The 5th International Conference on Rice Bran Oil 2018

World Demand for Edible Oil
with special reference to
Rice Bran Oil

By

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24th – 25th May, 2018, Hanoi, Vietnam

SEA Profile

- Formed in 1963 to foster the development & growth of the Solvent Extraction & Vegetable Oil Industry in India
- Largest and Premier Association in the Vegetable Oil Sector in India – over 800 members across the country
- First Association in Vegetable Oil & Oilseed sector to receive ISO 9001 Certification in India (2004), now upgrade to ISO 9001 : 2015
- Recognised as NGO by Ministry of Agriculture and TPO by Ministry of Commerce, Government of India
- ITC, Geneva (United Nation) has recognised SEA as the Best & Successful Model Association
- SEA is the founder member of IARBO

World Scenario: Oilseed Production

Quantity in MnT

Oilseeds	15-16	16-17	17-18F
Soybean	311	348	338
Sunflower Seed	43	50	49
Rapeseed	64	63	66
Cotton Seed	38	39	44
Groundnuts	28	30	31
Palm-Kernel & Copra	19	21	22
Total	**502**	**552**	**550**

- **Oilseed production growth stagnating during current year**
- **Cottonseed likely to be higher by 5 Million tons**

Source: OilWorld

World Soybean Production Growth

Quantity in MnT

Year	US	Brazil	Argentina	Others	Total
2015-16	107	95	54	55	**311**
2016-17	117	114	54	66	**351**
2017-18(F)	120	117	37	62	**336**

- **Argentina suffered a massive drought**
- **Argentinian soya crushing could be severely affected**
- **With China/US trade spat, US beans could find their way into Argentina**
- **Brazilian production is expected to be in access of 117 Mn Tons**
- **Quite likely China may start sourcing Soya from Brazil**

Source: OilWorld

World Sunflower Seed Production Growth

Quantity in MnT

Year	Ukraine	Russia	EU	Argentina	Others	Total
2015-16	12	10	8	3	10	**43**
2016-17	15	12	9	3	11	**50**
2017-18(F)	13	11	10	3	12	**49**

- **Sunflower Oil imports into China and India increasing every year**
- **In India, Sunflower oil is considered Premium oil**

Source: OilWorld

World Rapeseed Production Growth

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Quantity in MnT

Year	EU-28	Russia & Ukraine	China	India	Others	Total
2015-16	22	3	8	6	25	**64**
2016-17	21	2	6	7	27	**63**
2017-18(F)	22	4	5	6	30	**67**

- **World production of Rapeseed and Canola estimated at 67 MnT with EU production recovering and record crop in Canada and C.I.S countries**

Source: OilWorld

World Edible Oil Availability

Quantity in MnT

Production	2014-15	2015-16	2016-17	2017-18
Coconut Oil	3	3	3	3
Cottonseed Oil	5	4	4	5
Olive Oil	2	3	2	3
Palm Oil	62	59	65	70
Palm Kernel Oil	7	7	8	8
Peanut Oil	5	5	6	6
Rapeseed Oil	28	28	28	29
Soybean Oil	49	52	54	56
Sunflower seed Oil	15	15	18	18
Total	**177**	**177**	**189**	**198**

- **We expect oil availability to increase by 9 Million tons**
- **Incremental Production could be higher than incremental consumption**

Source: OilWorld

World Palm Production

Quantity in MnT

Year	Indonesia	Malaysia	Thailand	Others	Total
2014-15	33.53	19.96	2.07	7.38	**62.94**
2015-16	32.40	17.32	1.8	7.71	**59.23**
2016-17	36.80	19.92	2.58	8.57	**67.87**
2017-18	38.80	20.76	2.45	8.83	**70.8**

- **Palm production rebounding with vengeance**
- **Palm is the biggest saviour for increased consumption demand**

Source: OilWorld

Bio Diesel & HVO Production

Quantity in MnT

Country/ Jan-Dec	2017	2016	2015	2014	2013
Europe	12.90	12.61	12.41	12.29	10.71
USA	6.10	6.21	4.72	4.80	4.77
Argentina	2.80	2.66	1.81	2.58	2.00
Brazil	3.75	3.33	3.46	3.00	2.56
Colombia	0.53	0.51	0.51	0.52	0.50
Singapore	1.05	0.99	0.87	0.80	0.81
Indonesia	2.95	3.18	1.22	2.92	2.60
Malaysia	0.72	0.51	0.67	0.60	0.47
Thailand	1.33	1.16	1.14	1.04	0.94
Other	3.06	2.95	2.89	2.94	2.65
Total	**35.19**	**34.13**	**29.70**	**31.49**	**28.01**

