

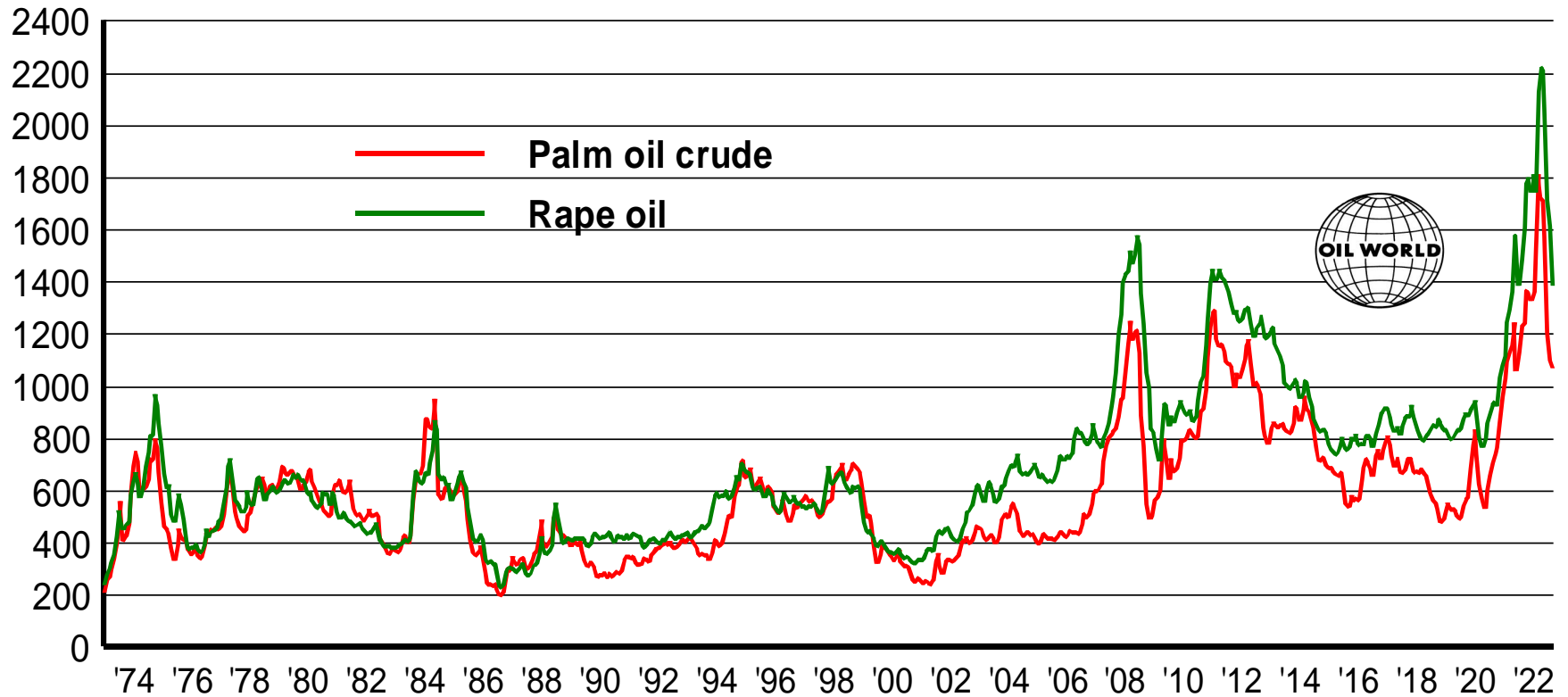


# Global Supply & Demand and Price Outlook of Vegetable Oils

David Mielke, ISTA Mielke, Oil World,  
Global Market Research on Oilseeds, Oils and Meals  
<[david.mielke@oilworld.de](mailto:david.mielke@oilworld.de)>

### Monthly Prices of 2 Oils

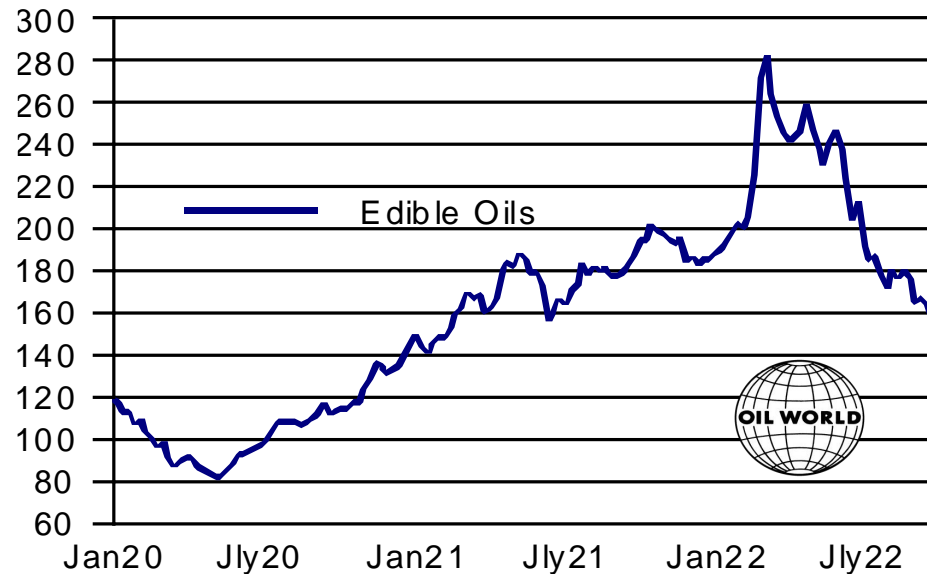
cif Rotterdam in US-\$ / MT



Monthly Prices from Jan 1973 until 27 Sept 2022

### Weekly OIL WORLD Price Index

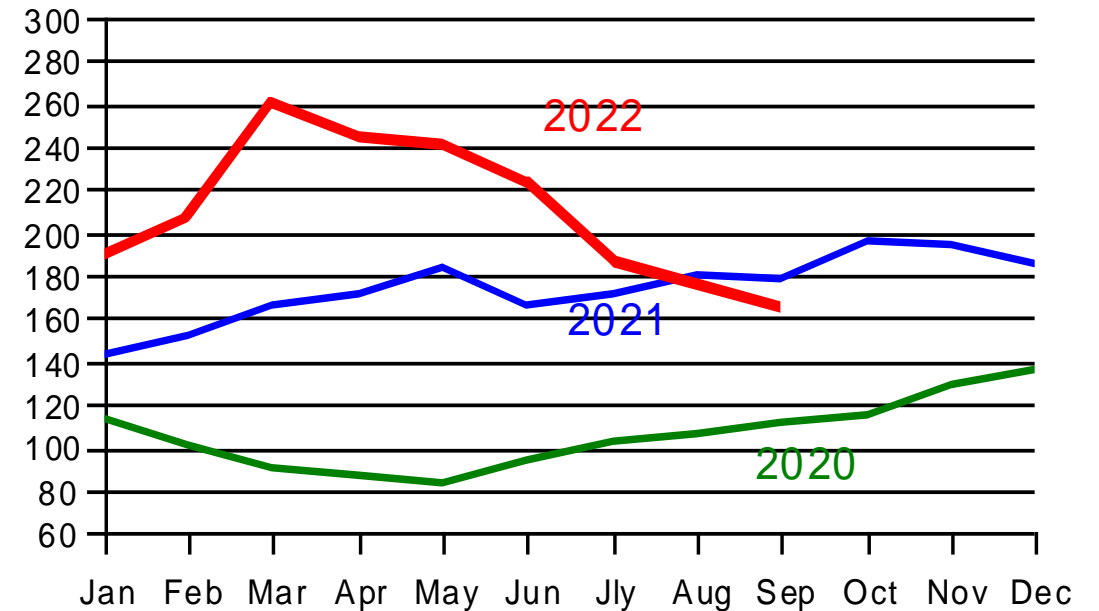
the five-year average 2015-2019 = 100



January 2020 until 27 Sept 2022

### MONTHLY Edible Oil Price Index

the five-year average 2015-2019 = 100



January 2020 until Sept 2022

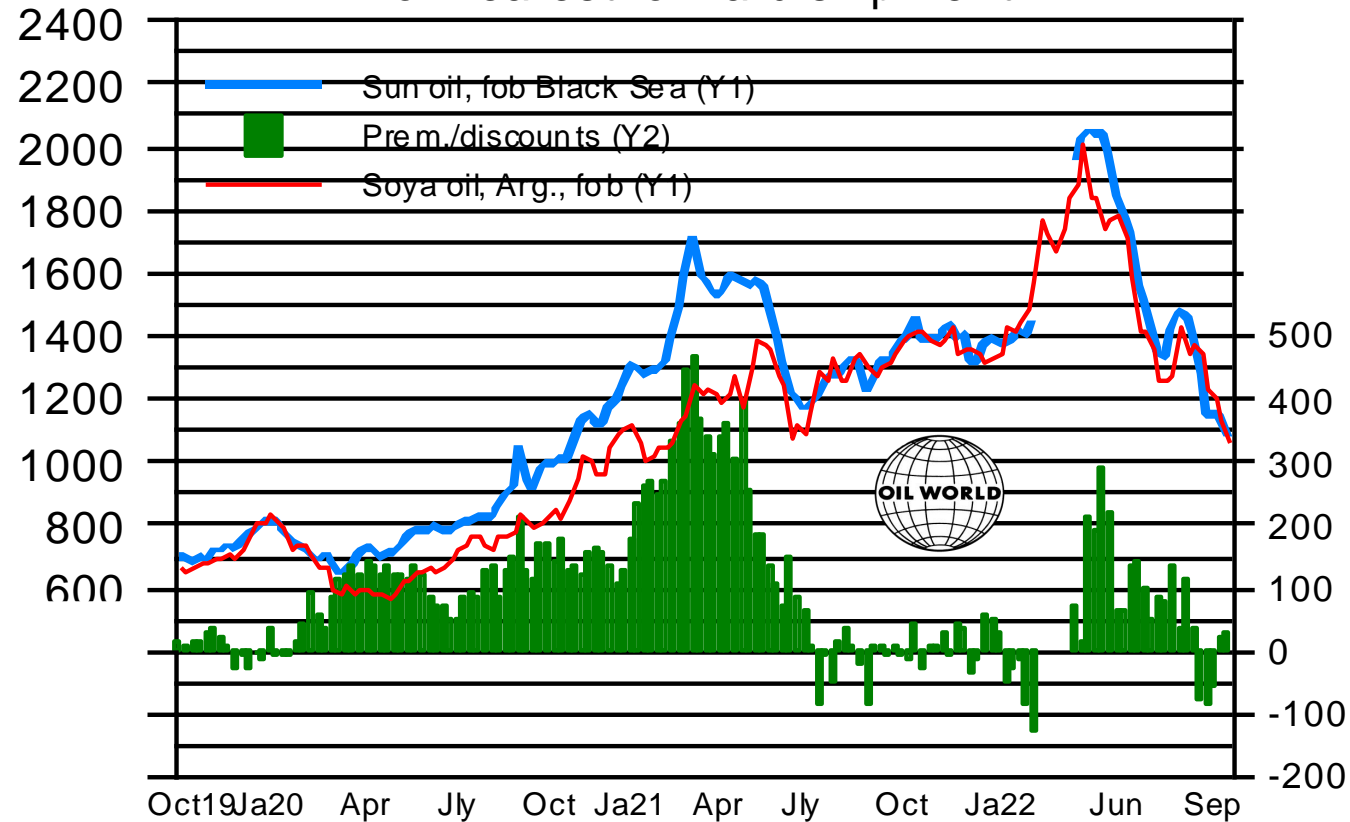


## Company Profil and Services

- **ISTA** Mielke GmbH – publisher of OIL WORLD - was founded in 1958
- **ISTA = International Statistical Agricultural Information**
- Leading private authority for global research and market analyses for oilseeds, oils & fats and oilmeals
- Independent, not involved in trading, unbiased information
- Providing quarterly world supply and demand balances
- Daily, weekly and monthly publications on [www.oilworld.biz](http://www.oilworld.biz) . There is also a report in Mandarin for our Chinese subscribers.
- We are providing individual studies and customer support upon request

