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Short-term Outlook for EU agricultural markets in 2017 and 2018

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This publication presents the short-term outlook for arable crops, meat and dairy markets in the EU for 2017-2018. The report is based on the analysis of market experts in the European Commission's Directorate-General for Agriculture and Rural Development. It uses information and data available up to 15 February 2017. The next issue will be published in summer 2017.

Directorate-General for Agriculture and Rural Development – Short-term Outlook – N°17
http://ec.europa.eu/agriculture/markets-and-prices/index_en.htm

HIGHLIGHTS

- The reduction in the EU milk supply at the end of 2016 contributed to a significant recovery in EU milk prices.
- Low cereal prices were driven by abundant world supply and stocks.
- EU meat production reached a record level in 2016 but is showing signs of downward adjustments.

EU cereal production declined by 5.5% in 2016/2017, following smaller-than-average soft wheat and maize harvests. This should result in a slowdown in EU cereal exports, in the context of abundant world supply and low prices. EU rapeseed harvest was also below average but, given the large world oilseed supply, this only resulted in a small price surge. EU sugar prices are catching up with high world prices.

Low 2016/2017 olive oil production (13% below average) together with low stock levels resulted in high prices and reduced availability of oil.

The seasonal decline in milk production was stronger than expected, leading to higher milk prices. Good exports and domestic demand led to record high prices for butter and a significant price recovery for cheese. By contrast, the skimmed milk powder (SMP) price is expected to remain around current levels given the high stock levels and that the seasonal peak of milk collection is still to come.

Sustained pigmeat exports to China facilitated a recovery in the EU price. By contrast, ample poultry supplies pushed EU prices down. Continued good beef exports held EU price decreases in check despite the high slaughter rate of dairy cows. The increase in sheep meat production is slowing down, on the back of lower prices.

This report has been prepared for the EU-28 under constant policy assumptions, with the Russian import ban assumed to be in place until the end of 2017.

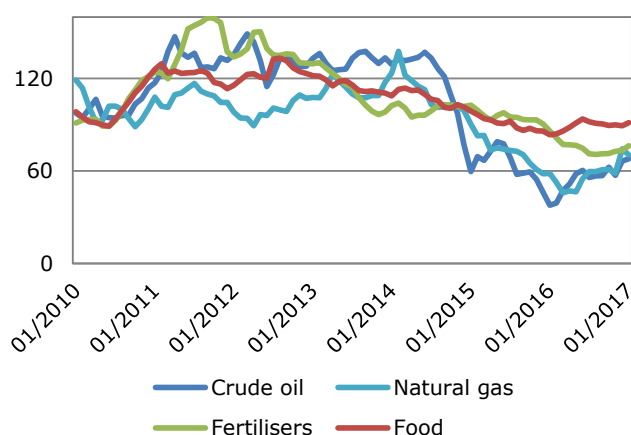
1. MACROECONOMIC OUTLOOK¹

Commodity prices recovered in 2016

The upward trend for energy prices continued in the second half of 2016, with strong trends for most fuels particularly for Brent crude oil with prices rising from 31 USD per barrel in January 2016 to 55 USD in January 2017. The price jump in late 2016 followed an agreement between OPEC² countries in the autumn to limit output and a later agreement between most oil producing countries to limit the supply of crude oil by a further 1.8 million barrels per day in the first quarter of 2017. Investments in the sector, in particular in some non-OPEC countries, have been low. Nonetheless global stocks have remained relatively high. The price of natural gas has picked up due to reduced production in Asia, higher demand in Europe for both electricity and heating, and colder than normal weather, particularly in the United States (US). The strong demand is expected to continue and a further increase in the gas price is expected.

The downward trend in the price of fertilisers since 2012, linked to the downward price trend in natural gas over the same period, turned a corner in 2016. The average price increase of fertilisers in the second half of 2016 was modest despite the higher price of natural gas. The price increase was limited to urea, while phosphate and potash prices remained rather stable. Key factors behind the urea price increase were the strong demand from China and Brazil and a drop in Chinese exports. Due to weak global demand, low prices for agricultural commodities and high stocks, the price projections for 2017 are relatively stable.

Graph 1 Main non-agricultural commodity price indices (2010 = 100)



Source: DG Agriculture and Rural Development, based on the World Bank

¹ Based on European Economic Forecasts (23 February), Markit (cut-off date 15 February 2017) and the World Bank (Commodity Markets Outlook and Global Economic Outlook)

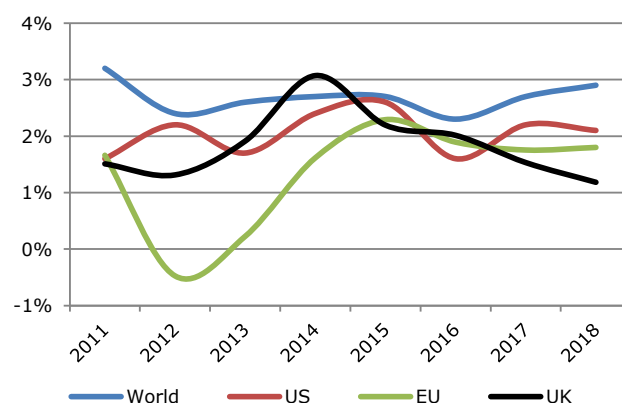
² Organization of the Petroleum Exporting Countries.

Low growth in 2016; uncertainty in 2017

As a result of the slowdown in the world economy in 2016, world economic growth was 2.3%, the lowest rate since the economic crisis. The advanced economies suffered from weak growth in 2016, with low inflation and weak productivity growth. Growth in the euro area slowed to 1.7% in 2016 (compared to 2% in 2015) and major forecasting organisations anticipate that it will suffer from uncertainties in 2017 and 2018: elections in several Member States (i.e. the Netherlands, France and Germany), the continued need for structural reforms and re-financing of public debts (Greece), a rebound in oil prices, coupled with appreciation of the US dollar, and uncertainty surrounding the consequences of the UK vote to exit the EU. This will continue to put pressure on growth rates in the EU and the euro area, with the euro area growth expected to slow down to 1.6% in 2017. The projection for growth in the UK is also affected by uncertainties surrounding Brexit, with a predicted slowdown to 1.5% in 2017 and 1.2% in 2018. However, the UK saw better-than-expected export and GDP growth performance in the second half of 2016 following the referendum.

In 2017, the downward trend in growth in the US in 2015-2016 is likely to come to an end. However, uncertainties surrounding US growth development are numerous.

Graph 2 Annual economic growth (%)



Source: DG Agriculture and Rural Development, based on the World Bank (world, US) and AMECO (EU, UK)

Economic growth prospects for south and east Asia, including India, remain strong, while growth in China continues to slow, with an expected annual growth rate of 6% in the medium-term (2020). The increase in commodity prices gave some relief to commodity-dependant economies, and helped to ease the recessions in Russia and Brazil.

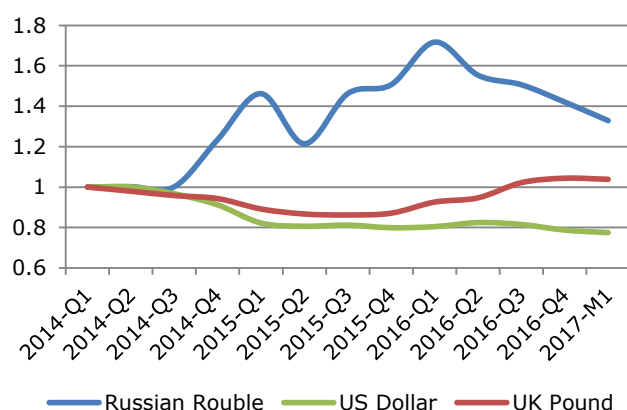
Thanks to the recovery in emerging and developing economies, prospects are better but still modest for 2017 (+2.7%). The positive trend is expected to

continue with slightly stronger projections for 2018 of around 2.9%

Stronger US dollar in the coming months

Since the US presidential elections, the US dollar has oscillated between 1.04 and 1.07 USD per EUR. This has meant further depreciation of the euro by 4 to 5 percentage points in the second half of 2016, helping EU exports but also boosting energy and commodity prices in euros. The expected fiscal policy of the new US government, accompanied by a tightening of US monetary policy, should further boost the US dollar in the coming months. Other currencies have appreciated substantially in relation to the euro, in particular the Russian rouble (which also appreciated in relation to the US dollar) thanks to better crude oil prices and the prospect of better relations with the US, or the Brazilian real. The British pound has suffered further depreciation in relation to the euro — by around 10 percentage points — since the vote on Brexit in June 2016.

