



# **“Demand & Supply of Edible Oils in India in Special Context with Soy Oil”**

**at**

**USSEC Seminar on “Entrepreneurship Development  
in Soy Food Processing ”**

**By**

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**(Premier Association of Vegetable Oil Industry & Trade)**

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**Mumbai**



# Indian General Economy & Recent Development





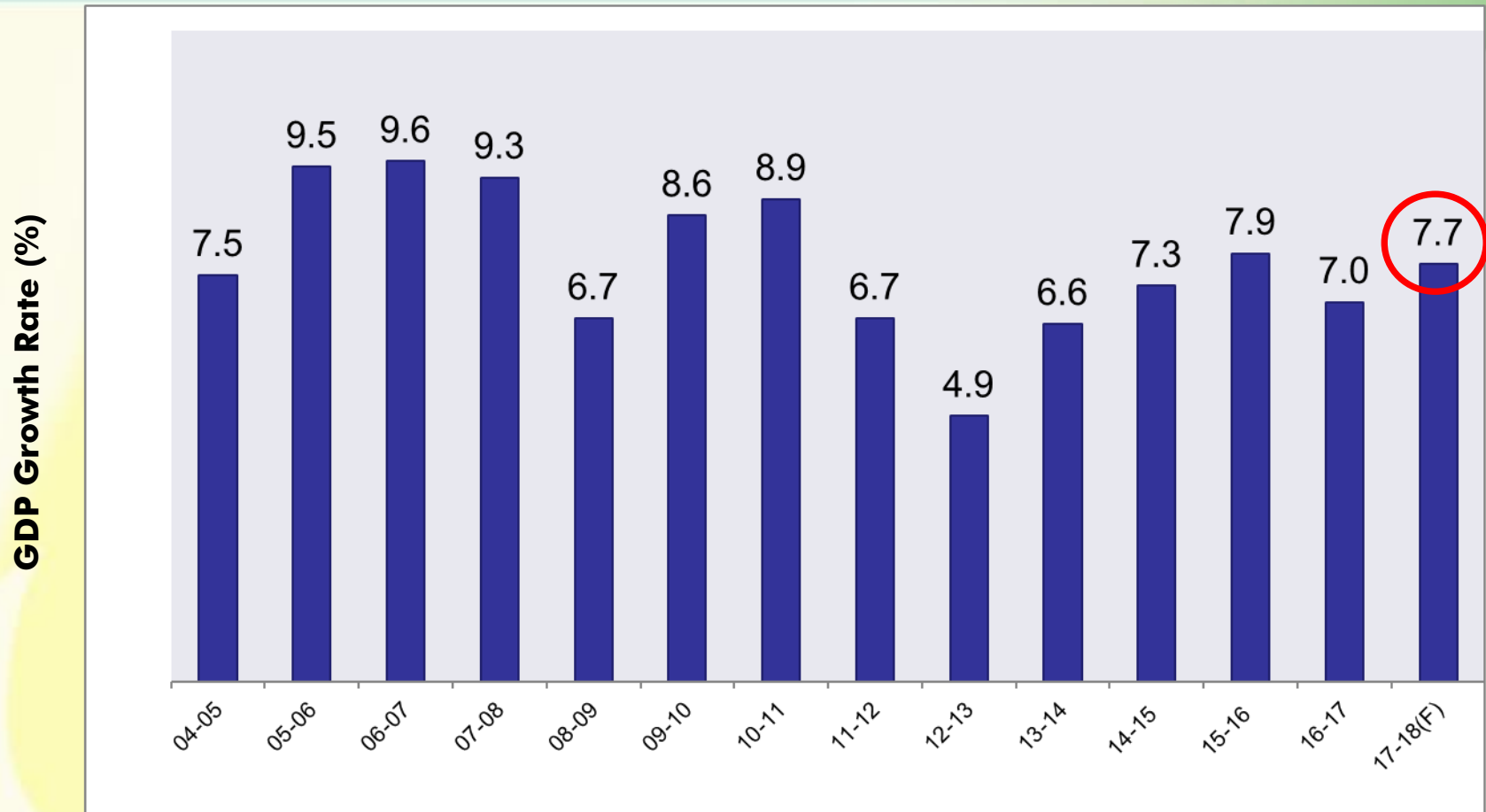
# Indian Macro-Economic Overview

- India – a fast growing significant economy in spite of global slowdown
- Strong Macro-economic fundamentals
- GDP Value: Over US\$ 2.25 Trillion (Tn)
- Purchasing Power Parity (PPP): US\$ 8.72 Tn
- Forex Reserve: US\$ 420 Bn and growing
- FDI Flow US\$ 40 Bn (2017)
- Per Capita Income : Rs. 112,800 (US\$ 1670)
- Income Growth Rate : 8.6%