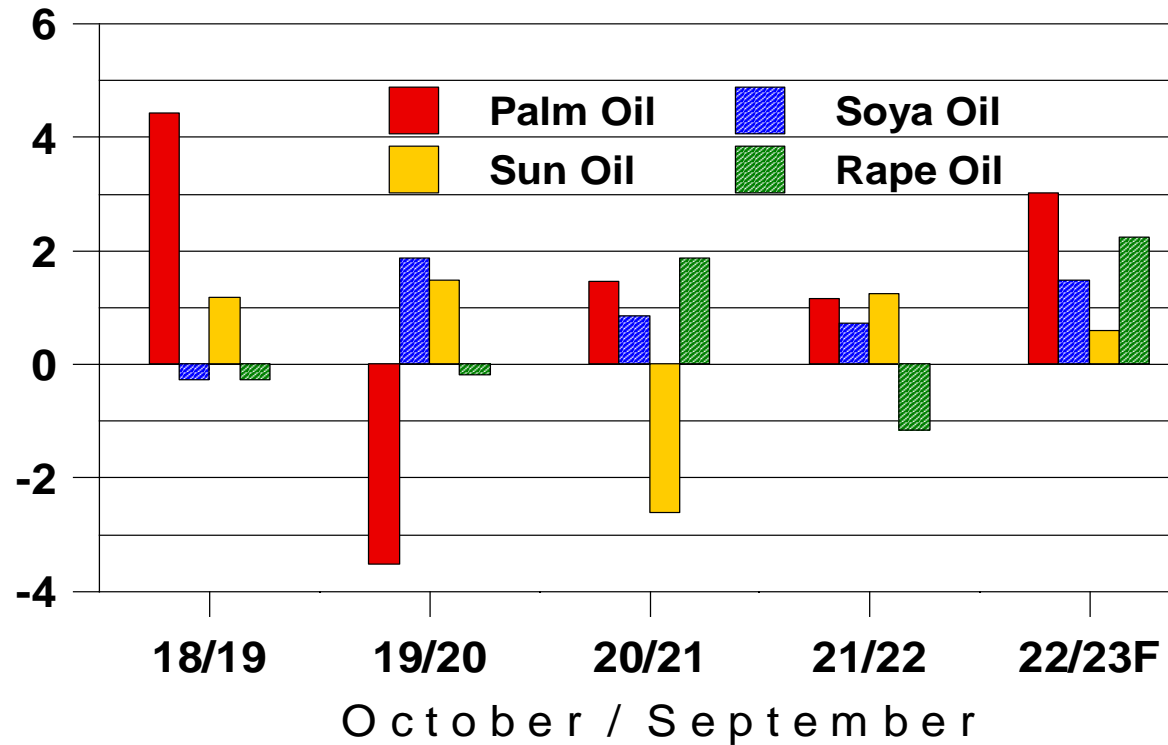


Weekly Prices of Sun Oil & Soya Oil (US-\$/T)  
For nearest forward shipment



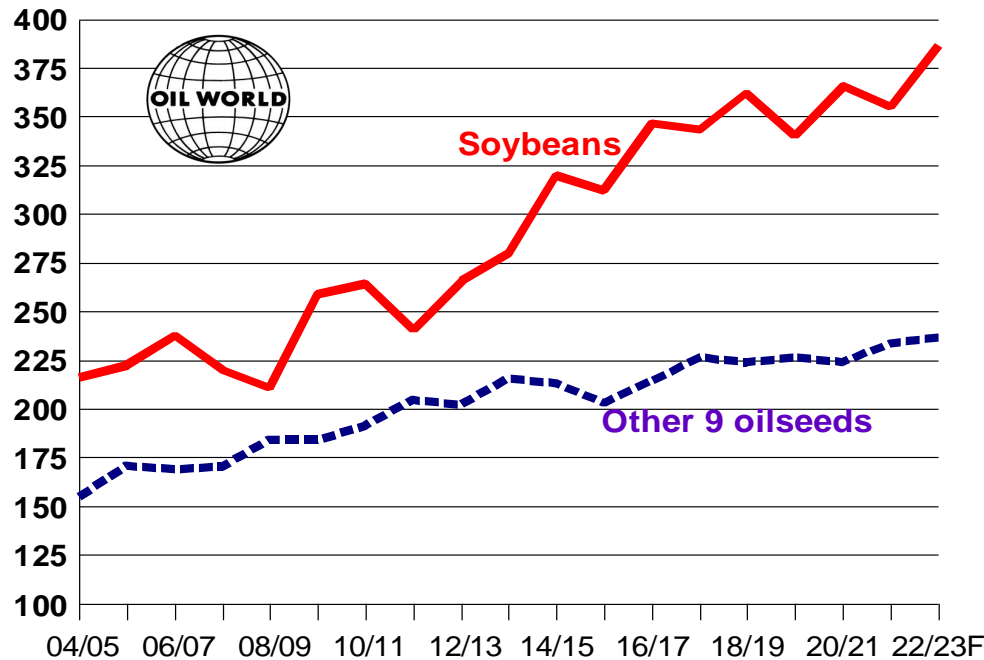
## World Production of 4 Major Oils

Change on Year in Mn T



## Outlook for Soybeans and Other Oilseeds

10 Oilseeds: World Production (Mn T)



Growing importance of soybean worldwide and further big growth ahead

In past 30 years world soybean imports doubled every 10 years

At the moment 1.0 Mn T of soybeans are used every day



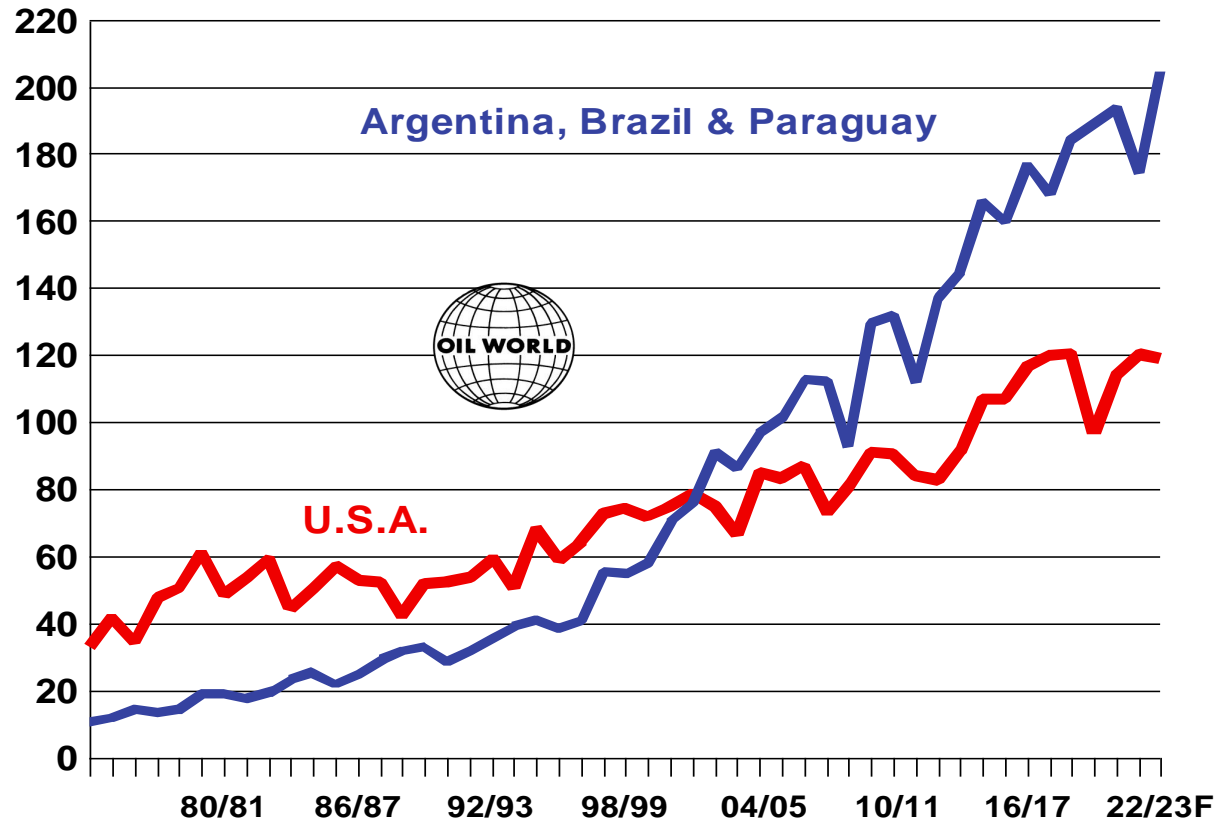
Last year, in Dec/Febr 2021/22, drought in of South America, resulting in soybean crop losses of a combined +27 Mn T.

Production forecast to rise by 31 Mn T to 386 Mn T in 2022/23

- U.S.A. 119.2 (vs 120.7)
- Brazil 148.0 (vs 127.2)
- Argentina 46.5 (vs 42.8)
- Paraguay 10.0 (vs 4.1)

Arg. farmers sold 8.9 Mn T of soybeans during Sept 5-21 in response of the attractive exchange rate offered under the 'soybean dollar scheme'. Rumours that this program will be extended until end-Dec 2022

### Soybean Crop Trend Since 74/75 (Mn T)



**2022/23 soybean supply & demand:**

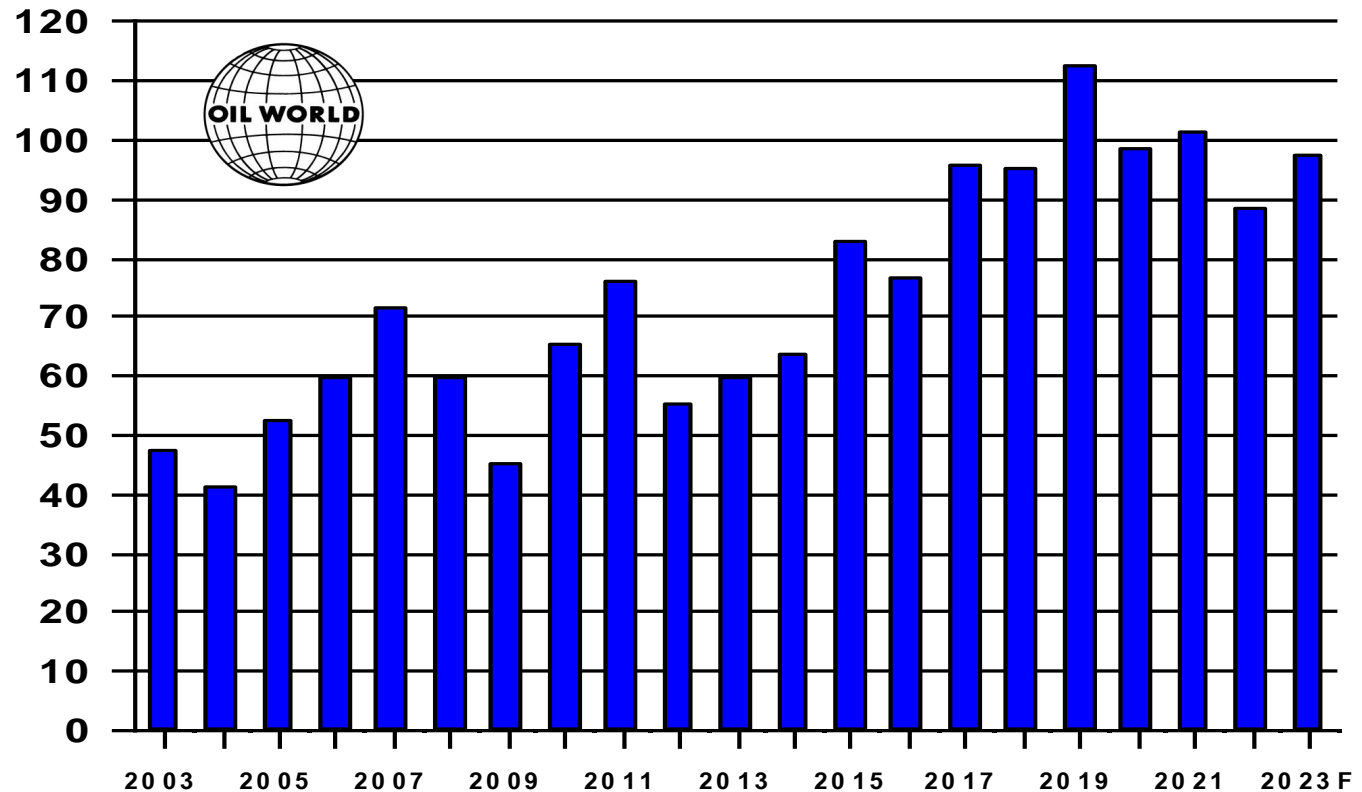
In early Sept 2022 world opening stocks down 13 Mn T

Production forecast at 386 Mn T in 2022/23 (up 31 Mn T).

Northern hemisphere 172 Mn T (up 1)  
Southern hemisphere 214 Mn T (up 30)

Full season world supplies up 18 Mn T.  
In Sept/Dec 2022 down 12 Mn T, but very high farmer selling in Argentine provide relieve to the declining Brazilian disposals

**Soybeans: World Stocks as of end-August (Mn T)**



**Uncertainties - - the war in Ukraine and export corridor**

**Production is forecast to fall by 4-5 Mn T in 22/23 (to 53-54 Mn T)**

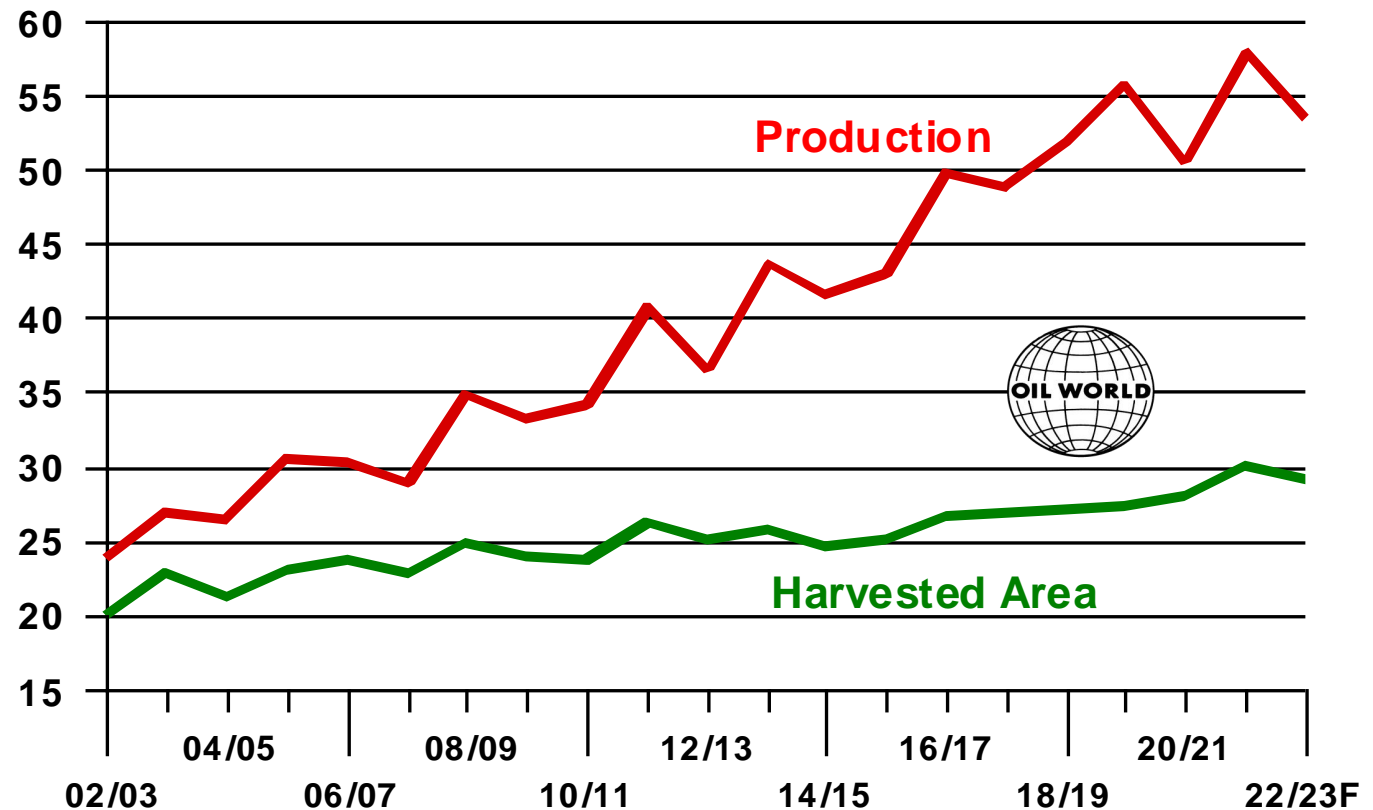
EU-27	9.7 Mn T	(vs. 10.5)
Ukraine	10.6 Mn T	(vs. 16.8)
Russia	16.5 Mn T	(vs. 15.4)
Argentina	3.7 Mn T	(vs. 3.4)

Record stocks carried into the 2022/23 season are offsetting the expected decline in world production. Crushings up 1-2 Mn T

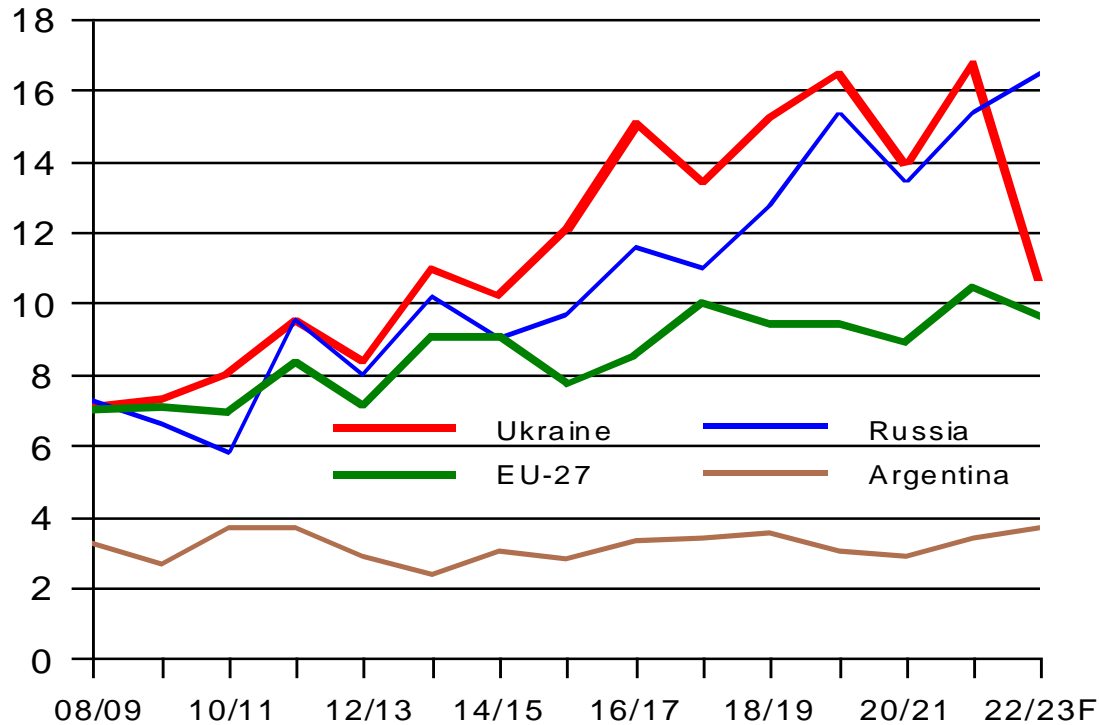
In coming years big growth potential in the former CIS cties, due to favourable margins. But high political uncertainty currently.

