

An economic modelling paper with indepth analysis on the “price outlook” aspect of palm oil supply and demand.



Global Oils & Fats Market Outlook and Updates for 2010

2010

MPOC

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The objectives of this economic modelling are to describe a prescriptive economic framework of the palm oil market and to identify the important factors contributing to the global oils and fats industry.

Setting the Scene

Abstract

IN recent years, we have seen a growing interest in economic forecasting among palm oil industry players. Yet, questions appear when industry players are asked about the supply and demand situation of global oils and fats.

In response to mounting worldwide interest in economic forecasting, we have decided to take up the challenge of constructing a very distinctive economic modelling initiative with a deeper analysis of the “price outlook” aspect of palm oil supply and demand.

The contribution of CPO by palm oil producers in Malaysia and Indonesia to the total production of vegetable oils in the world has increased considerably in the past several years. Similarly, the contributions of other vegetable oils producers around the world are also equally important.

In a publication of this nature, we feel it would be too numerous to include all the global oil producers. So our objective for now is to focus on net exporters and importers of vegetable oils regionally, i.e. China, India and the Americas, which directly influence the total global supply and demand of oils and fats. However, for the benefit of the readers, we shall sum up all the global oils and fats regions in the last section of this paper.

Major Highlights in the Global Oils and Fats

Outlook 2010

- **China:** Increased demand for oils and fats in China in 2010 will continue to be driven by population growth and a better economic environment. According to the National Development and Reform Commission of China, population will grow by 0.9% or by 11.9 million to 1.33 billion in 2010.
- **Europe:** Production of oils and fats in the EU-27 is expected to increase by 0.9-1.0 million metric tonnes (MT) in 2010, with rapeseed oil being the growth leader. On the consumption side, an increase of around 1.06 million MT is expected, compared with the 2009 increase of less than 1 million MT. In 2010,

consumption of oils and fats in the EU-27 for the food and non-food sectors is estimated at 30.9 million MT.

- **India:** As of 2010, production of oils is expected to be much lower, at only 7.8 million MT. Indian oilseed production has been very much stagnant, at between 20 and 25 million MT from 1991-92 till early 2000.
- **Africa:** Sub-Sahara Africa, with 45 countries and an estimated population of 680 million, imported 3.8 million MT of oils and fats in 2009 and this figure is projected to grow to 4.1 million MT in 2010. In 2009, local production can only make up 56% of domestic consumption of 6.4 million MT. For this year, domestic demand is projected to grow to 6.7 million MT, while local production would notch up to 3.7 million MT. Low per capita consumption of oils and fats, at less than 11kg compared with the world average of 24kg, is an indicator that the African market potential is yet to be realised.
- **Middle East:** The consumption of oils and fats in the Middle East has been on an uptrend since 1993, at around 16 % a year. Last year, it recorded a drop due to the global economic downturn and financial crisis, especially for industrial consumption, resulting in slower demand and therefore a slight reduced import of edible oils, from some 8.5 million MT in 2008 to 8.2 million MT in 2009. This was covered by better production of oils and fats, which increased by 50,000 MT. Of the 24 countries in the Middle East, Egypt, Iran and Turkey are the three main importers of oils and fats in the region, making up around 48% (3.9 million MT) of the total of 8.1 million MT imported in 2009. The production of oils and fats in the Middle East is stable at around 3.5 million MT a year. Last year, soybean oil was the most produced (710,100 MT), followed by olive oil (679,100 MT), sunflower oil (647,700 MT) and rapeseed oil

(490,600 MT).

- **South America:** Production of soybean has been growing significantly in South America since the 1990s, when major soybean farmers from the US stretched their production areas to their Southern neighbours.
- **USA:** The US is the biggest producer of soybean, accounting for about 38% of the world production. However, the US has seen a decline in its oils and fats production the past three years. In 2009, the country produced about 16.04 million MT of oils and fats, a 2% decline from the year before (16.4 million MT) and a further 5% decline from the year 2007, when about 16.8 million MT of oils and fats were produced.
- **Indonesia:** For the first time last year, Indonesia emerged as the largest exporter of palm oil in the world, with its total export of 16.94 million MT, surpassing Malaysian palm oil export of 15.87 million MT. According to the Department of Agriculture, there are 7.3 million hectares of oil palm plantations in Indonesia and this is projected to grow to 8.1 million hectares by the end 2010. Indonesian production of CPO in 2009 experienced a 10.1% growth to 21.14 million MT from 19.20 million MT produced. Out of this figure, 23% or 4.86 million MT were consumed domestically and the remainder was exported.
- **Malaysia:** Malaysian CPO production in 2009 declined by 1% to 17.56 million MT, short of the 2008 record of 17.73 MT. Nevertheless, growth in production is expected to resume in 2010 and may see the country register 17.9 million MT of palm oil, its highest volume yet.

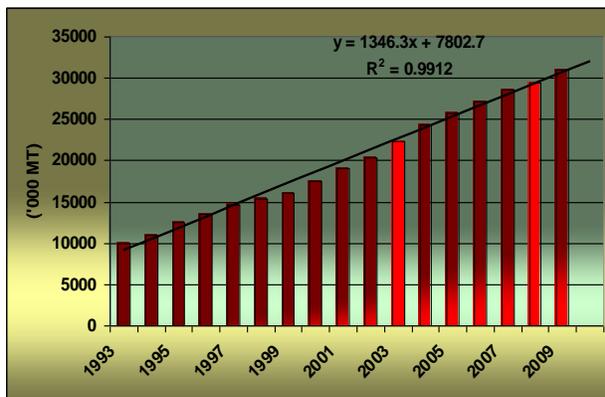
DEMAND

CHINA _____ The Growth Continues

INCREASED demand for oils and fats in China in 2010 will continue to be driven by population growth and better economic environment. According to the National Development and Reform Commission of China, population will grow by 0.9% or by 11.9 million to 1.33 billion in 2010.