- **Discretionary blending of Bio- Diesel is low in the world due to low crude values**
- **Indonesian Bio-Diesel mandate is successful**
- **In current year, Bio-Diesel production is likely to increase by 2.5 MnT to 37.5 MnT**

Source: OilWorld

World Oil & Fats – Demand & Supply

Quantity in MnT

	Forecast	October /September			
	17-18F	16-17	15-16	14-15	13-14
Opening Stock	27.1	26.71	31.86	30.12	27.58
Production	225.7	218.03	204.39	206.03	201.56
Change	+7.76	+13.64	-1.64	+4.47	+11.47
Imports	87.39	86.23	81.75	81.11	76.58
Exports	87.61	86.96	80.99	82.09	76.81
Consumption	223.15	216.91	210.3	203.32	198.79
Change	+6.24	+6.61	+6.98	+4.53	+9.10
End Stocks	29.42	27.1	26.71	31.86	30.12
Stocks/Usage	13.20%	12.50%	12.70%	15.70%	15.20%

- **Production of oil is higher than consumption**
- **End stocks remain comfortable keeping a lid on prices**

Source: OilWorld

Indian Oilseeds Production

(Trade Estimate - 2013-14 to 2017-18)

Quantity in MnT

Oilseeds	13-14	14-15	15-16	16-17	17-18(E)
Groundnut	6.5	4.9	4.5	6.9	6.50
Rape/Mustard	6.7	5.1	5.9	7.1	6.20
Soybean	9.0	8.5	7.2	10.6	8.70
Sesamum	0.7	0.8	0.7	0.6	0.63
Sunflower	0.6	0.4	0.3	0.3	0.24
Safflower	0.1	0.1	0.1	0.1	0.10
Niger	0.1	0.1	0.1	0.1	0.10
Linseed	0.1	0.1	0.2	0.2	0.20
Castor	1.1	1.3	1.4	1.1	1.20
Sub-Total	24.8	21.1	20.3	26.9	23.87
Cottonseed	12.5	11.9	10.9	10.9	11.40
Copra	0.7	0.6	0.6	0.4	0.40
Grand Total	38.0	33.6	31.8	38.2	35.67

- **Total area under 9 oilseeds crop is about 28.0 million hectare**
- **Oilseed crop will be lower in 2017-18 due to reduction in area**

Source: SEA

Edible Oil Consumption in India

Quantity in MnT

Particulars	2001-02		2007-08		2017-18	
	Quantity	%	Quantity	%	Quantity	%
Palm Oil	2.94	29.08	4.43	35.81	9.13	42.24
Soy Oil	2.25	22.30	2.17	17.51	4.56	21.09
Mustard Oil	1.72	17.00	1.81	14.64	2.34	10.82
Sunflower Oil	0.30	3.05	0.54	4.35	2.38	11.00
Cotton Oil	0.44	4.38	1.07	8.64	1.16	5.3
Groundnut Oil	1.21	12.01	0.69	5.56	0.68	3.1
RBO	0.43	4.25	0.77	6.21	0.86	3.9
Others	0.80	7.94	0.90	7.27	0.51	2.3
Total	**10.12**	**100%**	**12.39**	**100%**	**21.62**	**100%**

- **The oil consumption is rising by about 4-4.5% per annum**

Source: SEA

Indian Consumption Growth Expectations

Year	Population @ 1.76% Growth	Consumption @ 3% Growth		Consumption @ 4% Growth		Consumption @ 5% Growth	
	In Bn.	Per Capita (In Kg)	MnT	Per Capita (In Kg)	MnT	Per Capita (In Kg)	MnT
2015	1.25	15.2	19.00	15.6	19.5	15.9	19.87
2017	1.28	16.0	20.48	16.8	21.50	17.4	22.27
2019	1.31	17.0	22.27	18.0	23.58	19.1	25.02
2021	1.34	18.0	23.79	19.5	25.70	21.0	27.72
2023	1.38	19.0	25.24	21.1	27.80	23.2	30.56
2025	1.42	20.2	26.78	22.8	30.0	25.6	33.69

- **Indian policymakers are seriously worried on rising imports**
- **Imported oils now constitute more than 70% of total Indian consumption**