**SUNFLOWERSEED**

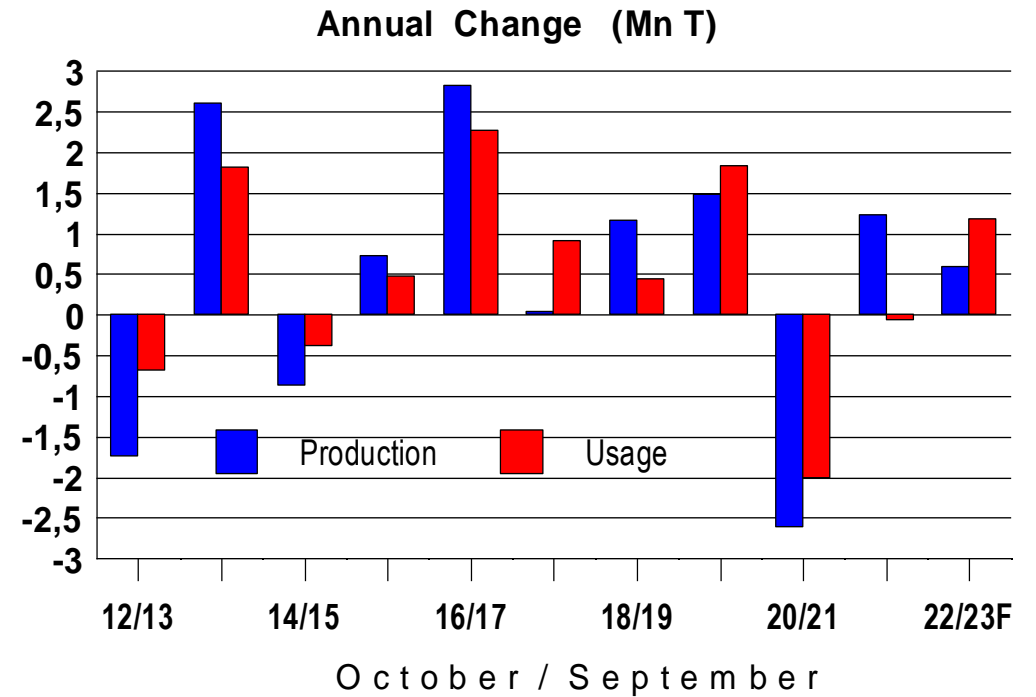
World Production (Mn T) and Area (Mn ha)



SUNFLOWERSEED: Production of 4 Key Countries (Mn T)

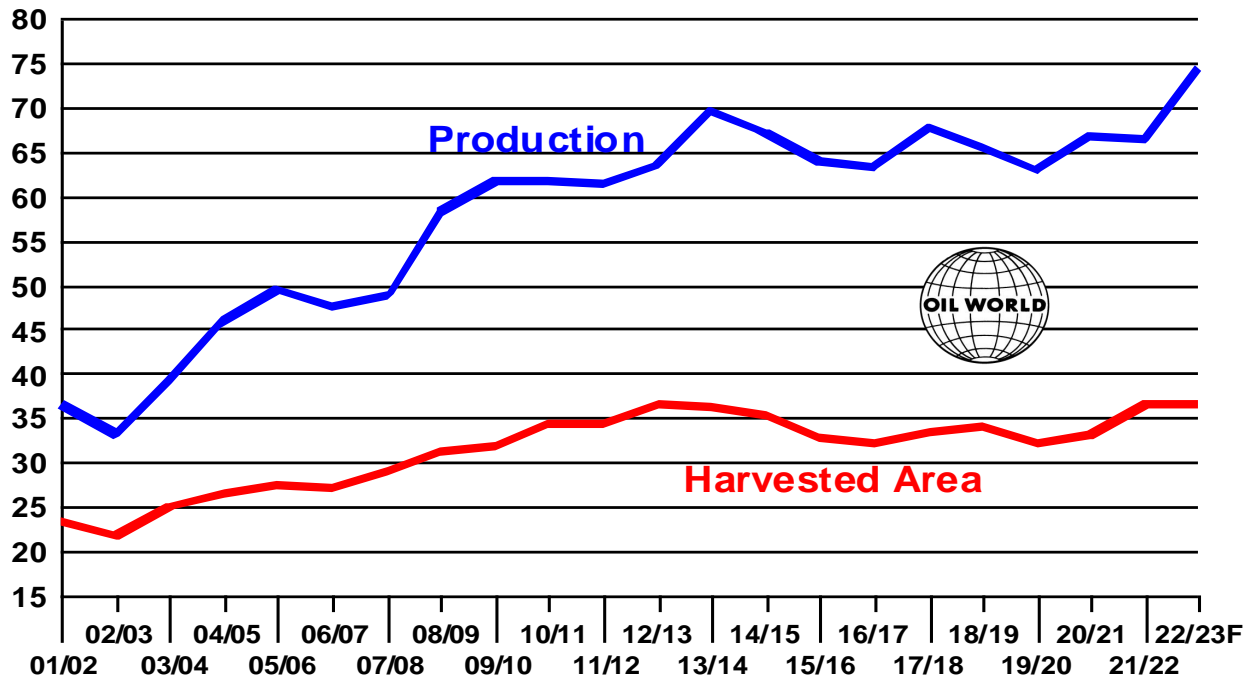


SUN OIL: World Production & Usage



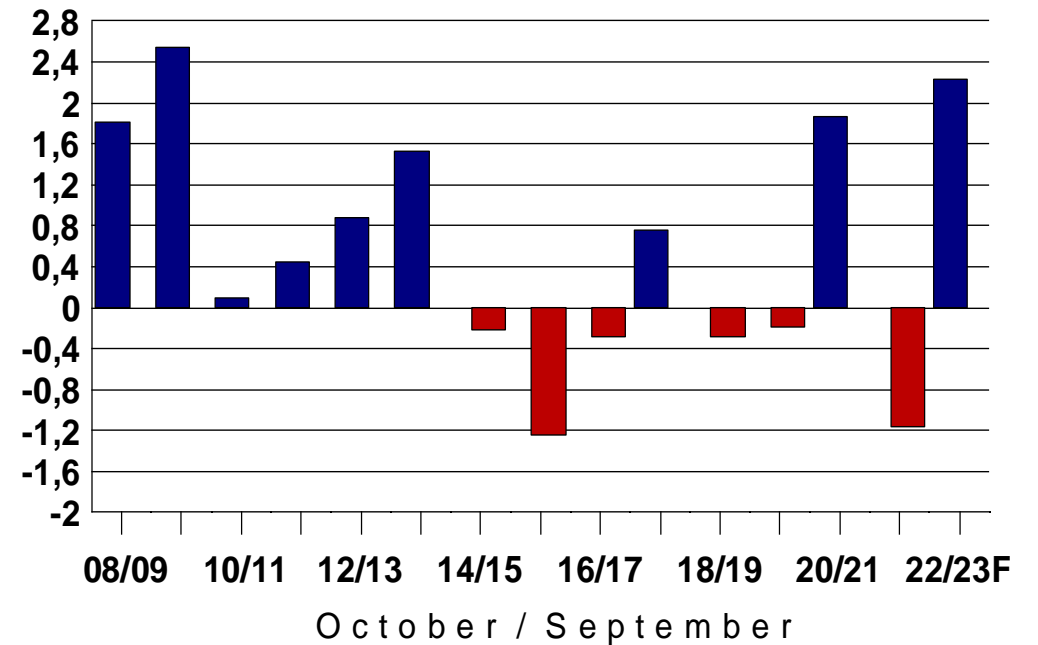
## RAPESEED & CANOLA

World Production (Mn T) and Area (Mn ha)



## RAPESEED OIL : World Production

Annual Change (Mn T)

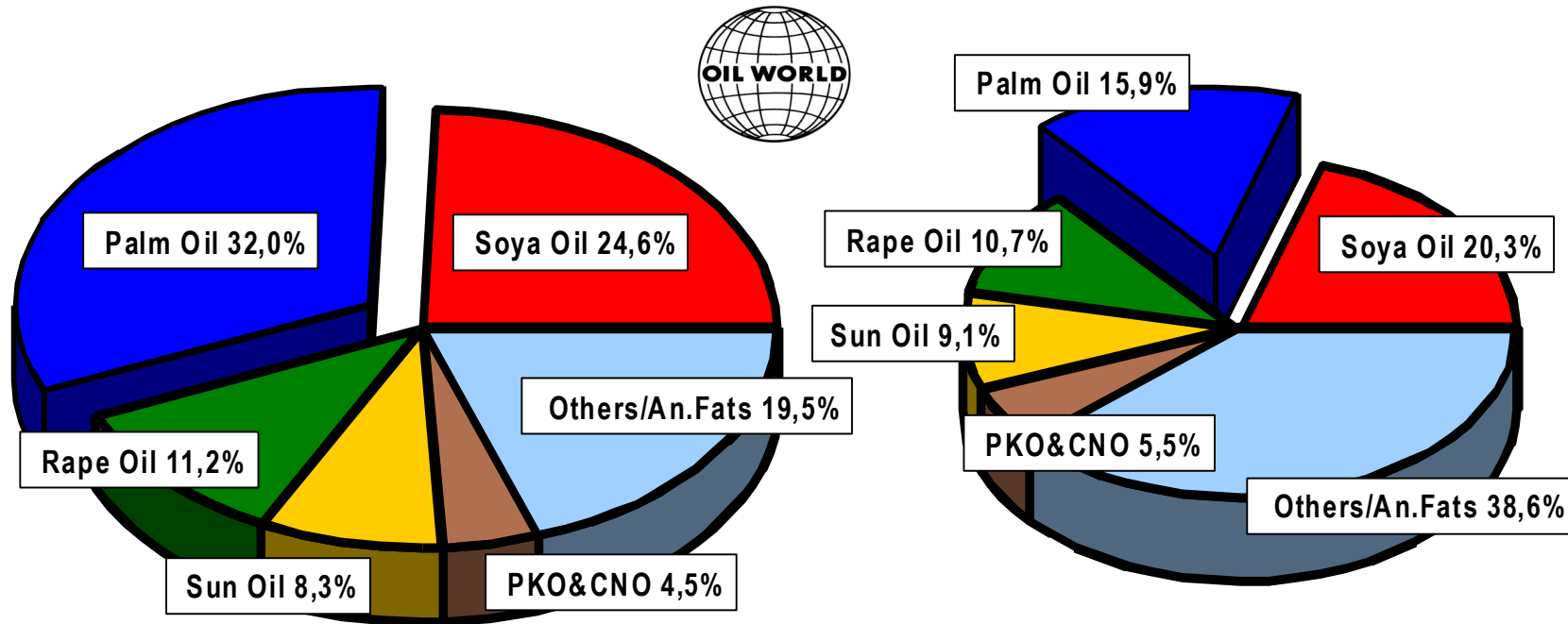


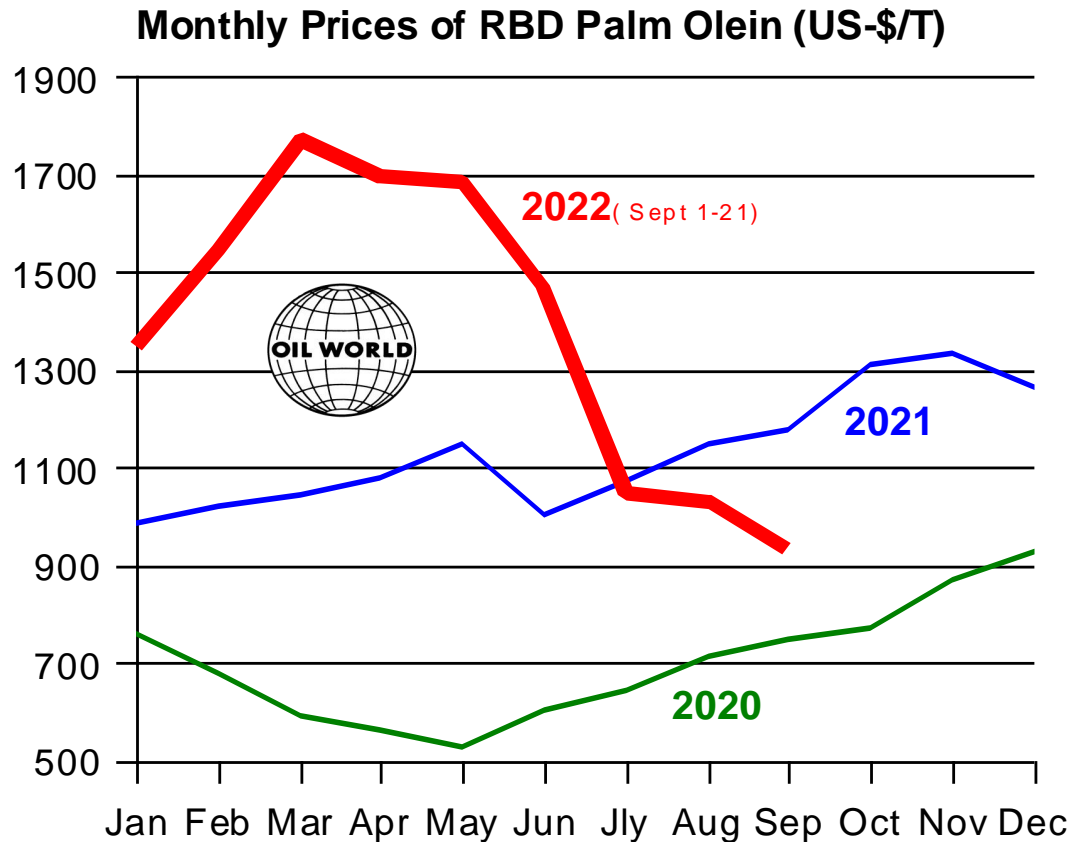


# World Production of 17 Oils & Fats

2022/23F - - 250.9 Mn T

1992/93 - - 84.6 Mn T



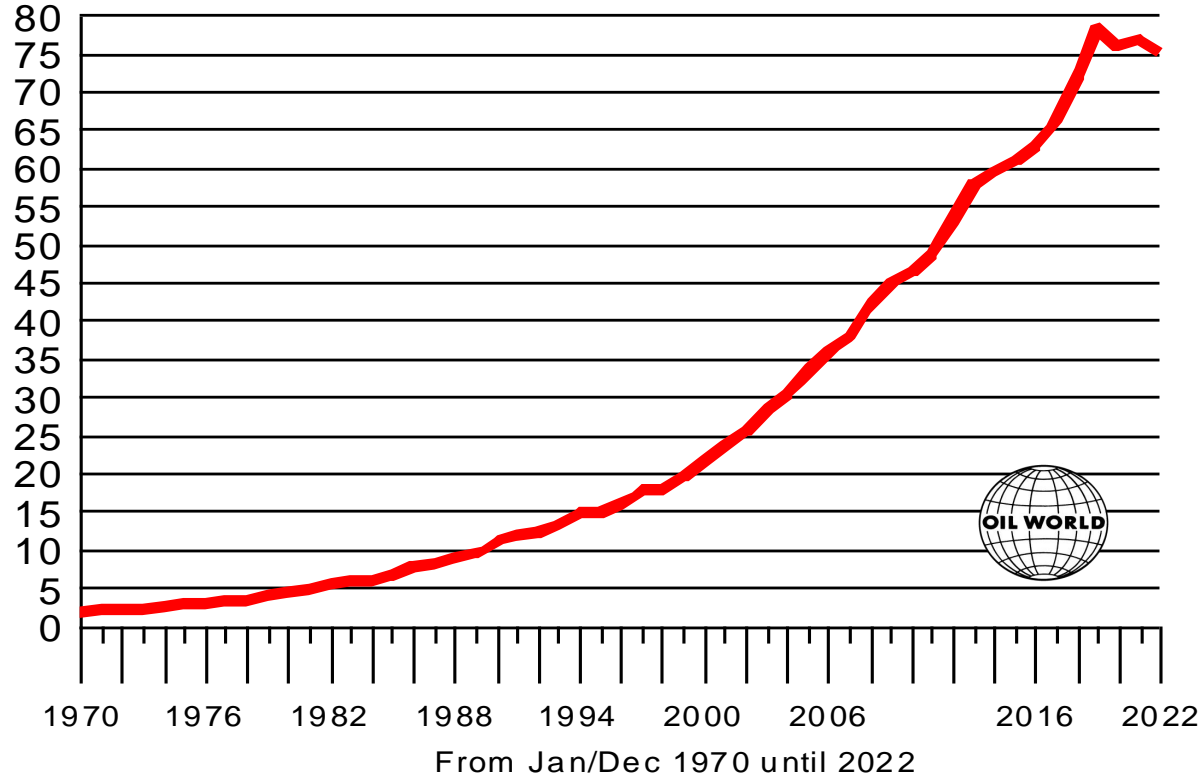


Palm oil prices collapsed.  
Record Indon. stocks of 9 Mn T in early July 2022.

