Gabon shows up well also. Both countries have strong professional plantation sectors, led by SAPH in Ivory Coast, and SIAT and Olam in Gabon. However, the scale of the African sector is dwarfed by the scale of rubber production in both Thailand and Indonesia.

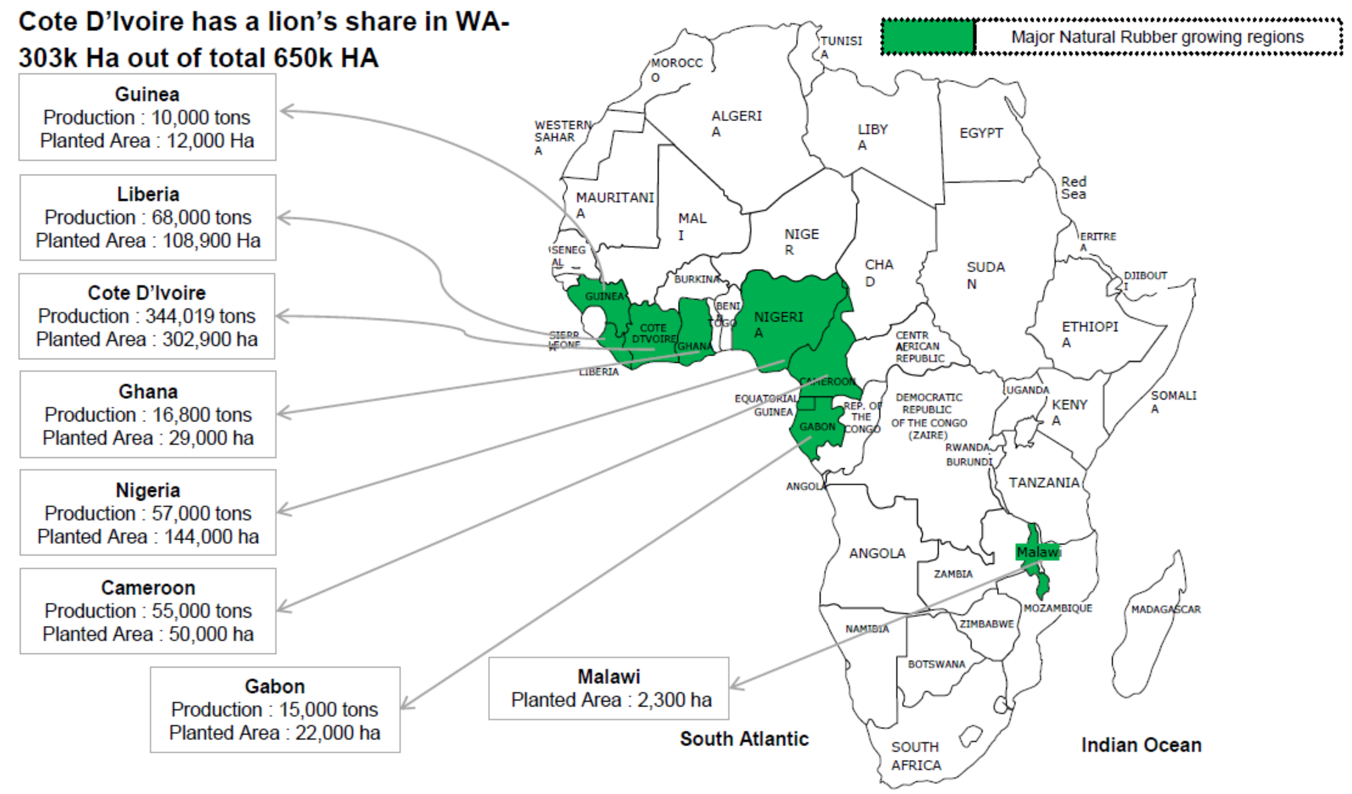
Dominant World Rubber Producers

Country	Production (mt)	Harvested Area (ha)	Yield (t/ha)
Thailand	4,546,260	2,915,813	1.56
Indonesia	3,153,100	3,606,300	0.87
Vietnam	961,104	566,537	1.70
India	940,000	455,000	2.07
China, mainland	840,171	678,148	1.24
Malaysia	668,613	1,065,630	0.63
Philippines	453,052	217,687	2.08
Guatemala	370,440	110,845	3.34
Cote d'Ivoire	312,029	189,703	1.64
Myanmar	194,900	255,600	0.76
Group Total/ Average	**12,439,669**	**10,061,263**	**1.59**
World Total/Average	**13,244,825**	**11,096,401**	**1.22**

Source: FAOSTAT and Hardman Agribusiness

Geographically, the African sector is overwhelmingly located in West Africa extending from Guinea Conakry to Gabon, except for a pocket of 2,300 ha in Malawi.

Natural Rubber Production in Africa



Source: Olam, 2017

There is a strong theme of foreign ownership within the African rubber production sector, with SAPH an important exception in that it is controlled by an Ivorian company. In Nigeria and Liberia, the leading plantations are foreign owned: Firestone in the case of Liberia, and the Belgian plantation operators Siat and Socfin, in Nigeria.

The SIFCA Group has a strong presence in the sector, right across the West African region, led by its chief operating unit, SAPH. As demonstrated by the data below, SIFCA, Socfinaf and SIAT are the dominant plantation actors in this sector. The Socfinaf majority owned subsidiaries SOGB and SCC account for some 25% of all the rubber produced in Ivory Coast. SOGB is the 2nd largest rubber producer in Cote d'Ivoire. The Socfin Group, acquired a controlling stake in the business (together with a local investor), when the business was privatised in 1994.

The SCC (La Société Sud Comoé Caoutchouc) was established in 2008 when the regional authorities in the Aboisso and Sud-Comoé regions, asked Socfinaf to investigate the feasibility of establishing a rubber factory to process regional production. Today the 2.5 t/h factory at Adaou is the 6th largest producer in the country with annual output of more than 25,000 mt of rubber. The factory is supplied with raw latex from some 16,727 ha of out-grower plantations (6,500 farmer partners). Consistent growth in regional production since 2008, has seen SCC continuing to invest the processing facilities. In 2014 for example, the processing / manufacturing capacity of SCC was expanded by 50%, providing annual export volume of 25 000 mt. The facility is certified ISO 9001 and ISO 14001.

Rubber Production In Africa

Country	2014 Production (tonnes)	% of Leading African Rubber Producing Countries Production	Producers	Estimated Contribution to 2014 Country Production
CDI	312,029	46.7	SAPH (SIFCA Group)	52%
			SOGB (Socfinaf)	18%
			SCC (Socfinaf)	8%
			SIAT Group	10%
			Others	12%
Nigeria	151,104	22.6	Rubber Estates Nigeria Ltd (RENL) (SIFCA Group)	39%
			Others	61%
Liberia	75,371	11.3	Cavalla Rubber Corp (CRC) (SIFCA Group)	6%
			Firestone Plantation	84%
			Liberian Agricultural Company (Socfin)	10%
Cameroon	55,769	8.4	Safacam (Socfin)	10%
			Cameroon Dev Corp	50%
			GMG Global (Halcyon)	40%
Gabon	23,161	3.5	SIAT Gabon	80%
			Olam	20%
Ghana	22,427	3.4	Ghana Rubber Estates Ltd (GREL) (SIFCA Group)	90%
			Rubber Plantations Ghana	10%
Guinea	15,897	2.4	Soguipah	82%
			Others	18%
Democratic Republic of Congo	11,714	1.8	Miluna Gwaka	43%
			Others	57%
Leading Producing Countries	**667,472**			
Total African Production	**671,286**			
% of African Production	**99.4%**			

Source: Hardman Agribusiness

Firestone (owned by Japanese Bridgestone Corporation since 1988), is the leading directly controlling, downstream tyre manufacturer operating in the sector. Firestone began developing plantations in Liberia in 1926 and for many years, rubber production was the largest source of employment in the country. By some estimates (Verité, Rubber Production in Liberia) more than 30% of the Liberian workforce was engaged in the rubber sector prior to the outbreak of the civil war (1989-1997). Operation of the plantation has resulted, from time to time, in the Firestone company attracting critical attention from the international media for worker rights and its role during the civil conflict. Other large scale downstream manufacturers with plantation interests, like Unilever in the palm oil production sector, have exited plantation operation, perhaps in part, to avoid the brand damage that can accompany allegations of labour and other human rights abuses.

