Operations Review

TROPICAL OILS (PLANTATION, MANUFACTURING AND MERCHANDISING)

The Tropical Oils (Plantation, Manufacturing and Merchandising) segment comprises the Group's entire value chain of palm oil assets from plantations and palm oil mills to processing, merchandising, branding and distribution of palm oil and laurics related products including oleochemicals, specialty fats and biodiesel.

Plantation

We are one of the world's largest oil palm plantation owners with a total planted area of 239,935 hectares (ha) as at 31 December 2017. Around 68% of our total planted area is in Indonesia, 24% in East Malaysia and 8% in Africa. Through joint ventures, we own plantations in Uganda and West Africa of approximately 46,000 ha. Wilmar also directly manages 34,772 ha under smallholder schemes in Indonesia and Africa, and another 149,000 ha under smallholder and outgrower schemes through the joint ventures and associates in Africa.

The medium to long-term growth of our plantation operations is supported by the relatively young plantations with an average age of 11 years. Around 58% of the plantations are at the prime production age of seven to 18 years and 23% are at age six years and below.

Sustainability

Sustainability is an integral part of our business and operations. Since announcing our No Deforestation, No Peat, No Exploitation Policy in December 2013, we have continued to further our commitment to drive sustainable practices and encourage collective action to accelerate supply chain transformation.

In 2017, we launched our Child Protection Policy to enhance the welfare of children living in oil palm plantations where their parents work. The policy will be implemented throughout our global operations, including our joint ventures, third-party suppliers and contractors.

In a first for the palm oil industry, we announced a collaboration with ING Bank which pegs our sustainability performance to the interest rate of an existing facility. We believe that incorporating sustainability metrics into various aspects of our business, from daily operations to corporate financing, is key to creating value for our stakeholders.

For more information on our sustainability efforts, please refer to the Sustainability chapter on pages 36 to 45 in this report.

Manufacturing and Merchandising

We are the world's largest processor and merchandiser of palm and lauric oils, processing palm and lauric oils into refined palm oil, specialty fats, oleochemicals and biodiesel. The crude palm and lauric oils are sourced from our own plantations, smallholders under the Plasma and Outgrowers schemes as well as third-party suppliers.

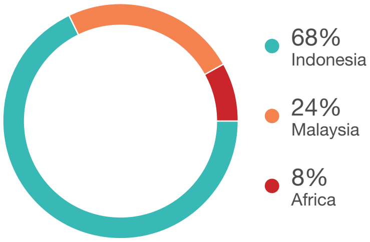
Through economies of scale and commitment to best practices in production, we have been able to sustain as one of the most cost-efficient producers in the industry. This efficiency is complemented by our strategically located facilities found near the coastal areas of both origin and destination markets, which enable us to manage transport, logistic and operational costs effectively. Together with an extensive distribution network and sales touchpoints spanning more than 50 countries, Wilmar is well-positioned to capitalise on market intelligence acquired throughout the entire supply chain to meet the ever-changing demands of our customers.

Within the Tropical Oils segment, our activities also include manufacturing, merchandising and distribution of consumer pack branded tropical oils. We are the leading producer and seller in markets such as India, Indonesia, Vietnam, Bangladesh, Sri Lanka and several African countries. In the key locations of India and Indonesia, we have a market share of around 20% and 35% respectively.

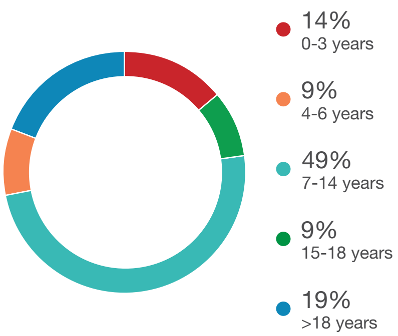
In June 2017, we entered into a conditional joint venture agreement with Lion Corporation (Lion) for the manufacture and sale of methyl ester sulfonate (MES). MES is used in the manufacture of products such as soaps and detergents. Lion, which is listed on the Tokyo Stock Exchange, is engaged in the manufacture and sale of toothpastes, toothbrushes, soaps, detergents, hair and skincare products, cooking-related products and pharmaceuticals. The transaction will be completed upon approval from all relevant authorities and certain conditions being fulfilled.