Graph 3 Changes in parity with the euro per quarter (Index 1 = 2014-Q1)



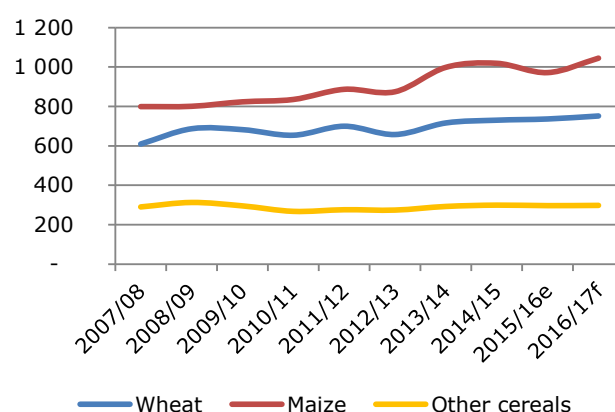
Source: DG Agriculture and Rural Development, based on IMF

2. ARABLE CROPS

Increase in 2016/2017 global cereal harvest

The overall good cereal harvest in the northern hemisphere in summer 2016 (except for the EU) has now also been complemented by an excellent cereal harvest in the southern hemisphere. Australia has seen record crops of wheat and barley, and maize supply expectations in South America are continually improving. Therefore, the International Grain Council (IGC) expects world cereal production (excluding rice) for 2016/2017 to exceed 2 100 million t, a new all-time record. At the same time, world demand is peaking.

Graph 4 World cereal production (million t)

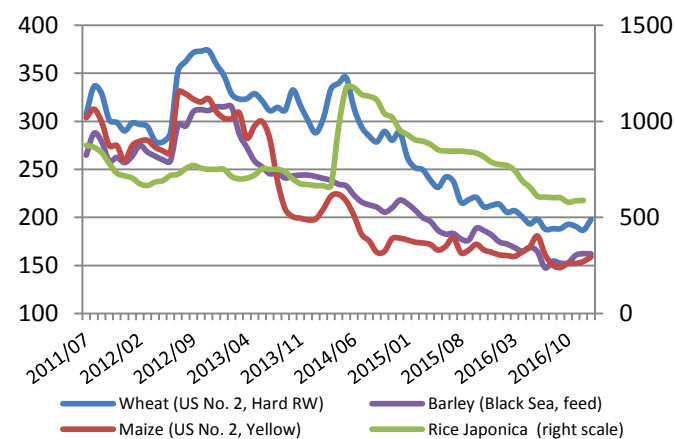


Source: DG Agriculture and Rural Development, based on IGC

World wheat production is projected to reach 752 million t according to the IGC. Recent upward revisions of harvests in Australia and Argentina partly offset the decrease in the projections for Ukraine and Kazakhstan, although harvests in these countries remain good.

Maize production is now expected to reach 1 045 million t globally, with better production projections in Latin America, particularly Brazil and Mexico. Other areas in the world also saw record high yields, e.g. Ukraine, and world consumption is also therefore higher than ever.

Graph 5 World cereal prices (USD/t)



Source: DG Agriculture and Rural Development, based on FAO-GIEWS

The high level of supply and availability of cereals continues to drive world prices down. On an annual basis, world cereal prices expressed in US dollars are 30-35% below the last five-year average and the world rice price is 23% below this average. In recent weeks, world cereal prices have strengthened slightly. This is partly due to concerns about climatic conditions in the coming season for wheat, an appreciation of the Russian rouble and projections of declining maize areas in the US in favour of soybeans. However, no significant price increases are expected in the context of abundant supplies.

Lower EU cereal harvest in 2016/2017

By contrast, the 2016/2017 EU harvest is confirmed to be 2.2% below the last five-year average³, and 5% below last year's harvest, with an overall usable production estimated at 294.5 million t.

As indicated in the previous edition of this report, late spring and early summer conditions in north-western Europe, particularly France, Belgium and south Germany, severely affected the soft wheat production in these regions. The summer was characterised by intense heatwaves in south-eastern Europe (Romania and Bulgaria), France, Spain and Italy, negatively impacting the yields of maize and sunflower. However, some regions benefitted from very favourable conditions for one or other crop, leading to, for example, a bumper maize crop in Hungary, and good wheat and barley harvests in Spain. This means that the EU harvest is only slightly below average.

The EU usable production of soft wheat was 134.3 million t, 3% below the last five-year average. The situation, however, varies between some Member States where the harvest is 20-28% below average (France, Belgium, the Netherlands and Denmark) and others where the harvest is 10-20% above average, in central-eastern, south-eastern and south-western Europe, and the Baltic states where it is even higher (25-27% above average in Latvia and Lithuania).

The final EU durum wheat harvest has been revised upwards since the last edition of this report to 9.0 million t, 10% above the last five-year average, thanks to excellent yields in Italy.

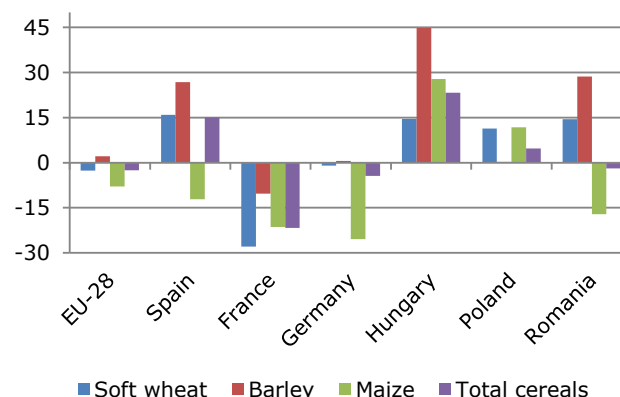
The total EU barley harvest stands at 59.7 million t, 2.1% above average, due to extremely good harvests in Spain, Hungary and Romania. The French harvest, however, is 9% below the last five-year average.

The EU maize harvest is below average for the second year in a row, reaching 60.4 million t, 8% below the last five-year average, with low levels in north-western, south-eastern and south-western Europe due to heat and/or drought in these regions. Production was 17-25% below the last five-year average in major producing countries such as Romania, France, Spain, Italy and Germany. This was partly compensated for by an excellent harvest in central Europe (Hungary and Poland in particular).

As regards other cereals, rye is characterised by low levels of production (7.3 million t, 12% below the last five-year average), particularly in Germany and Poland. By contrast, oats production is 3% above the last five-year average (8.0 million t), thanks to a good harvest in Spain. The production of triticale increased

by 2%, with bumper crops in Spain, Poland and Romania.

Graph 6 Change in cereal production, 2016/2017 relative to the last five-year average (%)

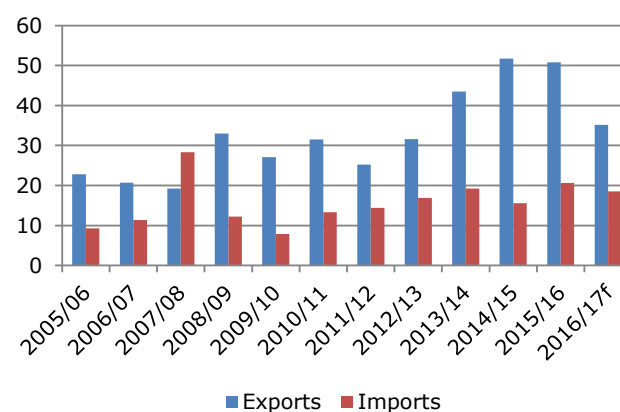


Source: DG Agriculture and Rural Development

Lower 2016/2017 EU harvest results in lower exports and stocks

2016/2017 projections for total EU cereal exports stand at 35.2 million t, which is below the three previous marketing years. This is particularly the case for wheat, with total EU exports projected to be 24 million t. Shipments from France and the Baltic states are expected to decrease but for different reasons: lack of supply in France and poor quality in the Baltic states, implying increased intra-EU exports of feed wheat.

Graph 7 EU cereal trade (million t)



Source: DG Agriculture and Rural Development

2016/2017 EU exports of barley are projected to halve compared to the previous marketing year. The demand from China which led to a surge in exports in 2015/2016 is now minimal, while the other large importer (Saudi Arabia) has lowered its demand.