Subject to Liberia's progress towards sustainable political and social stabilisation, the country's rubber production sector could become the focus of attention for operators seeking to expand their Africa based production. Besides Firestone's 51,000 ha plantation, there are a number of other large-scale rubber plantations operating in Liberia (Source: Verité, Rubber Production In Liberia) including:

- Liberia Agricultural Company (LAC) (subsidiary of Socfinaf) – near Buchanan, Grand Bassa County
    - The LAC plantation is one of the largest in Liberia with a labour force of approximately 3,000 workers (regular and seasonal) and a total population of 25,000.
- Guthrie (also known as Goodrich plantation) (and now owned by Sime Darby), is near Baha, Bomi County
- Liberia Company (LIBCO) – near Cocopa, Nimba County
    - LIBCO employs approximately 1,200 workers and has a population of 6,000.
    - This is family owned company
- Salala Rubber Corporation (subsidiary of Socfinaf) – near Nienka, Margibi County.
- Cavalla (initially part of the Firestone concession) (subsidiary of SIPH, Sifca) – near Harper, Maryland County
- Sinoe Rubber Corporation (SRC) – near Greenville, Sinoe County.

Rubber Sector Company Profiles

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	SIPH.PA
Price (EUR)	85.85
12m High (EUR)	86.00
12m Low (EUR)	31.35
Shares (m)	5.1
Mkt Cap ($m)	513.7
EV ($m)	668.3
Free Float (%)	21.21%
Market	Paris

Company information	
Chairman	Pierre Billon
CEO	Bertrand Vignes
Secretary General & SIFCA Representative	Frederique Varennes

Key shareholders	
SIFCA	55.6%
Michelin	33.6%

Land Use (ha)	
Concession Area	91,600
Total Rubber Plantations	58,478
Mature Rubber	40,583
Immature Rubber	16,586

SIPH - Société Internationale de Plantations d'Hévéas

SIPH, listed on the Paris Stock Exchange, is the holding company for a group of rubber producing businesses in Ivory Coast, Ghana, Nigeria and Liberia. Rubber production in Africa is around 670,000 mt per year with approcimately 50% coming from the Cote d'Ivorie. SIPH total production in 2015 was 183,000mt, up 12% up y-o-y. 86% of the group's production comes from SAPH (Ivory Coast) and GREL (Ghana). In June 2017 Michelin and SIFCA acting in concert, annouced a bid for the free float traded on the Paris Exchange.

- SAPH (Société Africaine de Plantations d'Hévéas), based in Cote d'Ivoire and listed on the Abidjan stock exchange, has 6 concessions totalling 33,600 ha. 22,290 of these hectares are planted, along with some 216,000mt/pa processing capacity across 5 factories. It accounts for some 37% of the area planted to rubber in Cote d'Ivoire and circa 52% of national rubber production.
- GREL (Ghana Rubber Estates Limited) owns a 22,000 ha concession, of which 15,172 ha are planted in rubber, all supported by factory capacity of 57,600mt/ pa. GREL accounts of over 90% of the area planted to rubber in Ghana, and perhaps the same for national production.
- REN (Rubber Estates Nigeria Limited) has 23,800ha of concessions over 4 sites, with 14,371 ha of rubber and 36,000mt/pa processing capacity.
- CRC (Cavalla Rubber Corporation), based in Liberia has 12,200ha of concession area of which 6,100ha are planted with rubber, supported by a 14,400mt/pa processing capacity.
- On 6th June 2017, Michelin (through its subsidiary CFM) and SIFCA announced a joint bid for the minority holdings in SIPH. The current position appears to be that CFM / Michelin owns 33.6% of the share capital in SIPH, and 30.8% of the voting rights, while SIFCA owns 55.6% of the share capital and 62.9% of the voting rights. Minority investors now own only 10.8% of the share capital and 6.3% of the voting rights.

Financial Summary *(Source: Thomson Reuters Eikon)*

(USD Million)	2016	2015	2014
Total Revenue	296.3	274.0	331.7
Gross Profit	66.9	55.0	62.3
Net Income	10.8	(4.2)	(82.1)
Gross Margin %	22.6	20.1	18.8
Net Margin %	3.6	n/a	n/a
Total Equity	137.1	119.3	140.6
Debt/ Equity	0.98	0.78	0.68
EV/ EBITDA (LFY)	17.70		
ROE (%)	5.1	(1.7)	(31.8)

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	SPHC.CI
Price (XOF)	3,000.0
12m High (XOF)	3,977.0
12m Low (XOF)	570.0
Shares (m)	5.1
Mkt Cap ($m)	141.1
EV ($m)	214.2
Free Float (%)	12.1%
Market	Abidjan

Company information

Joint CEO	Marc Genot
Joint CEO	Banga Amoikon
CFO	Patrick Hornecker

Key shareholders

SIPH	68.1%
Michelin	9.9%
Private	10.0%

Land Use (ha)

Concession Area	33,600
Total Rubber Plantations	22,920
Mature Rubber	17,251
Immature Rubber	5,669

SAPH - Société Africaine de Plantations d'Hévéas

SAPH, a subsiary of Société Internationale de Plantations d'Hévéas (SIPH), is listed on the Abidjan Stock Exchange in Cote D'Ivorie. African rubber production is around 670,000 mt a year, with roughly half of this coming from CDI, of which SAPH accounts for 50%.

- Over the group's 6 sites, SAPH has control of 33,600 ha. 22,920 ha are planted with rubber, leaving some 11,000 ha for further expansion. It is estimated that SAPH employs 2,300 workers on its plantations. SAPH is also actively developing its out-grower supply lines.
- As well as upstream plantations, SAPH is also present in the midstream value chain with 5 mills and a total processing capacity of some 150,000mt per year. Another 1,075 people are employed in the processing value chain.
- Gross margins are lower than in the palm oil production sector.

Financial Summary *(Source: Thomson Reuters Eikon)*

(USD Million)	2016	2015	2014
Total Revenue	190.7	165.0	201.4
Gross Profit	45.7	41.4	54.2
Net Income	2.0	(3.0)	(7.7)
Gross Margin %	24.0	25.1	26.9
Net Margin %	1.0	n/a	n/a
Total Equity	105.9	107.7	124.1
Debt/ Equity	0.67	0.70	0.54
EV/ EBITDA (LFY)	9.87		
ROE %	1.8	(2.7)	(5.4)

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	SOGC.CI
Price (XOF)	3,700.0
12m High (XOF)	5,321.0
12m Low (XOF)	342.5
Shares (m)	2.2
Mkt Cap ($m)	147.1
EV ($m)	157.1
Free Float (%)	27.0%
Market	Abidjan

Company information

NA

Key shareholders

Bereby Finances	73.0%

Land Use (ha)

Total Palm Oil Plantations	7,471
Mature Palm Oil	7,195
Immature Palm Oil	276
Total Rubber Plantations	15,861
Mature Rubber	10,616
Immature Rubber	5,425

SOGB - Société des Caoutchoucs de Grand Béréby

SOGB, which is listed on the BRVM in Abidjan, is controlled indirectly by the Socfinaf Group through its subsidary Bereby Finances (BF). Socfinaf owns 87% of BF, which in turn owns 73.0% of SOGB. Socfinaf, the Luxembourg listed holding company for Socfin's African plantation assets, is 59% owned by Socfin (also Luxembourg listed).