In August 2017, we announced the establishment of a joint venture with Aalst Chocolate Pte Ltd (Aalst Chocolate), a homegrown chocolate manufacturer in Singapore. Combining our expertise in the manufacturing of specialty fats used in the production of chocolates and compounds, with Aalst Chocolate's long experience in chocolate and compound-making, this

Plantations Geographic Locations as at 31 December 2017



Plantations Age Profile as at 31 December 2017



As at 31 December 2017, the Group has plants in the following countries:

	Refinery	Oleochemicals	Specialty Fats	Biodiesel
Subsidiaries				
Indonesia	25	4	4	11
Malaysia	14	3	1	2
China	51	10	6	0
Vietnam	4	0	2	0
Europe	0	2	0	0
Africa	2	0	2	0
Others	4	0	1	0
Total no. of plants	**100**	**19**	**16**	**13**
Total capacity *(million MT p.a)*	**30**	**2**	**2**	**3**
Associates				
India	39	2	5	0
China	7	2	2	0
Russia	4	0	1	0
Ukraine	2	0	1	0
Malaysia	3	0	0	0
Africa	10	0	4	0
Bangladesh	2	0	0	0
Europe	6	1	1	0
Others	0	0	1	1
Total no. of plants	**73**	**5**	**15**	**1**
Total capacity *(million MT p.a)*	**13**	**<1**	**1**	**<1**

Note: Refinery capacity includes palm oil and soft oils

partnership aims to expand Wilmar's offering and services to bakery products and confectionery manufacturers.

In November 2017, Wilmar and Cargill entered into an agreement for the purchase of Cargill's edible oil facilities in Kuantan, Malaysia, which include a palm oil refinery and a neighbouring storage facility. This acquisition marks our first presence in the east coast of Peninsular Malaysia. Located in the Kuantan Port, these facilities will strengthen our sales and distribution network in Malaysia and serve as a strategic location for regional exports. The sale will be completed upon approval from all relevant authorities and certain conditions being fulfilled.

Industry Trend in 2017

In 2017, global palm oil production recovered strongly as the impact of El Nino faded, with production growing 14% from 59.1 million MT in 2016 to 67.1 million MT. The two largest producing countries, Indonesia and Malaysia, accounted for about 84% of global palm oil production. Indonesia's production grew 13% to 36.5 million MT and Malaysia's production increased 13% to 19.6 million MT.

Global demand for palm oil grew 4% to 64.9 million MT in 2017. Demand in Indonesia decreased marginally to 9.1 million MT partly due to the lower deliveries of biodiesel in May and June of 2017. Demand in India remained steady, with a slight increase of 1% to 9.3 million MT, affected by an import tax hike in November 2017. Demand in China declined 2% to 5.0 million MT due to rising edible oils inventories after record soybean imports and strong purchases of rapeseed oil.

Crude palm oil (CPO) prices weakened significantly towards end-February 2017 due to the strengthening of the Malaysian Ringgit and expectations of improving palm oil production. Prices remained on a general downward trend for the first half of the year. In July, CPO prices started to rise due to expectations of strong export demand coupled with weaker than anticipated supply. However, prices eased in November as Malaysian palm oil production was larger than expected. CPO prices closed at RM2,503 at the end of 2017, down 21% from RM3,163 at the beginning of the year.

Our Performance

In 2017, pre-tax profit for the Tropical Oils division declined 38% to US$426.2 million from US$689.2 million in 2016. The weaker performance was mainly due to lower processing margins in the downstream businesses.

In Plantations, production yield improved 4% to 19.7 MT per ha from 19.0 MT per ha in 2016 and led to a 3% increase in total fresh fruit bunches to 3,922,904 MT from 3,817,969 MT in 2016.

Sales volume for the manufacturing and merchandising businesses declined marginally to 23.2 million MT from 23.4 million MT in 2016. Higher CPO prices in the first nine months of the year led to an overall 7% increase in segment revenue to US$18.07 billion from US$16.86 billion in 2016.