On this basis and the rising GDP per capita, a private forecaster has estimated that GDP growth will improve from 8.9% in 2009 to 9.25% in 2010. The forecast takes into account the desire of China's policymakers to reorientate the economy in May 2010 on concerns of possible overheating and the bloated Euro debt crisis.

Figure 1 : China – Oils and Fats Consumption and Estimates



Source: MPOC

There is an abundance of oilseeds available in 2010 that can be crushed to meet the country's oils and fats requirements. At the beginning of 2010, oilseed stocks in China

stood at 8.76 million MT, a big jump from 2.81 million MT last year.

For 2010, China's crushing activity is anticipated to rise due to higher local availability of oilseeds and prospects of greater demand for oilmeals from the neighbouring countries because of reduced availability of oilmeals from India. China is also expected to crush more soybeans following the trade dispute between the country and Argentina.

In retaliation to Argentina's imposition of import tax on China's textiles and apparels, the Chinese government has discouraged state-linked companies from buying soybean oil from Argentina, the main supplier which exported 1.9 million MT of the oil to China in 2009. This reduced import from Argentina is likely to push up the import of soybean from other countries as local crushers are expected to crush more soybean to meet the resulting shortfall.

According to *Oil World*, the Jan-June 2010 import of oilseeds by China increased by 3.10 million MT to 26.99 million MT. During the same period, the import of oils and fats fell slightly by 0.2 million MT to 4.54 million MT.

With higher crushing in China, it is anticipated that local oils and fats production will rise by 1.0 million MT to 22.3 million MT.

Table 1: China -2010 Forecast of of Oils and Fats Production

Types of Oils	Oilseed crushing ('000 MT)	Average OER for the past 5 years (2004 – 2009)	Oils and fats produced ('000 MT)
Soybean	47,426	17.4	8,226
Cottonseed	10,717	16.2	1,736
Groundnuts	4,700	39.5	1,857
Sunflowerseed	833	27.5	229
Rapeseed	13,600	37.5	5,100
Sesameseed	472	43.2	204
Linseed	541	30.1	163
Castorseed	188	43.7	82
(Butter fat, Lard, Fish Oil, Corn Oil, Tallow & Grease)			4,686
Total			22,282

Source: OilWorld

Note: Oilseed crushed obtained from Oilworld. Other oils and fats computed based on preceding 5 years average growth of 2.3%

Hence, it is concluded that the net import of oils and fats by China for 2010 will be lower, affected by higher local oils and fats production.

INDIA Growing Steadily

IN TERMS of consumption, India would require around 15 million MT of oils and fats

to meet the local demand. This requirement is met through locally-produced oils as well as imported oils. India's oils and fats consumption is expected to grow further in view of its per capita consumption of only 13kg (2008). In 2009, per capita consumption has increased by 1.1kg to 14.1kg due to the lower prices of vegetable oils, which intensified oils and fats purchasing. Despite the rapid growth last year, it is still much below the world's average of 23.69kg.

Table 2: India - Supply of Oils and Fats for Domestic Consumption

Year	Consumption of O/F	Domestic Supply	Imports	Import % of Total Consumption
1993	7,206	7,077	277	3.84%
1994	7,522	7,165	514	6.83%
1995	8,129	7,463	1,203	14.80%
1996	8,589	7,460	1,511	17.60%
1997	9,520	7,828	2,024	21.26%
1998	9,990	7,459	2,587	25.90%
1999	11,143	6,786	4,928	44.22%
2000	11,726	6,708	4,701	40.09%
2001	12,142	6,761	5,400	44.47%
2002	12,272	7,103	5,167	42.11%
2003	11,944	6,530	5,389	45.12%
2004	12,626	8,312	4,776	37.83%
2005	13,098	8,121	5,450	41.61%
2006	13,668	9,080	5,149	37.67%
2007	14,394	9,118	5,319	36.95%
2008	15,262	9,343	6,853	45.34%
2009	16,855	8,614	8,705	51.64%

Source : Oilworld

In 2010, India's demand of oils and fats is expected to grow further. Such growth is expected due to population growth, which is estimated to go up by another 1.66%, improved economic situation with GDP of 6-

7% as well as Indian consumers' income elasticity and price elasticity of oils and fats in the local market.

There are two scenarios from the Indian oils and fats demand situation:

- 1) If India were to maintain its per capita consumption of 14.1kg, which was recorded last year, consumption is estimated to grow by 17,050 MT.
- 2) If per capita consumption goes up by 3.5%, consumption will go up by 17,780 MT.

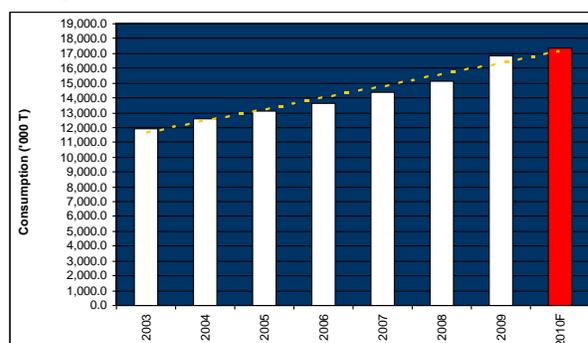
Table 3: India - Population and Consumption of Oils and Fats

	2009	2010F
Population (estimated growth of 1.66% annually)	1,198	1,217.9
Consumption (14.1kg per capita)	16,855	17,050
Consumption (if per capita caput use increases by 3.5% in 2010 to be 14.6kg)		17,780

Source: MPOC

However, based on the charts below and on a slight pessimist forecast, Indian consumption of oils and fats in 2010 should be between 17 and 17.8 million MT.