In many imp ctries consumption severely damaged (high prices)

In mid-Sept 2022, Indonesian PO price dropped below \$ 900 fob

PALM OIL: World Consumption (Mn T)



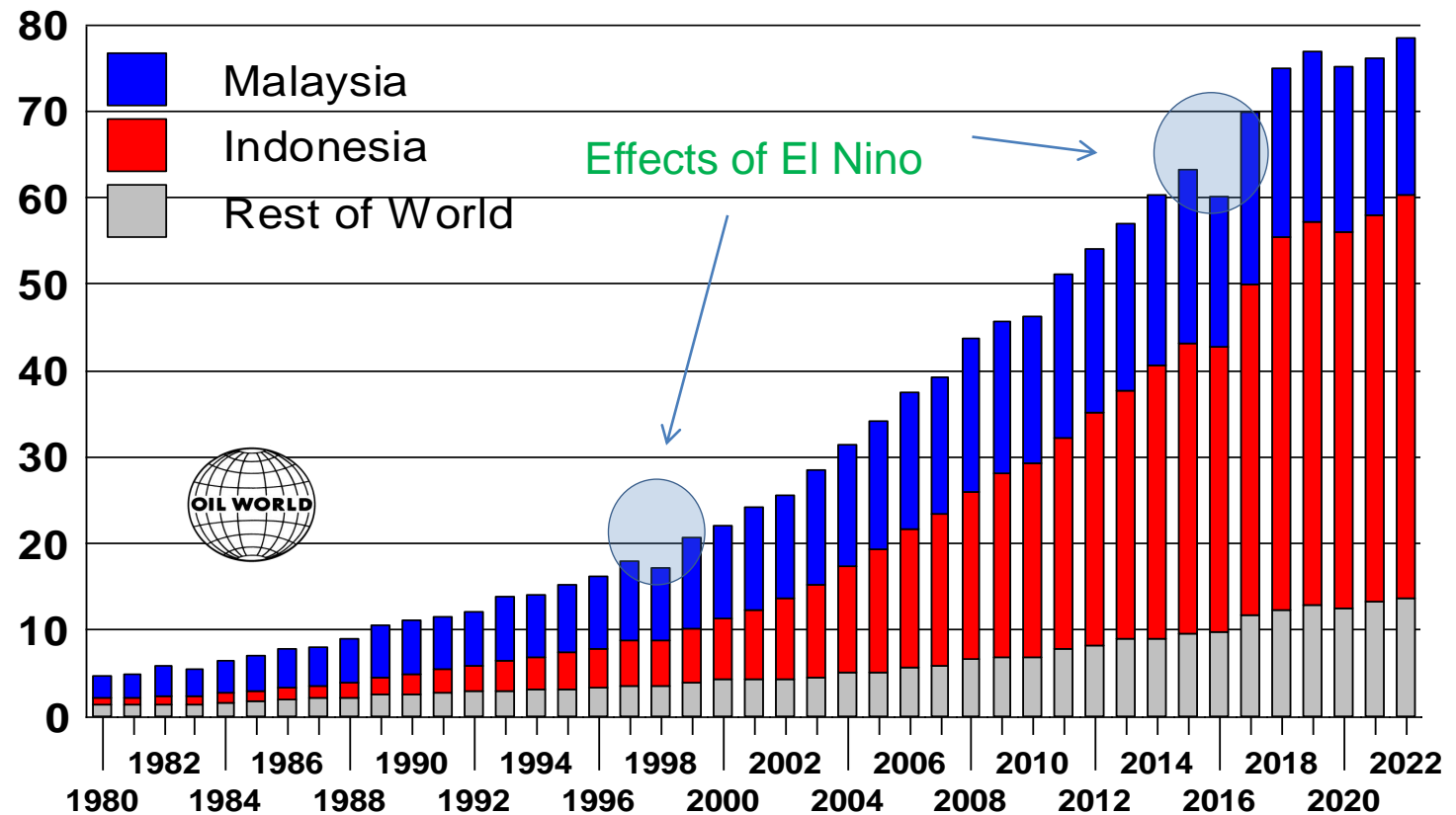
Palm oil is the most productive oil crop. It currently accounts for 32% of world production, which is achieved from only 6% of the area.

## Palm Oil Production 1980 - 2022 in Major Countries (Mn T)

Lower than expected palm oil production has resulted in a decline consumption in the 3 seasons to 2021/22.

Palm oil has lost its growth dynamics.

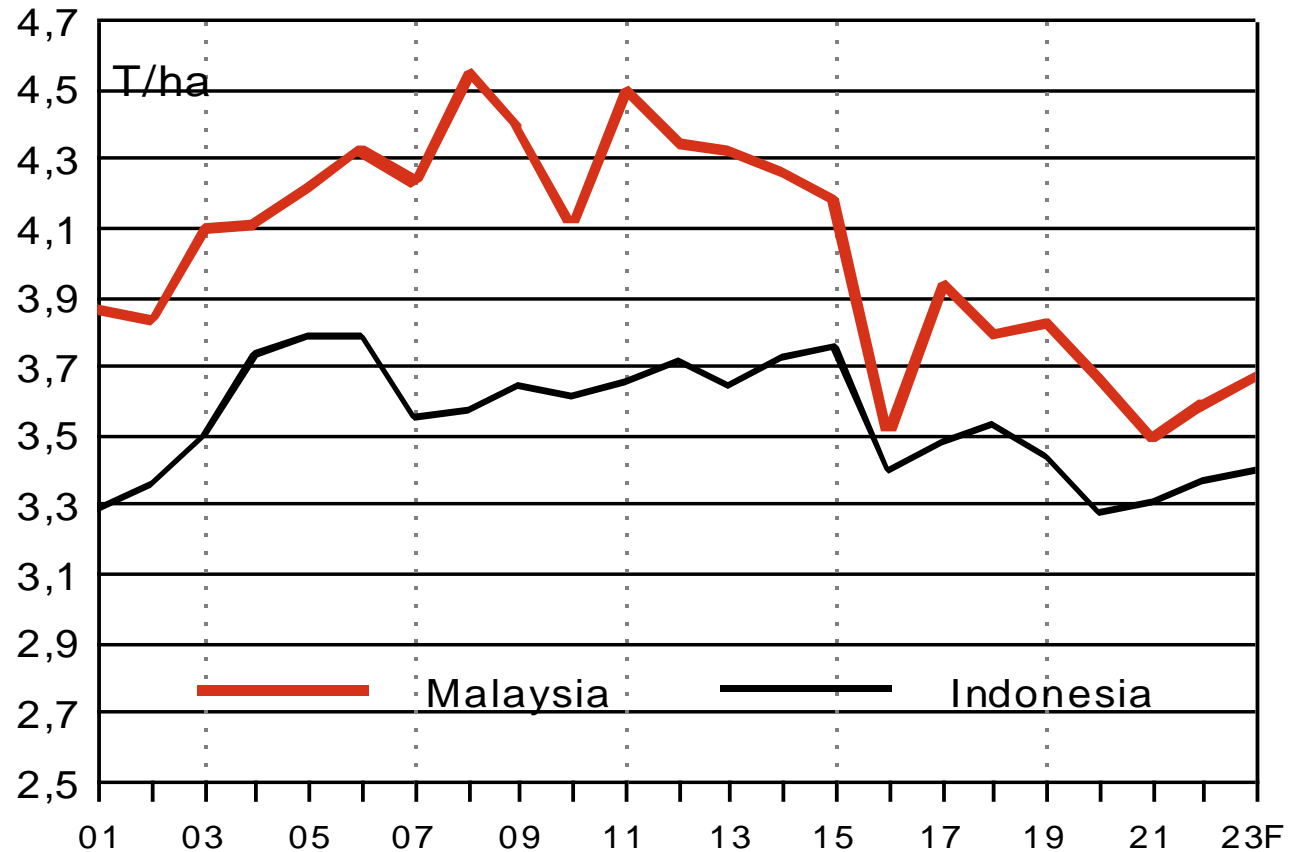
The annual growth to slow down to 2.3-2.5 Mn T p.a. in the 10 years to 2030 from an average annual growth of 2.9 Mn T in the 10 years to 2020



Lower than expected palm oil production worldwide has resulted in a decline consumption in the past 2 seasons. And again in 2021/22 !

- Palm oil has lost its growth dynamics.
- Declining yields (low re-plantings)
  - Lack of new plantings
  - Shortage of workers (harvest losses)

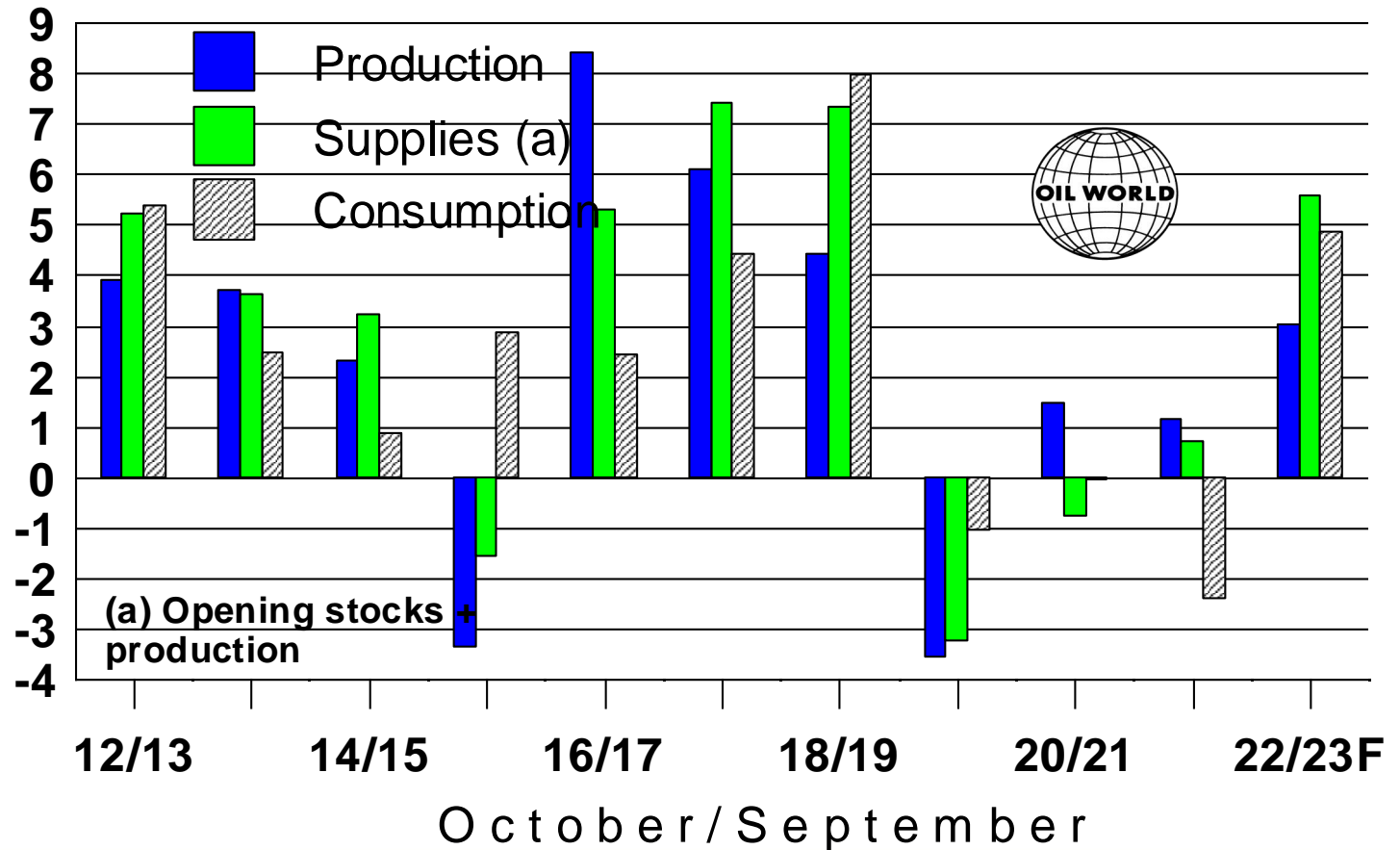
Annual Palm Oil Yields (T/ha)





### PALM OIL: World Consumption & Supplies (a)

Annual Change (Mn T)



Oil World forecast of palm oil  
output in Oct/Sept 2022/23:

Malaysia +0.4 Mn T  
Indonesia +2.2 Mn T  
Other countries +0.4 Mn T  
World +3.0 Mn T

Accelerating growth in supplies  
next season:

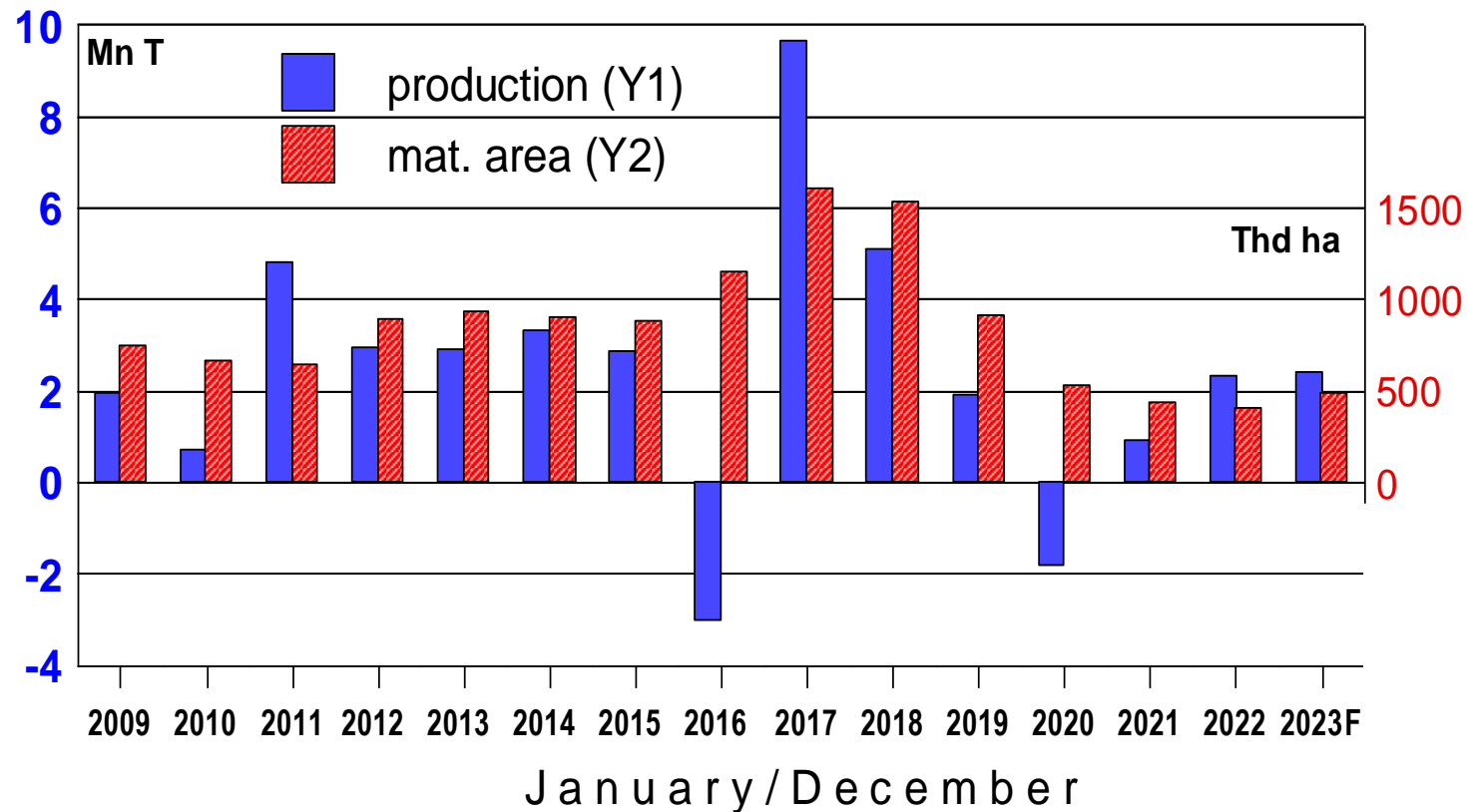
Opening stocks +2.5 Mn T  
Production +3.0 Mn T  
World supplies **+5.5 Mn T**

