

# MAP - Brief

## Monitoring Agri-trade Policy



### Update of 2007 Outlook for World Agricultural Commodity Markets

#### Introduction

With the OECD-FAO **Agricultural Outlook** 2007-2016 just published, this MAP-brief updates our newsletter of May 2007, which compared the latest medium term projections of the main forecasting institutions for world agricultural markets. We examine the changes in OECD-FAO's current projections for the next 10 years, compared to their 2006 baseline and also highlight the major differences between these latest projections and those of FAPRI 2007. A more detailed report, which examines the differences in outlook for world agricultural markets in depth, will shortly be available on our website.

#### Sources:

*This MAP brief is based on a set of forecasts and projections made by different international organisations, experts and foreign institutions:*

*the Organisation for Economic Cooperation and Development (OECD) and the Food and Agriculture Organisation (FAO)*

*the Food and Agricultural Policy Research Institute (FAPRI)*

*the US Department of Agriculture*

*and the European Commission, Directorate-General for Agriculture and Rural Development*

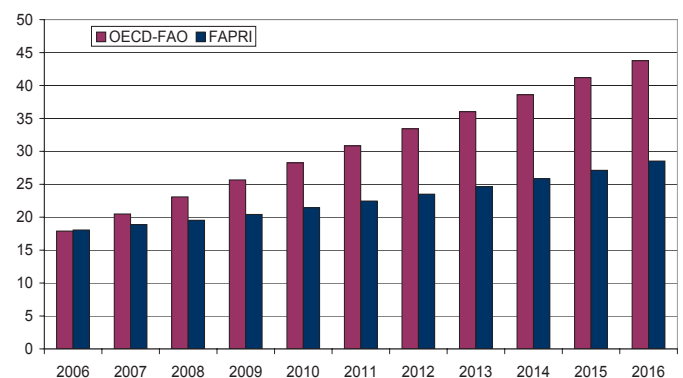
In summary the OECD-FAO 2007 report points out that current strong world prices are partly due to temporary factors such as low stocks and drought related supply shortfalls, but emphasises that increased demand for biofuels may be a structural change which could keep crop prices high during the coming decade. However cereal, oilseeds and sugar prices are not expected to remain at current or recent peak levels. Higher feed costs are also leading to higher livestock product prices over the projection period.

#### Crop prices underpinned by biofuel demand

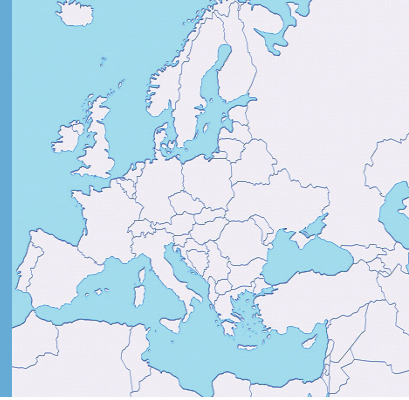
Both FAPRI and OECD-FAO expect **ethanol** production in the biggest producers to at least double over the coming decade.

OECD-FAO foresees that US ethanol production (based on maize) will double between 2006 and 2016, from 23 to 45 billion litres, while FAPRI predicts even faster growth of 160%. For Brazilian ethanol (obtained from sugar cane) OECD-FAO is more bullish than FAPRI, expecting production to reach 44 billion litres by 2016, almost the same as the US, as shown in graph 1. This represents a growth of 145% compared to 2006, well above the 58% increase predicted by FAPRI.

Graph 1: Ethanol Production in Brazil (billion litres)



OECD-FAO is also much more bullish than FAPRI about the potential for expansion of biofuel use in the EU. Total biodiesel and ethanol use is expected to grow fivefold from 6 billion litres in 2006 to almost 30 billion litres by 2016 (though even with this expansion, the EU will still not have reached the 5.75% target set under the Biofuels Directive). This increase is split between ethanol, which grows from 2 to 15 billion litres, thus exceeding biodiesel which expands from 4 to 14 billion litres. As regards the corresponding feedstocks, use of