Figure 2 : India Oils and Fats Consumption



Source: MPOC

Supply of Indian Oilseeds, Oils and Fats

Indian oilseed production has been very much stagnant, at between 20 and 25 million MT from 1991-92 till early 2000. However, the production of oilseeds has increased to more than 30 million MT in the last five years. The land area, however, has been stagnant at 30 to 40 million hectares. The increase in oilseed production has been the result of advance in technology, which have brought about higher productivity. Besides this, an increase in the minimum support price (MSP) has also encouraged an increase in oilseed area, thus increased oilseed production

While higher oilseed production may reduce India's dependency on imports, it is not always the case as higher production will provide farmers with more income and the resulting higher disposable income means they will buy more essential food items.

As far as India's oilseed production is concerned, it is very much influenced by weather conditions as 70% of the agricultural land is dependent on rainfall. A minimum support price that favours rice and wheat also influences Indian oilseed production as it is a

determinant factor for farmers to decide whether to plant oilseeds or food grains.

Domestic oils and fats supply is only 50% sufficient. Therefore, India has to meet the remaining 50% through imports. Last year, import was a record high at 8.7 million MT. The increase was because Indian oils and fats production was 700,000 MT lower than the previous year and also, prices of oils fats in the international market were significantly low.

As of 2010, production of oils and fats is expected to be much lower, at only 7.8 million MT.

As of Jan-June 2010, imports were recorded at 4.04 million MT against 4.52 million MT, or 10% lower than the previous year (*source: SEA of India*).

Current stock levels at Indian ports is about half a million MT, with another half million MT being shipped.

In view of the import performance recorded in the first half of 2010, as well as a slightly higher stock level, imports will not be significantly high in the second half of 2010 despite the fact that India consumes more during the Divali festival which will be celebrated in November. Therefore, imports for 2010 may settle at around 8 to 8.5 million MT.

While we anticipate that 2010 consumption will be between 17 to 17.8 million MT, the final figure may be just around 17 MT or less in response to slower imports of oils and fats.

Table 4: India - Supply & Demand Situation

('000T)	2006	2007	2008	2009	2010F
Opening Stock	935	1,204	892	1,433	1,596
Oils & Fats Production	9,126	9,120	9,341	8,614	7,880
Net Imports	4,815	4,980	6,462	8,403	9,000
Consumption	13,672	14,412	15,262	16,855	17,365
Ending Stock	1,204	892	1,433	1,596	1,111

Source:MPOC

Two main elements are taken into consideration in forecasting India's supply and demand situation: the country's oils and fats consumption and Indian oilseed production. Since India is net importing country, the scenario is more straightforward, for in any given situation, the country will still have to import in order to supplement domestic requirements.

As India's population will continue to grow, demand for oils and fats will go up as well. However, the growth is influenced by various factors such income level and prices of oils and fats, besides local production.

Based on the these factors, India is expected to consume more oils and fats in the future and in turn, we will see India's imports going up in 2010.

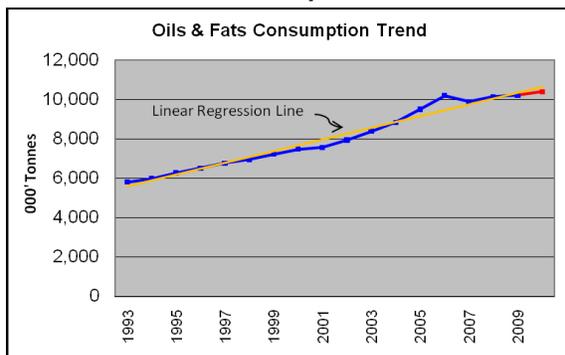
Middle East _____ Slight Growth

THE consumption of oils & fats in the Middle East has been on an uptrend since 1993, at around 16% a year. Last year, it recorded a drop, especially for industrial consumption, as a result of the global economic downturn and financial crisis, resulting in slower demand for edible oils and therefore a slight reduction

in imports of oils and fats into this region, from some 8.5 million MT in 2008 to 8.2 million MT in 2009.

- Of the 24 countries in the Middle East, Egypt, Iran and Turkey are the three main importers of oils and fats in the region, making up around 48% (3.9 million MT) of the total of 8.1 million MT imported in 2009. The production of oils and fats in the Middle East is stable at around 3.5 million MT a year. Last year, soybean oil was the most produced (710,100 MT), followed by olive oil (679,100 MT), sunflower oil (647,700 MT) and rapeseed oil (490,600 MT).

Figure 3: Middle East – Oils and Fats Consumption



Factors in Main Importing Countries

Egypt

Strong demand for oils and fats is expected to sustain in 2010 for Middle East and the North African countries with the recovery of their economies by mid-2010. In this regard, the Middle East and the North Africa countries are expected to register a consumption growth rate for oils and fats at 2-3% a year. Specifically, consumption growth rate for

Egypt will be about 2.5%, Morocco 2.7% and Ethiopia 2% a year.

The estimated Egyptian population is around 77 million, with a growth of about 2% a year. The implementation of zero import duty for all edible oils imported encourages the import of palm oil. For the first half of 2010, there was a slight increase in the import of Malaysian palm oil and sunflower oil imported from Argentina and Ukraine, at 16,704 MT and 9,000 MT respectively compared with the first half of the previous year.