Outlook and Strategy

Global palm oil production is expected to increase 5% to 69.3 million MT for the marketing period from October 2017 to September 2018 as production continues to recover. We remain positive about the long-term prospects of palm oil with the rise of global demand for our food and non-food applications such as oleochemicals, specialty fats and biodiesel.

OILSEEDS AND GRAINS (MANUFACTURING & CONSUMER PRODUCTS)

The Oilseeds and Grains segment consists of the processing, merchandising, branding and distribution of a wide range of agricultural products including non-palm and lauric edible oils, oilseeds, flour and rice as well as downstream products such as wheat and rice noodles in consumer pack, medium pack and in bulk.

Manufacturing

We are a leading player in oilseed crushing with extensive presence in various parts of the world such as China, India, Vietnam, Malaysia, Russia, Ukraine, South Africa and Zimbabwe. We crush a wide range of oilseeds including soybean, rapeseed, groundnut, sunflower seed, sesame seed and cotton seed into protein meals and edible oils. The protein meals produced are mainly sold to the animal feed industry while the oils are largely sold to the Group's Consumer Products and Oleochemicals businesses.

We have also expanded our business to include flour and rice milling as well as the production of rice bran oil. We are one of the largest wheat and rice millers in China and own flour mills through joint ventures in Malaysia, Indonesia, Vietnam, Thailand and Papua New Guinea.

Consumer Products

We are the largest producer of consumer pack edible oils in the world (including consumer pack tropical oils), with operations across the globe including China, Indonesia, India, Vietnam, Bangladesh, Sri Lanka and several African countries. We also produce and market rice, flour, and noodles under a diverse brand portfolio. Over the years, we have established a comprehensive sales and distribution network reaching out to traditional retail outlets, supermarkets, convenience stores and hypermarts. Our consumer brands are renowned for their quality, having won numerous product awards in their respective markets. In China, we have a substantial market share of around 45% for edible oils, helmed by our flagship Arawana brand of products.

Leveraging the extensive distribution and brand awareness from the consumer edible oils and food staples, we have also diversified into the consumer pack flour and rice businesses in China, rice in Bangladesh, India and Ghana as well as flour in Vietnam and Indonesia.

Industry Trend in 2017

China remained the top importer of soybeans, making up approximately 64% of the world's demand in 2017. Demand for soybeans in China grew a significant 15% from 83.2 million MT in 2016 to 95.3 million MT in 2017.

Total volume of soybeans crushed in China increased from about 79.0 million MT in 2016 to about 87.0 million MT in 2017. Consequently, both soybean meal and soybean oil saw higher consumption in 2017. Soybean meal consumption in China increased around 11% to 68.0 million MT while soybean oil consumption in China increased 10% to around 15.9 million MT in 2017. The sustained growth in soymeal demand has been driven by the trend towards a more protein-based diet. In China where pork is the protein of choice, this has also resulted in the modernisation of pig farming operations with more efficient and larger scale facilities, which in turn has led to some consolidation in the feed milling industry.

On the supply side, continuous good weather in major soybean growing areas such as the United States, Brazil and Argentina led to a year of abundant supply. International soybean prices were relatively stable in 2017. The year started with soybean prices at around US$10.00 per bushel, hitting a peak of about US$10.80 per bushel in mid-January and subsequently retreating to a low of around US$9.00 per bushel in

June as expectations for US production were raised. However, prices quickly recovered to about US$10.40 per bushel in early July on the back of increasing Chinese imports. However, a record crop in Brazil saw soybean prices retrace its gains to around US$9.20 per bushel by mid-August and where it remained range bound for the rest of the year.

In the Consumer Products business, we continued to benefit from healthy demand for branded consumer pack food staples across the countries in which we operate.

Our Performance

In 2017, the Oilseeds and Grains segment achieved a pre-tax profit of US$735.0 million, almost triple the US$251.1 million recorded in 2016. The strong performance was driven by higher crush volume and good crush margins.

Sales volume for Oilseeds & Grains grew 13% from 29.5 million MT to 33.3 million MT. Revenue increased 11% from US$17.81 billion to US$19.81 billion.

Outlook and Strategy

We expect to see continued growth for protein meals in China. Soybean imports into China are forecast to grow 4% to around 97 million MT for the marketing period from October 2017 to September 2018. With the lifting of restrictions on oilseeds and grains processing capacities in early 2017, we have been selectively expanding our facilities to enable us to better capture this growth. The more disciplined operating environment for the crushing industry in China is also beneficial for us, hence we remain positive on the outlook in 2018.