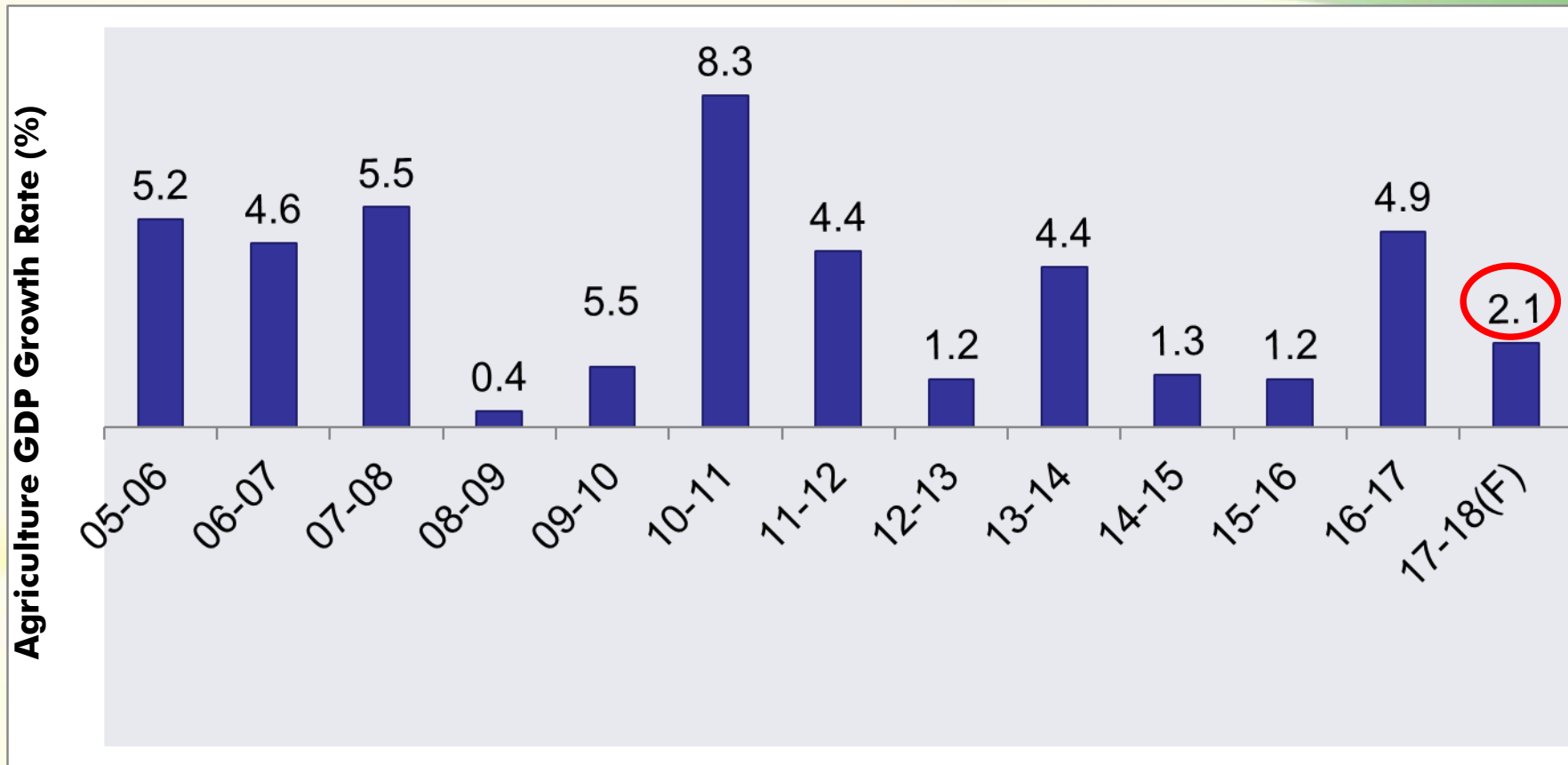
# India's Overall GDP Growth



- The average GDP growth in last five years is registered at 6.7%
- For FY 17-18 GDP growth forecasted at 7.7%



# Agriculture Sector GDP Growth



- **Agriculture Sector Growth depends heavily on monsoon performance**
- **For 2016-17, agri growth was higher (4.9%) , thanks to good monsoon**
- **For the year 2017-18, the GDP growth pegged at 2.1%**



# India's Oilseeds Production Scenario

**SUPPLY**



**Demand - Supply**

**and**

**Import of Vegetable Oils**



# Oilseed Sector 2017-18

• Area Under Oilseed Cultivation	25.4	Mn. Ha.
• Average yield *	950	Kg.
• Output of 9 cultivated Oilseeds *	24.1	MnT
• Output of Cottonseed & Copra *	11.8	MnT
<b>Total</b>	<b>35.9</b>	<b>MnT</b>
• Production of Oilcake/meal	26.5	MnT
• Production Edible & Non-edible Veg. Oils	7.7	MnT
• Demand of Veg. Oils (Edible)	23.0	MnT
• Import of Veg. Oil 2017-18(Nov-Oct)	15.1	MnT
• Per Capita consumption	16.5	kg

The overall turn over of the oilseed sector is Rs. 175,000 crores ( US\$ 27 bn) and on Import front, its 3<sup>rd</sup> item after Crude Petroleum and Gold. India spending over Rs. 75,000 crores ( US\$ 11.5 bn) for import of edible oils per annum and dependence on import is nearly 70%.



# Oilseeds Production (Trade Estimate) (2013-14 to 2017-18)

(Qty. in Million Tonnes)

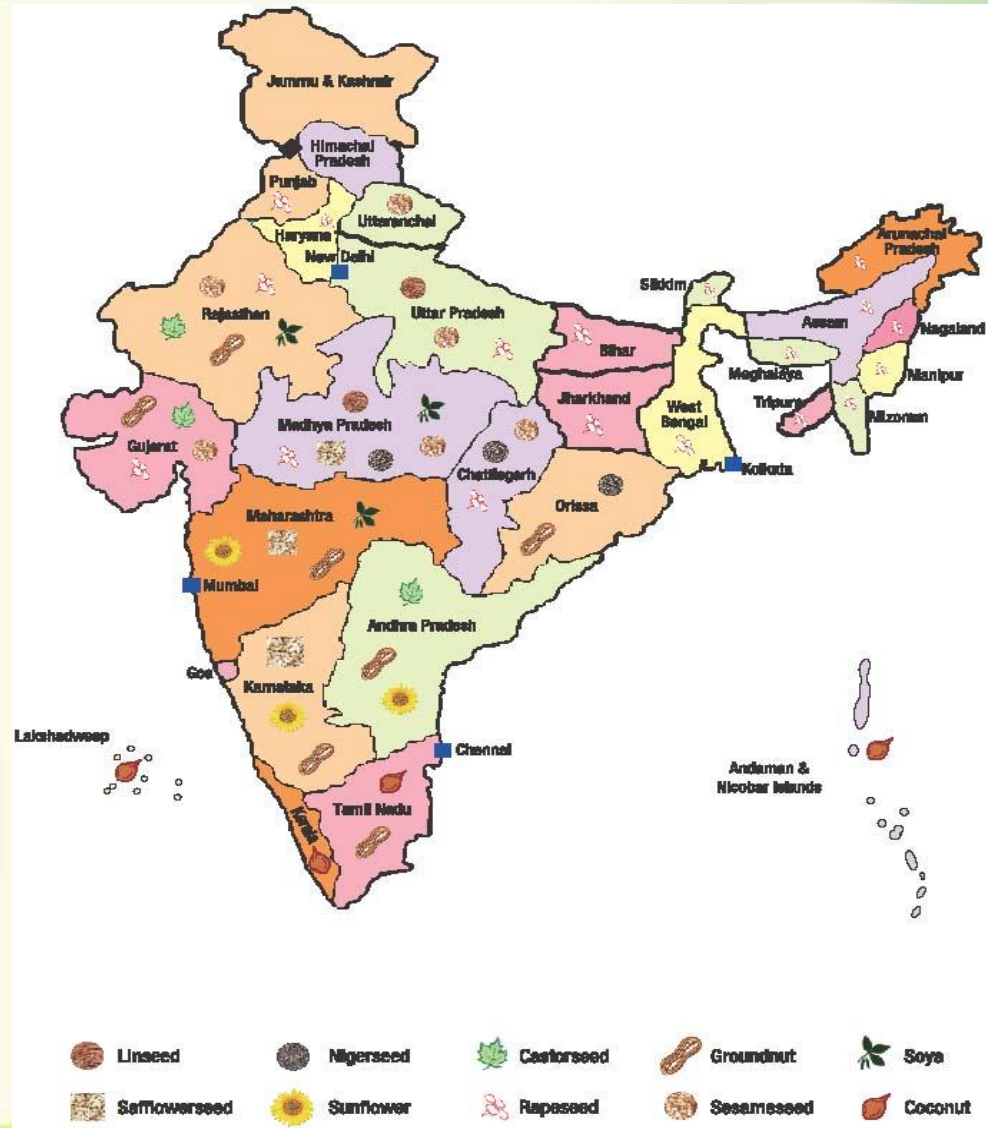
Crop	17-18(F)	16-17	15-16	14-15	13-14
<b>Major Oilseeds</b>					
Groundnut	6.50	6.9	4.5	4.9	6.5
Rape/Mustard	6.20	7.1	5.9	5.1	6.7
Soybean	8.70	10.6	7.2	8.5	9.0
Sesamum	0.63	0.6	0.7	0.8	0.7
Sunflower	0.24	0.3	0.3	0.4	0.6
Safflower	0.10	0.1	0.1	0.1	0.1
Niger	0.10	0.1	0.1	0.1	0.1
Linseed	0.20	0.2	0.2	0.1	0.1
Castor	1.41	1.1	1.4	1.3	1.1
<b>Sub-Total</b>	<b>24.08</b>	<b>26.9</b>	<b>20.3</b>	<b>21.1</b>	<b>24.8</b>
<b>Others</b>					
Cottonseed	11.40	10.9	10.9	11.9	12.5
Copra	0.40	0.4	0.6	0.6	0.7
<b>Grand Total</b>	<b>35.88</b>	<b>38.2</b>	<b>31.8</b>	<b>33.6</b>	<b>38.0</b>