## **PALM OIL : World Supply & Demand Balance ( Mn T )**

	October / September				
	<u>22/23F</u>	<u>21/22</u>	<u>20/21</u>	<u>19/20</u>	<u>18/19</u>
<b>Op'g stocks . .</b>	<b>14.87*</b>	<b>12.33</b>	<b>12.75</b>	<b>14.97</b>	<b>14.66</b>
<b>Production . . .</b>	<b>80.21*</b>	<b>77.20*</b>	<b>76.06</b>	<b>74.61</b>	<b>78.15</b>
<i>Annual change</i>	+3.9%	+1.5%	+2.0%	-4.5%	+6.0%
<b>Imports. . . . .</b>	<b>51.61*</b>	<b>46.97*</b>	<b>51.63</b>	<b>50.73</b>	<b>55.21</b>
<b>Exports. . . . .</b>	<b>51.90*</b>	<b>47.36*</b>	<b>51.45</b>	<b>50.86</b>	<b>55.32</b>
<b>Disappearance</b>	<b>79.14*</b>	<b>74.27*</b>	<b>76.66</b>	<b>76.70</b>	<b>77.72</b>
<i>Annual change</i>	+6.6%	-3.1%	-0.1%	-1.3%	+11.4%
<b>End'g stocks .</b>	<b>15.65*</b>	<b>14.87*</b>	<b>12.33</b>	<b>12.75</b>	<b>14.97</b>
<b>Stocks/usage</b>	19.8%	20.0%	16.1%	16.6%	19.3%

# PALM OIL : World Production & Area

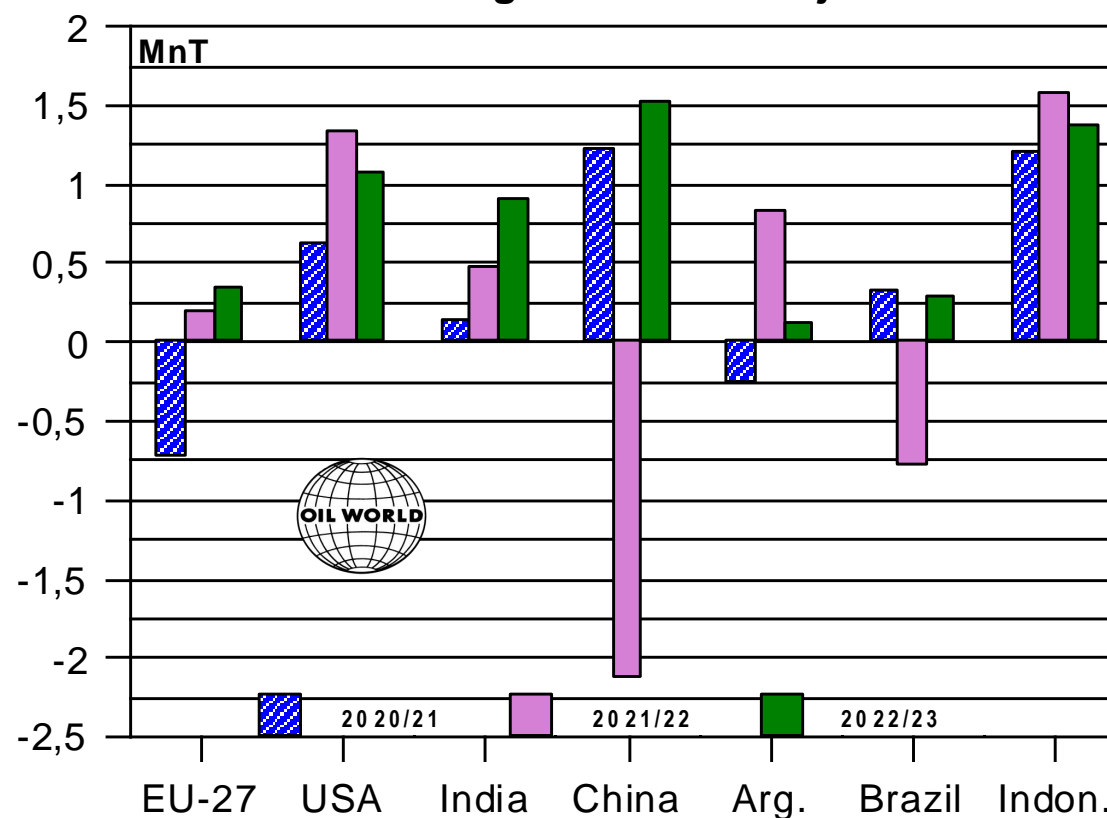
## Annual Changes



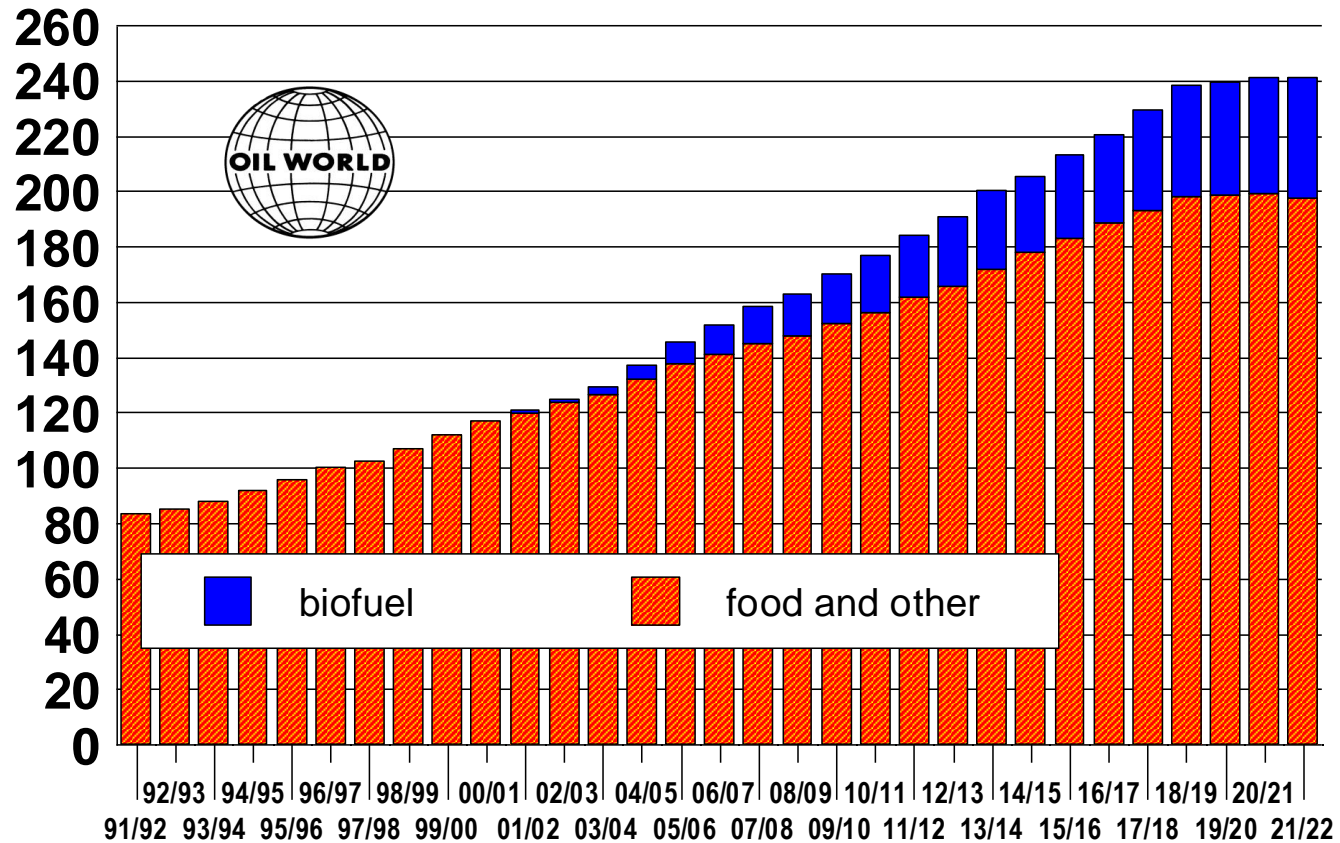
**17 OILS & FATS : World Supply & Demand ( Mn T )**

	Forecast <b>22/23F</b>	October / September			
		<u>21/22</u>	<u>20/21</u>	<u>19/20</u>	<u>18/19</u>
Op'g stocks . . . . .	32.93*	30.90	31.28	32.87	32.67
<b>Production . . . . .</b>	<b>250.92*</b>	<b>244.01*</b>	<b>240.49</b>	<b>238.10</b>	<b>239.29</b>
<i>Annual change</i>	+2.8%	+1.5%	+1.0%	-0.5%	+2.0%
Imports . . . . .	95.87*	88.90*	95.87	96.23	96.90
Exports . . . . .	96.20*	89.83*	95.55	96.50	97.69
<b>Consumption . . . . .</b>	<b>249.76*</b>	<b>241.05*</b>	<b>241.19</b>	<b>239.42</b>	<b>238.31</b>
<i>Annual change.</i>	+3.6%	-0.1%	+0.7%	+0.4%	+4.1%
End stocks . . . . .	33.77*	32.93*	30.90	31.28	32.87
<i>Stocks/usage . . . . .</i>	13.5%	13.7%	12.8%	13.1%	13.8%

**17 Oils & Fats: Usage Growth in Major Countries**



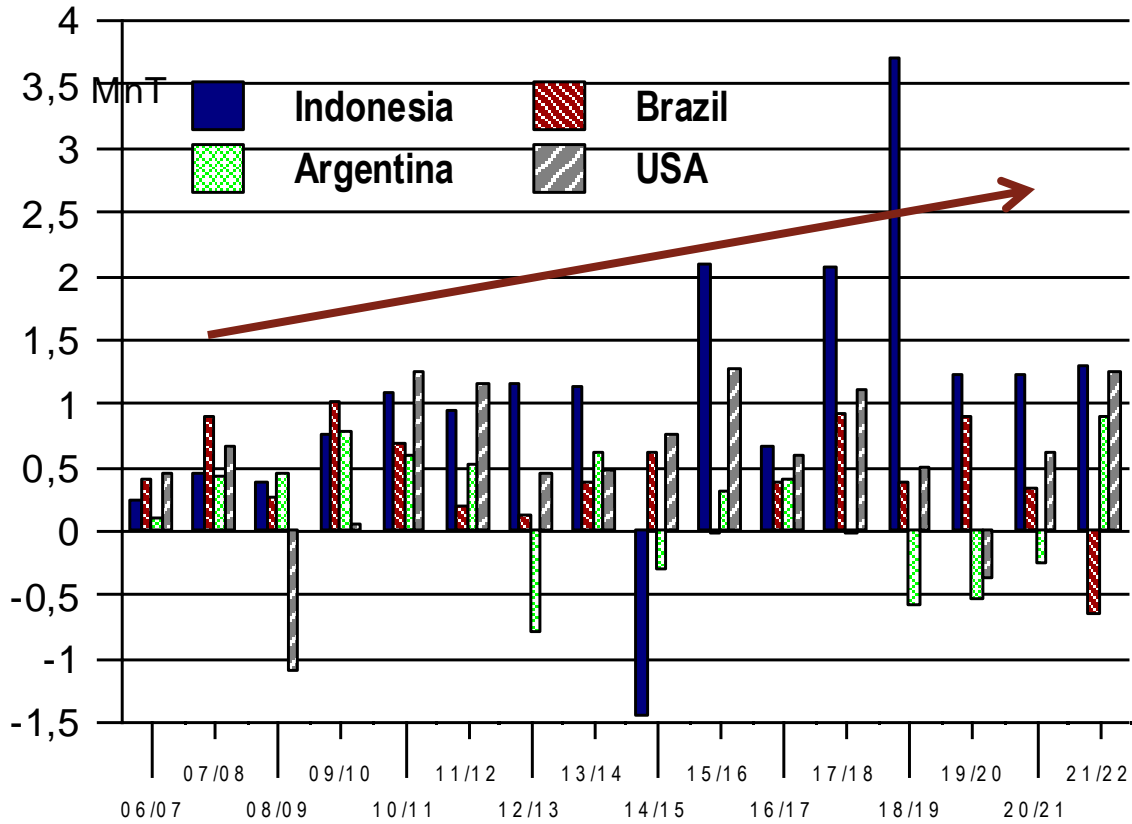
17 Oils & Fats : World Consumption  
Total Usage in Mn T