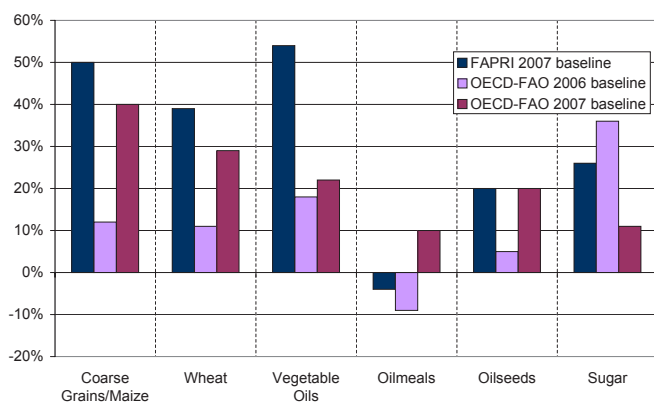


wheat for ethanol is assumed to expand by a factor of twelve, while the increase in use of maize (for ethanol) and of rapeseed (biodiesel) is less impressive. FAPRI meanwhile is predicting a much smaller increase in EU ethanol use, up by over 80% by 2016 compared to 2006. Nevertheless as consumption of biofuels still grows faster than production, FAPRI expects EU's net imports of ethanol to jump from 269 million (mio) litres in 2006 to 925 mio litres by 2016.

OECD-FAO has therefore revised its price projections upwards, though they remain somewhat less bullish than FAPRI for maize, wheat, vegetable oils and sugar.

Graph 2 compares price forecasts of the two institutions, showing the changes between the average for prices over the projection period and the average for the previous decade. Nominal prices are considered. The same approach is followed for livestock products in graphs 4 and 5.

Graph 2: Price projections for crop-products (compared to average of previous decade\*)



\*2006-2015 vs 1996-2005 and 2007-2016 vs 1997-2006

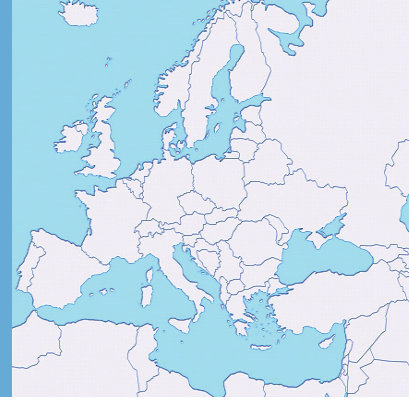
OECD-FAO now expects **maize** prices at \$138/mt by 2016/17 (a 40% increase over the past decade compared to FAPRI's 50% and well above the 12% rise predicted by OECD-FAO last year). The continued growth in US

ethanol production means that both institutions expect fuel to consume around one third of the US maize crop by 2016. They agree on a short term reduction in US maize exports, but their views differ on the medium term. OECD considers that US maize exports by 2016/17 will not be higher than in 2004-06 at around 55 mio mt, while FAPRI estimates that they are likely to increase to 73 mio mt by that time.

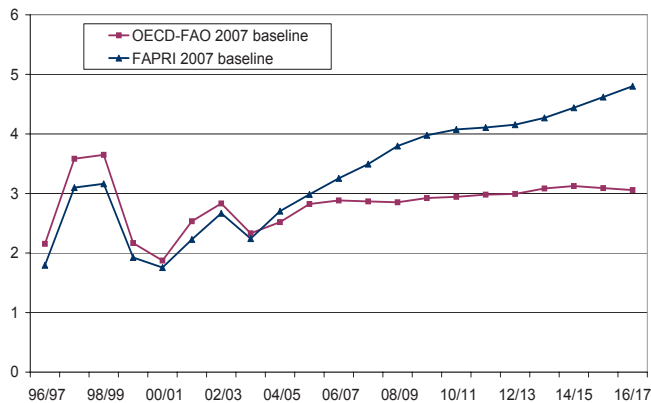
Due to continuous low stocks, **wheat** prices are now expected to be nearly 30% higher on average during the projection period to 2016/17, when compared to the past decade (versus 11% predicted a year ago). Both OECD-FAO and FAPRI foresee that trade will expand faster than production and consumption. This should benefit traditional exporters both in the OECD zone (mainly Australia, EU, US) and outside the zone (Russia, Ukraine and Argentina).