Major oilseeds produced in the country are GN, Rape and Soybean covers more than 85% of the total production of oilseeds. Total area under 9 oilseeds crop is about 25.4 million hectre in 2017-18. Oilseed crop is lower in 2017-18 due to reduction in area.





# Major Oilseeds Producing States in India

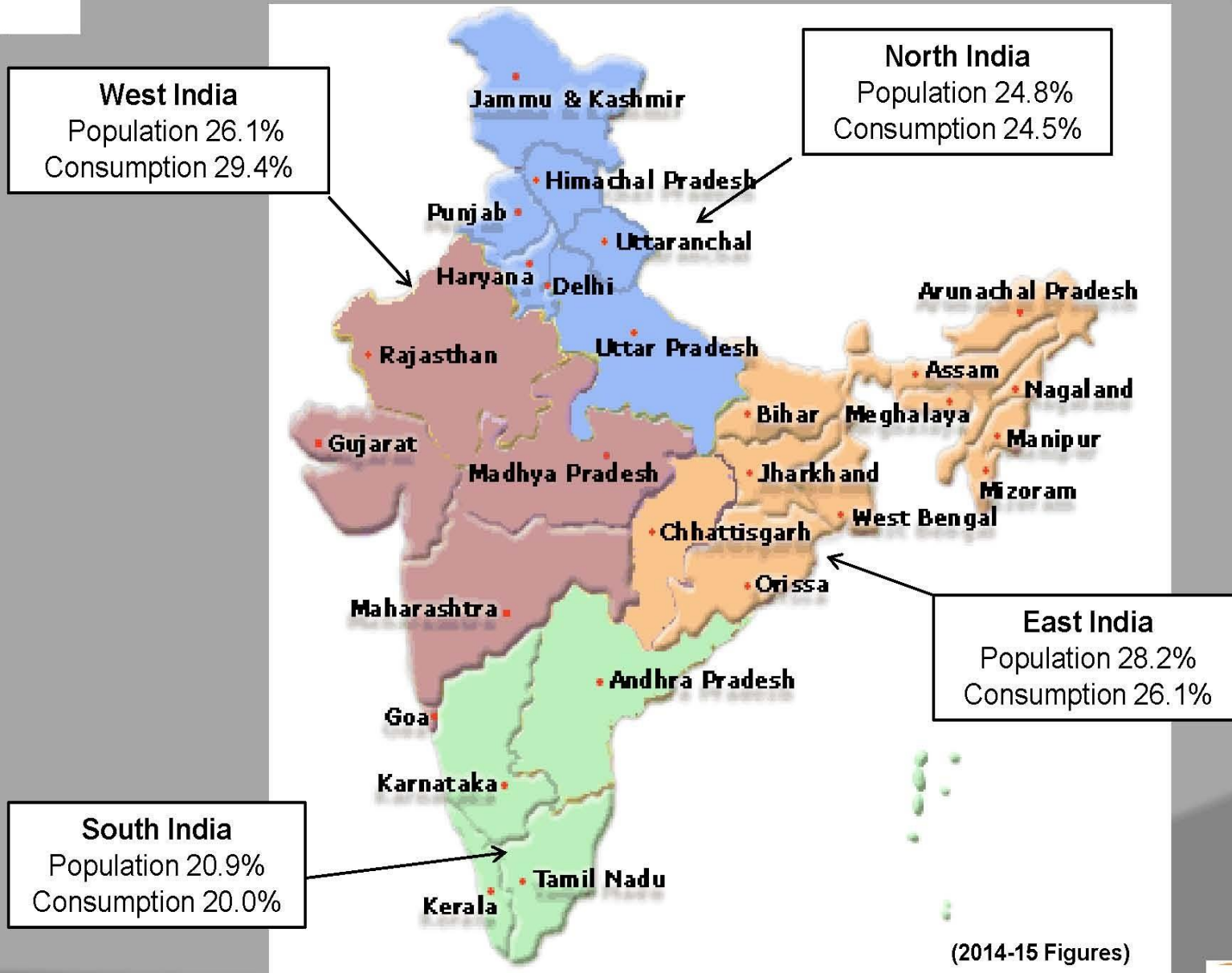