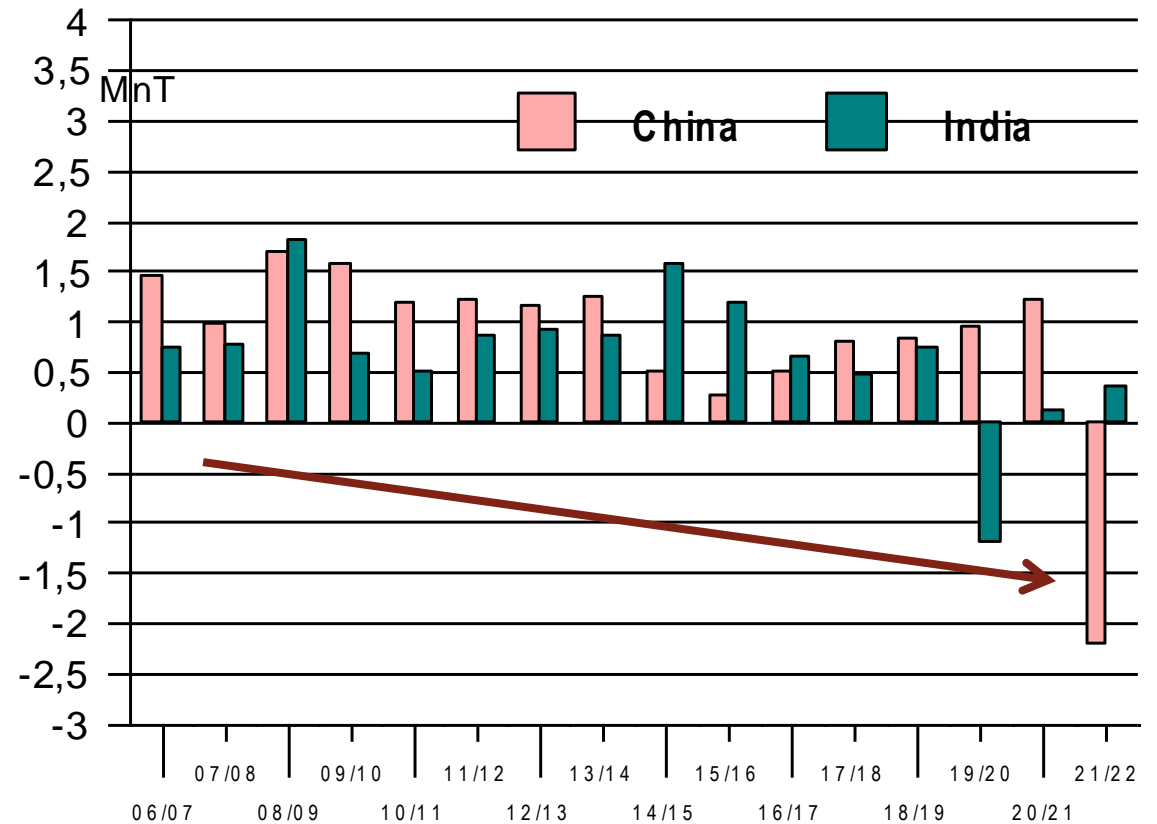
Demand boost from biodiesel

17 Oils & Fats: Usage Growth in Major Countries



Slowdown in food sector

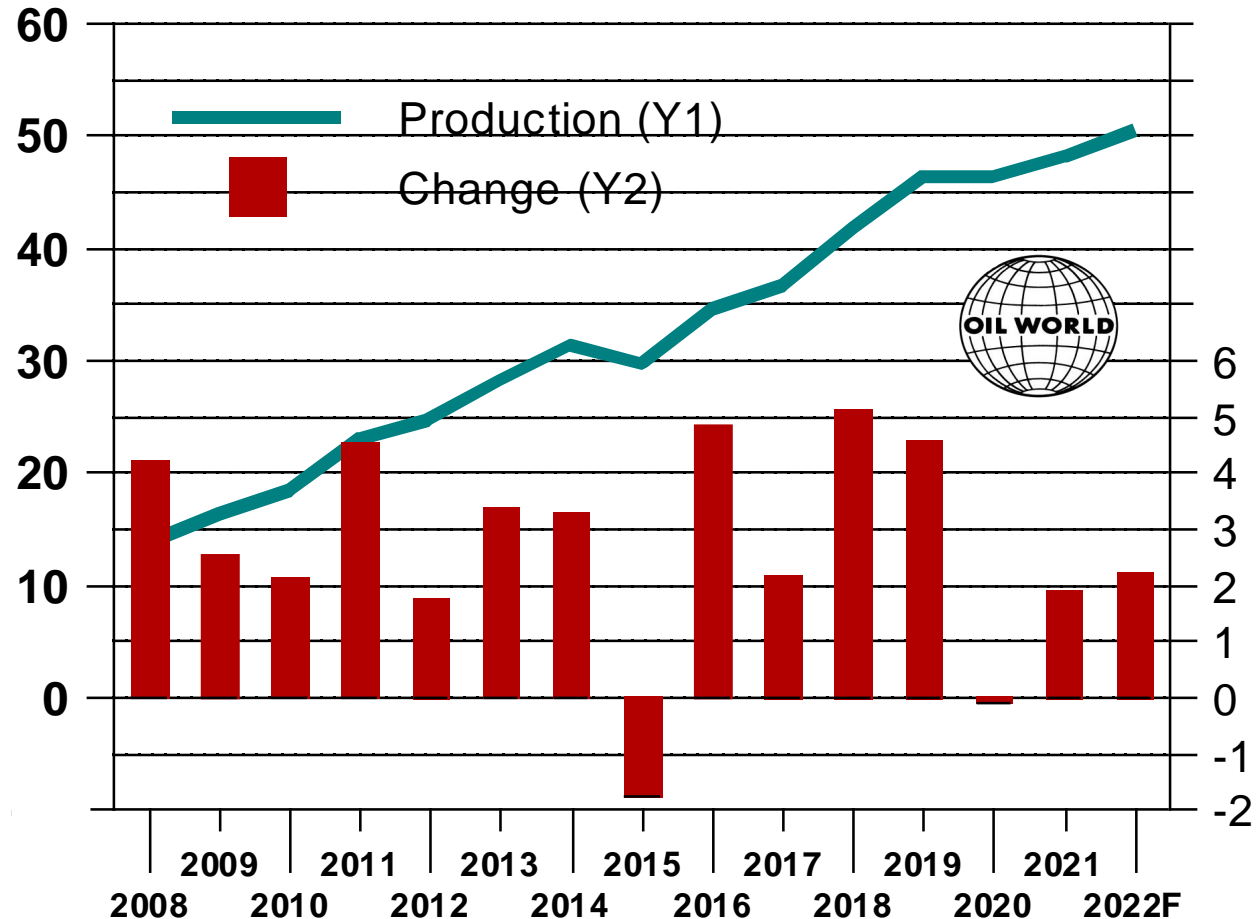
17 Oils & Fats: Usage Growth in Major Countries



**Biodiesel production virtually doubled in the past 10 years.**

At the moment, improved price competitiveness of palm oil in Indonesia and the effect on discretionary blending is a swing factor to watch.

**World Production of Biodiesel (Mn T)**



**BIODIESEL (a): World Production by Country ( Mn T )**

January / December

	<u>2022F</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>
EU-27 . . . . .	15.30*	15.24	15.40	15.01	14.19
U.S.A. . . . .	9.85*	8.49	7.85	7.35	7.20
Argentina . . . . .	2.12*	1.72	1.16	2.15	2.43
Brazil . . . . .	5.31*	5.91	5.62	5.16	4.68
China . . . . .	2.00*	1.80	1.50	1.00	.94
Colombia . . . . .	.69*	.67	.53	.58	.57
Singapore . . . . .	1.75*	1.80	1.80	1.75	1.35
Indonesia . . . . .	8.70*	7.47	7.35	7.48	5.37
Malaysia . . . . .	.90*	.92	.91	1.42	1.09
Thailand . . . . .	1.40*	1.60	1.65	1.65	1.32
Oth. cties. . . . .	2.48*	2.66	2.63	2.87	2.70
<b>Total . . . . .</b>	<b>50.50*</b>	<b>48.28</b>	<b>46.40</b>	<b>46.42</b>	<b>41.84</b>

(a) Incl. HVO

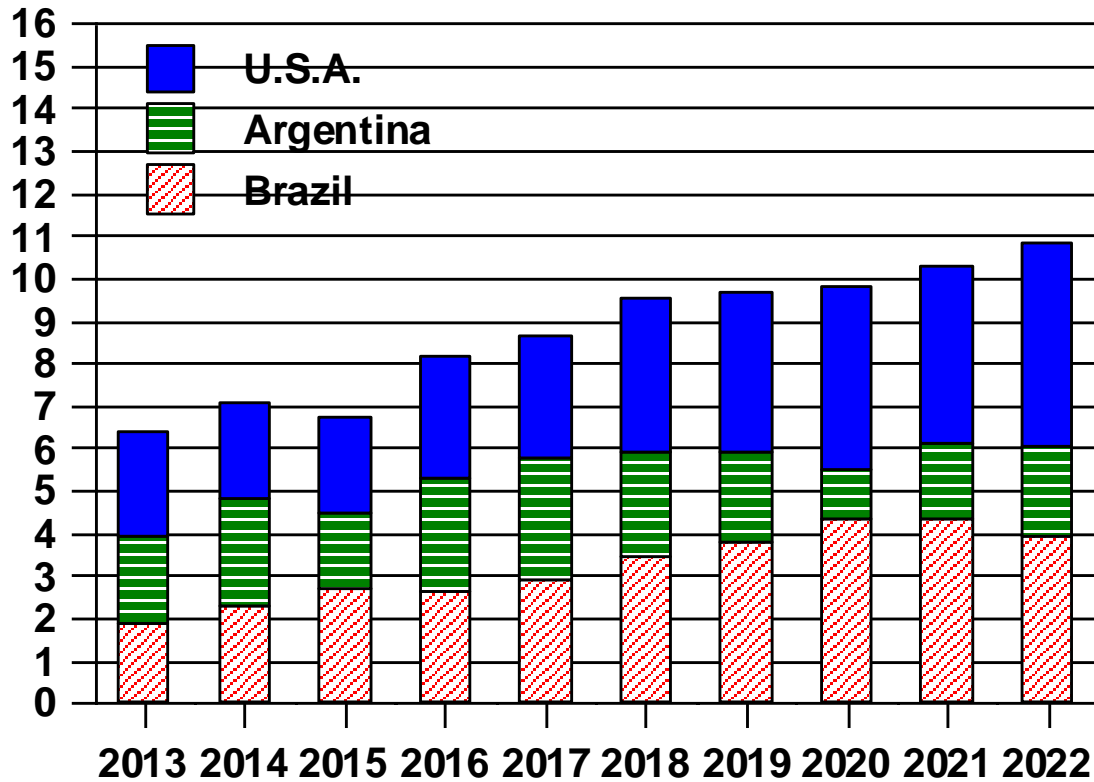
Indonesian biodiesel production seen reaching a new high in 2022.

After domestic prices of palm oil have fallen below those of gas oil, biodiesel usage may even exceed the mandate.

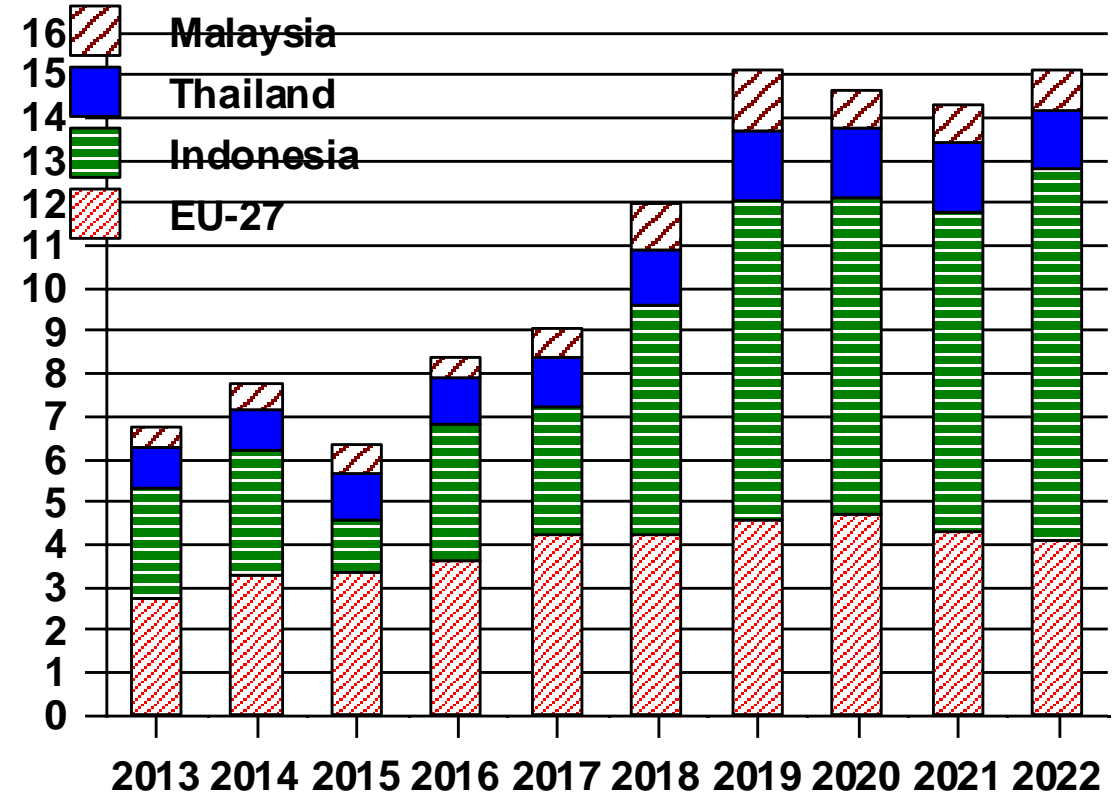
Record production in the USA

The severe shortage of diesel fuel in the Argentina prompted the government to lift biodiesel admixture.

**Soya Oil Use for Biodiesel (Mn T)**



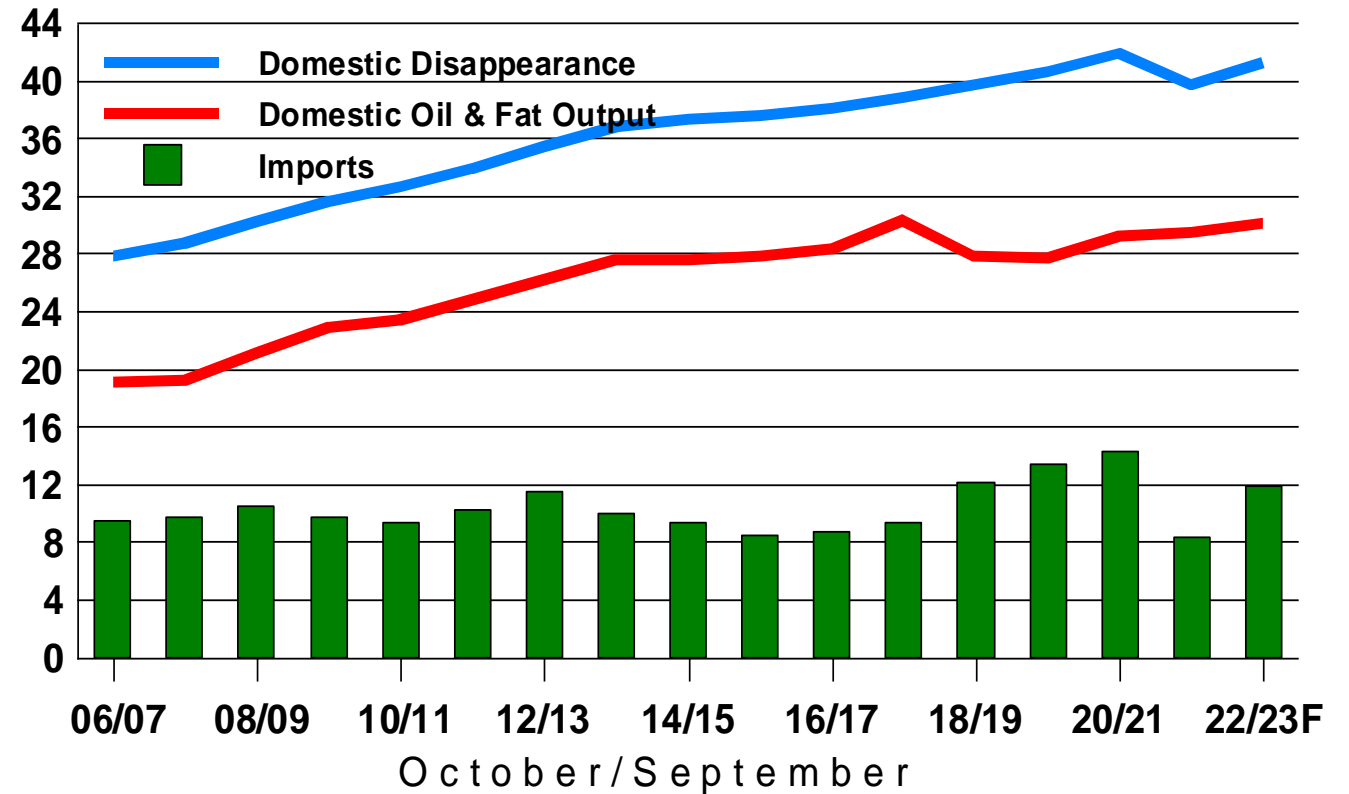
**Palm Oil Use for Biodiesel (Mn T)**



**CHINA, P.R.: Imports of 7 Vegetable Oils ( 1000 T )**

	Aug		July		Jan/Aug	
	2022	2021	2022	2021	2022	2021
Soybean oil . .	32	132	55	194	216	988
Groundnut oil.	29	12	22	13	115	239
Sunflower oil .	26	58	7	68	274	1033
Rapeseed oil .	54	135	67	152	669	1785
Palm oil . . . . .	522	667	450	508	2257	4239
Palmkern oil. .	32	53	35	27	250	342
Coconut oil . .	12	11	25	9	160	110
Total . . . . .	706	1067	661	971	<b>3941</b>	8737