India and China remain the swing factors. Last year China was expected to be an important net importer over the coming decade. But as demand has slowed down, FAPRI thinks it will be roughly self-sufficient, while OECD-FAO sees it as a small net importer by the end of the projection period. Meanwhile both institutions confirm that India has switched from being a small net exporter to a net importer of 3-5 mio mt throughout the projection period.

It is in the **oilseeds complex** that the most striking differences emerge between the two institutions. FAPRI sees a dramatic upward shift in the value of oils compared to meal, a view that is not shared by the OECD-FAO. This means that the expected oil/meal price ratios differ (graph 3). For FAPRI vegetable oils have a value five times that of oilmeals by 2016/17, which would represent a systemic change in the world oilseed complex. OECD-FAO forecasts a more moderate improvement in the value of vegetable oils against oilmeals, which is more in line with the price ratio over the past decade, in the range from 2 to 3.



Graph 3: Vegetable Oil/Oilmeal price ratio



There is some common ground on **oilseeds**, in that OECD-FAO's price projection for oilseeds is now the same as FAPRI's, on average 20% above the past decade. Together with the USDA, they agree that Brazil will overtake the US as the leading oilseed exporter. But they disagree on the timing: for OECD-FAO this will only happen from 2011 onwards. As a result, their forecast of the share of Brazil in world oilseeds exports, with over one third of trade, remains well below the 50% predicted by FAPRI.

Meanwhile OECD-FAO's forecast for 15 mio mt EU net imports (EU being the second world importer after China) is in line with that of FAPRI. Both institutions think that increased oilseeds demand over the coming decade will be met from enhanced production leaving net imports virtually unchanged. This is in stark contrast to the EU's own projection of imports of 35 mio mt in 2013, which assumes that the EU will increase crush capacity, importing seeds rather than vegetable oils.

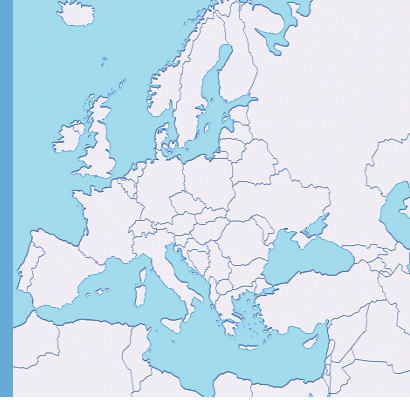
It is demand for **vegetable oils** rather than for oilmeals that will push oilseeds prices up. This reflects the growing food and fuel uses of oils and favours crops with higher oil yield, especially oil palms. Two thirds of all vegetable oil exports are likely to come from Malaysia and Indonesia at the end of the decade. OECD-FAO now predicts that the EU's net trade deficit in vegetable oils

will grow from 6 mio mt in 2006/07 to over 9 mio mt in 2016/17 (1 mio mt higher than FAPRI), despite higher domestic production. They have revised their forecast for growth in world trade up to 2.8 %, which is still weaker than the 4% predicted by FAPRI. Similarly, there are big differences in expectations on prices, with OECD-FAO raising its forecast marginally from an increase of 18% to 22 % over the next decade compared to the previous ten years. This is way below the 50% price jump anticipated by FAPRI.

For **oilmeals**, some changes are expected in Argentina and Brazil, the two biggest exporters. Both OECD-FAO and FAPRI are optimistic about the growth in Argentina's domestic crush capacity, with net exports expected to rise to 34 mio mt from the current level of 27 mio mt. By 2016/17 Argentina would account for half of global soybean meal exports, being the leading world exporter. Meanwhile OECD-FAO is forecasting that Brazil's meal exports will stagnate at the current 13 mio mt until 2016/17 (well below the 18 mio mt predicted by FAPRI) to meet demand from its expanding domestic livestock industry.

There are also differences in expectations concerning the EU. OECD-FAO considers that the EU will continue to be the biggest oilmeal importer until 2016 (when it will be overtaken by China), though its dependence on imports is now expected to fall as domestic meal production increases. FAPRI, on the other hand expects EU meal imports to continue to rise.