# Consumption



# India's 4 Zones for Consumption Pattern

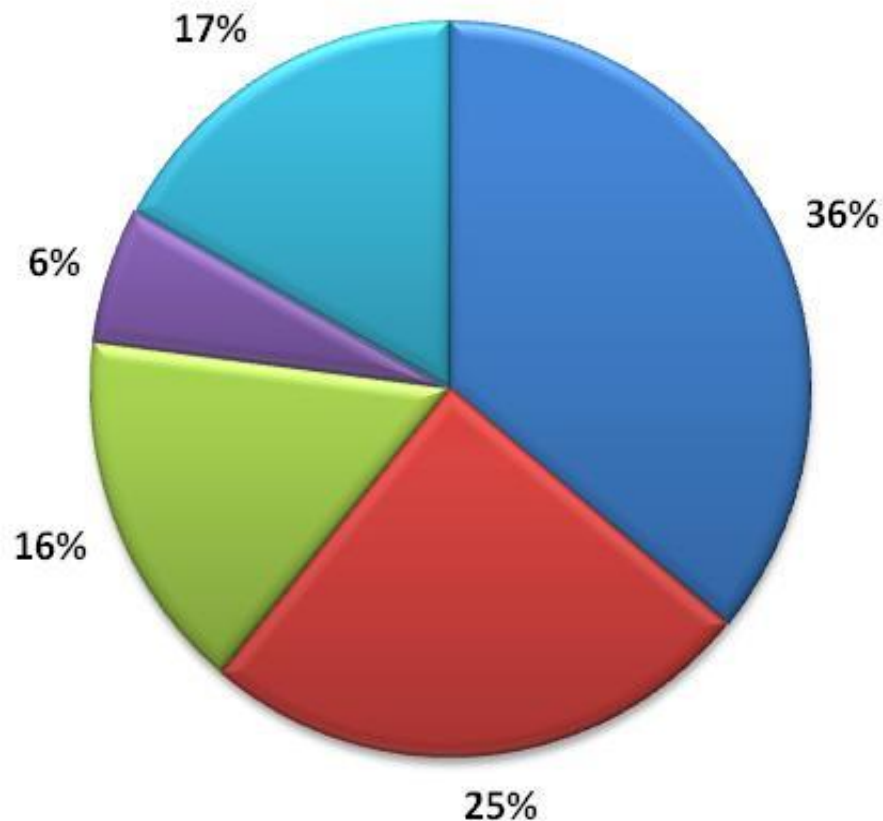




# Zone wise Consumption Pattern

## North India

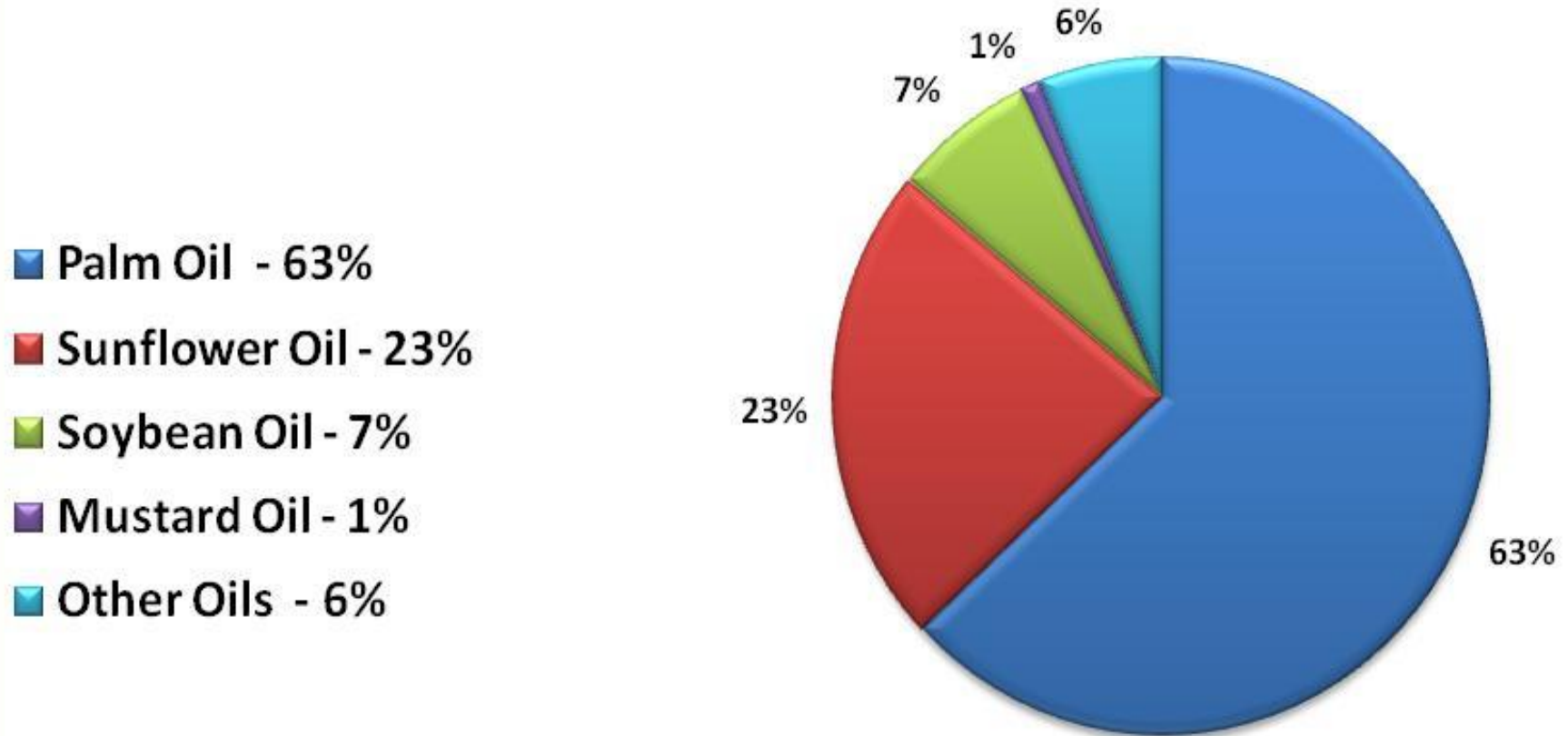
- Palm Oil - 36%
- Soybean Oil - 25%
- Mustard Oil - 16%
- Sunflower Oil - 6%
- Other Oils - 17%