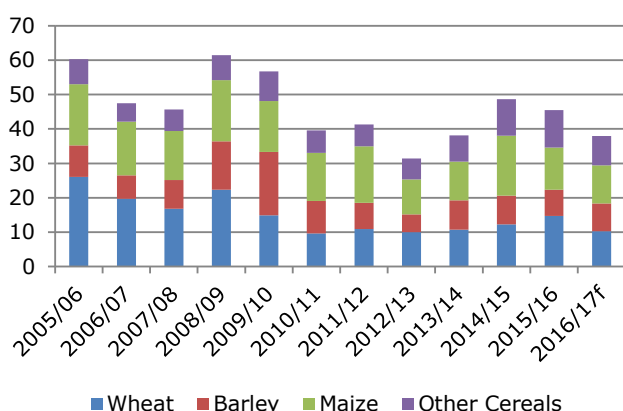
EU cereal imports are likely to decrease slightly to 18.5 million t compared to previous years. Soft wheat imports are declining and the feed wheat demand,

³ The five-year average is an Olympic average in this text (average of the last five years after removing the minimum and maximum values).

met by Ukraine last year, will be covered by the Baltic states. Despite the lower EU harvest, maize imports should remain stable because Hungary can supply the EU market and world prices are increasing slightly.

62% of the total use of cereals in the EU relates to feed (174.8 million t). Feed use in the EU in 2016/2017 is characterised by the attractiveness of the price and availability of barley (and to a lesser extent maize) compared to wheat. Feed use of wheat is therefore expected to decrease by 3.4% compared to the previous marketing year. There is, however, a sharp increase in barley feed use to 40.6 million t, thanks to a smaller decrease in availability and reduced export demand. Maize feed use is also decreasing slightly because of lack of availability, although prices are low. Biofuels uses are increasing slightly, particularly for maize which is progressively replacing cereals such as wheat as feedstock for ethanol production.

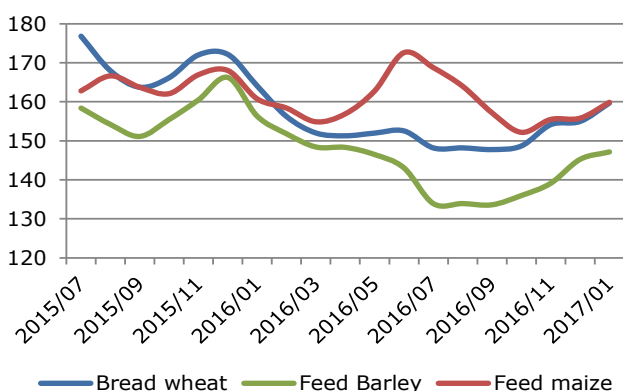
Graph 8 EU total cereals stocks at the end of marketing year (million t)



Source: DG Agriculture and Rural Development

This situation should result in a tightening of EU cereals stocks at the end of the 2016/2017 marketing year. These stocks, which are below 40 million t, are approaching 2010 and 2013 levels. EU wheat and maize stocks, in particular, are at their lower limits.

Graph 9 EU cereals domestic prices (EUR/t)



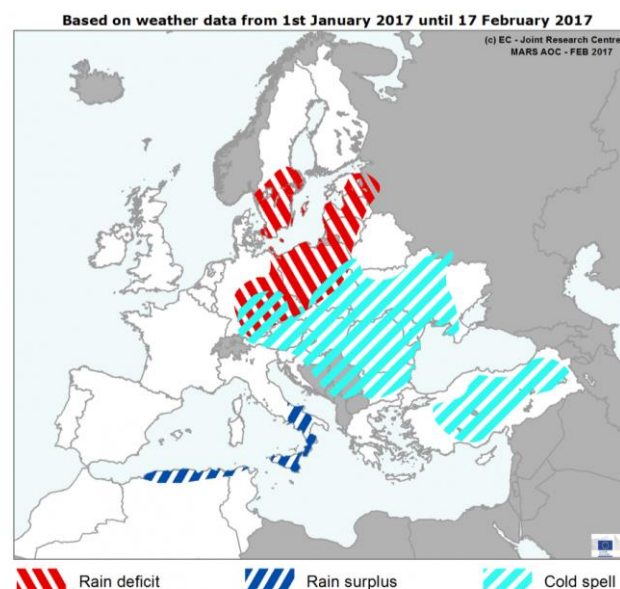
Source: DG Agriculture and Rural Development

In terms of EU domestic prices, the previous marketing year and the first part of the current year have been characterised by low and stable levels, with both the shortage of maize and the reduction in barley exports pulling prices in opposite directions. However, the second part of the current marketing year shows a slight tendency towards price increases (consistent with both expected low stock levels and the increasing international prices, including of crude oil).

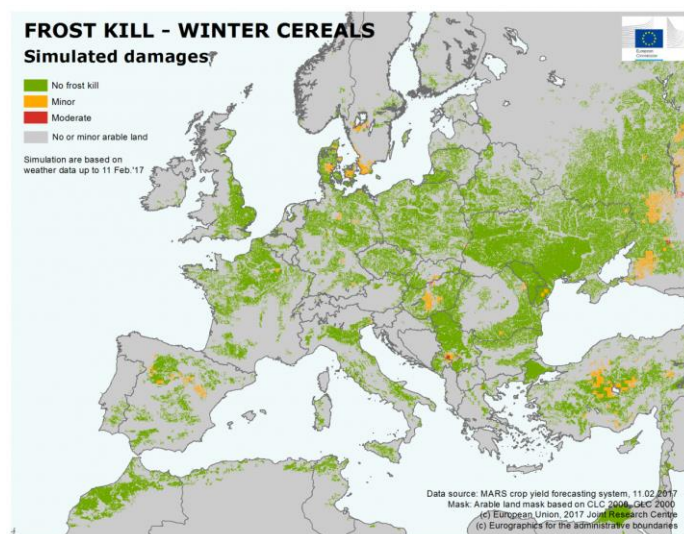
Good prospects so far for 2017/2018

Since winter cereals were sown, the climatic conditions have been characterised by the absence so far of major problems in the EU and neighbouring countries. There are some minor areas of concern, in particular a shortage of rain in central Europe, Scandinavia and the Baltic states. Cold temperatures have also been registered in central, south-eastern Europe and Ukraine, but do not seem to have generated significant frost-kill damage, which has occurred in certain areas of Spain, Scandinavia, Germany, Hungary, Romania and southern Russia. The situation may, for other reasons, also be delicate in central and north-eastern Ukraine, where the persistence of thick snow cover, sometimes with ice crust, can generate respiration problems and snow mould issues for the underlying crops. In addition, the hardening of cereals is only partial in central Europe and minimal in western Europe, which implies that plants are still vulnerable to potential frost damage in these regions in the event of severe cold waves below -10 to -12°C.

Map 1 Areas of concern for crops in January-February



Source: Mars-Bulletin Crop Monitoring in Europe 25(2)
<http://mars.jrc.ec.europa.eu/mars/Bulletins-Publications>

Map 2 Limited frost kill damage on arable crops

Source: Mars-Bulletin Crop Monitoring in Europe 25(2)
<http://mars.jrc.ec.europa.eu/mars/Bulletins-Publications>

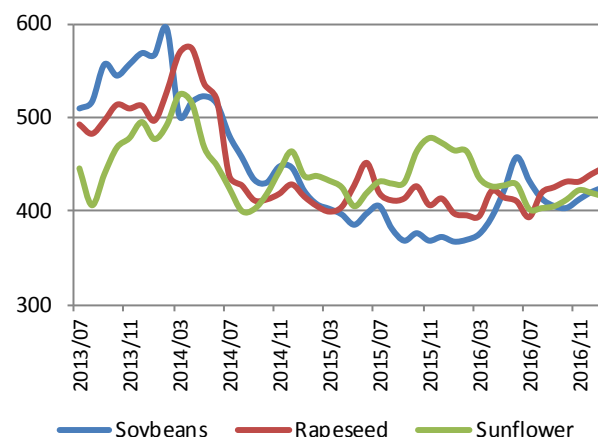
In these favourable conditions, areas sown with cereals (excluding rice) are estimated to reach a total of 56.9 million hectares in 2017/2018 in the EU, 0.5% above last year's total area, but 1% below the last five-year average. The areas of triticale, rye and soft wheat are estimated to be below the last five-year average, while durum wheat and barley will be above this level.

Given these assumptions for planted areas and, in the absence of major climatic disruption, i.e. with yields following historical trends, total EU cereal production could reach 313 million t in 2017/2018. This is 6% higher than last year and 3% above the last five-year average. This outlook will serve to keep prices at their current low levels.

High global oilseed supply in 2016/2017

As in the case of cereals, global oilseed availability and demand are at a record high level. Soybean plant development in Brazil is good and should result in a larger-than-ever supply. Even if it is revised downwards slightly during the marketing year, the US saw a bumper harvest. However, heavy rains in the centre of the country affected the harvested areas in Argentina causing some concern. These climatic conditions also impacted the Argentinian sunflower harvest, which also suffers from hydric deficit in the regions south of Buenos Aires. Nevertheless, there is an abundant supply of sunflower globally. Rapeseed supply, on the contrary, is tighter than in 2015/2016, in particular due to the lower EU and Ukraine harvests, which were not fully compensated by a good Canadian harvest and an excellent Australian one. Palm oil production is expected to recover from the recent production deficit, although perhaps not as fast as initially envisaged.