For both OECD-FAO and FAPRI, oilmeal prices will be the weakest element of the oilseed complex. Here as well there is a divergence in expectations concerning prices. For FAPRI, oilmeal prices are forecast 4% below their level of the last ten years, reflecting their availability as a by-product of biodiesel. OECD-FAO's outlook is now much more optimistic than last year (when prices were forecast to be down by 9%), with oilmeal prices expected to be up 10% in the coming decade, due to increasing demand for oilmeals as a cheaper substitute for maize in



livestock feed. Growing livestock production is expected to increase oilmeal demand by 2%, with demand outside the OECD projected to grow by 55%, two-thirds of which is in Brazil and China alone.

OECD-FAO has adjusted downwards last year's price projections for **sugar**, taking into account the price drop since 2006/07. Nevertheless, nominal prices over the projection period would still be 10% higher than the average for the previous decade, to be compared with plus 26% for FAPRI. Despite that difference, the latest OECD-FAO outlook foresees stronger growth rates for sugar than FAPRI.

This is largely based on its more optimistic view of Brazil's potential for continued expansion of its sugar cane industry, both for sugar and ethanol (graph 2). Growing demand for ethanol is not expected to halt further growth in the sugar sector. Brazil, already the biggest sugar producer and exporter in the world will get even bigger. Rising production and a slowdown in consumption growth should boost sugar exports from 19 mio mt in 2004-06 to 31 mio mt in 2016 (compared to FAPRI's 22 mio mt). Brazil is stepping into the void left by the EU's expected withdrawal from the export market, following the reform of the EU sugar regime.

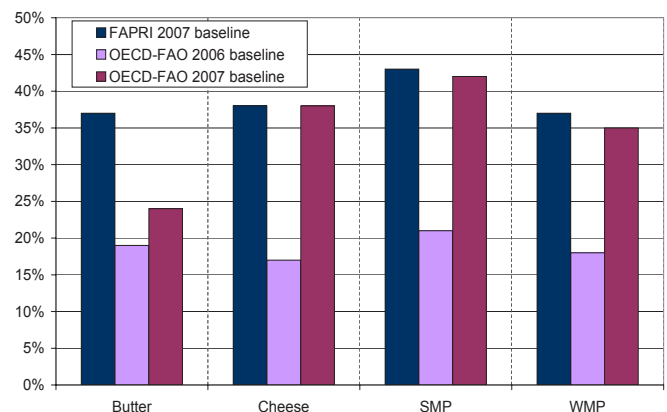
Thailand will also benefit from the growing world market and from the EU reform, with exports by 2016 up by 1.8 mio mt. Net exports of the ACP group are set to decline (minus 0.6 mio mt) as a result of changes in EU preferential import conditions and rising domestic demand. FAPRI and OECD-FAO agree that India will no more be a net importer and would be able to export around 2 mio mt by 2016.

OECD-FAO thinks that the EU is likely to become the world's largest sugar importer by 2016. As its imports are set to decline, Russia will be overtaken by the EU and China. The two institutions have different views on demand growth in China. OECD-FAO has revised its imports projections down somewhat but still expects imports to be 1.5 mio mt higher than FAPRI by 2016.

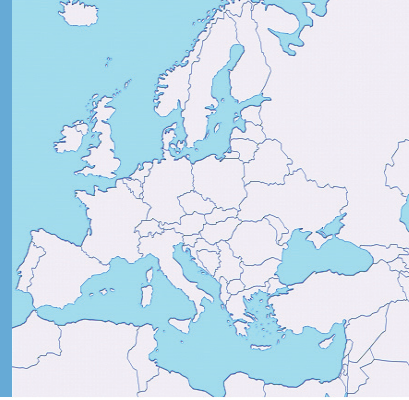
## Dairy – demand growing rapidly in Asia

The latest OECD-FAO projections confirm the increasing importance of developing countries in the growth of the **dairy** sector, especially India and China. Exports are still dominated however by traditional developed countries, Australia, New Zealand and the EU. OECD-FAO's price projections for the coming decade are now in line with those of FAPRI, at around 40% above the average of the last ten years. This is because OECD-FAO expects that high prices of recent years point to underlying structural adjustments in the sector. Firstly higher incomes and dietary changes have increased demand in the developing world, secondly technological progress and innovation have extended the variety and availability of processed dairy products. Finally, in the EU, the cut in support prices and the strict approach on export refunds have resulted in lower exports of butter and skimmed milk powder.