Iran

GDP growth is on a positive trend and is expected to be better than the previous year, which was 4.5% in 2009 and as at June this year, the total import of soybean oil had increased by more than double to 159,000 MT from 66,000 MT recorded earlier. There was a slight drop in Malaysian palm oil import by some 3,500 MT.

The import of oils and fats into Iran increased by double during the first quarter of 2010, especially in February and the first two weeks of March, over the previous months. This is because local producers and manufacturers of confectionery and pastries increased their intake of raw materials during this period to cope with local demands as Iranians celebrated grandly their calendar New Year, which falls on March 21 every year.

Plenty of traditional confectioneries and pastries are prepared and served during this whole day and night celebration. Therefore,

since palm oil is the main raw material used in confectioneries and pastries in Iran, the intake/import of palm oil goes up during this period. Population is now at over 60 million, an increase around 1-2% a year. The import of palm oil into this country is increasing and has replaced part of the market share of soybean oil.

Turkey

Based on recent statistics released by the Statistics Department of Turkey, the country imported 347,444 MT of major oils and fats between January and May 2010, mainly palm and sunflower oils. The total import registered went down by 122,269 MT or 26% if compared with Jan-May last year. This was due to the global economic downturn seriously affecting Turkey in the last two years.

The country appeared to be more positive towards the end of the year. The demand for oils and fats has been increasing due to the growing population and rising exports of halal foods. As a less fat-saturated and halal-guaranteed edible oil compared with animal fat, palm oil is starting to be recognised and it is expected to drive more people in Turkey to gradually switch to palm oil. Palm oil is gaining a bigger share of the US\$2.1 trillion global halal foods market. People in Turkey have started to become more halal-conscious and there is a potential for palm oil imports into Turkey to rise to 1 million MT in the next 10 years.

Palm oil currently accounts for about 38% of Turkey's annual edible oils consumption of

1.6 million MT and that share may rise as domestic oilseeds output, especially sunflower, continues to lag behind domestic demand. There are some positive signs that the economic and financial conditions will improve further during the second half of this year. This is a good sign for oils and fats imports and exports (within the region) to start to pick up at the beginning of next year.

Middle East Region

THE total consumption and imports of oils and fats this year is expected to increase by 2% and 5% respectively. More imports are needed by the region to support the lower local production of oilseeds forecast for 2010. Overall demand will outstrip supply for most countries in the region and thus imports of oils and demand in 2010 will be higher compared with 2009. The improving economic situation has contributed to a better outlook for oils and fats in this region and the stock usage ratio is expected to be lower this year to around 6.5%.

Table 5 : Middle East - Oils & Fats Balance

('000 T)	2006	2007	2008	2009	2010F
Opening Stock	1,095	1,257	1,077	1,233	1,013
Production	3,482	3,594	3,545	3,593	3,700
Import	8,747	7,741	8,479	8,197	8,600
Export	1,867	1,620	1,725	1,789	2,100
Consumption	10,200	9,895	10,143	10,221	10,400
Ending Stock	1,257	1,077	1,233	1,013	813
Stock Usage Ratio	10.4%	9.4%	10.4%	8.4%	6.5%

Europe — Biofuels Expanding

THE expanding biofuel sector is seen as a major factor behind the growing demand for vegetable oils in the EU, most notably rapeseed oil. Oilseed producers and processors in the EU have in recent years adjusted remarkably to the strong consumption growth, primarily in this particular sector. Production of oils and fats in the EU-27 is expected to increase by 0.9-1.0 million MT in 2010, with rapeseed oil being the growth leader. Demand for rapeseed oil will pick up in line with higher biodiesel production to fulfill the increased mandates in the EU, and partly because of minor reductions shaping up in the production of sunflower oil and soybean oil.

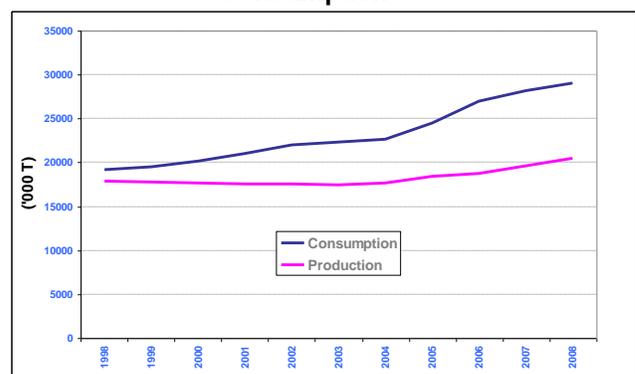
However, the recent hot and dry weather has created crop stress, which led to the deterioration of rapeseed crop prospects in the EU-27. It is expected that rapeseed will be in scarce supply in 2010/11 and a decline in crushing cannot be prevented as imports cannot be raised sufficiently owing to insufficient supplies in the exporting countries.

This will tighten the rapeseed oil balance and make it difficult for the energy market and edible oil consumers to meet their requirements. There is a certain hardcore demand for rapeseed oil in the food sector, but there is also scope for replacing it partly with other more attractively priced vegetable oils. However, in the EU biofuels sector, there is only limited scope for replacing rapeseed oil because of technical requirements, primarily in winter.

The growing demand for vegetable oils is rather price inelastic and fixed by mandates in national biodiesel policies. The 10% minimum biofuel share in transport by 2020 and national biofuel mandates could substantially increase vegetable oil demand. This will increase imports of vegetable oils as well as oilseeds for processing. Feedstock sustainability criteria included in the EU Climate Change package could have an impact on the origin of imports according to the approved sustainability scheme.