- SOGB was created in 1969 as the Government looked to open up the south west of the country to economic activity. It is the 2nd largest rubber producer and 3rd largest palm oil producer in Cote d'Ivoire. SOGB was privatised in 1994, when the Socfin Group, alongside a national investor, acquired a majority stake in the business.
- **Rubber** – The group's 15,861ha of rubber trees produced 53,416 tonnes in 2016. SOGB operates a 10t/h rubber factory.
- **Palm Oil** – The group's 7,471ha of palm oil plantations produced some 35,000 tonnes of CPO (4.7 MT/HA) in 2016. SOGB operate a palm oil mill (45t/h) and a palm kernel crushing plant.
- Since the privatisation, there has been substantial investment into the mills as well as the plantations to ensure the long-term future of the estates.
- Technical support from SOGB has led to growth in 3rd party supply of smallholder rubber production from some 26,000ha of out-grower plantations. Maintenance of local infrastructure in support of the rubber business, provides important support for local logistics.
- SOGB has built 10 schools with over 4,200 students, a modern hospital provides free immunisation and basic medical care, and health clinics provide health education for local populations. DEG, the German Development Bank, has helped financed investments into health and education on the plantations.

Financial Summary *(Source: Thomson Reuters Eikon)*

(USD Million)	2016	2015	2014
Total Revenue	94.9	90.5	116.3
Gross Profit	48.0	44.7	52.7
Net Income	10.4	10.1	9.3
Gross Margin %	50.8	49.4	45.3
Net Margin %	11.0	11.2	8.0
Total Equity	89.7	89.4	96.8
Debt/ Equity	0.13	0.18	0.20
EV/ EBITDA (LFY)	5.90		
ROE %	11.2	11.3	8.8

Groupe Blattner Elwyn

In addition to the listed rubber producers detailed above, Groupe Blattner Elwyn, a private group with extensive plantation interests in the DRC, owns and operates some 12,000 ha of natural rubber plantations.

Groupe Blattner Elwyn - Rubber						
Subsidiaries	**Province, District**	**Crop**	**Planted (ha)**	**Producing (Mature) (ha)**	**Village Cooperatives (ha)**	**Factories**
Busira Lomami Equateur (B.L.E.)	Equateur, Tshuapa	Rubber	5,643	5,643	2,405	Granulated rubber factory: 2 mt/hr
S.C.A.M	Bas-Congo Province, Bas-Fleuve District	Rubber	2,580	2,083		Granulated rubber factory: 0.75 mt/hr; Palm kernel oil factory
S.C.C. BINGA	Equateur Province, Mongala District	Rubber	3,173	2,983		Granulated rubber factory: 1 mt/hr
S.C.C. BOSONDJO	Equateur Province, Mongala District	Rubber	757	637		Granulated rubber factory: 1 mt/hr
Total Rubber			**12,153**	**11,346**		

Source: Company Website

Olam Natural Rubber

Olam International has partnered with the Government of the Republic of Gabon in a 60:40 Joint Venture to develop 12,000 hectares (ha) of rubber plantations in Bitam. Besides the production and processing of rubber, Olam has developed what it describes as a “world-class rubber trading” operation, leveraging on the company’s inhouse risk management capabilities.

In 2015 Olam acquired SAIC, a crumb rubber processing facility (with annual processing capacity of 21,000 mt) located in Aniassué, about 182 kilometres east of Abidjan, Côte d’Ivoire. SAIC sources raw latex from rubber tree plantations owned by some 2,000 smallholder farmers and members of 10l co–operatives within the region. Olam supplies customers with two grades of high quality Technically Specified Rubber (TSR) that meet stringent industry standards. The Olam operations employees 149 people and is ISO 9001 certified.

As noted elsewhere in this report, Olam also has an indirect ownership in the rubber production operations of the privately-owned Ivorian agri-holding group, SIFCA. SIFCA is the controlling shareholder in SIPH, one of the world’s leading rubber companies with plantations in Côte d’Ivoire, Ghana, Liberia and Nigeria. The investment, made through Nauvu Investments, a joint venture between Olam and Wilmar, has given Olam access to some 57,500 hectares of rubber plantations in these countries, as well as some 71,000 hectares producing rubber under out-grower programmes.

SIAT Group

In 2016, SIAT operated rubber plantations extending to 22,561 ha across Gabon and Ivory Coast. In Gabon, SIAT's activities produce circa 21,000 mt annually for export, and are all located in the northern part of the country. These Gabon activities comprise:

- Bitam Estate
    - 2,300 ha mature rubber plantation
- Mitzic Estate
- 4,200 ha of mature rubber plantations
- a crump rubber factory with a capacity of 2,000 tonnes per month
- Kango Estate
    - 1,750 ha mature rubber plantation
- Ikembele Estate
    - 300 ha of mature rubber
- Zilé, Bitam, Mitzic and Kango combined
    - 3,300 ha of immature rubber plantation
- Out-grower Plantations
    - cover about 2,100 ha.

In Ivory Coast, SIAT owns the Compagnie Hévéicole de Cavally (CHC), which is located 27 km from Zagné, in the prefecture of Guiglo in the region of Moyen Cavally, a well-established rubber growing zone near the Ivorian border with Liberia. CHC's operations include:

- A nucleus estate of 5,400 ha planted, of which 530 ha is immature
- An out-grower scheme of 13,500 ha of rubber plantation of which the larger part is immature
- A crumb rubber processing factory of 3,500 t/m capacity.

SIAT is seeking an additional area of land to expand the plantation by about 5,000 ha by 2022. The company is also seeking to expand its out-grower supply area by about 1,000 hectares each year. Also in Ivory Coast, SIAT owns Compagnie Hévéicole de Prikro (CHP), a new greenfield concession in Prikro, on which SIAT intends to develop 5,000 hectares of industrial rubber plantations and 8,000 of out-grower plantations, plus a processing factory, representing an investment of some 50 million Euro over the next decade.

In Nigeria, SIAT is proposing to develop further rubber plantations, alongside palm oil production, on some 17,000 ha recently acquired at Ologbo and Sakponba.

Coconut Production Africa

In coconut production, as with the production of the other big plantation crops: palm oil and natural rubber, Africa is a relatively minor player in a global context. Production data collected by the FAO (see below) for 20 African producer countries, suggests that the continent accounts for only 3.4% of global production, yet the African sector accounts for 9.6% of the global area planted to coconut production, thus underscoring the relative inefficiency of African production.

African Production 2014

	Hectares	Production (mt)	Yield (mt/ha)
United Republic of Tanzania	708,449	540,455	0.8
Ghana	26,600	380,380	14.3
Nigeria	38,907	267,520	6.9
Mozambique	82,605	251,367	3.0
Cote d'Ivoire	81,245	144,906	1.8
Comoros	33,980	98,125	2.9
Madagascar	33,486	76,896	2.3
Kenya	38,800	63,958	1.6
Sao Tome and Principe	12,890	63,616	4.9
Guinea	13,585	51,827	3.8
Guinea-Bissau	11,209	42,557	3.8
Benin	14,000	18,610	1.3
Togo	4,588	13,371	2.9
Somalia	3,539	10,980	3.1
Equatorial Guinea	4,081	7,359	1.8
Liberia	2,478	6,740	2.7
Cabo Verde	1,736	5,553	3.2
Cameroon	1,729	5,114	3.0
Sierra Leone	4,500	4,203	0.9
Senegal	1,301	4,044	3.1
Congo	980	3,419	3.5
Seychelles	554	2,540	4.6
Mauritius	514	1,440	2.8
Reunion	62	236	3.8
Africa Total Production	**1,121,818**	**2,065,216**	**1.8**
World Production	**11,939,801**	**60,511,756**	**5.1**
Africa as % of World	**9.4%**	**3.4%**	**36.3%**

Source: FAOSTAT and Hardman Agribusiness

Compare Africa sector average production efficiency (1.7 mt/nuts per) with world average (5.1 mt/ha), and with the weighted average yield per ha (5.5 mt) of the 6 top producer countries (responsible for nearly 84% of global production), listed below.

Top 6 Coconut Producing Countries 2014

Country	Hectares	Production (mt)	Yield (mt/ha)	% Of World Production
Indonesia	3,025,000	18,300,000	6.0	30.2%
Philippines	3,502,011	14,696,298	4.2	24.3%
India	2,140,000	11,078,873	5.2	18.3%
Brazil	250,554	2,919,110	11.7	4.8%
Sri Lanka	394,836	2,395,266	6.1	4.0%
Vietnam	139,236	1,374,404	9.9	2.3%
Total For 6 Top Producers	**9,451,637**	**50,763,951**	**5.4**	**83.9%**
World	**11,939,801**	**60,511,756**	**5.1**	**100%**

Source: FAOSTAT and Hardman Agribusiness

The data confirm the largely informal nature of the African sector, dominated as it is by smallholder farm cultivation. HAB was able to identify only one agro-industrial coconut plantation in Africa, Société Ivoirienne De Coco Râpé (further details are shown below), which has recently restarted operations after a long period of inactivity.