# Zone wise Consumption Pattern

## South India

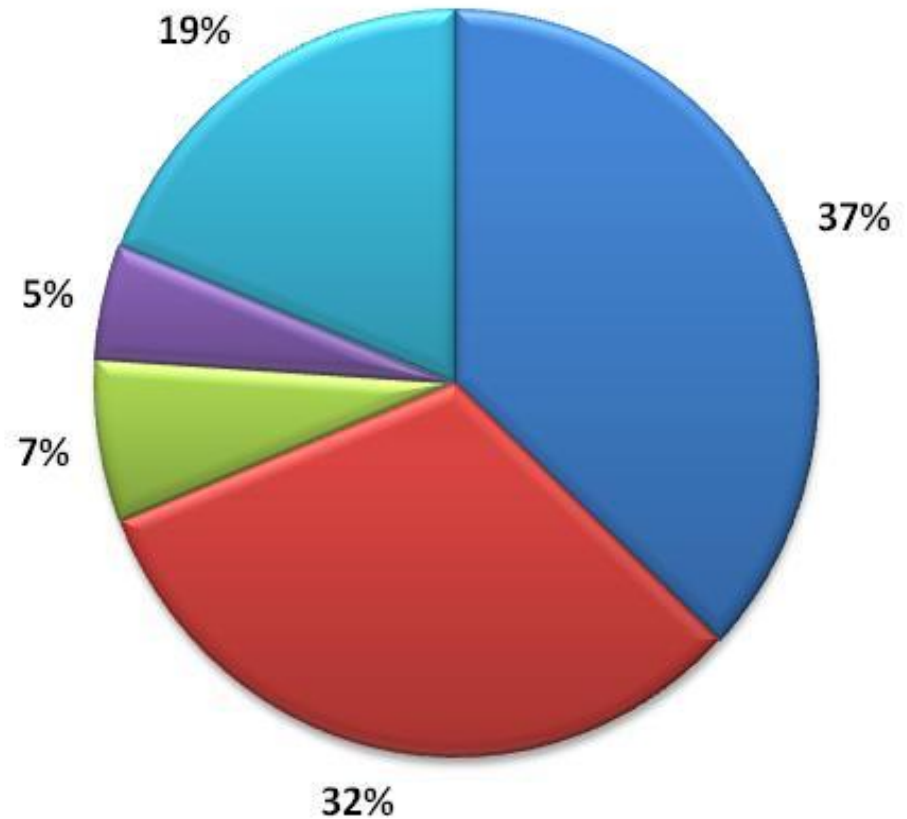




# Zone wise Consumption Pattern

## West India

- Palm Oil - 37%
- Soybean Oil - 32%
- Sunflower Oil - 7%
- Mustard Oil - 5%
- Other Oils - 19%

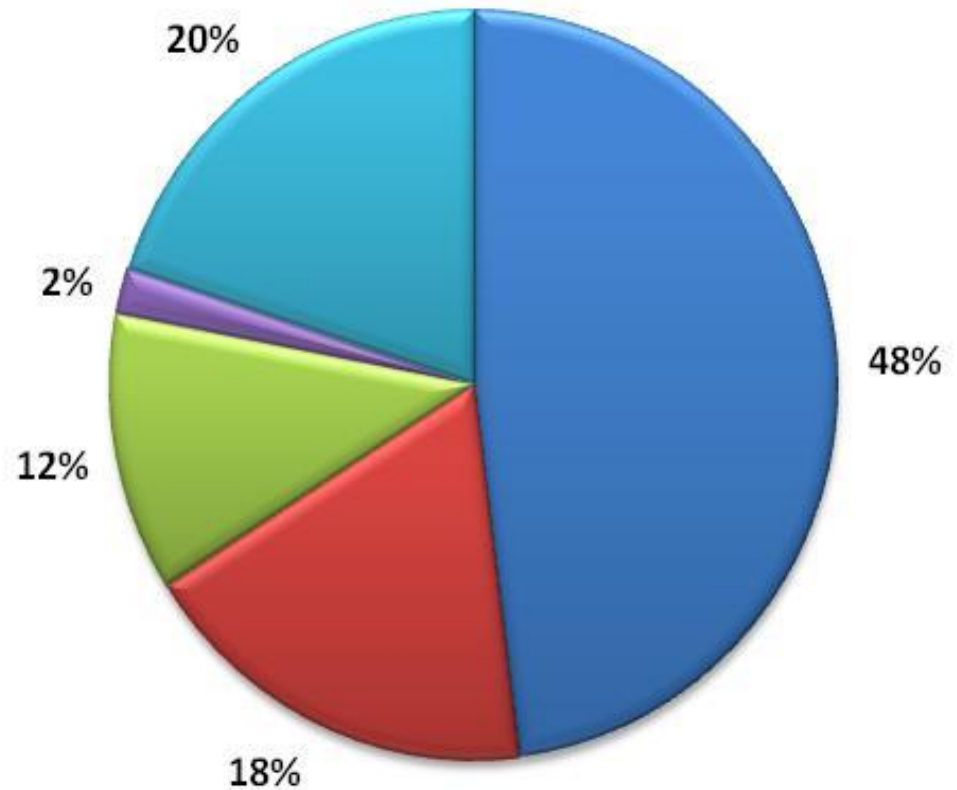




# Zone wise Consumption Pattern

## East India

- Palm Oil - 48%
- Mustard Oil - 18%
- Soybean Oil - 12%
- Sunflower Oil - 2%
- Other Oils - 20%





## Per Capita (kg) Disappearance of Oils and Fats in Selected Countries and World

Country	2017-18(F)	2016-17	2015-16	2014-15	2013-14
EU-28	66.3	65.7	64.5	63.6	63.6
U.S.A.	71.3	68.9	67.6	64.3	62.7
Argentina	82.4	89.2	81.1	74.3	82.3
China	26.7	26.5	26.3	26.1	25.7
Brazil	48.4	44.9	43.5	44.1	41.5
India	18.2	17.9	17.5	16.8	15.9
Pakistan	25.4	24.9	24.2	23.4	22.5
Indonesia	46.9	43.2	41.9	35.3	40.9
Bangladesh	17.2	16.1	14.8	13.5	12.4
Turkey	33.3	33.1	33.5	33.8	33.6
World	29.3	28.7	28.2	27.5	27.2

➤ Number shown includes consumption of oils and fats for Bio-energy / Non-edible purpose

Source : Oil World 2018





# Edible Oil Consumption in India

Qty : '000 T

Particulars	2001-02		2008-09		2016-17	
	Qty	%	Qty	%	Qty	%
Palm Oil	2944	29.1	6392	45.5	9105	41.9
Soy Oil	2258	22.3	2112	15.0	4895	22.5
Mustard Oil	1721	17.0	1610	11.5	2121	9.8
Sunflower Oil	309	3.1	846	6.0	2116	9.8
Cotton Oil	443	4.4	965	6.9	1189	5.5
Groundnut Oil	1216	12.0	591	4.2	531	2.4
RBO & Other Oils	1234	12.2	1543	10.9	1783	8.2
<b>Total</b>	<b>10125</b>	<b>100%</b>	<b>14059</b>	<b>100%</b>	<b>21750</b>	<b>100%</b>

- Consumption of Palm oil in India is now nearly 42%, while Soybean Oil is about 23% of the total oil consumption.