On the consumption side, an increase of around 1.06 million MT is expected, compared to the 2009 increase of less than 1 million MT. There are still several uncertainties on the demand side, for instance, whether and to what extent the postponed biodiesel tax increase allows a recovery of demand for B100 and refined vegetable oils to be used for fuel in Germany. Part of the EU biodiesel requirements will still be covered by imports, primarily from Argentina, but also by B99 from the US. However, overall competition from imported biodiesel has diminished after the imposition of duties on B99 from the US.

Figure 4: EU – Oils Fats Production & Consumption



In 2010, consumption of oils and fats for food and non-food in the EU-27 is estimated at 30.9 million MT. This implies an increase of 11 million MT or 54% from 10 years earlier. The impressive growth will occur almost exclusively in the biofuel sector. Production accelerated only in recent years and for next year, it is estimated that biofuel production will increase by only 0.83 million MT. As a result, imports of oils and fats from third countries are likely to increase further to 10.35 million MT in 2010. During the same period, EU exports of oils and fats diminished to an estimated 1.65 million MT in 2010.

Table 6 : EU-27 2010 Oils and Fats Supply & Demand Forecast

	2006	2007	2008	2009	2010F
Opening Stock	2,654	2,924	2,568	2,702	2,510
Production	18,793	19,604	20,551	21,584	22,300
Imports	9,816	9,720	10,103	9,893	10,350
Exports	1,424	1,518	1,534	1,645	1,650
Consumption	26,915	28,162	28,986	30,024	30,900
Ending Stock	2,924	2,568	2,702	2,510	2,610

In Jan-June 2010, Malaysian palm oil exports to Europe decreased slightly, by 5.2% or by 66,781 MT. Total exports of palm oil products to the EU-27 during Jan-June 2010 were at 1,015,696 MT, an increase by 16% on a year-on-year basis. Being a net importer of oils and fats, palm oil remains an important commodity to supplement the local industry.

The strong growth of consumption of rapeseed oil by the biofuel sector in particular, which accounts for more than 60%, has also led to shortages in the food sector and higher prices of rapeseed oil. Hence, the food sector has replaced rapeseed oil with other more attractively priced vegetable oils, mostly palm oil. Although the price of palm oil has increased significantly since 2007, the price margin with soybean, rapeseed and sunflower oil remained intact. This margin made palm oil an economic alternative in the growing EU oils and fats market.

As of June 2010, crude palm oil export to EU-27 was higher by 24.4% or 122,247 MT. This growth is mainly attributable to the growing demand from palm oil refineries in the port of Rotterdam. Imports of RBD palm oil and RBD palm stearin also increased by 10,066 MT and 34,901 MT respectively. Imports of RBD palm olein, however, went down by 31,468 MT or 33.6%.

SUPPLIES

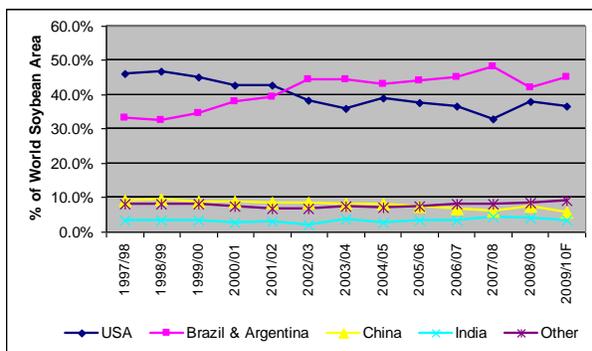
AMERICAS _____ Major Exporters

WITH the vast expansion of acreage for soybean planting, the total production of soybean from both Brazil and Argentina surpassed the United States in 2002, making it the largest soybean producing region in the world, contributing to approximately 47% of the total soybean production this year (2010).

Coupled with the soybean output by the US (38%), the three countries command more than 80% of the soybean crop yearly, indicating the importance of soybean

production in the Americas to the annual demand for soybean oil and meal.

World Soybean Production by Country (%)



Source: MPOC

Soybean Production

The production of soybean in South America grew at 3.7% annually in the past five years. By 2010, the soybean produced in this region (the major harvesting period is March to mid-May) is estimated to amount to 123 million MT, a sharp increase (and recovery) from drought affected 89.4 million MT crop last year.

As for the US, the soybean outlook for the year 2010 is also on the bright side as the US harvested a record of 91 million MT of for the crop year 2009-10. The figure is a 13% increase from the year before and a 5% increase from the previous record in 2005-06, when 86.6 million MT of soybean were harvested.

While the increase in soybean production in the South Americas was partly attributed to area expansion (by 9.2% or 3.50 million ha), the favourable weather ensured that almost all the soybean in the planted area grew under

optimum crop production conditions, with minimal damage from the Asian rust infection.

The same combination of high yield, large total area planted and good weather also played its role in contributing to the 2009 bumper crop harvest in the US.

Being one of the important fundamentals in the supply and demand scenario of the global oils and fats market, the South American soybean production will be closely monitored from October, since planting intention will provide an indication of the crop prospects while weather conditions in the subsequent months will be crucial to the crop yield.

Soybean Export

The expansion of production in South America was basically driven by the huge market potential around the globe, with growing populations and economic situations bringing about higher demand for various necessities, including oils and fats and as well as protein sources.

S & D of Soybean in S. America: Forecast for 2010/11

('000 MT)	Feb/Jan				
	06/07	07/08	08/09	09/10F	10/11F
Open Stock	2,710	4,020	4,770	10,328	5,568
Production	97,742	107,026	106,218	88,900	123,200
Import	905	2,935	2,900	687	230
Crushing	61,415	68,663	62,885	58,240	73,700
Other Use	4,125	4,305	4,371	4,607	4,640
Export	31,797	36,243	36,303	31,500	40,600
End Stock	4,020	4,770	10,328	5,568	9,023

Source: MPOC

The Argentinean government imposes a high export tax on soybean, which led to the excess soybean produced in the country being exported in the form of soybean oil and soybean meal.