Source: SEA

Import of Edible Oils

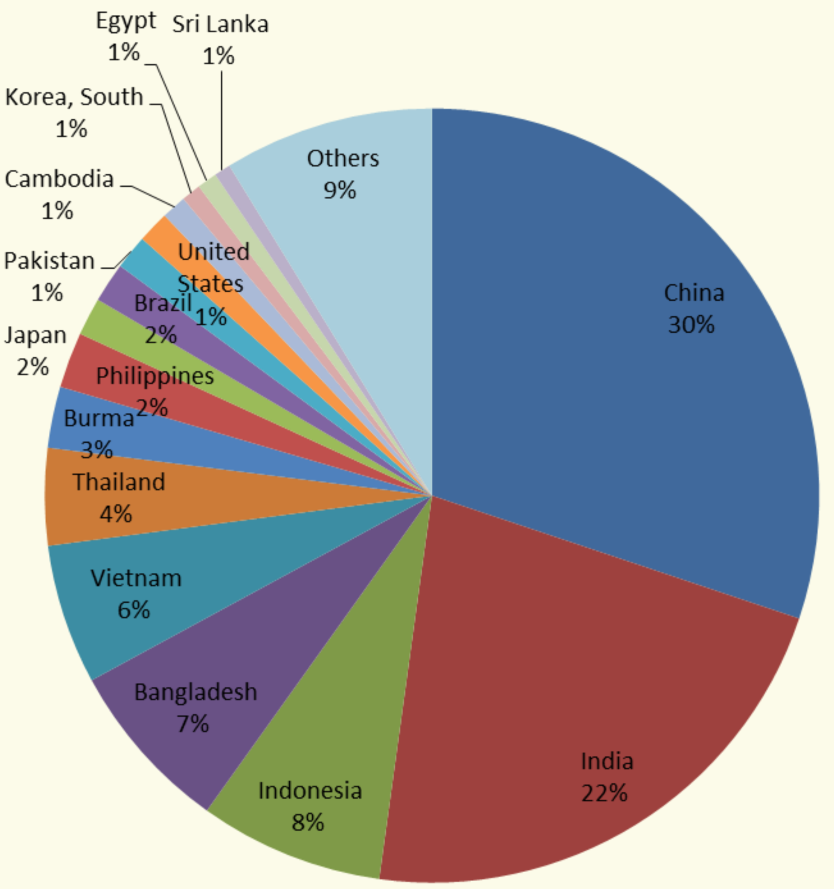
Quantity in MnT

Import Break-Up			
Oils	**2015-16**	**2016-17**	**2017-18 (F)**
Palm	8.44	9.30	9.50
Soybean Oil	4.23	3.52	3.50
Sun Oil	1.52	2.18	2.40
Others	0.38	0.29	0.30
Total	**14.57**	**15.08**	**15.70**

Source: SEA

World Rice Production

Country	2016-17		2017-18(E)	
	Qty ‘000 Tons	%	Qty ‘000 Tons	%
China	144,850	30.1	145,000	30.1
India	108,000	22.4	106,000	22.0
Indonesia	37,150	7.7	37,000	7.6
Bangladesh	34,578	7.1	34,700	7.2
Vietnam	28,861	6.0	28,100	5.8
Thailand	18,600	3.8	19,500	4.0
Burma	12,400	2.5	12,300	2.5
Philippines	11,500	2.4	11,200	2.3
Japan	7,780	1.6	7,600	1.5
Brazil	8,160	1.6	8,000	1.6
Pakistan	6,800	1.4	6,900	1.4
United States	7,117	1..4	6,382	1.3
Cambodia	4,950	1.0	5,000	1.0
Korea, South	4,198	0.8	3,900	0.8
Egypt	4,800	0.9	4,000	0.8
Sri Lanka	2,350	0.4	3,300	0.6
Others	38,780	8.0	42,159	8.7
World Total	**48,0747**	**100.0**	**48,10,41**	**100.0**



Source: USDA

World Rice Bran Oil Production & Potential

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Quantity in MnT

World Production of Rice	**486**
Rice Bran Potential (8% of Rice Production)	**38.88**
Rice Bran Oil Potential (17.5 % Recovery)	**6.80**
Current Production of Rice Bran Oil	**1.70**
World Untapped Potential	**5.1**
Percentage of Untapped Potential	**75%**