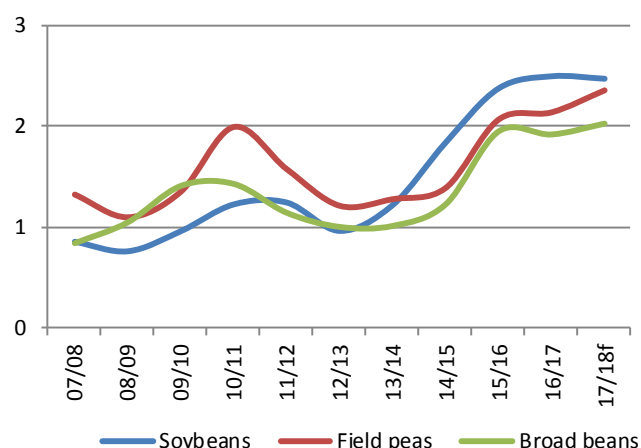
In view of these conditions, world prices for soybeans and sunflower remain at low and stable levels while rapeseed prices are increasing, driven by low EU stock levels and rising import demand. EU rapeseed prices have been increasing for the last 6 months. The expected decrease in the palm oil price and the abundance of other oilseeds should however prevent rapeseed prices surging.

Graph 10 Monthly world oilseeds price (USD/t)

Source: DG Agriculture and Rural Development, based on FAO-GIEWS

Decreased EU oilseed production in 2016/2017, but confirmed high production of protein crops

The EU 2016/2017 oilseeds harvest of 31.1 million t is 3.3% lower than last year's. This, however, is still higher than the last five-year average by 0.4%, with the increase in soybeans offsetting the decrease in rapeseed and sunflower.

Graph 11 EU production of N-fixing crops (million t)

Source: DG Agriculture and Rural Development

Rapeseed production closes at 20 million t (3% below the last five-year average), with production in western Europe, particularly the UK, France and Germany being 11-30% lower, due to poor climatic conditions and higher pest pressure than usual in spring. By

contrast, harvests were good to very good in central and eastern Europe (Romania, the Czech Republic and Hungary).

Even if resistant to water stress, sunflower seed production has been affected by the hot and dry summer conditions both in both France and Spain (where production is 20-25% below the last five-year average) and in south-eastern Europe, where the production level is around the last five-year average (-1% in Romania, +6% in Bulgaria). EU production, at 8.5 million t, will only be 1% below the last five-year average as the Hungarian harvest is at record levels (25% above the average of the last five years).

Soybean production in Europe is expected to be 2.5 million t, 5% above last year's harvest and more than 2 million t for the second year in a row. Together with protein crops, soybean benefitted from both the voluntary coupled support scheme in numerous Member States and greening measures (implemented as nitrogen fixing crops in Ecological Focus Areas).

The EU production of field peas and broad beans, 2.1 and 1.9 million t respectively, is well above the last five-year average by 52% and 70% respectively. Field pea production is particularly important and above historical levels in Germany, Spain, Latvia and the UK, and broad bean production is increasing in Germany,

Latvia, Poland and the UK. It can be noted however that production of field peas and broad beans declined strongly in France: the French field pea production is 17% below the last five-year average and French broad bean production 28% below, a trend that is counter to that for soybeans.

Rapeseed production recovering in 2017/2018

First estimates of winter rapeseed plantings, together with forecasts for spring rape areas, could lead to a significant recovery in total rapeseed areas sown – 6.6 million hectares (2% above last year areas). The recent increase in EU rapeseed prices may have contributed to the sowing decisions. Areas are expected to increase, in particular throughout eastern Europe from the Baltic states, to central Europe (the Czech Republic, Slovakia and Hungary) and south-eastern Europe, while there will be stagnation in Germany and Poland and a significant decrease by 4-5% in France and the UK. If yields follow their historical trends, these areas should allow for the production of around 22 million t of rapeseed in the EU in 2017/2018, 6% above the last five-year average. However, some winter damage is expected to occur, particularly in Hungary and Bulgaria where January cold waves occurred in the absence of snow cover and might have damaged the crops. It is too early still to assess the real damage.

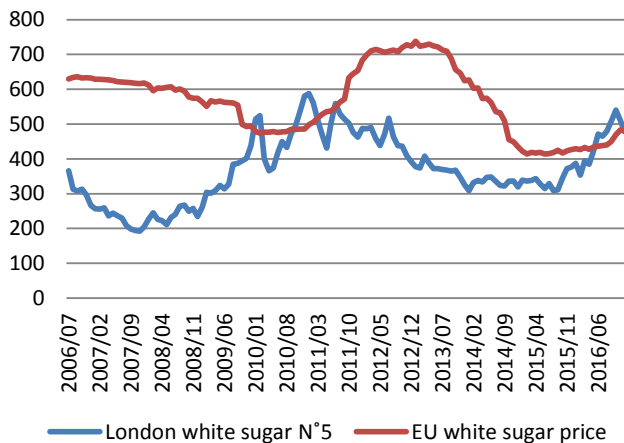


EU sugar prices catch up with world prices

Since the end of 2015, world sugar prices have increased strongly, and by mid-2016 raw and white sugar prices were back to the high levels of 2010 and 2011. Although both prices lost some ground in the final part of 2016, they regained most of it in the beginning of 2017. In the first half of February, the world white sugar price hovered around 510 EUR/t and raw sugar around 425 EUR/t. Indeed, the underlying market fundamentals stay strong as the world production deficit for the 2016/2017 season is now estimated at 6.2 million t following the deficit of -4.8 million t in 2015/2016 (ISO world sugar balance).

While the world outlook is for a more balanced market in 2017/2018, it does not necessarily mean prices will drop to the low 2015 levels. The reason is twofold. First, the world stock-to-use ratio is at its lowest level since 2009/2010, supporting higher prices in the short term. Secondly, due to the previous low price environment, the investment in the sector has decreased. As a result, consumption is expected to grow faster than production capacity over the coming years which should support sugar prices. Hence, 2016 could be the year where sugar prices moved to higher levels after several years of low prices. There is nevertheless downside price risk coming from Brazil in case the demand for sugar cane for ethanol would be disrupted.

Graph 12 World and EU white sugar prices (EUR/t)



Source: DG Agriculture and Rural Development, based on Member States' notifications and the London International Financial Futures and Options Exchange

So far, EU monitored sugar prices were less bullish despite the fact that the unusual low EU production in 2015/2016 led to low availabilities on the EU market on top of the world production deficit. The nature of the monitored price, ex-factory and often under longer term contracts explains the lag. Indeed, EU sugar spot prices have been reported to have increased significantly since 2015/2016. In the first quarter of the current marketing year (October-December 2016), the EU white sugar price started catching up reaching 480 EUR/t in December, 12%

above last year. It can be expected that the EU price will further converge with the world white sugar price over the coming months.

Tight EU sugar market balance in 2016/2017

The EU white sugar production has now been confirmed at 16.7 million t for 2016/2017, up 12% on the low harvest in 2015/2016 but just below the five-year average. Sugar beet areas increased by 6% and the sugar content also increased compared to 2015/2016. Despite this production increase, the balance for 2016/2017 remains tight. Starting stocks are low following the low 2015/2016 production of 1.9 million t. Assuming stable EU domestic uses, the main determinant of the final stock is the import volume. So far EU imports lag behind last years. The relation between the high world market price and the EU world market price has decreased the attractiveness of the EU sugar market for exports. This is both the case for duty free imports from EBA/ACP countries and the CXL quota at reduced duty⁴. For the first time in the current campaign Brazil applied for the use of their tranche in February. Given the expectation that EU sugar prices should increase further and the anticipated low ending stock, the appetite for exports to the EU could catch up over the campaign. Therefore, for the time being we assume imports just below 3 million t, similar to last year but significantly below seasons with similar EU production levels such as 2012/2013 and 2013/2014. Under this assumption the EU end stocks for 2016/2017 would be around 1 million t (including out-of-quota).

A first forecast for the 2017/2018 marketing year, the first year post-quota, will be provided only in the summer edition, when information on the area sown, and the weather in the first part of the growth cycle will be available, which will allow for a better forecast. However there are already clear indications of a substantial increase in production in the main producing Members States (e.g. +20% sowing has been announced for France in relation to last year), confirming the trends described in the DG AGRI agricultural outlook for the medium-term.