**India has  
promising  
demand  
growth**



# India has Promising Demand Growth

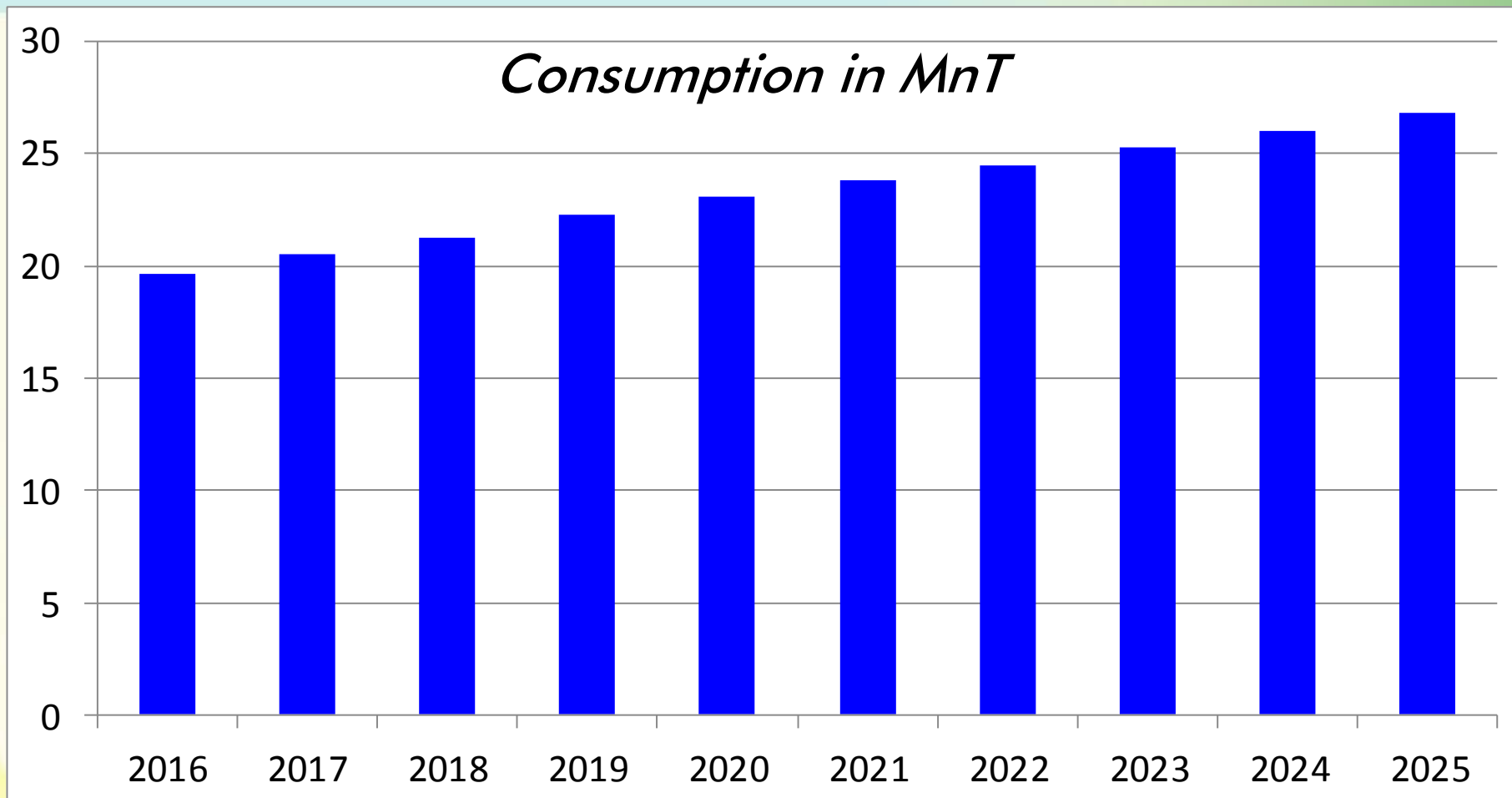
## Demand Drivers in India are

- Average GDP growth in last five years - 6.5 to 7.0%
- Big emerging Indian middle class
- Double digit growth of out of home consumption of edible oils
- Per capita consumption of Edible oils in India at 16.5 kg (2017-18) is still a lot below threshold level of consumption
- Even with a moderate population growth, the absolute increase in number of people is quite higher
- Indian Edible Oils demand is both switchable and elastic: Switchable to other oils to quite an extent & is elastic to an extent



# Demand / Consumption of Edible Oils in India

## Projections up to 2025



### For Demand Scenario up to 2025

- High growth in income levels, increasing trend in spending & better living standards
- High growth in consumption of edible oils and the consumption may reach 26.8 MnT by 2025 from present level of 22 MnT, ie, a 3% growth every year



# Edible Oil Demand- Long Term Projection

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
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

*(Excluding Non-edible Oils)*

- Due to lower consumption base, demand could grow at 4% or 5%
- By 2025, India may consume 30 MnT (at 4% growth) or 34 MnT (at 5% growth)



# Consumption & Characteristics

- Palm is the main oil in Out-of-Home consumption like HORECA, chips - savory manufacturers etc., nearly 45% of total consumption.
- Soybean Oil is also gaining the acceptance by the consumer.
- Also the Indian edible oil demand is quiet elastic and does reduce or increase to an extent with change in prices.
- Share of Average food budget is 47% v/s Total expenditure budget of an average middle class consumer, which justifies their sensitivity towards oil price.
- Soft oils like soybean oil and sunflower oil consumption and import is rising with their demand and fall in domestic production.