However, in Brazil, the acreage under soybean is fast expanding, but the country's processing capacity is still way behind, which is why the government allows the export of soybean. Nevertheless, the export of soybean, soybean oil and meals from this region also very much depends on the demand from the importing countries.

In terms of usage, exports of US soybean is expected to increase tremendously, with the USDA forecasting a high figure of 39 million MT for the year 2009-10. Abundance of local supply, coupled with diminished supplies from the competitors, especially Argentina with its export tax imposition, has given the US a positive outlook on the export potential for its soybean.

Outlook

South America has become a major producer of soybean over the past five years and the export of soybean and its products have been correlating positively with the production growth.

However, the scenario has slowly changed with the implementation of mandatory blending of biodiesel in both Brazil and Argentina, where demand for soybean oil in the domestic market is set to increase, causing more soybean and soybean oil to be retained for domestic consumption. Hence, the future outlook for the supply of South American

soybean and its products to the world market may be influenced further by the blending rate of biodiesel in both Brazil and Argentina.

For 2010, the consumption of soybean will be increased on the basis of population and economic growth, but more importantly the mandatory blending of biodiesel of 5% in both Brazil and Argentina. Therefore, despite the huge production of soybean, there may be no significant increase in soybean or soybean oil for additional requirements of the export market.

This is clearly reflected by the latest export figures: the export of soybean from Brazil has declined by 4.1% while soybean oil export also dropped 20.8% as of June 2010.

Export of soybean oil from Argentina also decreased by 557,000 MT to 2.12 million MT for the Jan-June period.

From the US point of view, the domestic demand is also forecast to be higher than the previous year, when local processors were expected to crush about 51 million MT of soybean to cater to the growing demand for soybean oil and meal.

The US is traditionally not a big exporter of soybean oil, as domestic demand takes up most of this oil the country produces. Nevertheless, it was forecast early this year that the US will export only about 900,000 MT of soybean oil. The official figure released by US Department of Agriculture is that the country exported about 599,035 MT in the first half of the year. Looking at the figure, it is possible that the US export for the

year may exceed 1 million MT, surpassing the earlier forecast of 900,000 MT.

INDONESIA

A New High

Indonesia Palm Oil Situation

INDONESIAN production of CPO in 2009 experienced growth of 10% to 21.14 million MT from 19.23 million MT produced the year before. Of this figure, 23% or 4.86 million MT were consumed at home and the rest was exported. Indonesian palm oil production has climbed steadily in the past 12 years because of acreage expansion, especially in Riau, North and West Sumatra, Central Kalimantan, Jambi, Sulawesi and West Papua.

According to Department of Agriculture, there are 7.3 million hectares of oil palm plantations in Indonesia now and the area is projected to grow to 8.1 million hectares by the end of 2010. Out of the 7.3 million hectares, smallholders own 46%, with another 43% owned by the private sector, while 11% belongs to Indonesian government.

As a result of continuous opening of new planting areas and with more oil palm reaching maturity, Indonesian palm oil production in 2010 is projected to reach a new high of 22.3 million MT, up by 1.2 million MT from last year. It is estimated that the mature oil palm area in Indonesia will reach 5.73 million hectares in 2010, compared with 5.35 million hectares in 2009.

For the first time last year, Indonesia emerged as the largest exporter of palm oil in the world with total export of 16.94 million MT, surpassing the 15.87 million MT exported by Malaysia. The major portion of Indonesian palm oil export is destined for India (36%), EU (19%) and China (16%). These three destinations absorbed 11.3 million MT or 71% of the total Indonesian export. Other important importers of Indonesian palm oil are Bangladesh, Pakistan, the Middle East and countries in the Southern African region. Despite an increase on palm oil export tax to 4.5% in April 2010, up from 3% in March, Indonesia is expected to keep its position as the largest palm oil exporter – but this figure may be lower than last year's, in view of increasing domestic consumption.

The demand for palm oil, which will remain strong, the availability of land for new plantations, more areas becoming mature and increasing yields are the major factors that will keep Indonesia the largest producer and exporter of palm oil.

Table 6 : Indonesian Palm Oil Mature Area, Yields and Production

	2006	2007	2008	2009F	2010F
Mature Area (Million Ha)	4.11	4.54	4.95	5.35	5.73
Yields (Ton/Ha)	3.91	3.80	3.88	3.95	3.89
Production (Million Ton)	16.05	17.27	19.23	21.14	22.30

Source: Reuters

Table 7 : Indonesian Palm Oil S&D Balance

	2006	2007	2008	2009	2010F
Opening Stocks	1,110	960	1,580	1,760	1,150
Production	16,070	17,300	19,230	21,140	22,300
Imports	31	25	34	49	50
Consumption	3,711	4,055	4,472	4,861	5,200
Exports	12,540	12,650	14,612	16,938	16,600
Ending Stocks	960	1,580	1,760	1,150	1,700
Stocks/Usage	5.9%	9.5%	9.2%	5.2%	7.8%

Source: Oil World

MALAYSIA

Production _____ Focusing on Sustainability

MALAYSIAN CPO production in 2009 declined by 1% to 17.56 million MT, short of the 2008 record of 17.73 million MT. According to MPOB, the total planted area for palm oil increased to 4.69 million hectares in 2009.

Despite a slight dent in production figures, Malaysian palm oil (MPO) export in 2009 registered an increase of 2.9% to 15.87 million MT, compared with 15.41 million MT in 2008. China was the largest importer of MPO for eight consecutive years, with 4.03 million MT a year, followed by EU (1.89 million MT), Pakistan (1.76 million MT) and India with an off-take of 1.35 million MT.