The time series data in the table below reveal some considerable disparities between African producer countries, in particular the strong development of the Ghanaian sector, which has achieved a 30% growth in output over the review period, in contrast to Mozambique, where the coconut sector is reeling from the impact of the insect-borne infection Coconut Lethal Yellowing Disease. Lethal Yellowing has spread across Mozambique, with some estimates suggesting that as much as half of the country's coconut trees have been destroyed. The disease, which has been found across the world from Jamaica to the Philippines and even southern Florida, is caused by a virus-like bacterium that is spread by insects. In Mozambique, the problem was exacerbated by rhinoceros beetles.

African Production of Coconuts (2014)

Country	2010	2011	2012	2013	2014	% Change
United Republic of Tanzania	570,000	550,000	520,000	530,000	540,455	-5%
Ghana	292,000	344,000	345,000	366,183	380,380	30%
Nigeria	263,815	265,000	264,814	266,045	267,520	1%
Mozambique	279,221	273,780	270,000	260,000	251,367	-10%
Cote d'Ivoire	150,816	158,410	151,430	152,410	144,906	-4%
Comoros	90,983	93,137	97,798	97,990	98,125	8%
Madagascar	78,100	76,000	76,940	76,940	76,896	-2%
Kenya	74,613	87,497	120,068	64,079	63,958	-14%
Sao Tome and Principe	32,000	33,730	38,300	54,100	63,616	99%
Guinea	41,679	51,400	50,950	49,955	51,827	24%
Guinea-Bissau	42,050	42,200	42,226	42,870	42,557	1%
Benin	17,200	17,000	18,780	18,780	18,610	8%
Togo	13,850	14,000	13,997	13,030	13,371	-3%
Somalia	11,090	11,000	11,037	10,988	10,980	-1%
Equatorial Guinea	6,899	7,000	7,000	7,500	7,359	7%
Liberia	6,650	6,500	6,564	6,610	6,740	1%
Cabo Verde	5,545	5,600	5,616	5,616	5,553	0%
Cameroon	5,000	5,000	5,250	5,100	5,114	2%
Sierra Leone	3,683	3,924	4,250	4,100	4,203	14%
Senegal	4,340	4,260	4,260	4,098	4,044	-7%
Congo	3,295	3,482	3,484	3,485	3,419	4%
Seychelles	2,481	2,400	2,800	2,900	2,540	2%
Mauritius	1,500	1,500	1,688	1,612	1,440	-4%
Reunion	206	231	237	236	236	15%
African Production	**1,997,015**	**2,057,052**	**2,062,489**	**2,044,628**	**2,065,214**	
World Production	**60,106,701**	**58,446,844**	**61,876,577**	**62,073,454**	**60,511,756**	
Africa as % of World Production	**3.3%**	**3.5%**	**3.3%**	**3.3%**	**3.4%**	

Source: FAOSTAT and Hardman Agribusiness

Tanzania

The coconut palm is an important perennial cash and subsistence oil crop along the coastal belt of Tanzania. The crop is thought to support the livelihoods of more than 300,000 rural households, with an average farm size of 0.5 to 3 ha.

Some of the major constraints to coconut cultivation in Tanzania include the presence of serious pests and diseases, including Lethal Yellowing, poor crop husbandry practices as a result of inadequate extension services to growers, lack of improved planting materials, ageing coconut palms and sub-optimal climatic conditions.

Ghana

Agriculture is the main driving force behind Ghana's economy, accounting for approximately 42% of the country's GDP and employing 54% of its work force. Coconut production in Ghana is mainly on smallholdings (0.5-5.0 ha). Out of the annual national production of 224 million nuts, 179 million (80%) were produced by smallholders on an estimated 36,000 hectares.

The government is seeking to enhance the competitiveness and profitability of crop production (including coconuts), through access to improved technological packages for increased productivity and greater sustainability. The government sponsored 'Ghana Coconut Project' sought to have 1,000,000 hectares of coconut planted along the Ghanaian coast (55,000 ha in 2013), providing more than 200,000 jobs from growing and processing coconuts and coconut products, with a goal to generate national coconut economy revenues of $12bn annually. In 2010, The Ministry of Food and Agriculture (MOFA), established a Coconut Sector Development Unit (CSDU), to continue the work of the Coconut Sector Development Project. The unit has been partly supported by contributions from Agence Francaise de Development (AFD), the aid-agency of the French Government.

Amongst its objectives was the development of high yielding hybrid coconut planting material. Hybrids with which the unit has been experimenting include:

- Sri-Lankan Green Dwarf x Vanuatu Tall
    - CIRAD and the Ghanaian coconut sector have worked together to develop a resistant hybrid to replace the local variety which is very sensitive to this disease.
    - The Sri Lanka Green Dwarf x Vanuatu Tall (both resistant varieties) hybrid is seen as a strong material to manage the impact of the disease
- Malayan Yellow Dwarf x Vanuatu Tall
    - Both of which are reported to be tolerant/resistant to Lethal yellowing unlike the locally occurring West Africa Tall
    - 11,000 ha of palms in the coastal belt, were destroyed by Lethal Yellowing in 1999
- Equatorial Green Dwarf
- Malayan Red Dwarf
    - high yielding dwarf coconut varieties.

The unit is charged with the establishment and expansion of coconut seed gardens and nurseries, and also, the maintenance of existing coconut seed gardens and nurseries.

Nigeria

The coconut palm, though not indigenous to Nigeria, grows well in places with a mean annual temperature of 25°C - 28°C and an annual rainfall of 200mm. The crop is under cultivation in a number of regions including:

- the coastal areas of Lagos State
- the delta areas of Rivers State.

The low productivity of traditional Nigerian orchards is as a result of poor management practices, high density plantings in the groves, poor soil fertility management, lack of fertilizer use, and poor pest and diseases control. This contrasts with the reported FAO data (see Table on page 38) which pitches Nigerian productivity well ahead of world averages. An explanation may be that the cultivated area has been under-reported.

An estimated 1.2 million hectares have been identified as suitable for coconut cultivation by the Nigerian Institute for Oil Palm Research (NIFOR), which has been mandated to carry out national research on coconut production. NIFOR has identified the spread of Lethal Yellowing as the major threat to the development of the coconut industry in Nigeria. The incidence of the disease is estimated at 8-10% in the inland areas and about 5% in the coastal areas of Lagos state.

Mozambique

Coconut cultivation in Mozambique, as in Kenya, mostly occurs along the coast. It is a family based activity, with more than 60% of cultivations, located in small landholdings. It is estimated that about 14% of the Mozambican population depends on the crop as the main source of income and nutrition or food. The country's total production is about 60 000 tonnes of copra-equivalent, of which 50% is consumed locally. The other half is commercialized as fresh coconut or to produce copra (dried coconut) for oil and soap production.

Once a strong sub-sector, making an important contribution to GDP, coconut production is now facing several constraints due to the age of the trees and Lethal Yellowing. In the Province of Zambézia it is reported that there are private companies controlling large coconut farms, and for some this was the core business, before the onset of Lethal Yellowing. Outbreaks of this disease now threaten the industry and the livelihood of over 1.7 million people in the Zambézia and Nampula Provinces. Most of the local cultivars are 'Talls' that fall under the general category of Mozambican Tall, and are susceptible to the disease. Some of the introduced varieties, with greater resistance, include Brazilian Green Dwarf, Brazilian Yellow Dwarf, Malaysian Red Dwarf and Malaysian Yellow Dwarf.

Cote d'Ivoire

Amongst the varieties of coconut available in Cote d'Ivoire there is the Great West Africa (GOA), a smaller (90mm) and well flavoured coconut and the larger (100mm) Great Hybrid (GH).