⁴ Least developed countries have duty-free access under the Everything but Arms (EBA) agreement, as do the African, Caribbean and Pacific group of states (ACP). The CXL quota, reserved for a limited number of preferential suppliers, attracts a duty of 98 EUR/t.

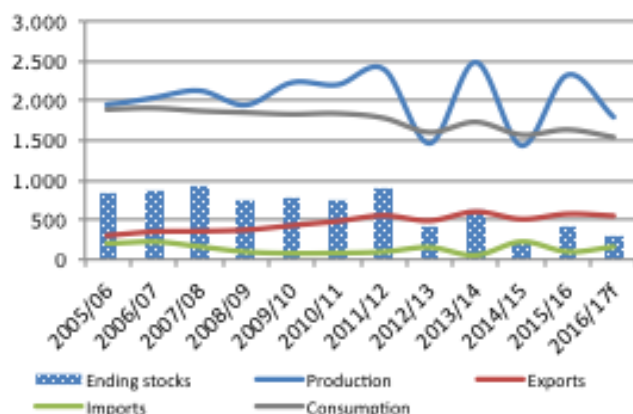
3. OLIVE OIL

Low 2016/2017 production...

The Short-term Outlook report includes, for the first time, an analysis of market developments and the short-term outlook for olive oil and apples. Future issues of this report will extend the coverage to other products such as wine, and fruit and vegetables.

The EU production of olive oil, estimated at 1.79 million t in 2016/2017⁵, is likely to be 23% lower than in the previous marketing year (13% below the last five-year average). The decrease is particularly noticeable in Italy and Greece (with a production level 30 to 40% below the last five-year average), while the Spanish and Portuguese harvests could reach the level of the last five-year average level. Unfavourable climatic conditions have impacted production in all main producing areas. Summer humidity favoured the development of the olive fly in Italy, where cold and windy conditions also impacted the fruit setting. The olive fly development also affected flowering in Greece, and strong summer heat waves lowered production in Spain, Portugal and Greece. At the time of finalising this report, the oil production season was not finalised and downward adjustments of the production estimate are still possible. This decrease coincides with lower production levels in several third countries too. Tunisia in particular has been affected by a severe drought. Only Turkey is expected to see its production increasing in 2016/2017.

Graph 13 EU olive oil supply balance sheet (1000 t)



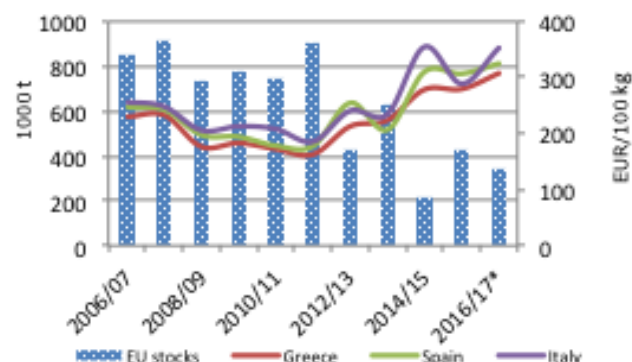
Source: DG Agriculture and Rural Development based on data from EUROSTAT, the COI and Member State communications

...resulting in sustained producer prices...

The decline in 2016/2017 production combined with overall low stocks has supported prices at record high levels since 2005 (EU average 332 EUR/100 kg for virgin olive oil over the first 4 months of 2016/2017). In the first part of 2016/2017 prices are respectively 6% and 22% above last year in Spain and Italy. Prices

are around 30% above the last five-year average in the EU (and 38% above it in the case of Italy). It is expected that prices will stay at these levels or even rise further, in view of the lower harvest, steady demand and the weak supply in third countries, as well as insufficient rain so far for the next production cycle in Spain.

Graph 14 Producer price of virgin olive oil in the main producing Member States and EU ending stocks levels

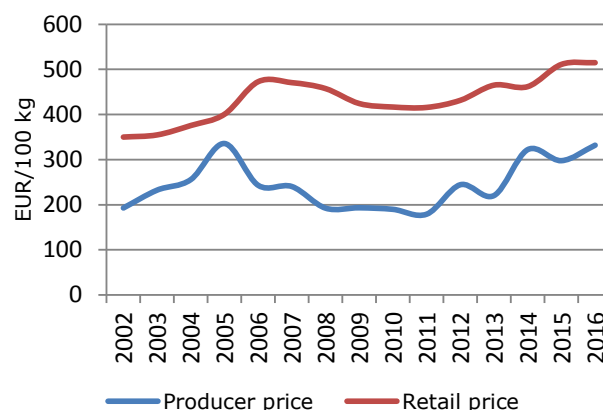


* Price from October 2016 to January 2017
Source: DG Agriculture and Rural Development

...not hampering intra-EU and extra-EU export growth so far

In the first part of the marketing year, intra-EU and extra-EU import demand remained at the level of the last five-year average, although retail prices have followed a similar increasing trend to producer prices over recent years. Retail sales as a proportion of the total consumption of olive oil have kept on increasing — from 49% in 2002-2004 to 61% in 2014-2016.

Graph 15 EU-28 producer and retail prices of olive oil



Note: Producer price: marketing year; Retail price: calendar year
Source: DG Agriculture and Rural Development and Euromonitor

Despite lower availability and higher prices, EU exports were 3% above the last five-year average in the last quarter of 2016. Demand from third countries remains high (e.g. from China and Japan). Imports also increased by 22% compared to the last five-year average; the quantities however are modest.

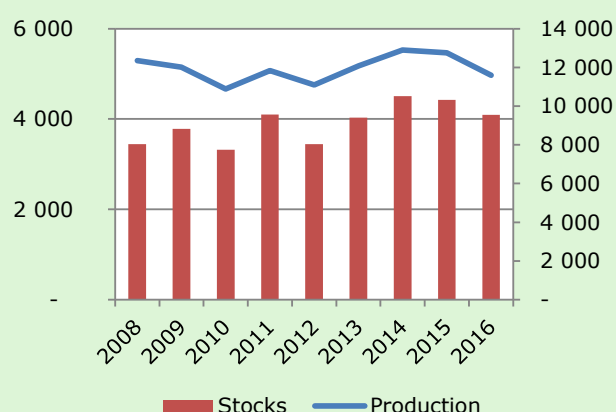
⁵ The olive marketing year runs from 1 October to 30 September.

Apples: the short supply in 2016/2017⁶ helps to rebalance the market

Apples are one of the products that have been most seriously affected by the Russian embargo in the past two years. This country was a major market for EU apples, in particular for Poland. Traditionally around 50% of Polish exports were destined for Russia. As a result of the embargo, EU exports to Russia dropped dramatically from 2014 onwards while production of this permanent crop remained high, and EU producer prices deteriorated significantly, especially in Poland. The accumulation of high volumes of stocks put negative pressure on the EU market, despite increasing exports.

EU production for the current season is estimated at 11.6 million t, 9% below last year. The central-eastern regions of the EU were hit by a late frost and cold spell in April 2016. Hail storms in September further damaged the harvest, in particular in Poland, affecting around 15% of its production. However, the 2016/2017 apple harvest is the 4th largest over the last decade.

Graph 16 EU-28 apple production and stocks at 31 December, 1000 t



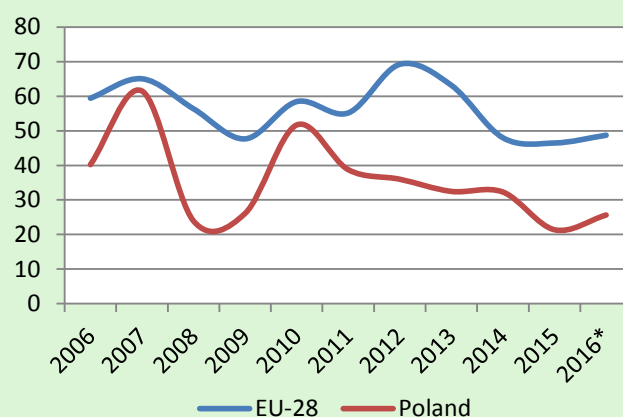
Source: DG Agriculture and Rural Development based Eurostat and World Apple and Pear Association (WAPA)

The reduction in EU production helped to improve the market situation with respect to the previous season. Prices recovered in the second half of 2016 and currently stand around average season levels.

Concerning trade, there is a gradual opening of new destinations for EU apples, in particular in Asian (China, India and Vietnam) and American countries (US and Canada). Despite the strong dependency on the now lost Russian market, the diversification of trade partners has helped to keep overall EU exports in 2014 and 2015 on an upward

trend. Exports to North African countries have increased substantially, though these are subject to some political uncertainty. With lower production in 2016/2017, exports are expected to decrease.