Graph 4: Dairy price projections  
(compared to average of previous decade)



For **butter**, OECD-FAO is now more optimistic about Australia's export potential, anticipating constant rather than declining exports. In contrast it now projects that the EU will lose even more market share than it was predicting a year ago (from 30% in 2006 to 16% by 2016). Meanwhile Ukraine, a small net exporter is expected to gradually increase its export potential.



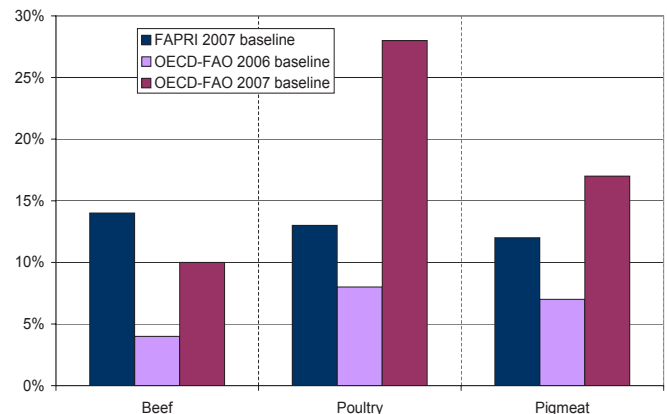
FAPRI is more optimistic about growth in the **cheese** sector than OECD-FAO. Oceania remains the largest exporting region and may even gain market share. By contrast, the EU is projected to reduce its share with almost stagnant exports during the next decade, as a result of growing domestic demand. **The rising star** is Argentina which is forecast to consolidate its position as a major exporter gaining world market share. OECD-FAO even thinks that Argentina will come to Australia in terms of market share with exports projected to triple by 2016 (FAPRI expects exports to double).

Views on prospects for skimmed milk powder (**SMP**) still differ between the two institutions, with OECD-FAO anticipating much weaker growth than FAPRI (though last year OECD-FAO had even projected a shrinking SMP sector). The whole milk powder (**WMP**) sector is estimated to continue to grow strongly, with demand concentrated in developing countries. As for SMP, current prices are well above the level expected for the coming decade. As in the cheese sector, OECD-FAO is very optimistic about Argentina's expansion prospects, projecting it to gain 22% world market share.

### Meats – steady growth predicted in developing countries

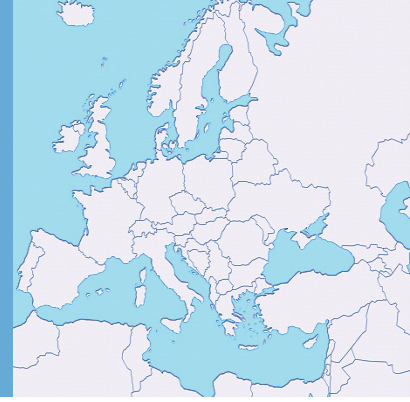
After various disease outbreaks, meat production and consumption are resuming growth. **Global meat** production is now projected to rise by 1.7% per year according to OECD-FAO, to meet growing demand, essentially in developing countries, notably China, India and Brazil. The traditional exporters remain dominant but there are significant changes within that group. Brazil's share of the global meat market (at 28%) will be bigger than that of the other five (i.e. US, Canada, Argentina, Australia and the EU) all together. The EU remains a small net exporter of meat, but this is essentially driven by pigmeat.

Graph 5: Meat price projections (compared to average of previous decade)



In its latest projections for **beef**, OECD-FAO now expects global consumption and production to grow in line with expansion over the past decade (1.5% per annum), whereas last year it was anticipating quicker growth of 1.9%. But trade is forecast to grow faster, with OECD-FAO revising its projections for Brazilian exports up to 3.4 mio mt by 2016 (compared to FAPRI's 2.8 mio mt) and nearly 90% above the 1.8 mio mt exported in 2003-05. Meanwhile the latest OECD-FAO projections confirm that the EU should continue to be a net-importer and are now in line with the EU's own estimate of net imports of 0.7 mio mt by 2013. Prices have also been revised upwards closer to FAPRI's. OECD-FAO now forecasts that beef prices will stay at their current relatively high level, on average 10% over the average of the past decade.

