

Observations on China market - for sustainable palm oil, FORTASBI

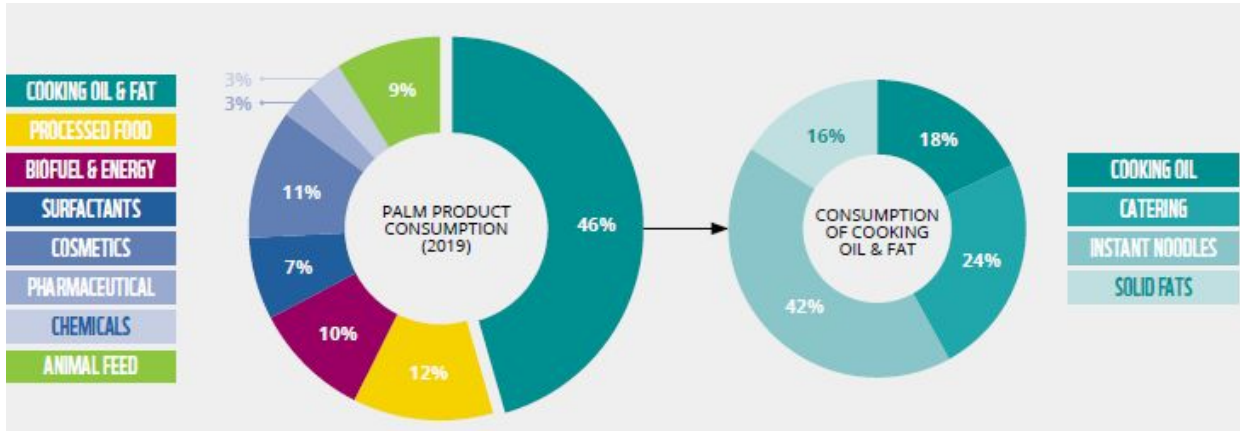
From WWF reports on sustainable palm oil markets by Ms KHOR Yu Leng
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FORTASBI, 30 Nov 2022, Kuala Lumpur

WWF Report Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021)



Palm Oil Consumption by Application Sector



Source: Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021, WWF)

RSPO Uptake by Application Sector

CHINA	ESTIMATED VALUE OF PALM PRODUCT CONSUMPTION (USD MILLION, 2019)	CONSUMPTION (THOUSAND TONNES, 2019)	RSPO CSPO UPTAKE (2019)	RSPO SUPPLY CHAIN MODEL USED (% CREDITS : % MB : % S6/IP, 2019)
COOKING OIL & FAT	3,080	4,020	Not available	Not available
PROCESSED FOOD	(included above)	1,030	7%	35:48:17
BIOFUEL & ENERGY	500	830	Not available	Not available
SURFACTANTS	370	610	4%	0:100:0
COSMETICS	570	950	2%	22:78:0
PHARMACEUTICAL	160	260	2%	79:14:7
CHEMICALS	130	220	8%	0:87:13
ANIMAL FEED	450	750	2%	Not available

Source: Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021, WWF)

Major Buyers

SECTOR	RSPO BUYERS	OTHER MAJOR BUYERS
COOKING OIL & FAT	Yihai Kerry-Wilmar, COFCO	Luhua, Xiwang
PROCESSED FOOD	Unilever, Mondelez, Ferrero, Yum! China, Namchow, Kerry Group	Ting Hsin (Master Kong, Wei Chuan, Dicos), Uni-President, Want Want
BIOFUEL & ENERGY	Yihai Kerry-Wilmar	Targray, Ninbo, Xinjiang International Yueda Investment, Century Longlive, Tuangan
SURFACTANTS	Unilever, Procter & Gamble, Guangdong Tsinghua Smart Biotech, Zhuhai Jenny's Choice, Yangzhou Yangfeng	Nice, Liby, Nafine
COSMETICS	Unilever, Procter & Gamble, L'Oréal, Kao, Shiseido, Guangzhou Shifei Bio-Tech	Jianong Chemical, Beijing Sanlu, Owicare, Soho Aneco Chemicals
PHARMACEUTICAL	IVC Nutrition, Hebei Hejia Pharmatech	Shanghai Pharma, Sinopharm, Hengrui Medicine, Fosun Pharma
CHEMICALS	Yihai Kerry-Wilmar, Solvay, Lianshui Xinyuan Biology, Jintung Petrochemicals	Sinopec, BP, Idemitsu, Nippon, Yuangen Petrochemical
ANIMAL FEED	Yihai Kerry-Wilmar, Cargill	East Hope, Alltech, New Hope