Graph 17 EU-28 fresh apples annual producer price (EUR/100 kg)



* August 2016 to January 2017

Source: DG Agriculture and Rural Development

Graph 18 EU trade of fresh apples (1000 t)



Source: DG Agriculture and Rural Development based on Eurostat

In order to promote exports, the EU sector is trying to adapt the range of apple varieties produced to the taste of consumers in relevant destination markets, e.g. sweet apples for Asia. Similarly, the proportion of less common varieties and organic apples is increasing in the EU, while traditional leading varieties such as Golden Delicious, Gala and Idared are decreasing. Of concern for the sector is the stagnating EU domestic consumption of fresh apples (15.1 kg per capita in 2014-2016, but expected to fall to 14.3 kg in the coming decade).

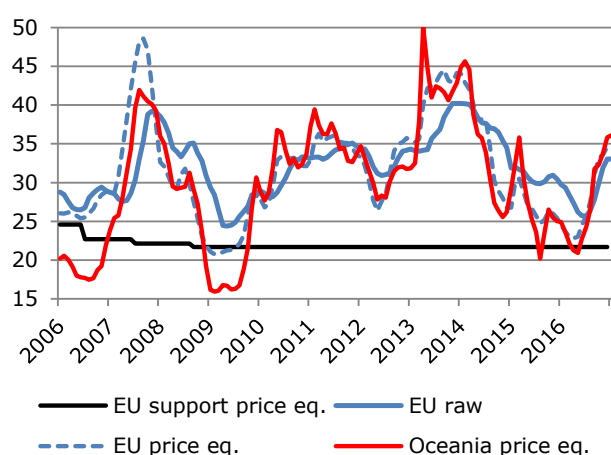
⁶ The apple marketing year runs from 1st August to 31 July

4. DAIRY

EU raw milk price back to average levels

The EU raw milk price gained more than 7 EUR/100kg in 5 months to reach 33.05 EUR/100 kg in December 2016, 8% above the previous year and close to the 2011-2015 average milk price. This increase was particularly strong (above 30%) in countries where the decline in price in 2016 had been particularly significant: Belgium and the Baltic states. By contrast, the rise in milk prices was less pronounced in France, Spain and Italy, where the milk price was more stable (see box). Moreover, in the UK the December quotation in euros was still below the 2015 figure, due partly to the currency devaluation.

Graph 19 EU and world milk prices (EUR/100 kg)



Note: The milk price equivalent is based on butter and SMP prices
Source: DG Agriculture and Rural Development

The rise in the EU milk price is driven by:

- the seasonal decline in EU milk collection;
- the 3.7% reduction in milk production in the last quarter of 2016 compared to 2015 because of lower prices, less favourable weather conditions, lower forage availability and the scheme for voluntary milk production reduction;
- the lower milk collection in South America, New Zealand and Australia;
- a sustained increase in the EU demand, estimated at 1.5% above 2015 (+1.5 million t of milk equivalent), in particular for cheese, butter and whole milk powder (WMP);
- remunerative prices for butter;
- a strong world import demand for cheese (see box).

This dynamic demand for products with a high proportion of dairy fat led to a strong increase in EU butter prices which reached a record level of 4 300 EUR/t in the last week of December. By contrast, the SMP price remained stable, around 2 000-2 100 EUR/t, because of large stocks and low global demand. The milk price equivalent, based on SMP and

butter, reached 34.6 EUR/100 kg in December 2016, still more than 1 cent above the raw milk price.

In 2017, several factors could weigh on the milk and dairy product prices:

- the upcoming seasonal peak in EU milk collection;
- the sizeable dairy herd at the end of 2016, indicating the potential for increasing production; in some Member States, after several months of delivery below the previous year, the gap between 2016 and 2015 milk collection is already closing e.g. January 2017 milk collection in Poland was 3.6% above 2016;
- 2017 EU milk deliveries are expected to be 0.6% above last year;
- the continuous increase in US supply;
- an expected recovery in milk collection in New Zealand;
- the accumulated SMP stocks.

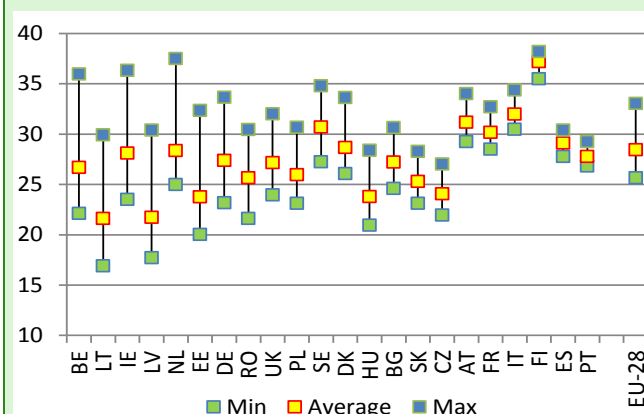
On the other hand, relatively low feed prices support dairy farmers' margins. Milk production in grass-fed systems is very much influenced by grass developments but there is little information at this stage on upcoming pasture conditions.

Raw milk price intra-year variability

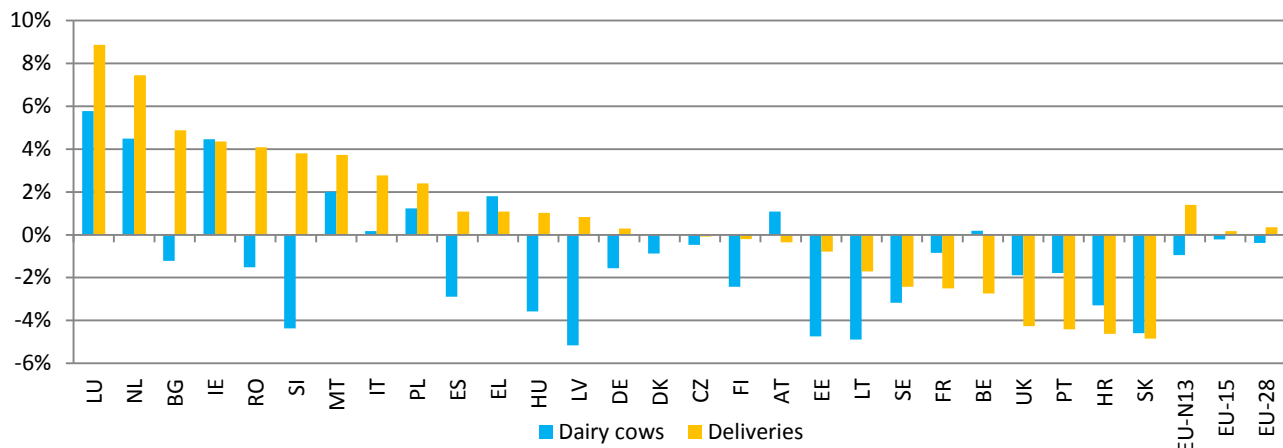
In 2016, the gap between the lowest and highest monthly milk price reached more than 12 EUR/100 kg in Belgium, Ireland, the Netherlands and the Baltic states. These countries are characterised by: low average milk prices in the Baltic states, Belgium and Ireland; a limited domestic market and strong reliance on exports; and a significant increase in milk production in 2016 in the Netherlands and Ireland.

By contrast, in 2016 in Portugal, Spain, Italy, Finland and France, the milk price variability reached 4 EUR/100 kg at most. This may be explained by the chronic milk deficit in Italy and the heavy use of milk to produce speciality cheeses. In France, a large proportion of milk is also channelled into cheeses and supply is managed by processors. However, farmers in France and Spain delivering to processors applying an A/B price system may be paid up to 10 cents less for the B milk.

Graph 20 Minimum, average and maximum 2016 raw milk prices (EUR/100 kg)



Note: The average price level cannot be compared between Member States because it is not standardised milk.
Source: DG Agriculture and Rural Development

Graph 21 2015/2016 change in deliveries and dairy cow numbers (%)

Source: DG Agriculture and Rural Development, based on Eurostat

Further expansion of EU milk production to be expected in 2017 and 2018

In 2016, EU milk deliveries increased by 0.4% compared to 2015. The decrease in milk collection in the last quarter of the year almost fully offset the strong increase in the first quarter (+7%). However, the situation varies greatly in the EU Member States. There have been strong increases in the Netherlands (+7.5%), Ireland (+4.4%), Italy (+3.1%) and Poland (+2.4%), as well as in smaller producing countries such as Luxembourg, Malta, Bulgaria and Romania. By contrast, milk collection declined strongly in the UK (-4.3%), France (-2.5%), Belgium, Portugal and Slovakia.