# Import of Edible Oils by India





# Major Indian Ports - Imports of Edible Oils







# Port-wise Imports Of Edible Oils 2016-17 (Nov.-Oct)

(Qty. in '000 Tons)

Ports	RBD Palmolein	Crude Palm Oil	Cru. Palm Ker. Oil	Sunflower Oil	Soybean Oil	Rapeseed Oil	Total
Kandla	564.9	2117.9	0.5	111.9	1802.7	288.4	4892.5
Haldia	196.7	1271.5	--	7.5	765.5	--	2241.3
JNPT	336.1	400.9	15.5	376.2	227.2	--	1355.9
Mundra	74.1	234.1	34.1	90.5	512.9	4.2	950.0
Chennai	577.6	96.9	3.0	642.8	8.0	--	1328.3
Krishnapattinam	74.4	1087.7	12.9	356.9	--	--	1531.9
Kakinada	112.4	318.5	21.5	355.3	--	--	807.7
Mangalore	233.9	290.3	--	219.5	--	--	743.7
Budge-Budge	74.3	466.7	--	--	--	--	541.0
Others	626.5	50.8	0.4	8.2	--	--	686.0
<b>Total</b>	<b>2870.9</b>	<b>6335.3</b>	<b>87.5</b>	<b>2168.8</b>	<b>3316.3</b>	<b>292.6</b>	<b>15077.4</b>

**Kandla , Krishnapattinam, Haldia and China are major ports for the import. Most of the Refiners are located at the ports.**



# India – Country Wise Imports of Edible Oils

(Figures in '000T)

Country	Jan.- Dec 2017	Jan.- Dec. 2016	Jan. –Dec. 2015	Jan.-Dec. 2014	Jan.- Dec. 2013
<b><u>Soybean Oil</u></b>					
Brazil	493	631	705	402	233
Argentina	2485	2920	2544	1457	803
Paraguay	378	313	251	229	32
Other Countries	35	20	99	13	106
<b>Total</b>	<b>3391</b>	<b>3884</b>	<b>3599</b>	<b>2101</b>	<b>1174</b>
<b><u>Sunflower Oil</u></b>					
Ukraine	2103	1508	1462	1673	1058
Argentina	114	70	11	1	23
Other Countries	38	1	4	4	3
<b>Total</b>	<b>2255</b>	<b>1580</b>	<b>1477</b>	<b>1678</b>	<b>1084</b>
<b><u>Palm Oil</u></b>					
Indonesia	7054	5313	5771	4758	5879
Malaysia	2091	2990	3725	3073	2384
Thailand	152	--	--	100	209
Other Countries	1	1	1	--	--
<b>Total</b>	<b>9297</b>	<b>8304</b>	<b>9496</b>	<b>7931</b>	<b>8472</b>
<b>Other Oils</b>	<b>395</b>	<b>496</b>	<b>541</b>	<b>478</b>	<b>411</b>
<b>Grand Total</b>	<b>15338</b>	<b>14264</b>	<b>15113</b>	<b>12188</b>	<b>11141</b>

**Soybean Oil is mainly imported from Argentina and small quantity from Brazil and Paraguay.**

Source: OILWORLD



# **World and Indian Soybean Scenario**



# World Production of Soybeans

(Qtn. In Mn.T)

Country	Harvest	18/19 F	17/18p	16/17	13/14-17/18
EU-28	Sep-Sep (1)	2.73	2.61	2.46	2.12
Russia	Sep-Oct (1)	3.75	3.62	3.14	2.67
Ukraine	Sep-Oct (1)	4.30	4.34	4.50	3.86
Canada	Sep-Nov (1)	7.30	7.72	6.60	6.43
U.S.A.	Sep-Nov (1)	121.00	119.52	116.92	108.31
Argentina	Apr-May (2)	53.00	36.50	54.60	51.10
Brazil	Jan-May (2)	117.00	118.00	114.08	102.22
Paraguay	Jan-May (2)	10.30	9.70	10.30	9.24
Uruguay	Apr-May (2)	3.25	1.85	3.40	2.90
China	Aug-Nov (1)	14.50	16.66	11.71	12.63
India	Oct-Jan	10.40	8.30	10.50	8.64
Oth. Countries		10.47	10.02	10.07	9.54
World		358.00	338.84	348.27	319.66

U.S.A. Followed by Brazil and Argentina are major producers of soybean constitute nearly 80% of the world production.

Source : Oil World 2018



# World Production of Soybean Oil

(Qtn. In Mn.T)

Country	Oct-Sept 17/18 F	Oct-Sept 16/17 P	Oct-Sept 15/16	Oct-Sept 14/15	Oct-Sept 13/14
EU-28	2.81	2.72	2.80	2.61	2.48
Russia	0.75	0.71	0.66	0.58	0.49
Ukraine	0.18	0.18	0.17	0.15	0.14
Canada	0.35	0.34	0.36	0.33	0.27
U.S.A.	10.40	10.03	9.96	9.75	9.14
Argentina	7.36	8.40	8.43	7.69	6.79
Brazil	8.80	8.13	7.93	8.04	7.26
Paraguay	0.79	0.73	0.80	0.73	0.64
Mexico	0.80	0.79	0.74	0.69	0.68
China	16.02	15.12	13.82	12.37	11.57
India	1.30	1.41	0.95	1.10	1.32
Oth. Countries	5.36	4.89	4.74	4.43	3.75
<b>World</b>	<b>54.92</b>	<b>53.45</b>	<b>51.36</b>	<b>48.47</b>	<b>44.53</b>

China is the largest producer of soybean oil followed by U.S.A. and Brazil



# World Production of Soybean Meal

(Qtn. In Mn.T)

Country	Oct-Sept 17/18 F	Oct-Sept 16/17 P	Oct-Sept 15/16	Oct-Sept 14/15	Oct-Sept 13/14
EU-28	11.84	11.45	11.88	11.09	10.51
Russia	3.34	3.17	2.91	2.58	2.19
Ukraine	0.81	0.80	0.77	0.67	0.62
Canada	1.52	1.41	1.51	1.43	1.18
U.S.A.	42.77	40.62	40.52	41.03	37.04
Argentina	28.89	33.29	33.21	30.93	27.89
Brazil	33.36	30.59	30.32	30.71	28.18
Paraguay	2.94	2.71	3.21	2.90	2.58
Mexico	3.57	3.48	3.28	3.06	2.98
China	72.00	68.10	62.10	56.06	52.13
India	5.99	6.45	4.55	5.07	6.09
Oth. Countries	23.47	21.51	20.78	19.54	16.30
World	230.50	223.58	215.04	205.07	187.69

China is also emerging as largest producer of soybean meal since they are importing about 95.0 Mn.T of soybean for domestic crushing.