In the Consumer Products business, our growth will continue to be underpinned by the transition from unpackaged to quality branded consumer pack products. We will continue to strengthen our brand reputation while improving our distribution networks, research and development as well as expanding our portfolio of product to grow our market presence globally.

As at 31 December 2017, the Group has crushing plants and flour and rice mills in the following countries:

	Crushing	Flour Milling	Rice Milling
Subsidiaries			
China	53	18	18
Malaysia	1	0	0
Vietnam	3	0	0
Africa	1	0	0
Indonesia	0	2	0
Total no. of plants	**58**	**20**	**18**
Total capacity *(million MT p.a)*	**25**	**6**	**4**
Associates			
China	17	1	2
India	17	1	0
Russia	2	0	0
Ukraine	1	0	0
Malaysia	0	9	0
Indonesia	0	2	0
Others	5	8	1
Total no. of plants	**42**	**21**	**3**
Total capacity *(million MT p.a)*	**13**	**3**	**<1**

SUGAR (MILLING, MERCHANDISING, REFINING & CONSUMER PRODUCTS)

Wilmar is a leading sugar operator with operations covering sugar production from cane in Australia, India, Myanmar and from beet in Morocco. We are a leading sugar refiner in Australia, New Zealand, Indonesia, India and Morocco as well as a distributor of leading brands such as CSR, Chelsea, Al Kasbah and Madhur. With the support of key strategic partnerships, such as the joint venture with the leading sugar and ethanol producer, Raízen Energia S.A. in Brazil, we trade about 11 million MT of raw and white sugar globally.

In Australia, our sugar business involves sugarcane cultivation, milling and refining to produce white sugar, brown sugar, caster sugar and syrups. We also produce ethanol as well as fertiliser.

We produce around 60% of Australia's raw sugar and our 75%-owned refinery joint venture supplies about 75% of Australia's and New Zealand's refined sugar requirements and also exports to many Asia Pacific markets. We are also Australia's largest generator of renewable electricity from biomass. We own leading sugar brands – CSR in Australia and Chelsea in New Zealand. To complement our diversified product and brand portfolio, we also distribute the Equal range of sweeteners.

In Indonesia, we are one of the top three sugar refiners. We operate two refineries in Java with a refining capacity of about 700,000 MT.

In Morocco, through our 29.9% associate (as at December 2017), Cosumar S.A. (Cosumar), we have one refinery and seven sugar beet/cane mills as well as the sugar brands, Al Kasbah, La Gazelle and El Bellar. Cosumar is the sole sugar producer in Morocco and the third largest in the African continent, with a strong distribution network that includes exporting refined sugar to neighbouring countries in Europe.

We are a strategic industrial partner of Shree Renuka Sugars Limited (SRSL), the leading sugar company in India. In India, SRSL's business comprises seven mills with a total cane crushing capacity of 5.5 million MT per annum; two port-based refineries, one each in Kandla and Haldia, with a combined capacity of 1.7 million MT per annum, a cogeneration capacity of 584 MW, as well as the sugar brand,

As at 31 December 2017, the Group has sugar mills and refining plants in the following countries:

	Milling	Refining
Subsidiaries		
Australia	8	2
New Zealand	-	1
Indonesia	-	2
Myanmar	2	-
Total no. of mills/plants	**10**	**5**
Total capacity *(million MT p.a.)*	**19**	**2**
Associates		
Brazil	4	-
India	7	2
Morocco	7	1
Total no. of mills/plants	**18**	**3**
Total capacity *(million MT p.a)*	**27**	**3**

Madhur. In March 2018, SRSL completed a debt restructuring exercise. As part of that exercise, the Group invested an additional US$120 million in SRSL, thereby increasing its stake from about 27% to 39%.

We have a majority 55:45 joint venture with Great Wall Food Stuff Industry Company Limited, the leading sugar company in Myanmar. The joint venture operates two sugar mills, a bio-ethanol plant and an organic compound fertiliser plant.