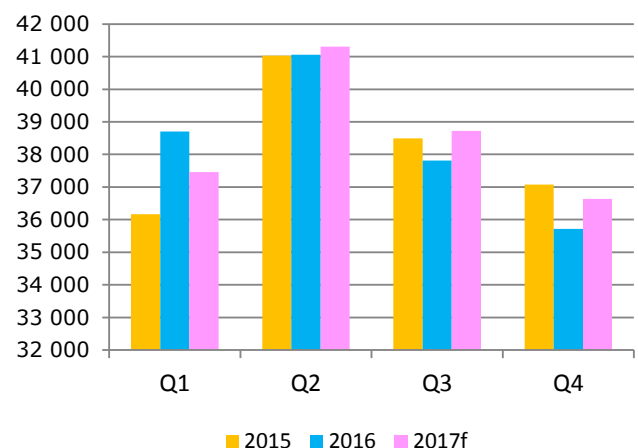
At the end of December 2016, the number of dairy cows in the EU was estimated at 23.3 million heads, 0.4% below last year. The decrease is very limited in the EU-15 (-0.2%) and modest in the EU-N13 (-0.9%). In view of the low milk prices, the high level of slaughterings and the limited increase in milk production the herd might seem large. In some Member States, it is due to the replacement of dairy cows by large numbers of heifers. At the end of 2016, the number of heifers was 1% down in Europe while the drop was much greater in Member States, such as the UK, the Netherlands and Ireland. By contrast, the heifer numbers were up in France, Italy and Spain. This also shows that some farmers opted for an adjustment of the feed rather than decapitalisation, to lower production costs until prices recovered. This together with less favourable weather in autumn 2016, meant that the yield increase in 2016 was small (+0.9%).

As illustrated in the graph above, increased milk collection does not always go hand in hand with a higher number of dairy cows. Some Member States that implemented structural adjustments had gains in efficiency. However, in those Member States where milk deliveries increased most in percentage terms,

the higher number of cows contributed significantly to this rise. In addition, the replacement of older cows with young heifers led to additional yield gains. In France, the herd declined less than milk collection did, highlighting the fact that farmers did not decapitalise too much and adapted their production using other means (e.g. less feed concentrates and delayed calving). The less favourable weather conditions in 2016 in the EU played a major role too.

The growing herd explains why milk collection in Poland is currently above last year and why the 2016 milk collection in the Netherlands was higher than in 2015 for the whole year. Given the herd increase in the herd in Ireland, the reduced collection in the final months of 2016 can mainly be explained by the weather and lower forage quality and quantity.

In view of the low dairy prices it is estimated that feed uses of milk increased in 2016 explaining why milk the production increase (+0.5%) is slightly above the change in deliveries.

Graph 22 EU milk collection forecast (1000 t)

Source: DG Agriculture and Rural Development

In 2017, milk collection is projected to be 0.6% above 2016. However, in the first quarter, it is expected to be below the high levels of 2016, particularly because there is one day less in February 2017. In spring, EU milk collection should close the gap on last year and, if raw milk prices remain stable, a significant increase can be expected in the second half of 2017. This change is expected to go hand in hand with a yield increase of 2% to 7 065 kg/cow and a herd decline of 1.6%. The herd decline is projected to be greater in the Netherlands to comply with the phosphates legislation. In 2018, there might be room for a larger increase in EU milk production, especially if world demand keeps rising and if the Russian import ban is removed.

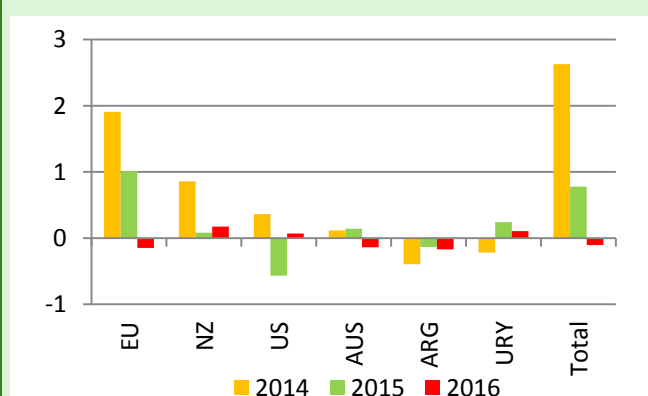
Growing world market for cheese and strong decline for SMP in 2016

Based on main exporters' trade figures⁷, world import demand remained stable in 2016, at close to 50 million litres of milk equivalent (total solids).⁸ The strong increase in cheese and fresh dairy products imports (+7% and +23% respectively) was fully offset by the decline in SMP imports (-6%), while butter and WMP imports remained stable. In addition, infant formula imports increased by 12% and whey by 4%.

While in 2015 EU exports increased significantly more than the decline in US exports, in 2016 EU, the US and New Zealand exports remained broadly unchanged. Uruguay's exports keep growing, continuing to replace Argentinian exports.

Interestingly, the imports of large players on the dairy market increased significantly in 2016: China (+15%), Russia (+13%), Mexico (+14%), the Philippines, South Korea and Hong-Kong. Brazilian imports almost doubled to compensate for the decline in domestic production and US imports increased further (+12%). By contrast, Japanese and Malaysian imports decreased by 7% and 8% respectively.

Graph 23 Annual changes in dairy product exports (million t of milk equivalent, total solids)



Note: Due to the good performance of EU cheese and butter EU exports in contrast to SMP, expressed in fat and protein equivalent, EU exports increased by 3% in 2016 compared to 2015.

Source: DG Agriculture and Rural Development based on GTA

⁷ New Zealand, EU, US, Australia, Argentina and Uruguay.

⁸ The total solid methodology is explained in the last chapter. In milk equivalent, based on fat and protein, world import demand increased by 3%.

In 2016, the EU market was characterised by a dynamic consumption of cheese, butter and WMP, significant rise in exports of fresh dairy products, cheese and butter, high public buying-in of SMP and a strong drop in SMP exports. The production of fat-rich products was supported by a strong increase in milk fat content by 0.4 percentage points. With the end of the dairy quota system (where volumes were adjusted according to the fat content), farmers no longer need to keep the fat content of their milk under control.

Strong cheese exports in 2016

Thanks to good export and domestic demand, together with the reduction in the EU milk supply, cheese prices were back to 2011-2015 historic levels in February 2017, at 2 740 EUR/t for cheddar.

In 2016, cheese exports reached 800 000 t, 11% above 2015 and, importantly, above the 2013 export level when Russia was the main EU customer. Shipments to the US remained stable and represented 18% of EU cheese exports. The main increases were registered to Japan, Saudi Arabia, South Korea and Australia. In 2017, cheese exports could increase further by 3%.

In 2018, assuming that the Russian import ban is removed, exports could grow by 75 000 t. This represents 30% only of the 2013 EU exports to Russia. Shipments are not expected to revert to their previous levels because, during the ban, Russia found new suppliers, analogue (produced with dairy proteins and vegetable fat) developed, consumption and purchasing power decreased and EU exporters may still consider Russia to be a risky destination. If the ban is not removed, exports could nevertheless grow by 25 000 t to other destinations.

In 2016, EU cheese *per capita* consumption increased for the third year in row to 17.7 kg, though more slowly (+1.3%). This generated a 1.4% rise in production to 9.7 million t and allowed for a stock decrease. In 2017 and 2018, cheese production is expected to increase further by around 2%.

Record high prices for butter

For the second year in a row, a strong US and domestic demand for butter pushed up butter prices. With the decline in EU milk production in the second half of 2016, the EU butter market has moved to a situation of undersupply reaching a record price level of 4 300 EUR/t in December 2016. Since then the EU price was corrected slightly downwards to 4 180 EUR/t in February 2017, but was still 20% above the February 2011-2015 average price. With EU milk production reaching its peak in spring, there could be further downward adjustment of butter prices.

In 2016, EU butter production increased by 2.7% to 2.4 million t. At 211 000 t, 2016 butter and butteroil

exports closed 23% above 2015, assisted by increasing exports to most destinations and, in particular, the US, Saudi Arabia and Egypt. In 2016, US net exports declined to 62 000 t, half below their 2014 level. With the decline in US and South American exports and the stagnation of New Zealand exports, the EU gained further market share, capturing 24% of the world butter market in 2016. In addition, excluding inward processing, butter imports remained low at 3 000 t.

The EU domestic use of butter in 2016 increased for the third year in a row (+2%). Private Storage Aid for butter expired in September 2016 and the stock levels by the end of the year were low at 24 700 t. A further destocking in 2017 will support a rise in consumption.

In 2017, demand is expected to drive a further increase in production (+1.2%). This lower increase on previous years is due to a limited milk production growth combined with an assumed stagnation in the milk fat content. As a consequence, the increase in EU exports is expected to be limited to 10%.