One supplier, Nococi, offers supply in very large quantities, its capacity exceeding 18,000,000 coconuts per year. Furthermore, Société Ivoirienne De Coco Râpé (SICOR), listed on the BRVM in the Ivory Coast, announced in November 2016 that it was to resume its operating activities. The company, is described by Thomson Reuters as an Ivory Coast-based company engaged in the food manufacturing sector, offering coconut products and derivatives, including desiccated coconut and copra.

Following a decade of interruption due to a land dispute between the company and neighbouring populations, who opposed the development of "several thousand hectares of coconut groves", operations will finally commence again. According to Financial Afrik, two agreements have been signed between the state, the company and the local communities, thereby ending the dispute. The recommencement of operations is expected to generate 400 direct jobs in the first year and 600 additional jobs within three years. The company is intending to invest some $11m "to renew its industrial facilities and resume planting operations at its Jacqueville, Grand-Lahou and Gliké sites (CCILCI, 4th November 2016) and remains "the only coconut processing enterprise in West Africa". As of the 20th September 2017, SICOR's market capitalisation was some US$7m (2014 revenues were reported by Reuters at circa $1.5m).

Kenya

President Uhuru Kenyatta has called for the formulation of policies that will unlock the country's potential in coconut farming. The President has noted that the commercialization of the coconut economy could lead to sector revenues growing to $240m pa, compared to the current $61m. Kenya has an eye on export markets in Europe, the United States and the large East African Community (EAC). To achieve these ambitious targets, the authorities are looking for the cultivated area to expand to between 300,000 and 500,000 hectares. While this compares with FAOSTAT data for the cultivation area extending to 42,000 ha, other reports indicate an existing planted area of 200,000 ha. More than 99% of the Kenyan crop is grown along the coast. Away from the coast, coconuts cultivation is reported in Nyanza, western Kenya, and the eastern and Rift Valley region.

The Kenya Coconut Development Authority (established in 2007), is mandated to boost investment in the sector and to increase training services to farmers. A plan to promote growth of some 10% annually is predicated on supporting farmers with the planting of around 1,000,000 seedlings pa. The Agriculture ministry is providing coconut farmers with early maturing, high-yielding and disease-tolerant coconut seedlings. Emerging coconut products such as virgin oil, coconut milk, desiccated coconut, and coconut fibre are being promoted in Kenya.

With an initial investment of US$30 per acre for seedlings, and about US$206 for compost manure and labour, coconut growing has few overheads, making it suitable for poorly-financed rural farmers. Seedlings costs between US$0.60 and US$1.20.

Cocoa – Africa Leads Global Production

Africa leads in the global production of cocoa, producing more than 70% of the crop annually, with 40% coming from Cote d'Ivoire alone. But cocoa, like coconuts is an informal crop, dominated by smallholder producers for more than 90% of annual output (in the case of cocoa). The African cocoa sector produces more than 3 million tonnes of cocoa annually in a good year, with Cote d'Ivoire now approaching 2 million tonnes pa. The land area on which this production is generated is estimated at more than 6 million hectares, with yields on average under 0.5mt/ha. Production increases largely rely on area expansion, posing a serious question about the sustainability of African cocoa production. Strikingly there is only a very small plantation culture in the African cocoa production sector (only three agro-industrial initiatives are detailed herein). The economics of production are overwhelmingly influenced by the smallholder sector, while complex land laws and poor logistics, act as significant deterrents to investors in upstream production. However, more recently interest has increased in African origins for the production of premium and flavour beans, with production on São Tomé e Príncipe (by Satocao) and Madagascar (Akesson's Organic, a family owned plantation also producing coffee, pepper and aromatic oils) providing evidence for this trend. HAB is aware of other such initiatives in West Africa, focused on the rehabilitation of former premium plantations.

A number of mixed tropical tree crop plantations (palm oil, rubber and cocoa), were commercially successful across West Africa in the late 19th Century and during the first half of the 20th Century. More developments occurred during the 1960s and 1970s, but many of these were subsequently abandoned, often during periods of political upheaval across the region from Guinea, to DRC, Sierra Leone and Liberia.

Notable demonstrations of agro-industrial cocoa production in Africa include the cocoa plantations of Satocao Lda in São Tomé e Príncipe, the plantations of Groupe Blattner Elwyn (GBE) in DRC, KKO International's Solea project in Ivory Coast, and Akesson's organic cocoa production in Madagascar. Satocao won a concession of some 2,500 ha on a 25 tenure (renewable) from the São Tomé government in 2011. Satocao is rehabilitating this concession and has planted 722 ha with selected hybrid cocoa trees. The plantations are distributed in a number of fertile regions of São Tomé e Príncipe creating a broad area of operations for the company and allowing for collaboration with a number of the local villages. The GBE plantations, in three sites extend to 1,024 ha in Bas-Congo, plus 117 ha and 360 ha in Equateur Province, (Mongala District) respectively. The group also runs its own drying facilities in both Bas-Congo and Equateur. KKO International's Solea cocoa plantation venture in Cote d'Ivoire, was founded in 2011, representing a relatively recent development of agro-industrial cocoa production in Africa. By contrast the Akesson's plantations in Madagascar were first established in the 1920s. Akesson's has gone on to win Madagascar international cocoa industry recognition for the production of fine flavour cocoa.

African Cocoa Production

Country	Production (000 mt) (ICCO)		Harvested Area (ha) (FAOSTAT 2014)		Yield (mt/ha)	
	2013/14	**2016/17 e**	**2014**	**2017**	**2013/14**	**2016/17 e (assume constant hectare from 2014)**
Cameroon	211.0	240.0	670,000		0.31	0.36
Congo	5.0	3.0	26,102		0.19	0.11
Congo, Dem. Rep. of	2.5	8.0	9,549		0.26	0.84
Côte d'Ivoire	1746.2	1980.0	2,748,357		0.64	0.72
Equatorial Guinea	0.5	0.5	6,662	FAO	0.08	0.08
Gabon	0.2	0.5	3,300	DATA	0.06	0.15
Ghana	896.9	950.0	1,683,765	NOT	0.53	0.56
Guinea	6.0	12.0	20,000	AVAILABLE	0.30	0.60
Liberia	7.5	30.0	52,900		0.14	0.57
Madagascar	8.4	8.0	10,204		0.82	0.78
Nigeria	248.0	220.0	1,374,399		0.18	0.16
Sao Tome and Principe	3.2	4.0	23,033		0.14	0.17
Sierra Leone	10.3	12.0	44,000		0.23	0.27
Tanzania	9.6	16.0	7,900		1.22	2.03
Togo	16.5	12.0	32,813		0.50	0.37
Uganda	26.0	28.0	51,914		0.50	0.54
Other Africa	1.0	1.0	5,469		0.18	0.18
African (Total)	**3,198.8**	**3,525.0**	**6,770,367**		**0.47**	**0.52**
World (Total)	3,943.4	4,692.5	10,434,201		0.38	0.45
Africa as % of World Total	81.1%	75.1%	64.9%			

Source: ICCO, FAOSTAT, Hardman Agribusiness

Agribusiness

Source: Eikon Thomson Reuters

Market data	
EPIC/TKR	ALKKO.BR
Price (EUR)	0.93
12m High (EUR)	3.10
12m Low (EUR)	0.89
Shares (m)	12.1
Mkt Cap ($m)	13.2
EV ($m)	13.2
Free Float (%)	49%
Market	Alternext Brussels / Paris

Company Information	
President, Founder, Managing Director	Remy Allemane
Deputy Managing Director	Indranil Ghosh
CFO	Laurent Skrypczak

Key Shareholders (pre July dilution)	
Lord and Duke Company	20%
Hughes Lamottes	13%
Polka Invest	10%
Lucidum International	8%

Land Use (ha)	
Landbank	2,399
Land Developed	1,549

KKO International

KKO International, a Belgian company, listed in both Paris and Brussels, is seeking to establish one of Africa's largest industrial cocoa farms. It describes itself as 'a pioneer for intensive cocoa cultivation'. KKO's 99.94% owned Ivorian operating arm, Société de Logistique et d'Exploitation Agricole (SOLEA), an Ivorian legal entity, claims to have successfully developed 'innovative agronomic techniques' based on advanced irrigation, fertigation and chemigation technology, which it believes should significantly improve cocoa bean production yields.