At the end of 2009, palm oil stocks stood at 2.24 million MT against 2 million MT recorded in 2008. For the past four years, annual stock usage ratio ranged between 9.1%

and 12.3% and for this year, the year-end stock usage ratio is estimated at 11.9%.

Malaysian palm oil stocks at the end of June 2010 stood at 1.451 million MT, the lowest level in 10 months, mainly because of lower-than-expected growth in CPO production and an increase in export as well as domestic consumption.

Based on the estimated 4.072 million hectares of matured area and yields of 4.42 tonnes/hectare, MPO production for this year is projected to grow by 2.5% to 18 million MT. However, dry weather caused by El Nino and tree stress in the early part of the year has slowed down CPO output for the first half of 2010, causing the output to grow by a mere 0.7% only. Malaysian CPO production for the period of Jan-June 2010 was 7.977 million MT.

Table 8 : Malaysia -Supply and Demand Balance ('000 Tonnes)

	2006	2007	2008	2009	2010F
Opening Stocks	1,604	1,506	1,682	1,995	2,239
Production	15,880	15,823	17,734	17,564	17,917
Import	602	268	561	930	800
Consumption	2,157	2,168	2,571	2,384	2,640
Export	14,423	13,747	15,412	15,866	16,020
Ending Stocks	1,506	1,682	1,995	2,239	2,296
Stocks/Usage	9.1%	10.6%	11.1%	12.3%	12.3%

Source: MPOB

Table 9 : Malaysian - Palm Oil Area, Yields and Outputs

	2008	2009	2010F
Mature Area (1000 Ha)	3,900	4,002	4,072
Yields (T/Ha)	4.55	4.39	4.40
Production (1000 T)	17,734	17,564	17,917

Source: Oilworld

S&D Outlook

FOR this paper, we have decided to use the Stock Usage Ratio or SUR as an indicator to predict the possible price scenario of palm oil. The indication of whether the price will rise or fall can be ascertained by the SUR scenario, where the relationship between the two variables is correlated inversely. Higher SUR very often gives an indication for lower prices, and vice-versa.

The equation can be written as follows:

$$\text{Ending Stock} = \text{Opening Stock} + \text{Production} + \text{Import} - \text{Export} - \text{Consumption}$$

with the Stock Usage Ratio (SUR) calculated using the formula:

$$\text{SUR} = \text{Ending Stock} / \text{Total Usage} \times 100$$

The SUR is also a useful indicator to measure the amount of surplus in stock that can be carried forward to the next year, thus determining the number of days or months the surplus will be able to support the population based on current demand.

The Global Oils and Fats balance for 2010 is therefore forecast to be:

Table 10 : Global Oils and Fats Balance

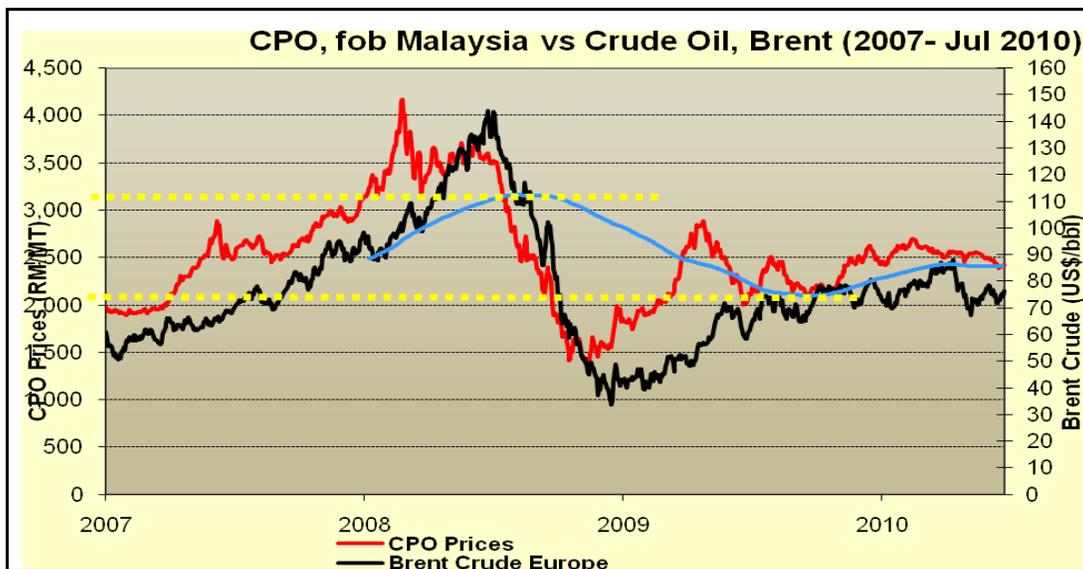
('000 T)	2006	2007	2008	2009	2010F
Opening Stock	15,241	16,496	17,103	17,842	17,878
Production	147,129	151,354	157,208	161,684	166,298
Import	53,403	54,647	57,957	60,893	60,759
Export	56,758	57,325	59,945	63,391	65,121
Consumption	142,518	148,070	154,480	159,150	163,195
Ending Stock	16,496	17,102	17,842	17,878	16,619
Stock Usage Ratio	8.3%	8.3%	8.3%	8.0%	7.3%

Source: MPOC

SUR for the year 2010 is forecast to be lower than the previous year. Therefore, the indicator points to a price rise for the year.

The table above also indicates that the overall global scenario was more bullish as the stock usage ratio dropped from 8% to 7.3% for the year 2010. Concurrently, we can see from Figure 5 below that the trend of Brent oil prices has had an effect on the CPO price the last few years.