**CHINA: Domestic Supply & Demand and Imports of 17 Oils & Fats (Mn T)**

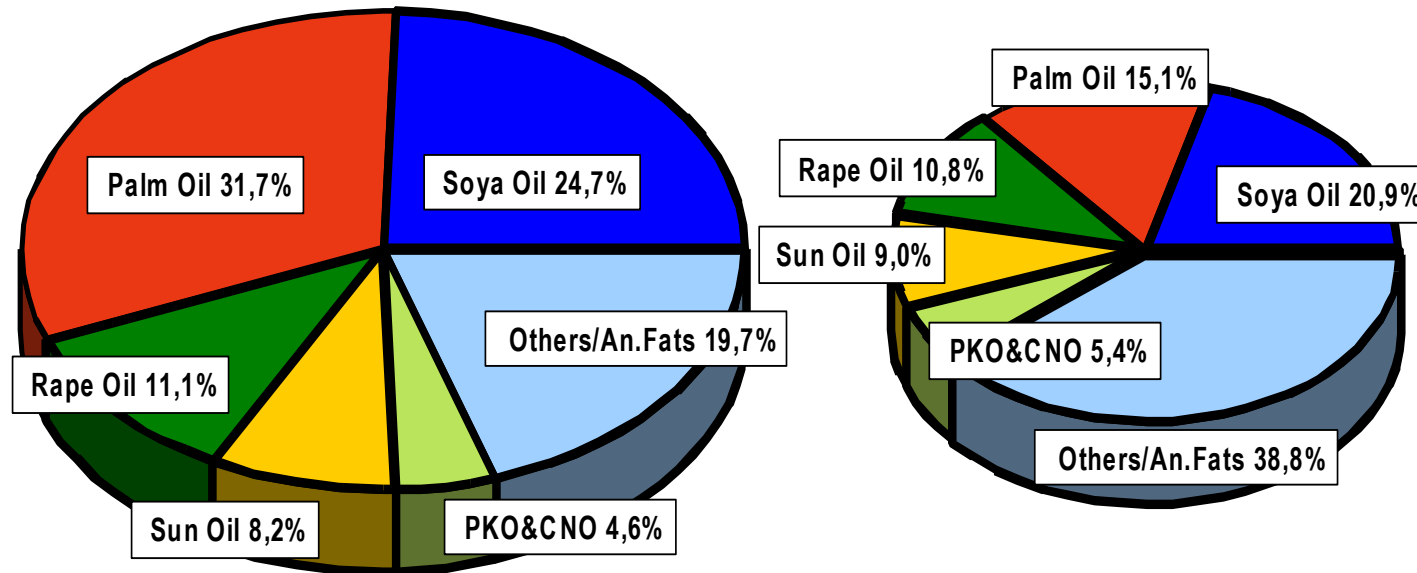




# World Consumption of 17 Oils & Fats

2022/23F -- 249.8 Mn T

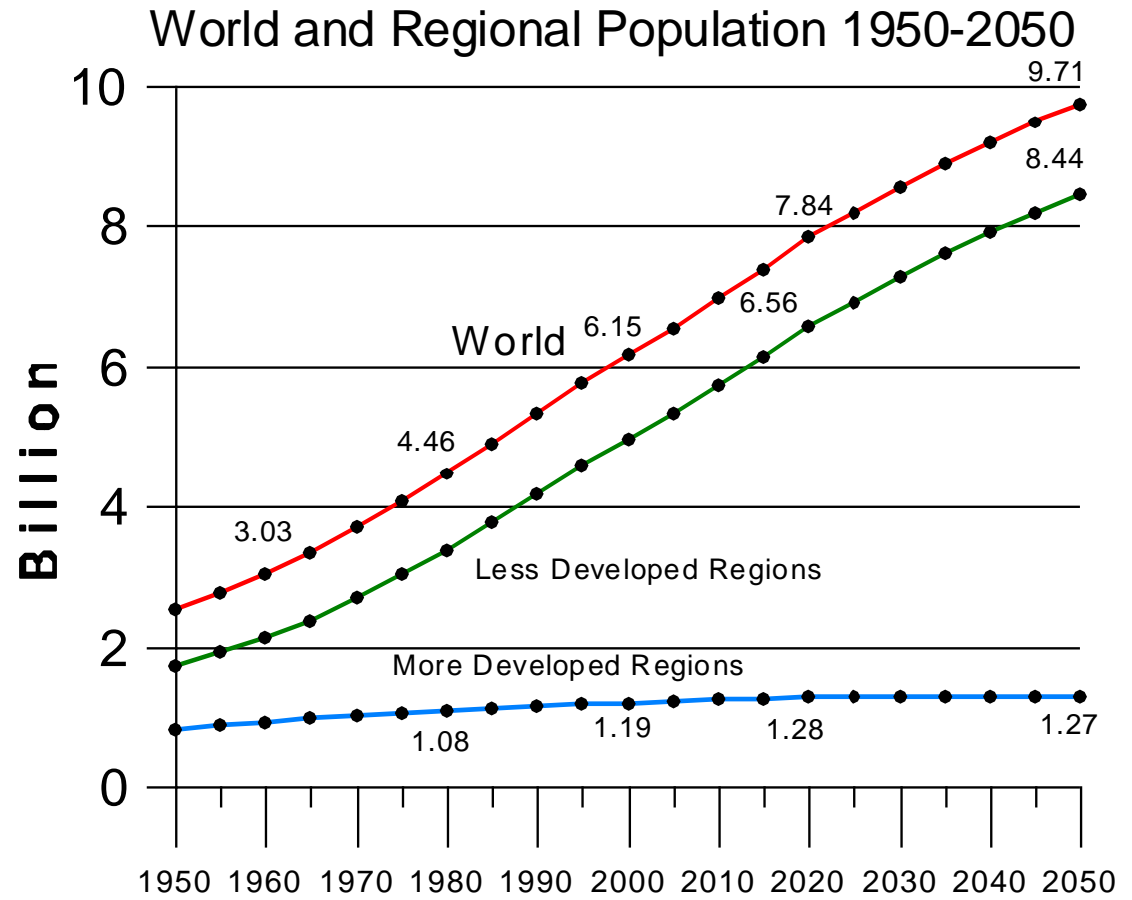
1992/93 - - 84.9 Mn T



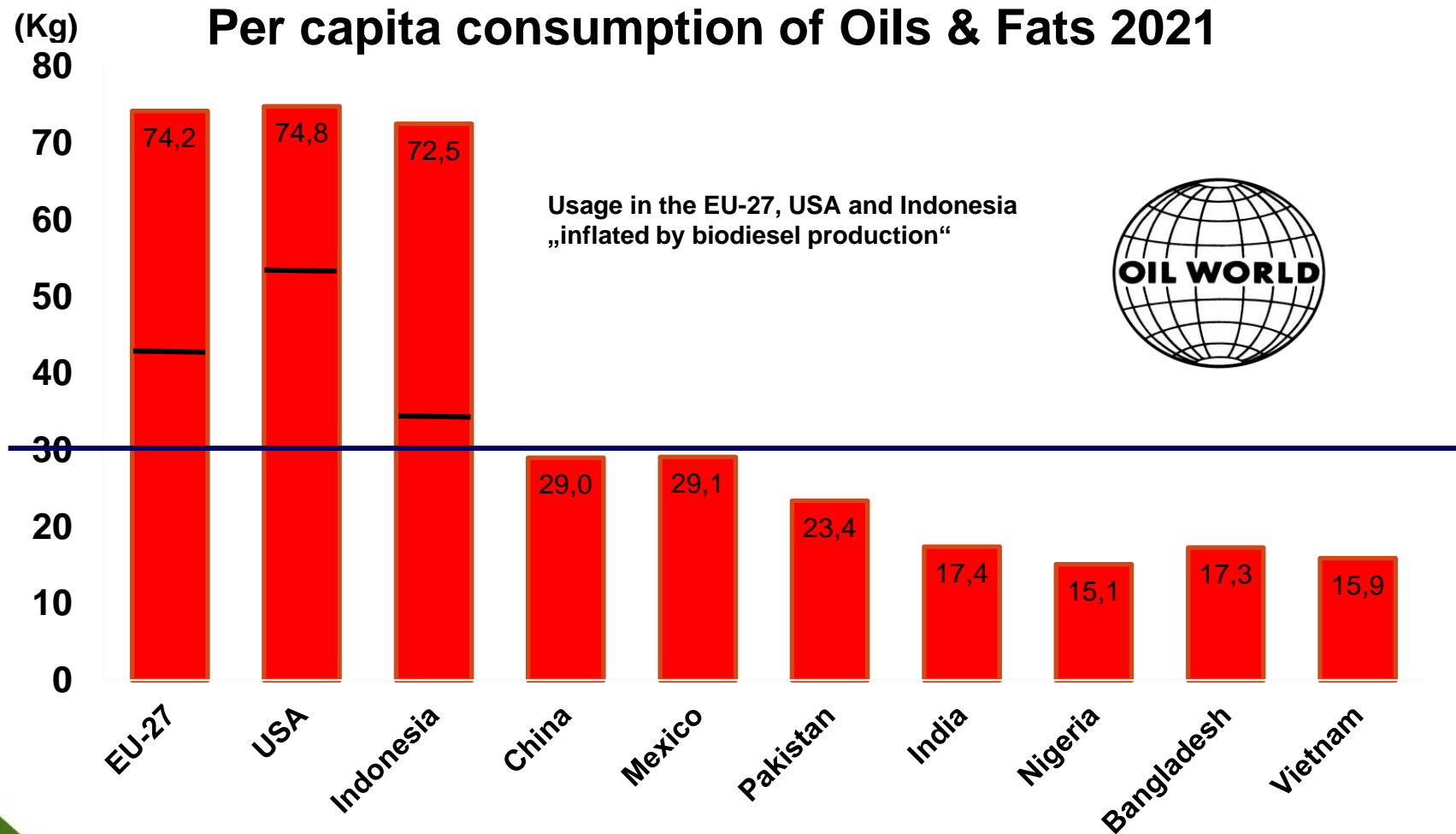
*“ global food production must increase by 70% within the next 30 years to ensure adequate food supplies by 2050”*

*Limitations of land and water*

*Yields have to be increased sizeably, and this in a sustainable way*



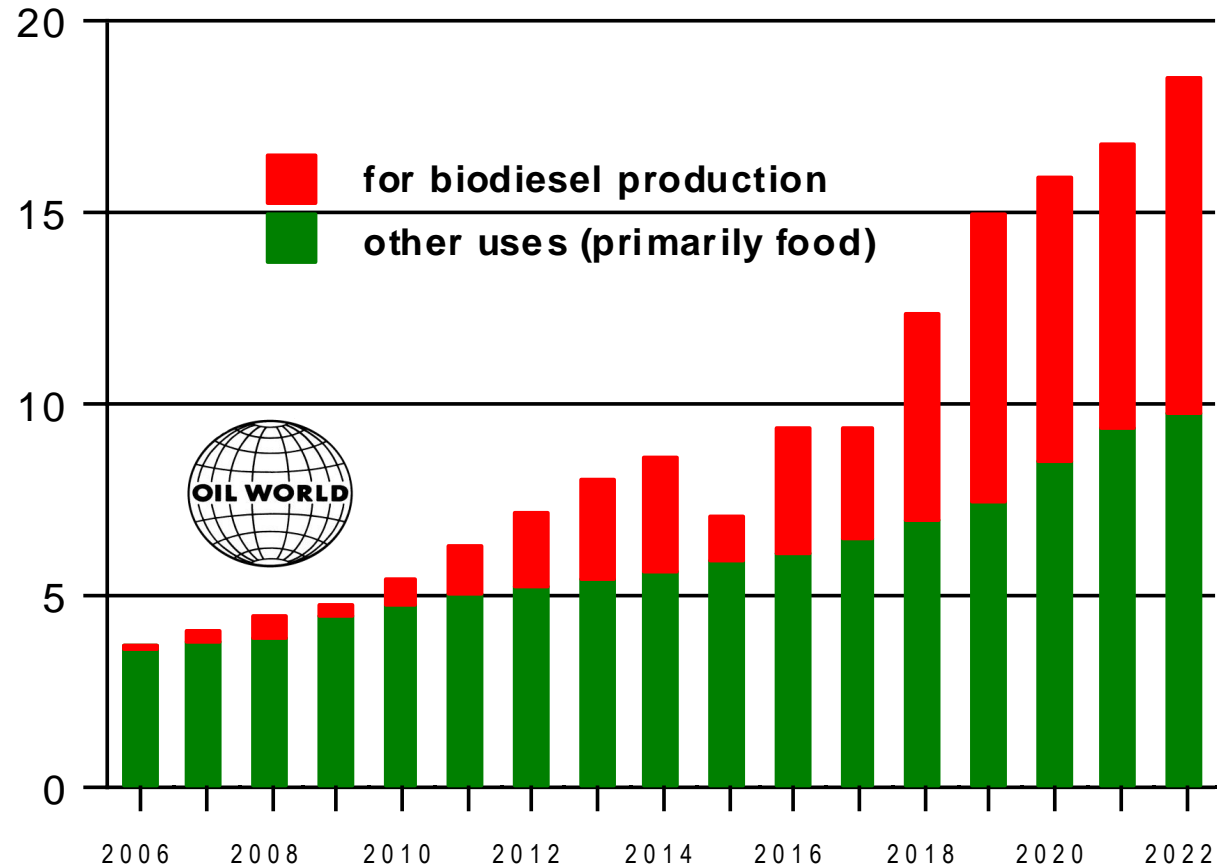
SOURCE: United Nations. 2022 Revision (Medium variant)



Annual usage of palm oil in biodiesel soared by 3.4 Mn T to 8.7 Mn T in the 4 years to 2022.

Usage in the oleochemical industry also up sharply, also promoted by high export taxes on crude palm oil.