Source: Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021, WWF)

Major Refiner

REFINERS	REFINING CAPACITY (THOUSAND TONNES, 2019)
YIHAI KERRY 益海嘉里 (WILMAR-YIHAI KERRY); WILMAR INTERNATIONAL	2,000 to 3,000
COFCO GROUP 中粮集团	1,200 to 1,800
JIUSAN GROUP 九三集团	400 to 600
SHANDONG LUHUA 山东鲁花	400 to 600
JINGLIANG 京粮控股	300 to 400

Source: Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021, WWF)

Key Sectors: Cooking Oil, Instant Noodles & Oleochemical

Cooking Oils - HORECA:
For instance, 20% of palm oil use in China is in the catering sector, which is equivalent to 1.4 million tonnes or just over 1% of global palm oil use. Large multinationals including Yum! China and McDonald's are making a significant contribution in these markets, but regional and local fast food chains need to be recruited and encouraged to make their own commitments. Singapore-based FoodServices, which distributes cooking oil to hotels and restaurants is an example of this, sourcing 100% RSPO CSPO.

ACCELERATED ACTION IN KEY SECTORS IS CRUCIAL TO MOVE THE NEEDLE

Three key sectors stand out as pivotal to accelerate RSPO CSPO uptake in Asia:

A. THE COOKING OILS SECTOR

In countries with a modest modern grocery retail sector, such as Indonesia and India, engagement with the bulk market in the cooking oils sector is crucial to maximise transformation. This includes direct engagement with processors and traders, the majority of whom are already RSPO members with commitments to increase their RSPO CSPO uptake via shared responsibility and/or through group level commitments.

In countries with a large and well established modern grocery retail sector such as China, Malaysia and Singapore, consumer packed cooking oil can be an entry point for engagement, albeit challenging on account of the trend towards mixing different types of oil and national level regulations around composition. However, the Singapore market presents a case for hope. Preliminary studies indicate that at least 10% of palm oil-based cooking oils available in Singapore is currently RSPO-certified — although some industry experts suggest the RSPO market share is likely much greater thanks to commitments made by domestic manufacturers and retailers towards increasing RSPO CSPO uptake. As an example, Singapore-based retailer Fairprice NTUC is sourcing 100% RSPO CSPO for its homebrand products.



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Across all countries, the hotel, restaurant and catering (HORECA) sector has an important role to play in boosting RSPO CSPO uptake. For instance, 20% of palm oil use in China is in the catering sector, which is equivalent to 1.4 million tonnes or just over 1% of global palm oil use. Large multinationals including Yum! China and McDonald's are making a significant contribution in these markets, but regional and local fast food chains need to be recruited and encouraged to make their own commitments. Singapore-based FoodServices, which distributes cooking oil to hotels and restaurants is an example of this, sourcing 100% RSPO CSPO. It is a commendable example that others should follow.

B. THE INSTANT NOODLES SECTOR

Instant noodle companies are large consumers of palm oil across several Asian markets, with several companies sourcing between 50,000-100,000 tonnes of palm oil. Increasing uptake of RSPO CSPO within this sector can have a notable impact, as less than a third of the 25 largest instant noodle companies are RSPO members. President Nissin Corp, which has the highest RSPO CSPO uptake of all the instant noodle companies headquartered in Asia, was sourcing 20% RSPO CSPO in 2019.