For **pigmeat**, there are fairly minor changes compared to the previous OECD-FAO baseline. However there is one important adjustment, with Brazil's exports revised up from 0.8 mio mt to 1.2 mio mt, above FAPRI's forecast of 1.1 mio mt. OECD-FAO has also lowered its predicted net exports for the EU to 1.2 mio mt, bringing it into line with the EU's own projection. The average price forecast of OECD-FAO for the coming decade has been revised up to 17% above the average of the last ten years.



Although **poultrymeat** is expected to continue to be the fastest growing meat sector, OECD-FAO now foresees a slowdown in growth to 1.9% annually (from last year's forecast of 2.3%). Nevertheless it is projecting prices to be considerably higher at 28% compared to the past decade, reflecting growing demand worldwide as well as the impact of increased feed costs, driven up by sustained demand for biofuels. In contrast to the beef and pigs sector, the anticipated growth in Brazil's poultry meat exports from 2.7 mio mt in 2006, has now been revised down from 4.4 mio mt to 3.8 mio mt in 2016, as domestic consumption increases. As regards the EU, OECD-FAO is now in line with the EU's own projections, as it is predicted to become a net importer (0.3 mio mt by 2016 according to OECD), although FAPRI thinks it will remain a small net exporter.

## Conclusions

In the conclusions of the May 2007 Newsletter on the 2007 outlook for world markets, the following question was raised: "will the high prices last?" Considering the latest OECD-FAO outlook, one could answer "yes, but..."

OECD-FAO now project higher **prices** than they did one year ago (except for sugar), taking into account recent price hikes. But they foresee less strong price increases than FAPRI (except for pigmeat and poultry). Prices are expected to remain high, but for cereals, oilseeds and sugar they should not stay at their current or recent peak levels. For livestock products however, prices at the end of the decade would remain above the recent averages.

A clear distinction is established between **structural** factors and more time-limited or localised problems like weather and disease-related events. OECD highlights trends in demand that are underpinning high prices. Demographic and economic growth in developing countries will go on fostering demand for food and feed. In addition, the rapidly growing demand for biofuels further pushes prices up for the main crop products and has also an impact in the livestock sector.

As usual, there are **uncertainties** for all of these factors, especially macro-economic ones. If economic growth is less strong and income effects are more uneven in developing countries, demand for food and feed will not increase that much. OECD-FAO also made several assumptions on biofuels, especially on oil prices (assumed range of 55 to 60 US\$/barrel).

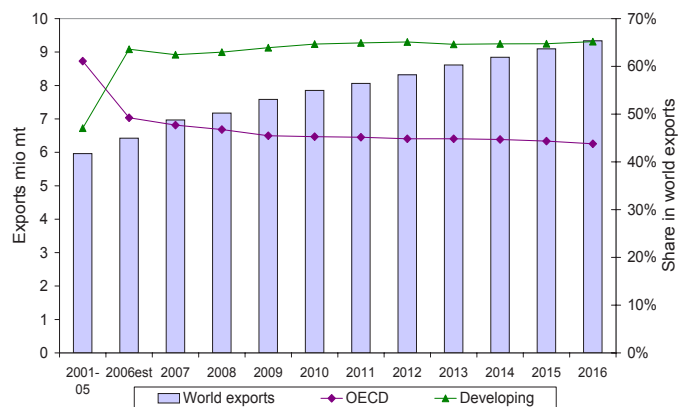
Last, but not least, these projections only take into account changes in agricultural and trade **policies** that have already been agreed. Hence, the outlook integrates the effects of the reforms adopted by the EU in recent years, especially decoupling of support. In addition, OECD-FAO acknowledges that the reforms of the dairy and sugar regimes have a structural downward effect on EU exports. But, OECD-FAO left current US policy parameters unchanged, pending a decision on the new Farm Bill, while underlining that the latter may have significant impact on the projections. No simulation is carried out on a likely outcome in on-going negotiations in the World Trade Organisation, but the publication includes a special analysis on historical trade patterns in trade flows.