Source : Oil World 2018



**Indian**

**Oilseeds Production Scenario**

**and**

**Availability of edible Oils**

**including Soybean Oil**



## Indian Kharif (Summer) & Rabi (Winter) Oilseeds Production During 2016-17 and for 2017-18

(Qty. in 'Mn. Tons)

Oilseeds	2016-17			2017-18			Y-o-Y Change
	Kharif	Rabi	Total	Kharif	Rabi	Total	
Groundnut	5.38	1.40	6.78	5.10	1.50	6.60	(-) 0.18
Soybean	10.50	--	10.50	8.90	--	8.90	(-) 1.60
Rapeseed	--	6.73	6.73	--	6.30	6.30	(-) 0.43
Sunflower	0.14	0.15	0.29	0.08	0.25	0.33	(+) 0.04
Sesame	0.42	0.30	0.72	0.35	0.30	0.65	(-) 0.07
Safflower	--	0.05	0.05	--	0.05	0.05	--
<b>Total</b>	<b>16.44</b>	<b>8.63</b>	<b>25.07</b>	<b>14.43</b>	<b>8.40</b>	<b>22.83</b>	<b>(-) 2.24</b>

**Note :** As per the Govt. estimate, soybean production in 2016-17 was 13.16 Mn.T and for 2017-18, production estimated at 11.39 Mn.T.


Source : GGN Research





## Domestic Edible Oil Production During 2016-17 and Projection for 2017-18 (Nov.-Oct)

(Qty. in 'Mn. Tons)

Oils	2016-17	2017-18	Y-o-Y Change
Groundnut Oil	0.57	0.71	0.14
 Soybean Oil	1.44	1.47	0.03
Rapeseed Oil	1.87	2.11	0.24
Sunflower Oil	0.10	0.12	0.02
Sesame Oil	0.12	0.09	(-) 0.03
Cottonseed Oil	1.24	1.32	0.08
RBO – Edible Oil	0.96	1.00	0.04
Others Oils	0.75	0.84	0.09
<b>Total</b>	<b>7.05</b>	<b>7.66</b>	<b>0.61</b>

Source : GGN Research



# Availability and Consumption of Soybean Oil

(Qty. in Lakh Tons)

Year	Local Availability	Import	Total Disaperance	Population Cr.	Per Capita Consumption Kg.
2017-18(F)	14.70	34.00	48.70	132.0	2.71
2016-17	14.40	33.16	47.56	130.0	2.75
2015-16	9.54	42.35	51.89	127.0	4.10
2014-15	12.44	29.86	42.30	126.5	3.35
2013-14	14.03	19.51	33.54	125.0	3.75
2012-13	17.58	10.91	28.49	123.7	2.30
2011-12	16.07	10.79	26.86	122.5	2.20



# Import of Edible Oil - Projections for 2017-18 ( Nov.- Oct )

<b>IMPORT BREAK-UP (Mn. T)</b>			
<b>Oils</b>	<b>2016-17</b>	<b>2017-18 Nov'17-May'18</b>	<b>2017-18 (F)</b>
<b>Palm (Edible)</b>	<b>9.30</b>	<b>5.07</b>	<b>9.13</b>
<b>Soybean Oil</b>	<b>3.32</b>	<b>1.49</b>	<b>3.40</b>
<b>Sun Oil</b>	<b>2.17</b>	<b>1.65</b>	<b>2.30</b>
<b>Rapeseed Oil</b>	<b>0.29</b>	<b>0.18</b>	<b>0.30</b>
<b>TOTAL</b>	<b>15.08</b>	<b>8.39</b>	<b>15.13</b>

- India needs additional over a million tons of edible oil every year to meet the growing requirements



## Latest Sowing Data of Soybean as on 21.6.2018

(Area in Lakh Ha)

<b>Oils</b>	<b>Normal Area (DES)</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
Telangana	2.33	0.02	0.33	0.59
Arunachal Pradesh	0.03	0.03	0.04	--
Chhattisgarh	1.08	--	--	--
Gujarat	0.73	0.01	0.05	--
Karnataka	2.44	1.23	1.38	1.77
Madhya Pradesh	58.45	0.05	2.61	--
Maharashtra	35.84	0.37	0.46	0.39
Uttarakhand	0.13	0.19	0.11	0.03
Rajasthan	10.80	--	--	--
Uttar Pradesh	0.28	--	--	--
Others	0.40	0.23	0.16	--
<b>Total</b>	<b>112.51</b>	<b>2.13</b>	<b>5.14</b>	<b>2.78</b>



# Sowing Progress

The recent poor progress of the monsoon towards central and north-western India has resulted in a slow start of kharif crop plantings. According to official data, plantings of soybeans, groundnuts, cotton and pulses were notably behind the year-ago levels as of June 21 with farmers waiting for adequate precipitation.

However, the kharif crop season has only started and if the monsoon gains momentum in the near term as expected, the planting pace should normalize soon. So far roughly 4-5% of the groundnut area was sown, compared to 9% a year ago, while soybean planting was only 2% done (vs. 5%)



## Take away message

- ➔ India has been an importer of edible oils for long years because of a mismatch between demand and domestic production. In recent years, the supply shortfall has widened rapidly, driven by rising incomes and population pressure.
- ➔ Every increase in income translates to a rise in demand for food products including cooking oil. Consumption-driven demand growth has outstripped domestic supply growth, increasing the country's import dependence to nearly 70%
- ➔ The latest mantra of the Indian Government is “Make in India”. It means value addition within the country

Cont....



# Take away message

Cont..

- ➔ Furtherance to this objective, Government of India likely consider in near future, to reduce the Duty on some Oilseeds from present 30% to 5 or 10% , if this happens, it would encourage import of high content oilseeds like non GMO Rapeseed and Sunflower seeds. This will change the current level of Import of Vegetable Oil by India, as it happened in China few years back
- ➔ Inverted duty structure by Indonesia and Malaysia losing Palm Oil Indian market and all incremental growth is taking by soft oils.
- ➔ Recent rise in import duty on all edible oils will support the domestic farmers to expand the area under soybean and other oilseeds crop in ensuing kharif season.



# Take away message

Cont..

- ➔ **With hike in import duty on edible oils four times in one year will generate a revenue of over Rs. 30,000 crores. Industry demanding to create 'Oilseeds Development Fund' to raise productivity and production of oilseeds to meet growing requirements and to check the rising import.**
- ➔ **Lastly, the recent trade war between U.S.A. and China and lifting embargo on Indian Soybean meal and Rapeseed meal by China will boost the export from India to China, that will support domestic industry and farmers.**





Thank  
You



**Dr. B. V. Mehta**  
**Executive Director**

## **The Solvent Extractors' Association of India**

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