Sugar Developments

In 2017, Wilmar Sugar Australia finalised an ambitious agreement with its growers regarding sugar export and marketing. Growers who supply their sugar cane to Wilmar mills now have the additional choice of nominating Wilmar to market and export their share of the sugar produced. Growers have access to a unique range of services, including crop pre-payment, competitive financing, agriculture services and flexible pricing facilities. With cane production, milling, logistics and export services now fully integrated, we are able to deliver to growers additional value on a fully transparent basis. In the first year of the new marketing arrangement, Wilmar has significantly increased the volume of sugar exported to 1.2 million MT.

Industry Trend in 2017

World sugar prices declined sharply and traded to a low of 12.50 US cents per pound in June 2017. Sugar prices were negatively impacted by various factors, including the significantly higher sugar production and export deregulation in Europe; the record Centre South Brazil crop and the subsidised export programme of 2 million MT implemented by Pakistan. Nonetheless, trade flows remained strong due to the low crop in India and China. Global sugar consumption increased by 3 million MT and reached a record 183 million MT.

Our Performance

In 2017, the Sugar division reported a pre-tax loss of US$24.6 million which included a US$30.6 million impairment loss on our Australian refinery assets. The overall weaker performance was partly due to the timing effect of the new sugar marketing programme in our Australian milling operations which came into effect during the year. Under the new programme, certain proportion of sugar produced in 2017 will only be sold in the first half of 2018. The division's results were further impacted by weaker performance from the merchandising, refining and consumer products businesses.

Sugar volumes declined 12% from 13.5 million MT to 11.9 million MT from lower milling and merchandising activities. Correspondingly, revenue decreased 14% from US$5.86 billion to US$5.05 billion.

Outlook and Strategy

In 2018, global sugar production is expected to exceed consumption for another year. Although India and Thailand are expected to have a strong crop recovery, Brazil is expected to have a crop reduction due to a price parity strongly in favour of ethanol. Increasing crude oil prices may impact sugar and ethanol parity in many countries. At current sugar prices, the global sugar industry will be challenged and some under investment are to be expected.

FERTILISER

The bulk of Wilmar's fertiliser business and market is in Indonesia. We are one of the largest fertiliser players in Indonesia, with 1.2 million MT production capacities dedicated to nitrogen, phosphorus and potassium (NPK) compound fertilisers. We also engage in the trading and distribution of various straight fertilisers and agrochemicals, making us a one-stop supplier of agriculture inputs. The fertiliser business has been geared towards the oil palm sector, in line with our core business. The remarkable growth in new planted acreages in the past decade has resulted in a rising demand for fertilisers, thereby leading to the expansion of the fertiliser business unit. Customers of the fertiliser products are also our suppliers of fresh fruit bunches, crude palm oil and palm kernel, thus we have been able to minimise our credit risk. Supported by our extensive distribution channels and logistics networks built over the years, we have been able to maintain substantial market shares of NPK and potash in Indonesia. We are also the appointed distributor of Canadian potash, Peruvian rock phosphate and USA borate in Indonesia.

The expansion of fertiliser operations into Malaysia in the second half of 2015 provided an opportunity to tap into the demand of the world's second largest oil palm producer. Similarly supported by its own NPK production line and logistics facility, our fertiliser business in Malaysia is well-positioned to develop and complement our existing operations particularly in East Malaysia.

At present, our total installed capacity of NPK compound is 1.3 million MT per annum in Indonesia and Malaysia, and our total fertiliser sales volume is more than 2 million MT annually. Besides Indonesia and Malaysia being the backbone of our fertiliser markets, we are also shipping our products to other countries in South-East Asia as well as Africa, predominantly to the oil palm plantations sector.

Industry Trend and Our Performance

The broader fertiliser market improved in 2017 on the back of higher consumption amid better weather conditions in the region. Fertiliser prices across the board inched up, particularly in the second half of the year, in line with recovering demand and tighter supply. This trend is expected to continue into the first half of 2018. Prices of most fertilisers ended 2017 near their year-highs, indicating strong and steady rebound from the lows in 2016. The fertiliser business recorded much improved sales volume in 2017 in line with industry recovery. However, profitability was lower due to increased fertiliser costs.