INDONESIA: Booming Dom. Palm Oil Usage

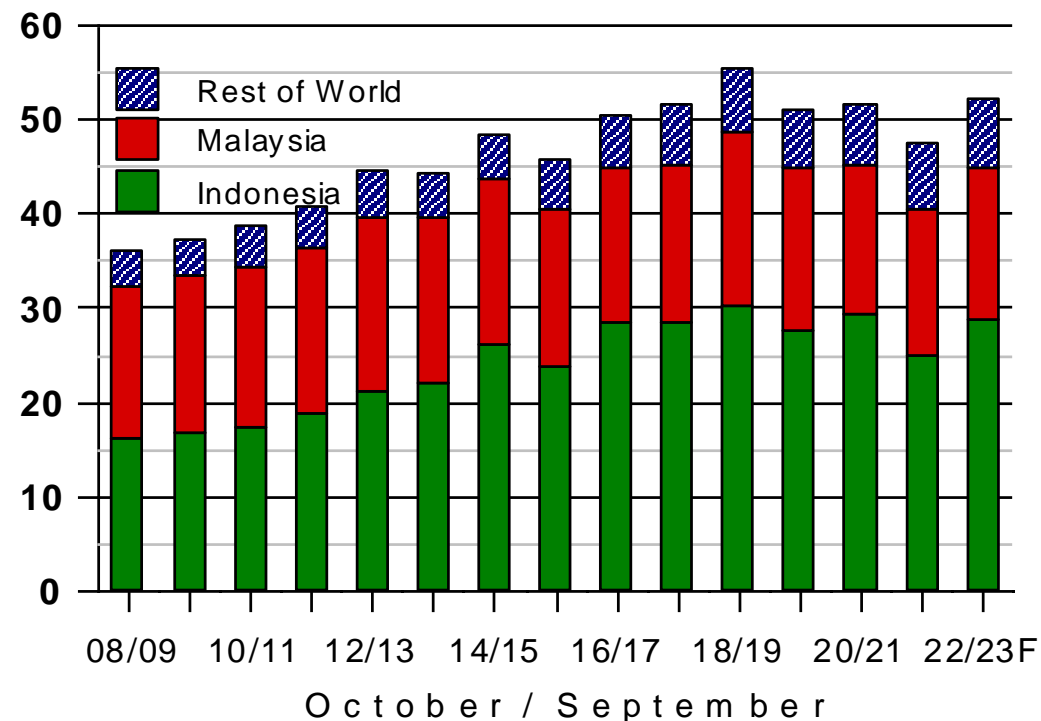


**INDONESIA : Balance of Palm Oil ( Mn T )**

January / December

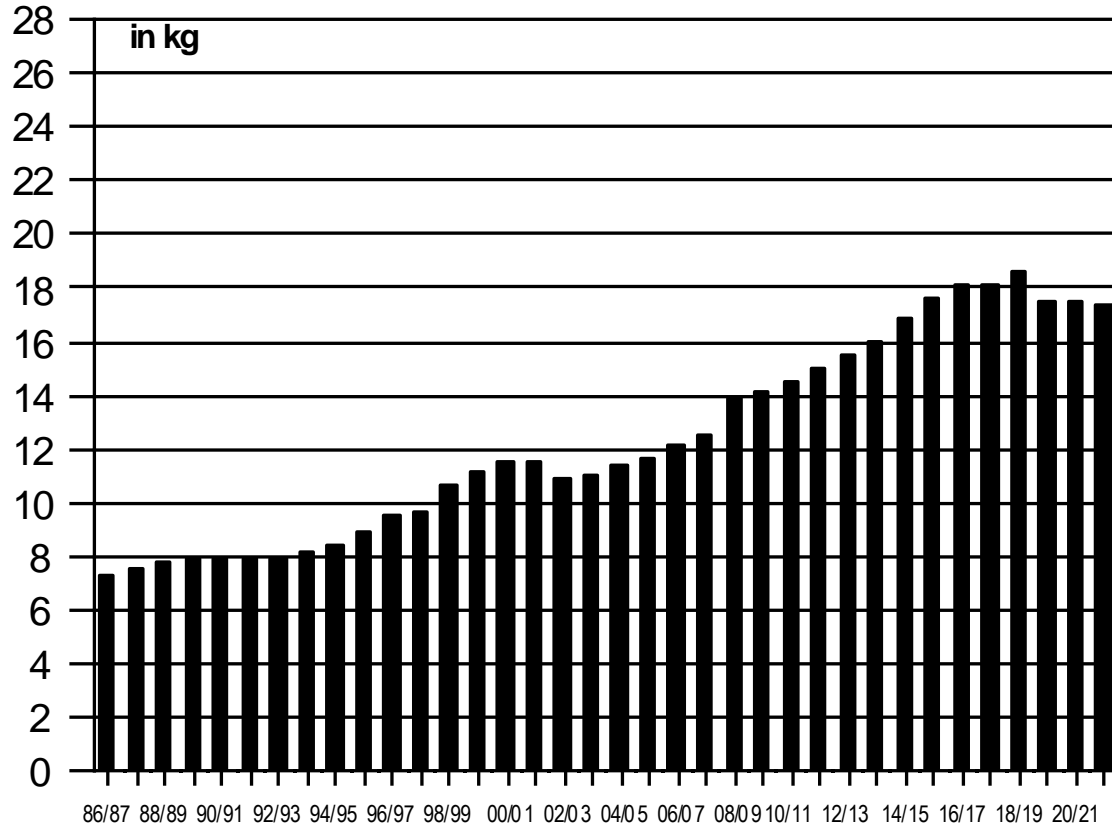
	2022F	2021	2020	2019	2018
Op'g stocks	4.80*	5.00*	4.65*	5.30*	3.88*
<b>Production .</b>	<b>46.55*</b>	<b>44.65*</b>	<b>43.48*</b>	<b>44.30*</b>	<b>43.10*</b>
Imports . . . .	.01*	.01*	.01	.10	.01
Exports . . . .	26.60*	28.09*	27.26	30.12	29.34
<b>Dom. use . .</b>	<b>18.46*</b>	<b>16.77*</b>	<b>15.88*</b>	<b>14.93*</b>	<b>12.35*</b>
<i>Biodiesel . .</i>	8.70*	7.47*	7.35*	7.48*	5.37*
<i>Other use . .</i>	9.76*	9.30*	8.52*	7.45*	6.98*

**PALM OIL : Exports of Key Countries (Mn T)**

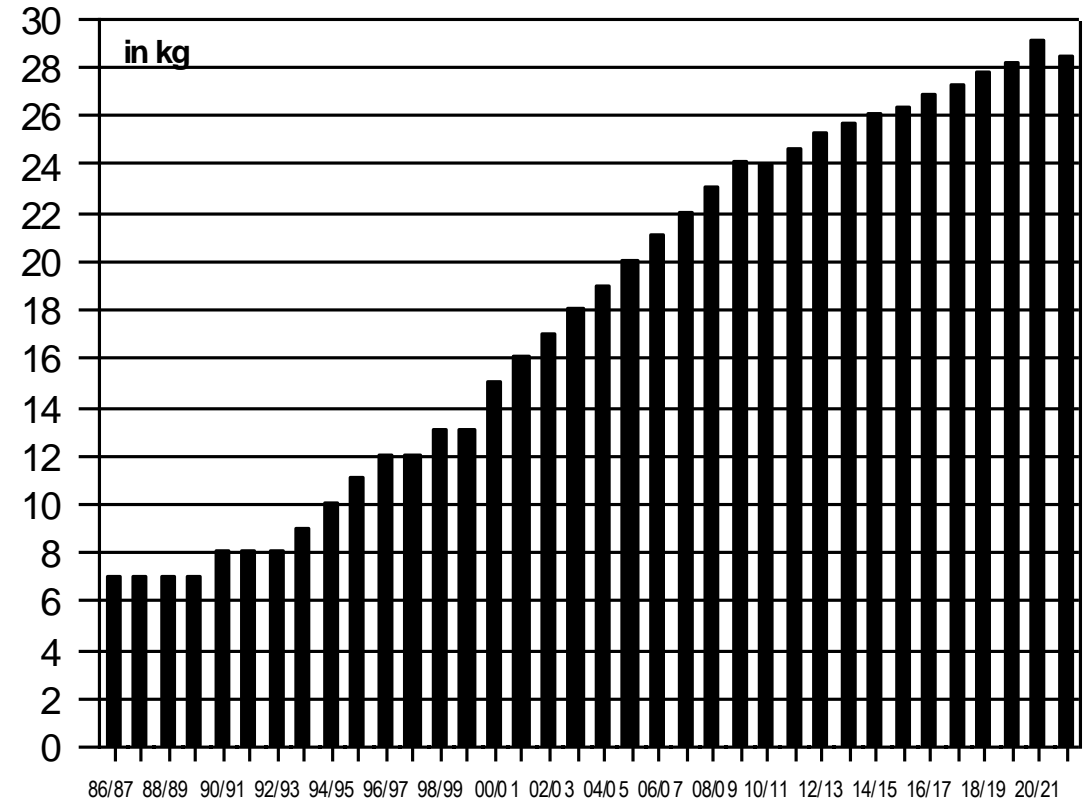




INDIA: Per Capita Use of 17 Oils & Fats

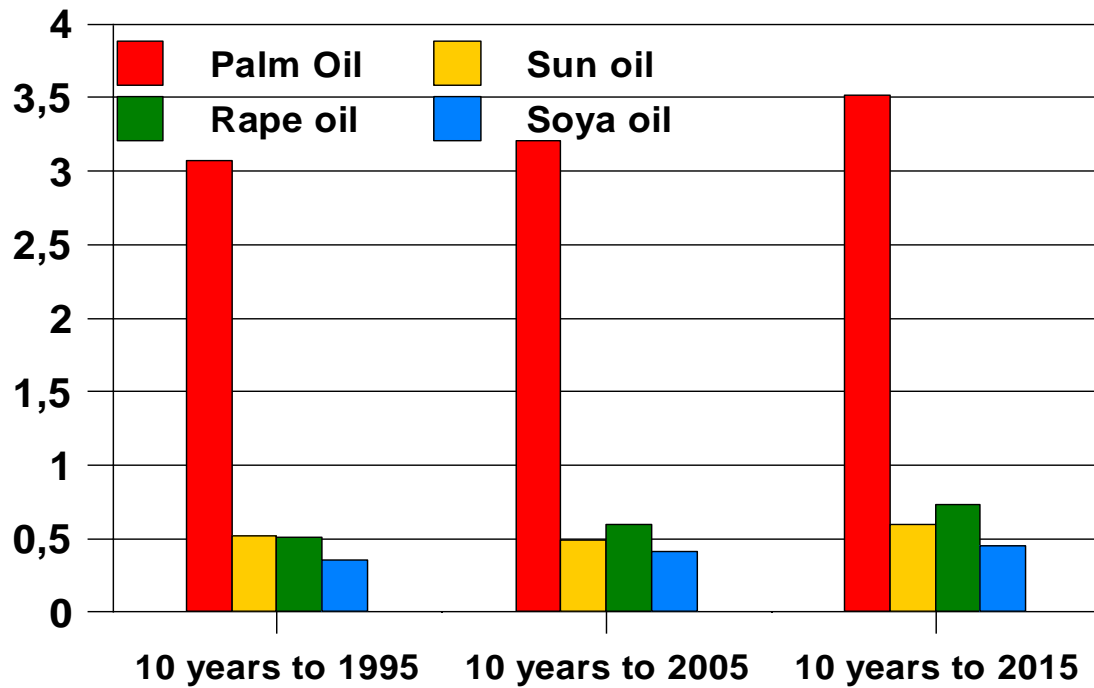


CHINA, P.R.: Per Capita Use of 17 Oils & Fats



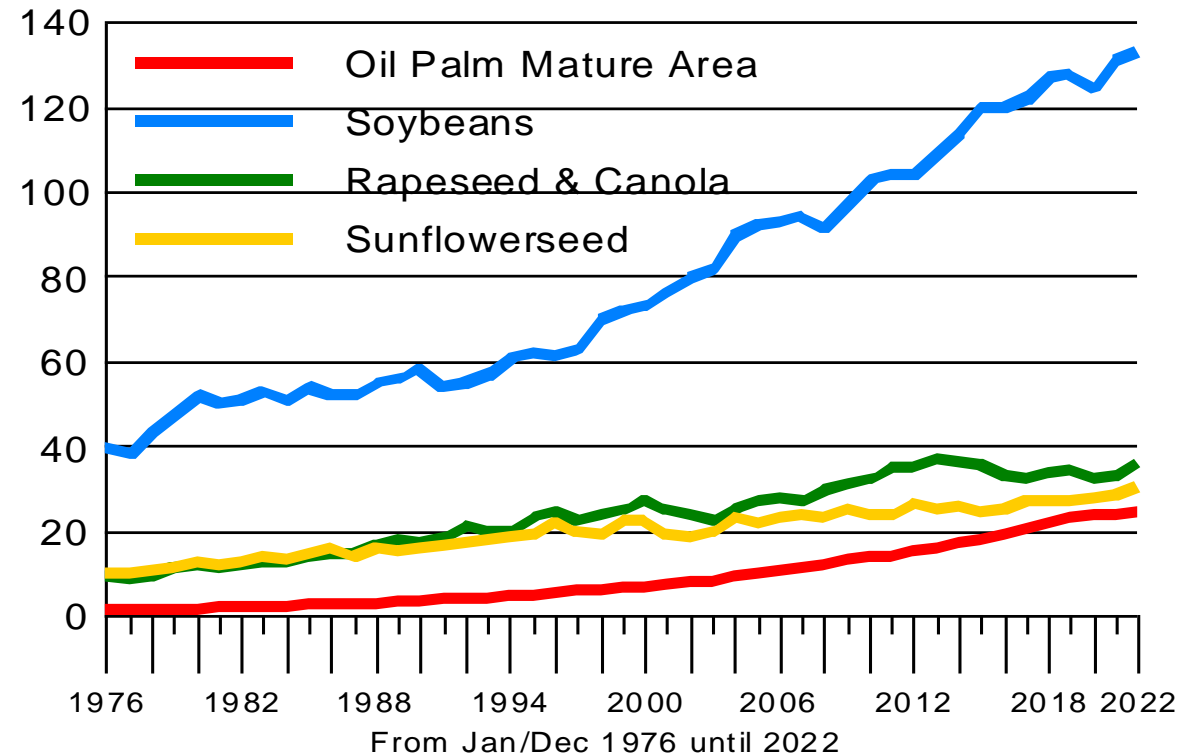
World Average Oil Equivalent (a)

in Tonnes per Hectare



(a) Calculated based on average crush and seed yield

OIL PALMS and 3 OILSEEDS: World Area (Mn ha)



In Oct/Dec 2022, Indonesian crude PO is forecast to bottom at \$ 800-820 fob and Mal RBD olein at US-\$ 830-850

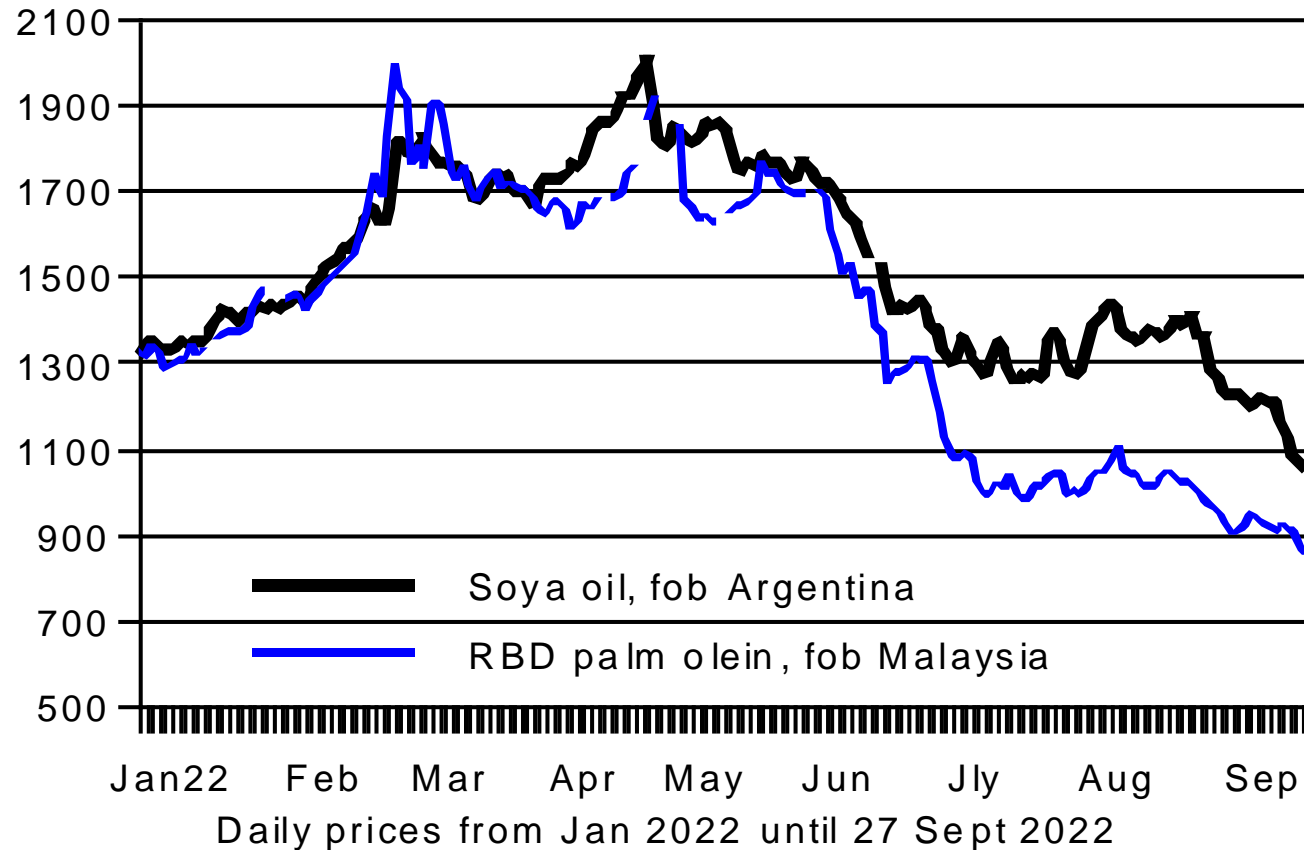
Current huge discounts boost consumption. Palm oil will find support once surplus stocks are removed.

Structural PO production problems exist.

In Jan/June 2023 further downward trend of sun, soya and rape oil prices. A narrowing of the price premiums versus PO.

High energy prices support veg oil prices.

Daily Prices of Soya & Palm Oils (US-\$/T)



## Some Longer Term Considerations

- Acreage limitations. It will be increasingly difficult to expand oilseed and grain production into new areas. Price impact. Biggest growth is likely to occur in Brazil, Russia and, possibly, on the African Continent. Yield improvement essential
- Palm oil has lost its growth momentum. Area expansion has slowed down considerably in Indonesia in recent years. Insufficient replantings will keep average yields below potential in the years ahead. Soaring input costs and strict sustainability criteria are discouraging investment.
- Lack of water is expected to be the key limiting factor in the years ahead.
- The big challenge for the future is to raise yields per hectare (oilseeds, grains, tree crops) in a sustainable way. But how quickly can yields (in the field) be increased? Replantings in oil palms and coconut trees sharply behind requirements.
- Increasing dependence on trade. - - > Logistics, logistics, logistics....



THE TRANSFORMATIVE  
POWER OF OIL PALM

# Thanks