- **Huge untapped potential**

Major Countries Producing Rice Bran Oil

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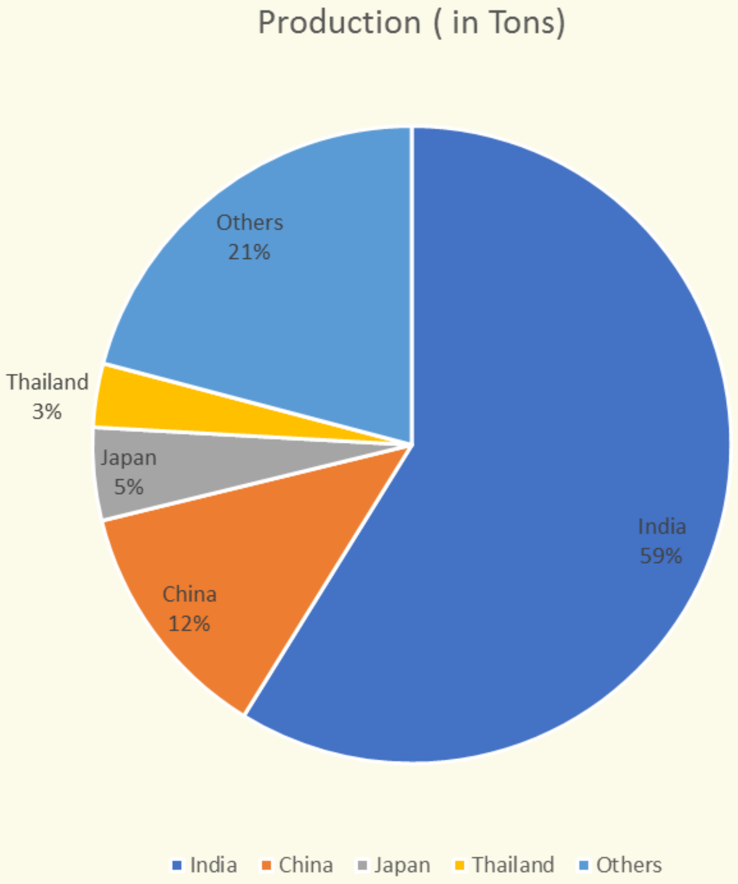
Country	Production (in Tons)
India	1,000,000
China	210,000
Japan	80,000
Thailand	55,000
Others	355,000
Total	**1,700,000**



Rice Bran Oil - Key Takeaways

- **China and India contribute 50% of the world Rice production**
- **Indonesia and Bangladesh are also sizable producers of Rice**
- **Rice Bran Oil potential not properly exploited by these countries**
- **Against potential of 6.8 MnT, RBO production curently stands at 1.70 MnT, thereby untapped potential is 5.1 MnT**
- **China has not done much to recover Rice Bran Oil. Against potential of 2 MnT, the actual production is only 210,000 Tons**
- **Indian efforts relatively better, but still lot needs to be done**
- **Indian produces 1 MnT of RBO against potential of 1.6 MnT**
- **Important that the world is made aware of the huge potential of untapped opportunity of 5 MnT of RBO, which needs to be fully explored**

Lessons from Olive Oil Marketing

- World produce about 3 MnT of Olive oil only, however, it fetches over US$ 3,200 to 3,500 per Ton
- The number of studies conducted shows that Rice Bran Oil is much better than Olive oil in number of parameters, but it is fetching very low price as compared to Olive oil
- International Olive Council has done wonderful marketing and placed the Olive oil as most premium and healthy oil
- I am sure the newly formed Marketing Committee of IARBO will have herculean task and challenge to create awareness about good virtue of rice bran oil and thereby placing RBO in premium oil bracket in line Olive oil

Challenges & Way Forward

- Major problem in Rice Bran Oil is the rapid deterioration of Oil quality
  - Modern milling processes help ensuring reduced deterioration of Bran
  - Extraction plants in proximity to rice mills help in ensuring oil quality
  - Going forward, large Rice Mills with integrated extractions plants may be the answer to this challenge
- Another major issue is its relatively high color, especially the red hue
  - Over the years Indian consumers have started believing that lower color indicates better quality of Oil
- It is important for us to educate the consumers about health benefits of Rice Bran Oil as well as the fact that high color does not necessarily means poor quality
- Awareness of Rice Bran Oil world across will create demand and thereby the opportunity to exploit the potential & better realization of RBO

Thank you

Mr. Atul Chaturvedi, President SEA,
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and
Dr. B. V. Mehta - Executive Director

The Solvent Extractors' Association of India

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