- Soluble fertiliser is fed through the micro-irrigation distribution system. This methodology is believed to optimise dosage delivery based on the plants age and condition, and the subsequent absorption of the fertiliser. Based in the N'Zi Comoe region of Ivory Coast, SOLEA holds some 2,399 hectares of land on 35-year leases from local communities. Circa 1,549 hectares were already developed or in the process of being developed for the cultivation of cocoa as of 30th June 2016.
- In return for leasing their land, the communities will receive a 5% share in the gross revenues of the project. The company reports that payments for land leases have funded several drinking water and infrastructure projects for the local communities. Furthermore, to date the project claims to have created more than 700 direct jobs.
- SOLEA is also companion planting banana, teak and yams within its cocoa orchards. Banana is an efficient shade (and cash) crop, when cocoa trees are young and becoming established. Bananas are being planted at a density of 2,000 trees per hectare. It is intended that following the third harvest, the banana stands will be cut down. On the perimeters of the plantation, SOLEA is planting teak to define the plantations boundaries, protect against the elements and as a long-term cash crop.

- **Convertible Obligations – 3rd May** - KKO announced the signing of a definitive agreement with the Bracknor Fund Ltd for the establishment of a flexible bond financing facility of a maximum amount of €3.12m of which €3m in cash, through the issuance of 312 company convertible bonds.

- **Private Placement - 28th July** - KKO announced the raising of capital through a private placement with qualified investors for a total amount of € 2.4m of which €1.2m by contribution in cash and €1.2m by contribution in kind. The contribution in kind consists of claims against the Company and its subsidiary Solea and is the subject of a report the Board of Directors and the statutory auditor. The issue price of new shares is set at €1, a price slightly higher than the current share price. Through the creation of 2.4m new shares, the total number of shares rises to 12.1m and therefore there is a dilution of 24.7%.

Financial Summary ***(Source: Eikon Thomson Reuters)***

(USD Million)	2016	2015	2014
Revenue	0.0	0.0	0.0
Gross Profit	0.0	0.0	0.0
Net Income	(4.75)	(5.32)	(0.49)
Gross Margin %	n/a	n/a	n/a
Net Margin %	n/a	n/a	n/a
Total Equity	2.21	6.82	(3.42)
Debt/ Equity	n/a		
EV/ EBITDA (LFY)	n/a		
ROE %	(102.4%)		

Groupe Blattner Elwyn

In addition to the listed cocoa producer, KKO International, Groupe Blattner Elwyn, a private group with extensive plantation interests in the DRC, owns and operates some 1,500 ha of cocoa plantations.

Groupe Blattner Elwyn – Cocoa					
Subsidiaries	**Province, District**	**Crop**	**Planted (ha)**	**Producing (Mature) (ha)**	**Processing Facilities**
S.C.A.M	Bas-Congo Province, Bas-Fleuve District	Cocoa	1,024	1,024	Cocoa processing factory
S.C.C. BINGA	Equateur Province, Mongala District	Cocoa	117	117	
S.C.C. BOSONDJO	Equateur Province, Mongala District	Cocoa	360	360	Cocoa production factory: drying of 10 mt of cocoa within 48 hours
Total Cocoa			***1,501***	***1,501***	

Source: Company Website

Satocao Lda – São Tomé e Príncipe

History of Cocoa Production on São Tomé e Príncipe

Cocoa production on the islands dates from circa 1822 when Portuguese settlers introduced cocoa trees from Brazil to Principe. At the start of the 20th Century São Tomé had an annual production of some 35,000 tonnes of cocoa, and it was renowned for the quality of its beans. However, a combination of political and economic factors led to the decline and near collapse of the country’s cocoa sector with production levels falling to 2,000 tonnes in 2012.

Satocao Lda

Established in 2010 Satocao, has worked to re-establish the reputation of São Tomé e Príncipe as a world-renowned cocoa origin. As part of this process, Satocao has sought to revive the traditional cocoa culture of the islands: it has enlisted the support of the country’s small and medium sized planters, who have been supported to boost the production and quality of the beans produced on the islands.

Concession/Plantations

In 2011, Satocao won a concession of some 2,500 ha on a 25 tenure (renewable) from the São Tomé government. Satocao is rehabilitating this concession and has planted some 722 ha with selected hybrid cocoa trees and local varieties. The plantations are distributed in a number of fertile regions of São Tomé e Príncipe creating a broad area of operations for the company and allowing for collaboration with a number of the local villages. Several nurseries have been established on the island to support the expansion of the company’s plantations.

All the planting material originates from nurseries on the island in order to maintain and develop the integrity of São Tomé’s cocoa “brand”. The Forastero Amelonado variety found on São Tomé is described as having retained its original Brazilian qualities, having not been widely hybridized, as is the case across most of West

Africa, due to the genetic isolation of the material on the islands of São Tomé in the Gulf of Guinea.

Supported by an investment of some Euro 12 million, Satocao has established two major goals: the replanting of more than 1,500 hectares of cocoa plantations, and the active support for its out-grower programme.

Processing Operations & Certification

2013 Satocao inaugurated a modern cocoa processing facility. Situated in Morro Peixe, this complex includes fermentation and dry facilities, warehouses, a laboratory and the company's head offices. In order to optimise the flavours of its cocoa, Satocao has chosen to use traditional artisanal fermentation processes using fermentation boxes and solar drying tables constructed out of wood.

Having its own centralised processing facilities has allowed Satocao to maintain a high level of quality control over its supply chain and production processes. In addition to using its own laboratory for analysis, Satocao partners with the Centre for Agronomic and Technological Investigation (CIAT) and has a regular dialogue with the French Agronomic Institute (CIRAD), all in pursuit of precision in the analysis of cocoa quality and in promulgation of production best practices.

From processing to export, strict quality control is maintained. The company is working for the continuous improvement of the fermentation process, and the solar drying process is finished off with mechanical drying, in order to ensure the optimal quality of the cocoa. Importantly the warehouse facilities are maintained dry with optimal airflow. All of Satocao's cocoa exports undergo quality analysis by the CIAT as well as by an international certification agency: BUREAU Veritas.

Out-Grower Project

Central to Satocao's development has been the establishment of several autonomous out-grower hubs capable of supplying cocoa that satisfies the company's stringent quality controls. The out-growers are trained in best practices (pairing traditional practices with modern farming processes) for the production of high quality cocoa. The construction of nurseries for production of new planting and grafting material has been important to encourage the replanting of ageing out-grower cocoa farms. Between 2011 and 2015, Satocao established 68 out-grower communities encompassing 3,000 individual planters. More than 99% of Satocao's 330 employees are Santomean.

Satocao offers its out-grower partners a 'fair and stable' market price, guaranteed to be locally competitive. The company works to ensure that even the most isolated communities are reached ensuring that they are able to sell their cocoa.

Akesson's Organic Madagascar

Akesson's Organic Madagascar (AOM), and Bertil Akesson in particular, can be credited with putting Madagascar 'on the map' as a flavour origin. The AOM plantations (formerly known as Domaine de Bejofo), were initially planted in 1924 by one Guy de la Motte Saint-Pierre, but were nationalised in 1976. The property was then acquired, early in this century, by Bertil Akesson, who recognised the unique organoleptic qualities of the beans produced by the cacao growing on the estate.

The entire property runs to some 2, 200ha, of which circa 650 ha are planted with cacao at this time. AOM also produces peppercorns (3 ha), coffee (80 ha), Ylang

Ylang (170 ha), basil (10 ha), rice (300 ha), and sugar cane, the remainder of the estate is under forest.

The cacao varieties growing on the AOM estates were most probably imported from Reunion (Fauchere and CJJ Van Hall) and Mauritius (Bartley), descendants perhaps of a variety known as the "Old Red." First implanted on the East Coast of Madagascar in the 1800's, it was the only variety cultivated in the island before the introduction of the Forastero in 1878. Cocoa, as a commercial crop, assumed no importance in Madagascar until plantations were developed in the North-West of Madagascar, in the Sambirano Valley, around 1922-1924. At that time, the earlier imported varieties were then introduced in the Sambirano Valley together with cocoa imported from Java. Later, in the 1950s, Forastero and Trinitario varieties were imported from mainland Africa.