C. THE OLEOCHEMICALS SECTOR

Oleochemicals — including surfactants, cosmetics, pharmaceuticals and chemicals — is a sector dominated by a few large players supplying products to consumer goods manufacturers. Accelerated action by these players could make a significant contribution. For example, Singapore-based Nikko Chemicals and India-based SAI Fertilizers and Phosphates are leading the way in sourcing 100% RSPO CSPO.

The non-branded sector also has an important role to play in driving RSPO CSPO uptake in the oleochemicals space. Groups such as major hotel chains, commercial property owners, hospital chains and real estate investment trusts should make and follow through on commitments to source 100% RSPO CSPO. Wildlife Reserves Singapore, for example, has committed to 100% RSPO CSPO uptake across their operations.

Source: Sustainable Palm Oil Uptake in Asia: Where do we go from here? (2021, WWF), Page 16

WWF Report Business Case for Certified Palm Oil (2022)



Palm Oil Production & Consumption 2020/2021

Indonesia and Malaysia are the major producers of palm oil globally producing 85% of the total palm oil. Indonesia, India, and China are collectively responsible for 40% of global consumption².

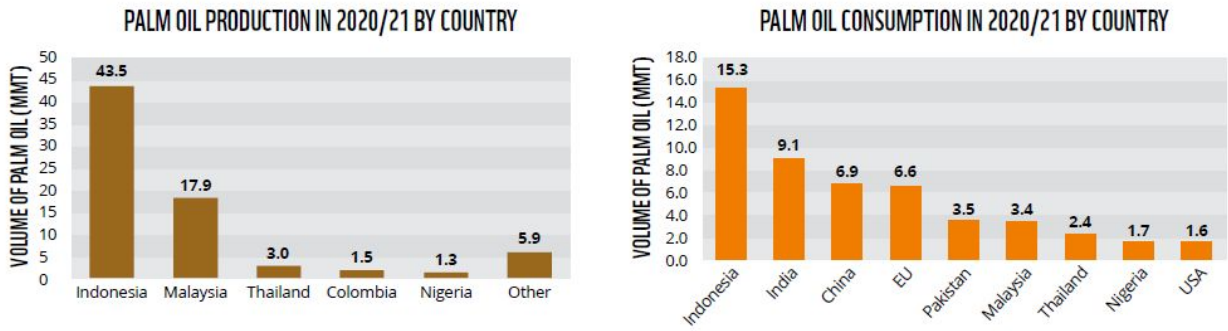


Figure 3: The volume of palm oil produced (L) and consumed (R) by major producing and consuming geographies. Geographies (MMT) in 2020/21.

Source: USDA FAS 2022

Source: Business Case for Certified Palm Oil (2022, WWF)

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Premiums Values

REFINED PALM COOKING OIL

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	35
SG	65.5
Credits from Mill/Crusher	2
ISH Credits	12

PKO

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	262.5
SG	530
Credits from Mill/Crusher	195
ISH Credits	200

PALM STEARIN

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	40
SG	150

PALM KERNEL STEARIN

SUPPLY CHAIN	PREMIUM PER TONNE (\$)
MB	300
SG	950

Source: Business Case for Certified Palm Oil (2022, WWF)