Outlook and Strategy

We maintain a positive view on the long-term outlook of the agricultural sector in the region. We continue to actively engage and focus on markets where we have a significant presence to ensure achievable and sustained growth. The long-term deal signed with Sirius Minerals PLC for their new product coming on stream in few years' time will provide us with another avenue to boost growth organically. We are honoured to collaborate with Sirius to market this unique blend of nutrients in South-East Asia.

SHIPPING

The Group owns a fleet of liquid and dry bulk carriers which caters primarily to in-house needs. As part of our integrated business model, this fleet of vessels gives our merchandising operations greater flexibility and efficiency. Additional shipping requirements not served by this fleet are met by chartering-in third-party vessels.

In 2017, shipping volumes of vegetable oils and of dry bulk decreased marginally from the previous year. Despite the volatile and challenging market conditions, the shipping unit maintained a respectable profit for the year.

The Group will continue to look out for good opportunities to expand its fleet with more cost-effective vessels to support the needs of its logistics operations.

As at 31 December 2017, the Group owned and controlled 60 tankers / dry bulk vessels with a total tonnage of about 2.2 million MT.

RESEARCH AND DEVELOPMENT

Wilmar's research and development (R&D) activities aim to improve our manufacturing processes, develop new products and improve the quality and consistency of our existing products. Our R&D work is carried out by about 350 researchers in various locations worldwide.

In China, our R&D centre in Shanghai focuses on developing new technologies and products in areas including cooking oil, specialty fats, proteins, cereals, condiments as well as functional foods.

In Singapore, our R&D centres focus on the following areas:

- in-depth clinical studies of macronutrients in our products and ingredients in relation to the management of Type II diabetic conditions, obesity, heart health and sarcopenia in the elderly;
- development of high-throughput microbial platforms for the cost-effective production of valuable biochemical as well as specific and proprietary host strains that can produce engineered lipases with enhanced properties to meet industrial needs; and
- future foods, as well as food structure, texture and safety.

In Indonesia, our R&D laboratory focuses on biotechnology research to enhance our competitiveness and sustainability in the oil palm industry.

By the end of 2017, Wilmar has been granted a total of 95 patents covering these different areas.

Major activities and achievements in 2017:

- Screening microbial strains for new lipases and beta-carotene degrading enzymes.
- Cloning and characterisation of novel lipase genes.
- Engineered lipases to increase their stability and activity at elevated temperatures.
- Replacing chemical processes by enzymatic processes.
- Application of enzymes in oils and fats processing – The use of enzymes in oil processing helps reduce energy input, waste discharge and greenhouse gas emissions. Our work on enzyme development spans from upstream enzyme engineering, strain development and fermentation, to downstream recovery, formulation and immobilisation of enzymes. Application of enzymes has also expanded from degumming and interesterification to the production of oleochemicals and enhancing the quality of aromatic oils.
- Application of enzyme in seed grains to increase oil yield and in animal feed to enhance its nutritional value.
- Enzyme-mediated production of high quality biodiesel.
- Improving taste and flavour profiles of hydrolysed vegetable protein using enzyme.
- Intensifying technical support services to our customers, especially in Asia and Africa, on product innovation and applications with specialty fats.
- Development of granulated and cube bouillon for markets in Indochina and Africa.
- Transforming side-stream products, such as wheatgerm from wheat-flour milling process and rice bran powder from rice milling process, into healthier innovative food products.
- Fast prototyping of food product for Wilmar's food manufacturing and fast food customers.
- Controlling risk substances in edible oils - To ensure product safety, we are studying new processing technologies to effectively control substances in edible oils and fats that may potentially have negative health impact.
- Arawana sunflower oil conferred the Global Sunflower Oil Quality Award (Technology & Innovation) at the 2nd International Sunflower Oil Summit in Odessa, Ukraine.
- Collaborations with external parties:
  - Collaborated with the University of Udine, Italy, to develop a method to determine the freshness of extra virgin olive oil. This parameter has since been introduced by the International Olive Council in its testing methods.
  - Partnered with organisations such as the International Association of Rice Bran Oil, Novozymes, Jiangnan University and Wuhan Polytechnic University to promote the quality and consumption of rice bran oil as well as seek new applications for rice bran oil.