Madagascar Criollo cacao, was described and detailed by Fauchere (Culture Pratique), circa 1906, and this description is considered to be consistent with the cacao growing on the AOM estates. Recent analysis undertaken by the Fine Chocolate Industry Association (FCIA) (with genetic material from the Akesson Bejofo Estate), is reported to have confirmed Fauchere's findings. The mix of cacao species, implanted in the 'terroir' of the lower Sambirano Valley, is said to give the local cocoa a "very fruity" (red berries and citrus) character. Bertil Akesson recalls that this fruity acidity "was not well perceived until the early years of this century", when chocolate makers came to appreciate the cocoa's unique qualities, when the post-harvest processing was undertaken properly.

Combava trees are planted along the roads and boundaries of the AOM estates and Piper nigrum (peppercorn) is planted on the plantation's shade trees, with patchouli between the cacao trees. Combava (Citrus hystrix), sometimes referred to as the 'makrut lime', is a citrus fruit native to tropical Asia, its fruit and leaves are used in cuisine and its essential oil is used in perfumery.

AOM has fermentation, drying, bagging and storing facilities sufficient to process 400 mt of cocoa beans annually. Its own production is supported also by an out-grower programme producing another 25 mt -50 mt of beans pa.

Owned and managed today by Bertil Akesson Jr, AOM produces some 325 mt of fine or flavour cocoa annually which is sold to over 150 high end chocolatiers around the world. Bertil Akesson also uses his estate produced cocoa in Akesson's Organic award-winning chocolate. At the London Academy of Chocolate Awards 2017, Akesson's Organic' Madagascar origin chocolate took the following awards:

ÅKESSON'S

- Bean to Bar (80% and above cocoa solids): SILVER
    - Åkessons's Organic Akesson's **Madagascar 100% Criollo**
- Bean to Bar (under 80% cocoa solids): GOLD
    - Åkessons's Organic Akesson's **Madagascar Bejofo Estate 75% Criollo**
- Bean to Bar White: GOLD
    - Åkessons's Organic Åkesson's **Madagascar 43%** White Chocolate – Organic

All AOM's cocoa production is certified "Organic" by the European organic licensing agency, Ecocert and "For Life" (IMO).

Banana Production

Within the least developed economies in the tropical zone, bananas are the fourth most important food crop providing a dietary staple for some 400 million people. Some 1,000 varieties of banana have been identified in more than 150 countries, producing more than 110 million metric tonnes (mt) of fruit a year. There are two main families: the sweet banana or "fruit banana", a category overwhelmingly dominated by the Cavendish variety (which can be picked green and ripened during shipping), which accounts for some 60 million to 65 million mt annually (CTB Trade for Dévelopment), and the "cooking banana", better known as plantains. Plantains are used more like a vegetable in tropical zone food preparation and account for annual production of circa 40 million to 50 million mt (CIRAD, Banane et plantain, please see CIRAD website). Both banana crops tend to be consumed at source, with only some 14 million mt of fruit bananas (Cavendish variety typically) destined for export markets, for a trade worth between $12bn - $20bn. Exports of the plantain banana are increasing but still remain a little known and limited market compared with the fruit banana. The Cavendish banana, which dominates export markets worldwide, is now being planted in increasing quantities on large commercial farms across Africa according to http://www.bananalink.org.uk/west-africa.

According to the University of Stellenbosch, the crop has critical importance to the food security and income generation of more than 70 million Africans, making disease threat a particular concern for African producers. The East African Highland cooking banana (EAHB), and the plantain, make up approximately 70% of all bananas grown on the continent according to University of Stellenbosch. Sweet dessert bananas are cultivated widely, but they form a smaller portion of the total African crop according to Stellenbosch.

Disease Threat

In 1965 the commercial banana variety that had dominated the global trade in bananas for more than a century, "Gros Michel", was declared 'commercially extinct'. It had been wiped out by a fungal disease that had originated in Central America, and which came to be known as Panama Disease. The disease is caused by a fusarium soil fungus, which enters the plants through the roots and travels with water into the trunk and leaves, producing gels and gums that cut off the flow of water and nutrients, causing the plant to wilt, and exposing the rest of the plant to lethal amounts of sunlight.

Today, scientists are speculating that the same fate could be in store for the world's current and wholly dominant export banana cultivar, the Cavendish. Commercial banana cultivars are described as monogenetic: they lack genetic diversity, which makes them vulnerable to diseases. The threat today from banana diseases, is a particular concern in Africa, as both commercial cultivation and small-scale subsistence farming are challenged by this same threat.

Tropical Race 4

Tropical Race 4 (TR4) is described as a reinvigorated strain of Panama disease first discovered in 1992. This virulent form of fusarium wilt has severely impacted Cavendish in several southeast Asian countries. Tens of thousands of hectares planted with Cavendish bananas have been wiped out in China, Indonesia, Malaysia and the Philippines (http://www.fusariumwilt.org/index.php/en/about/). The Cavendish variety is believed to be highly susceptible to TR4, apparently lacking genetic resistance to the disease, for which no chemical treatment has yet been found. Within Africa, Mozambique was the first country to be infected with TR4.

Black Sigatoka

Black Sigatoka is a fungal leaf spot disease first discovered in Fiji in the first half of the 1960s, since when it has spread to banana plantations throughout the tropics. It affects all main cultivars of bananas and plantains (including the Cavendish variety, impeding photosynthesis by blackening parts of the leaves, eventually killing the entire leaf. Starved for energy, fruit production falls by 50% or more: during the 1970s, Uganda produced 15 to 20 mt of bananas per hectare, but in 2014, FAOSTAT data indicates that productivity had declined to 4.2 mt/ha.

The fungus has shown ever-increasing resistance to treatment. Chemical treatments appear to be in the range of $1,000/ha per year, an expense well beyond the capacity of most African farmers. To meet this challenge, new disease-resistant cultivars have been developed by the International Institute of Tropical Agriculture and the National Agricultural Research Organisation of Uganda (NARO). These varieties include: FHIA-17 (known in Uganda as the Kabana 3).

Banana Bunchy Top Virus

Banana bunchy top virus (BBTV) is spread by aphids. It stunts leaves, resulting in a "bunched" appearance. Generally, an infected plant does not produce fruit. There is no cure; however, its effect can be minimized by planting only tissue-cultured plants, controlling aphids, and immediately removing and destroying infected plants. These are not generally available strategies for African smallholder farmers.

In South Africa, banana plants showing symptoms for BBTV were detected in June 2015. The infected farm was placed under quarantine and infected plant material was destroyed. A follow up survey was done in February 2016 where it was found that the virus had spread further than the initial infection point, but still within the Hibberdene area. The Banana Aphid (Pentalonia nigronervosa), the vector for the disease was also detected in the Ramsgate area of KwaZulu Natal.

Banana Bacterial Wilt

Banana bacterial wilt (BBW) is a bacterial disease. BBW occurred in Uganda in 2001 affecting all banana cultivars. Since then BBW has been diagnosed in Central and East Africa including the banana growing regions of Rwanda, the Democratic Republic of the Congo, Tanzania, Kenya, Burundi, and Uganda.

African Production

African production (West, Central and Eastern Africa) has been estimated by the FAO at circa 44% of the world crop of fruit bananas but a much lower 4.4% of the global plantain crop. The big African producer countries include Angola, Tanzania, Rwanda, Cameroon, Kenya, Burundi and Egypt.

Typically, Africa contributes approximately 7% of the global supply of bananas, with exports led by Ivory Coast, Cameroon and Ghana. West African countries produce nearly all of Africa's banana exports, and bananalink.org indicates that production has seen rapid growth during the 21st Century. The vast majority of these bananas were assumed to be sold in Europe, mainly in France and the UK.

In 2016, according to http://worldstopexports.com/, Ivory Coast exported bananas with a value of some $370 million (assumed to be 3.1% of global market value), Cameroon exported bananas with a value of circa $338.1 million (2.9% of estimated global market value) and Ghana exported bananas with a value of some $65.3 million (0.6% of estimated global market value). Mozambique is another notable supplier of bananas for export: UN Comtrade data for 2015 indicated that Mozambique exported bananas with a value of $33m. Frits Popma, an international consultant in the banana sector, observed to Fresh Plaza (September 2016), that he had 'high expectations for Mozambique… a lot is invested there and there is export potential to the Middle East … Saudi Arabia is very interested in [Mozambique] bananas'.