Even without a WTO agreement, OECD-FAO projects significant changes in production and trade. Actually there is a **continuous shift** from the OECD zone towards developing countries (graphs 6-9 & table). **Trade is further** increasing, sometimes faster than production, driving prices further up. OECD-FAO confirms shifts in trade patterns, with growing trade for developing countries, both for so-called "South-South" trade and in terms of their exports to developed countries. OECD countries as a whole are expected to see a fall in their share of world production and exports for many commodities, while emerging economies move further ahead on their expansion path. Among the latter, Brazil, Russia, India, China (BRIC countries) as well as Argentina play a growing role on the demand and/or on the supply side. Brazil becomes the undisputed world's largest supplier of several strategic agricultural products: sugar, meat, oilseeds, ethanol... Argentina consolidates its position

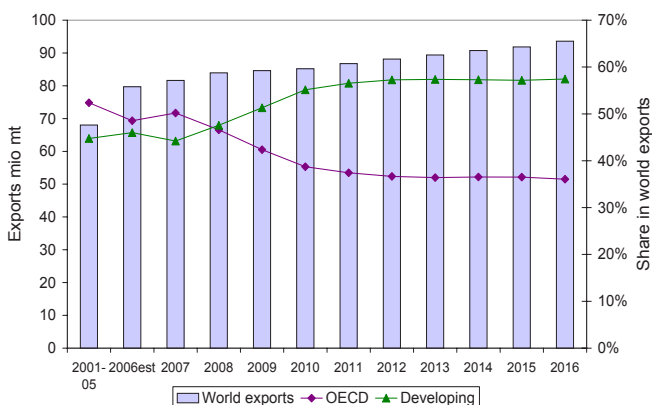
for grains but also for selected processed products, such as oilmeals and dairy products. China, India and Russia are key players for a range of food products, especially cereals and sugar. There are specific uncertainties for emerging economies, in particular as regards economic growth and its distribution, as well as on inflation and exchange rates. OECD-FAO considers that increasing prices for food products are a growing concern in emerging economies, and that the competition between food and non food uses plays a role in this respect.

*OECD zone losing export shares to the benefit of developing countries:*

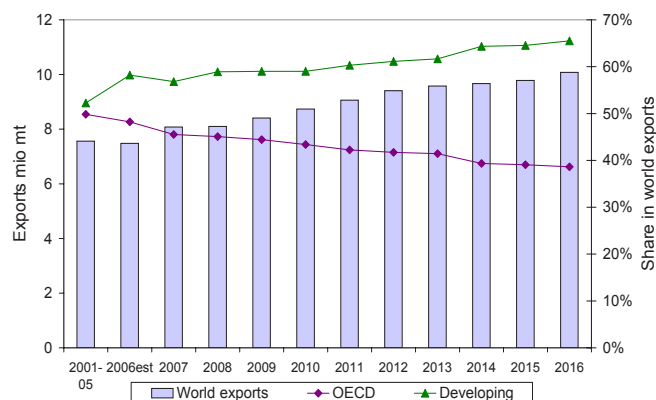
*Graph 8: Beef*



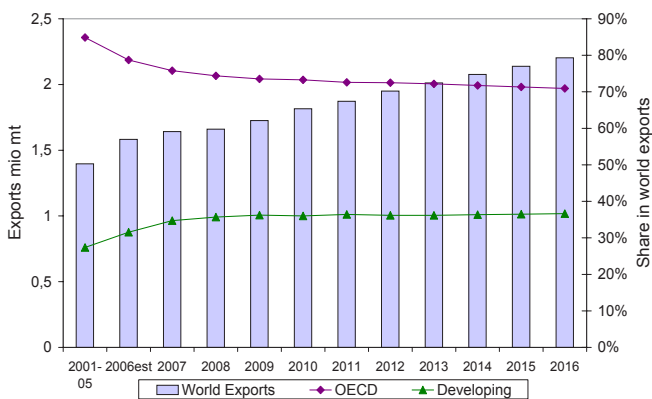
*Graph 6: Oilseeds*



*Graph 9: Poultry*



*Graph 7: Whole Milk Powder*



*Share of OECD countries in World Production*

	2006	2016
<b>Wheat</b>	39.6	43.3
<b>Oilseeds</b>	42.1	37.7
<b>Sugar</b>	24.0	21.0
<b>Milk</b>	46.6	41.6
<b>Beef</b>	41.1	36.3
<b>Pigmeat</b>	34.9	30.2
<b>Poultry</b>	45.5	41.8

Source: OECD & FAO Secretariats