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Palm Oil Premiums

PALM OIL	REFINERS/ PROCESSORS/ TRADERS		REFINERS/ PROCESSORS/ TRADERS		CONSUMER GOODS MANUFACTURER		RETAILER/ HORECA	
	Malaysia, Indonesia, Singapore		India		Germany, Italy, UK, USA, Singapore		UK	
Conventional Price (\$/tonne) ²²	CPO (local delivered): \$1056				RBD Palm Oil: \$1143		RBD Palm Olein: \$1146	
	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price
MB - CSPO	\$10 - 30	0.9 - 2.8%	\$15 - 50	1.4 - 4.7%	-	2.4% Goes up to 2.5% as stated by a CGM	-	3 - 5% > conventional (2017)
MB - RBD PO	-	-	-	-	\$25 - 45 Recent price spikes have increased this to \$60-70, going up to \$100 at times.	2.1 - 3.9% Going up to 5.2 - 8.7% with recent price spikes.	-	-
SG/IP - CSPO	\$25 - 55	2.4 - 5.2%	\$35 - 80	3.3 - 7.5%	\$40 - 70	3.5 - 6.1%	-	-
SG/IP - RBD PO	-	-	-	-	\$40	3.5%	-	-
SG/IP - RBD Palm Olein	-	-	-	-	\$45 - 85	3.9 - 7.4%	-	-
Credits	\$2.5 - 3.5	0.2 - 0.3%	-	-	\$1 - 3	0.09 - 0.26%	-	-
ISH Credits	\$16 - 32	1.5 - 3.0%	-	-	-	-	-	-
Traceable (TTM/ TTP)	\$5 - 10 for TTP info-data	0.4 - 0.9%	\$5 - 15	0.4 - 1.3%	-	-	-	-

Source: Business Case for Certified Palm Oil (2022, WWF)

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Kernel Palm Oil Premiums

PALM KERNEL OIL	REFINERS PROCESSORS/ TRADERS		REFINERS/ PROCESSORS/ TRADERS		DERIVATIVE MANUFACTURER		CONSUMER GOODS MANUFACTURER	
	Malaysia, Indonesia, Singapore		India		EU, UK, USA, Singapore		UK and EU	
Conventional Price (\$/tonne) ²⁴	CPKO (local delivered): \$1362				RBD Palm Kernel Oil: \$1443			
	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price	Premium Value (\$)	Premium as % of conventional price
MB - CSPKO	\$100 - 200	14.7% - 18.4%	India: \$200 - 250	14.7 - 18.4%	\$250 - 300	18.4 - 22%	\$150 - 250	11 - 18.4 %
MB - RBD CSPKO	-	-	-	-	-	-	\$300 - 350	20.8 - 24.3%
SG/IP - CSPKO	\$250 - 400	-	-	-	-	-	\$530	39%
Credits	\$100 - 150	7.3 - 11%	-	-	-	-	\$100 - 150	7.3 - 11%
ISH Credits	\$90 - 115	6.6 - 8.4%	-	-	-	-	-	-
TTM/TTP	\$5 - 10 for TTP info-data	0.4 - 0.7%	-	-	-	-	-	-

Source: Business Case for Certified Palm Oil (2022, WWF)

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Costs of Working with CSPO

The costs associated with transitioning to and working with CSPO include memberships, assessments, audits, documentation, trainings, and the premium price paid for certified palm oil.

THE IMPACT OF CSPO SG PREMIUMS ON THE PER UNIT COST OF SOME COMMON PRODUCTS: **



70g pack of Instant Noodles
\$0.0009



125g bar of Soap
\$0.006



350g jar of Peanut Butter
\$0.005



1kg box of Laundry Detergent
\$0.08



80g bag of Potato Chips
\$0.002



0.35g pencil of Pencil Eyeliner
\$0.0001

Overall, the total cost of working with CSPO can vary. It can be as little as \$800 a year for those working with credits and can range between \$30,000 - \$70,000 for those working with physical supply chains, having audits conducted, etc. However, stakeholders stated that some of these costs are only incurred in the beginning and become negligible in the grand scheme and that the additional costs are also minimal on a per unit basis.

Source: Business Case for Certified Palm Oil (2022, WWF)

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References

- Business Case for Certified Sustainable Palm Oil, (WWF,2022)
https://wwfint.awsassets.panda.org/downloads/full_report_business_case_for_certified_sustainable_palm_oil.pdf
- Sustainable Palm Oil Uptake in Asia: Where do we go from here? (WWF, 2021)
https://wwfint.awsassets.panda.org/downloads/sustainable_palm_oil_uptake_in_asia_sept_2021.pdf

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