Banana Production 2014

Country	Hectare	Production (mt)	MT/ha
India	802,570	29,724,550	37
China, mainland	392,000	11,791,900	30.1
Philippines	442,751	8,884,857	20.1
Brazil	478,765	6,953,747	14.5
Indonesia	134,070	6,862,568	51.2
Ecuador	182,158	6,756,254	37.1
Guatemala	71,218	3,552,948	49.9
Angola	126,966	3,483,432	27.4
United Republic of Tanzania	505,320	3,192,030	6.3
Costa Rica	42,841	2,194,940	51.2
Mexico	74,585	2,150,520	28.8
Viet Nam	114,437	1,857,641	16.2
Rwanda	322,095	1,804,650	5.6
Colombia	73,862	1,770,899	24
Cameroon	119,585	1,719,009	14.4
Kenya	59,361	1,644,634	27.7
Thailand	36,821	1,398,202	38
Burundi	164,581	1,362,837	8.3
Egypt	27,514	1,283,644	46.7
Dominican Republic	25,848	1,208,824	46.8
Papua New Guinea	75,076	1,166,029	15.5
Top 21 Producer Countries	**4,272,424**	**100,764,115**	**23.6**
World Production	**5,393,809**	**114,128, 343**	**21.2**
Top 21 Producer Countries as % World	**79.2%**	**88.3%**	**111.3%**

Source: FAOSTAT and Hardman Agribusiness

Major Producers

Readers will note that the leading suppliers out of Africa include Compagnie Fruitière, (previously affiliated of the US food group Dole Inc), and the listed Belgian plantation company Sipef (see profile at bottom of this section).

More than 80% of the global banana market is controlled by four multinationals – Chiquita, Dole, Del Monte and Fyffes (Sumitomo). Dole had a presence in Cameroon, Ghana, and the Ivory Coast via the Compagnie Fruitière, which supplies more than 400,000 mt of bananas to the EU market. The Compagnie Fruitière group claims to be the largest banana producer in Africa, grown mainly in its own plantations, and, or contracted plantations, in Ivory Coast, Cameroon and Ghana. It advertises its bananas as being “beautiful orangey – yellow bananas “with an “intense flavour”.

Compagnie Fruitière

Since its creation in 1939 in Marseille, Compagnie Fruitière (CF) has specialised in the import and distribution of fruits and vegetables. CF claims to be the leading producer of fruits in the Africa-Caribbean-Pacific zone with annual amounts of more than 500 000 tons of fruits and vegetables produced in Western Africa, mainly bananas, pineapples and cherry tomatoes. Initially a trader of fruits from Africa, the group, now operates along the entire value chain. From 1992 to 2014, the founding shareholders of CF were in a partnership with the American group Dole, which then owned 40% of the company's capital. In 2014, the majority shareholders in CF purchased Dole's stake. CF has acquired and developed tropical tree crop plantations across West Africa.

Cameroon

During the mid-1980s CF acquired the plantation which today is thought to be the lead producer in Cameroon, the Société de Plantations du Haut Penja (PHP), The company operates along the entire value chain from upstream production to packing, processing, shipping and marketing. PHP operates banana farms in the Littoral region of the country, with some 3,000 hectares in the Moungo department. Additionally, PHP has been developing a banana plantation extending to 800 hectares near Dehane in South Cameroon. PHP has stated that it aims to produce 230,000 tons of bananas by 2020 (against 168,000 tons in 2015). During 2016 PHP was expected to produce some 185,000 tons. The company accounts for more than half of Cameroon’s total production. It exports bananas to the European Union, and regionally to Morocco, Chad and Nigeria.

Ghana

During 2003 CF acquired a banana plantation and a pineapple plantation in Ghana, together amounting to some 3,500 ha.

Ivory Coast

In 1997, CF acquired some 20 smaller plantations, aggregating to around 4,000 ha.

Senegal

CF expanded into Senegal in 2001, and today it has under cultivation some 40 ha of fruit, 160 ha of vegetables, and 100 ha of greenhouses.

CF also operates a fruit logistics business through the ownership of the integrated maritime firm (Africa Express Line, 2001), and it ripens and distributes fruits in several European countries, having purchased former Dole subsidiaries in France, UK, Spain and Portugal. Independently, CF has expanded into Hungary, with all its operations unified under the Compagnie Fruitière brand.

SIPEF NV

SIPEF is a Belgian agro-industrial company listed on the Euronext Brussels. Incorporated initially in 1919, the group has grown significantly, developing production and export facilities over Asia, Africa and Oceania. The group produces several important tropical tree crop commodities: palm oil, rubber, tea and bananas. By the end of 2016, SIPEFs tropical plantations extended over a planted surface area of 69,438 hectares.

- **Oil Palm** – SIPEF produces palm oil in Indonesia (47,015 planted hectares with 38,046 mature hectares) and in Papua New Guinea (13,621 planted hectares with 11,278 mature hectares). These plantations produced 246,121 tonnes of palm oil in 2016, alongside 51,584 tonnes from out-growers.
- **Rubber** – SIPEF has 6,326 planted hectares in Indonesia, with 4,606 mature. The Group recently sold its holding in Galley Reach Holdings which has 3,041 mature rubber hectares in Papua New Guinea. 9,017 tonnes of rubber were produced in 2016.
- **Tea** – SIPEF has a tea plantation in Indonesia, where 1,704 of the 1,744 hectares are mature. 2,940 tonnes of tea were produced in 2016.
- **Pineapple Flowers, Decorative Foliage and Lotus Flowers** – 569,000 units of pineapple flowers were produced in 2016, from 23 mature hectares. SIPEF has another 19 immature hectares still to come on-stream.
- **Bananas** – In Ivory Coast, SIPEF has 690 planted hectares, of which 630 ha are mature. In 2016, over 4 plantations, 24,991 tonnes of bananas were produced. Expansion at the Azaguie plantation continues; a new packing station became operational in February 2016, and the final 60 hectares of a 200-hectare expansion were planned to be planted. SIPEF plans to plant a further 150 hectares at Motobe, in addition to the 220 hectares already established.
- SIPEF has completed the Rainforest Alliance certification process for its banana operations. The banana operations have been accepted also for Global - G.A.P. standard.
- New applications for European Union subsidies under the Banana Accompanying Measures (BAM) have been approved, with intended benefits for banana production workforces, including the construction of new housing (primariy at Azaguie). SIPEF's 2016 annual report states that its *"banana business still represents the best source of income and social benefits for the agricultural workforce in Ivory Coast"*.

Financial Summary *(Source: Eikon Thomson Reuters)*

(USD Million)	2016	2015	2014
Revenue	267.0	225.9	285.9
Gross Profit	73.8	44.2	84.4
Net Income	39.9	19.2	56.3
Gross Margin %	27.6	19.6	29.5
Net Margin %	14.9	8.5	19.6
Total Equity	448.1	413.9	547.5
Debt/ Equity	0.14	0.17	0.13
EV/EBITDA (LFY)	11.06		
ROE %	9.2	4.5	10.7

Agribusiness

Source: Eikon Thomson Reuters

Market data

EPIC/TKR	SIFB.BR
Price (EUR)	62.78
12m High (EUR)	70.00
12m Low (EUR)	50.20
Shares (m)	10.5
Mkt Cap ($m)	788.3
EV ($m)	856.7
Free Float (%)	57.46%
Market	Euronext Brussels

**As defined by AIM Rule 26*

Company information

Chairman	Baron Luc Bertrand
Past Chairman	Baron Bracht
Managing Director	Francois Van Hoydonck

Key shareholders

Ackermans & Van Haaren NV	30.25%
Cabra NV (Group Bracht)	7.11%
Gedei NV (Group Bracht)	5.18%

Planted Hectares (ha)

Oil Palm	60,636
Rubber	6,326
Tea	1,744
Bananas	690
Pineapple Flowers	42

Notes

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