Figure 5



Source: MPOC

Evidently, we can make an assumption that the (CPO) price has been highly correlated with the Brent oil price since 2007. This is due to the increasing demand for biofuels in the world market substituting Brent oil in daily usage and mandated biofuels laws imposed by local regulators in some European countries. The increase in the Brent oil price will support the improvement of CPO price indirectly, and vice-versa.

Table 11: Biodiesel Production by Country

(MnT)	2006	2007	2008	2009	2010F
EU-27	4.9	6.0	7.5	8.4	9.6
USA	1.1	1.7	2.7	1.8	2.1
Argentina	0.1	0.2	0.7	1.2	1.6
Brazil	0.1	0.4	1.0	1.4	2.0
Colombia	0.0	0.1	0.0	0.2	0.4
Thailand	0.0	0.1	0.4	0.5	0.7
Turkey	0.3	0.1	0.1	0.0	0.1
Other	0.7	1.2	1.9	2.4	2.9
TOTAL	7.1	9.5	14.3	15.9	19.2
% Change	98.3%	33.7%	50.4%	11.2%	20.4%

Source: OilWorld

The European Union is the world leader in biofuel production, with 4.9 million MT produced in 2006, reaching 8.4 million MT in 2009, with the figure expected to reach 9.6 million MT this year. US biodiesel production is estimated to jump to 2.1 million MT in 2010, making it the second largest producer. Other significant producers of biodiesel are Brazil and Argentina, with a projected production of 2 million MT and 1.6 million MT respectively.

Table 11 illustrates the total supply of biodiesel from the EU countries, which contributed to nearly 50% of the total global biodiesel production. Looking at the trend, the rate of biodiesel production compared with previous year was highest in 2006, with 98.3%. Total biodiesel production in 2008 increased more than twice compared with the 2006 figure.

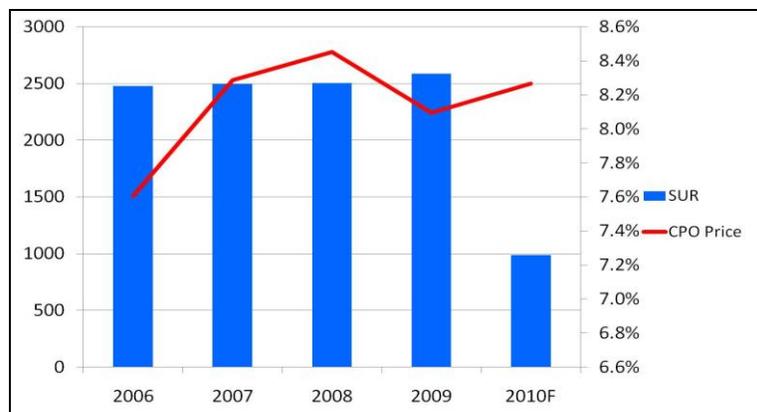
Higher crude oil prices boosted the demand for biofuel as an alternative for gasoline oil. Riding on the high price of crude oil, the demand for alternative fuel gathered momentum in 2007, bringing vegetable oil prices to a record level in 2008. However, when the petroleum price dropped, the demand for biodiesel also dropped as customers switched back to petroleum and caused biodiesel producers to scale back production.

It is also estimated that the world will see biodiesel production increasing by 20% by 2010. Should the biodiesel demand in 2010 not be up to the expectation, soybean oil prices will be pressured by the ample supply of soybean and CPO price will also be affected.

Nevertheless, it is unlikely the demand will be far off from figure forecast as the major producing countries have implemented mandatory blending of biodiesel. Furthermore, if the SBO and CPO prices drop below the support level, it will make these oils more attractive for biodiesel production and application in the countries where biodiesel blending is not mandatory, subsequently driving up vegetable oil prices.

Therefore, the projected CPO price for 2010 is estimated at the average of RM2,500, if crude mineral price stays at the level of US\$80 per barrel, as indicated in Figure 6 below.

Figure 6: Stock Usage Ratio vs CPO Price



Source: MPOC

Global Summary

Revisiting the global supply and demand, palm oil is expected to continue as the growth leader in output, with Indonesia continuing to keep its role of lead supplier in the global vegetable oils industry as the biggest producer and exporter.

Supply of soybean oil in 2010 is expected to be higher than in 2009 due to the rise in South American soybean production, with weather conditions forecast to remain intact.

The growth of production in 2010 is expected to be around 2.9% from 161.7 million MT to 166.3 million MT this year.

Nevertheless, the global consumption of oils and fats will increase more than production, to around 2.5% from 159.2 million MT to 163.2 million MT in 2010.

This will be driven by rising vegetable oil demand for food in China, India and many other countries. The importance of biofuels will gradually expand to the energy market, most significantly in Europe, South America and the US, with government intervention set to increase further demand of oils for fuel.

The consumption of global oils and fats will be led by China, as the country is set to see its domestic demand grow by 0.9 million MT to 32 million MT in 2010. Nevertheless, the country is not expected to import more compared with last year as its high ending stock and heightened local processing activities will be enough to cater to about 67% of the local demand. China will still import 9.75 million MT, although the figure is lower by 0.7 million MT compared with 2009.

India on the other hand, will also need an additional of 145,000 MT of oils and fats in 2010 thus creating demand of up to 17 million MT in the country's oils and fats balance. Due to diminishing local production, the Indians are expected to import about 8.5 million MT of oils and fats in 2010.

Therefore, the projected CPO price for 2010 is estimated at the average of RM2,500, if crude mineral price stays at the level of US\$80 per barrel, as indicated in Figure 6.

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