SMP stocks will limit SMP price increase

2016 was marked by a further increase in SMP production (+4%) to 1.6 million t, strong public buying-in to a stock level of 352 000 t and a reduction in private stocks from 250 000 t to 180 000 t. Most stock piling took place in spring at the time of peak milk production. Purchases stopped in September and the EU SMP price started increasing from 1 700 EUR/t, close to the intervention price level, to 2 100 EUR/t at the end of December. Since then the price declined slightly to 2 000 EUR/t in February, 21% below the 2011-2015 level but 22% higher than in the same period the previous year.

In the last quarter of 2016, when intervention purchases stopped, exports were expected to rebound, but this did not happen because the EU was less competitive than its main competitors. Over 2016 as a whole, EU exports decreased by 17%. By contrast, shipments from New Zealand increased by 8% and from the US by 2%.

In 2017, the EU could be back on the world market thanks to competitive prices. However, only a substantial increase in SMP exports and a reduction in production could lead to a balanced EU SMP market. As a working hypothesis, a release in 2017 of the 22 000 t, currently on sale has been considered. Private stocks could go back to normal levels at around 130 000 t. In a scenario of continued market recovery, the additional destocking of SMP from public stocks might be feasible.

A significant increase in WMP domestic use

In 2016, WMP production increased by close on 4% compared to 2015, on the back of strong domestic use (+50 000 t, mostly for the chocolate industry), while EU exports decreased by 5%. Similarly in the coming years, domestic use rather than exports is expected to support a small increase in production.

EU liquid milk exports compensate for the consumption drop

Despite the structural decline in per capita milk consumption in the EU, the production of total fresh dairy products increased slightly in 2016 (+0.2%) driven mainly by export demand. Fresh dairy products shipments reached 1.12 million t in 2016, 23% above 2015.

The main EU trading partner for fresh dairy products is China (37%), which imports mainly UHT milk and, increasingly, liquid cream for bakery. In addition, in 2016 EU exports to Belarus increased by 10%. 2016 milk production in Belarus is estimated 2% above 2015, but this increase is not enough to supply the growing Russian demand, thus the rise in milk imports. Total EU exports are expected to further increase in 2017 (+15%).

The total EU consumption of fresh dairy products in 2016 is estimated to be 0.1% below that of 2015 only (*per capita* the decline is 0.5%). Retail sales of milk are on a downward trend, particularly strongly in France and Spain. There are, however, large consumer markets where sales are more stable, such as the UK. In addition, more milk is being used in food services (coffee shops) and sales of organic milk are booming. Moreover, while cream consumption is estimated to have fallen in 2016 (-0.8%), yogurt consumption increased (+2.5%).

The small decline in fresh dairy products is expected to continue in 2017 and 2018, but export growth should help to stabilise production.

5. MEAT

Beef: slower increase in EU suckler cow herds

According to the livestock survey of December 2016, the suckler cow herd in the EU increased by another 80 000 heads, up to 12.4 million heads, while it increased by 274 000 heads the previous year. Almost all EU countries slowed down their increases or even reduced their herd size. The slowdown was more pronounced in the EU-15 than in the EU-N13. The largest decreases were noted in Italy (-24 000 heads) and the Netherlands (-15 000 heads). The changes in the suckler cow herd also include some reconversion from dairy to beef production in some Member States. On the other hand, the three EU countries with the largest suckler cow herds still increased their heads — by 41 000 (Spain), 19 000 (UK) and 14 000 (France). Nevertheless, a decline in the suckler cow herd in the EU-15 is expected in 2017 (-1%) and 2018 (-1.5%), while in the EU-N13 it continues to slowly expand (+2%, +1%). As the size of the dairy herd is expected to decline over the same period, total beef production potential is going down, which will affect beef production in the coming years.

In 2016, EU beef net production reached 7.9 million t, an increase of 2.3% year on year, both in the EU-15 (+1.9% or 128 000 t) and the EU-N13 (+5.9% or 50 000 t). The surge in the EU-N13 comes mainly from Poland and Romania, which together produced 39 000 t more in 2016 than the previous year. The rise in EU production comes mainly from herd destocking in the dairy sector and a higher slaughtering rate of female animals — cows (+7% in heads and 6% in volume) and heifers (+6% in heads and 5% in volume). The rate for the category bulls and bullocks, however, showed only a slight decline of 0.9% (in heads and volume).

Beef net production is expected to increase further in 2017 but more slowly than in 2016 (1.2%). As the total cow herd in the EU is still increasing, the beef production potential is still relatively high. Moreover, the ongoing restructuring of the dairy sector will continue to provide high numbers of cows and heifers for slaughtering. A decline of 1.7% in production is expected in 2018, after four years of consecutive moderate increases. The level of the decline is still uncertain because it is difficult to predict the exact timing of the turning point and its pace. The transition could also be spread over two years and the decline smoothened over the same period. Driving this are the productivity gains in the dairy sector over the medium term.

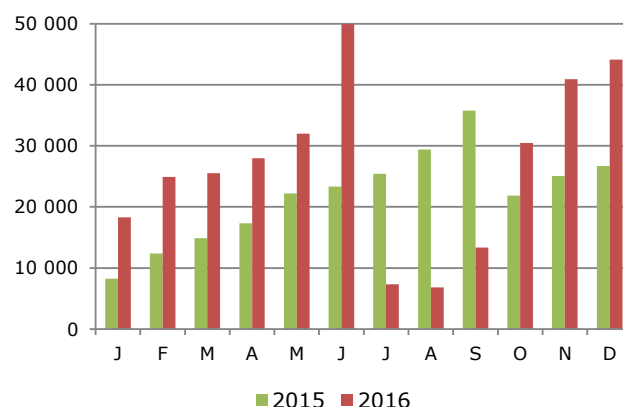
EU live bovine exports continue to rise

EU exports of live bovine animals continue to be high although there was a slight hiccup in exports to Turkey in summer due to a change in the import management system of the meat and live trade. This,

however, did not hamper the increase in live exports in the second half of 2016. For 2016 as a whole, live exports were 23% above the already high 2015 levels and mostly above the high levels recorded in 2011-2012, when Turkey was also the main outlet for EU cattle. Live trade is focused on countries around the Mediterranean. In 2016, the three most important destinations of live bovine animals were Turkey (322 000 heads), Israel (176 000 heads) and Lebanon (155 000 heads), representing around 2/3 of the EU live cattle trade. Israel consolidated its position as an important destination for live exports in the second half of 2016, while Libya made an important comeback, absorbing 27 000 more live animals in 2016 compared to 2015.

While live exports to Turkey are facing increased competition from Uruguay and Brazil, other markets, such as Algeria and Egypt, could open additional outlets for EU live exports. Assuming normalised trade with Turkey, without any sudden drops, live exports in 2017 are expected to continue growing by 10%. As a small footnote, the EU kept exporting live breeding animals — numbering some 33 000 — to Russia in 2016, despite the Russian import ban applying to meat.

Graph 24 Monthly EU exports of live cattle to Turkey (heads)



Source: DG Agriculture and Rural Development, based on Eurostat

Beef exports totalled 244 000 t in 2016 (+18%). In the first quarter of 2016, exports started to increase by 10% year on year and gained speed in the summer. Firm world demand, led by China, at relatively high prices opened opportunities to the EU. Exports to Turkey were already doing well but Hong Kong came back on the market as an important outlet, mainly for offal but also meat. In the summer, Turkey finally introduced a tariff-rate-quota (TRQ) for the EU for imports of 5 000 t of meat (except from Poland⁹), compared to 20 000 t last year, which limits meat exports to Turkey. On the other hand, a large portfolio of other destinations showed marked

⁹ During the tendering procedure organised by the Turkish authorities, no bids from Poland were selected

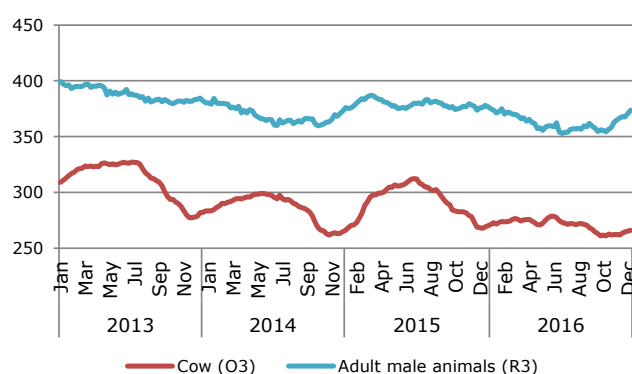
increases for fresh and chilled meat exports (+14% in total) and frozen meat exports (+33%).

The outlook for 2017 is fairly positive (+5%) as the EU gains access to new (niche) markets after the long import ban because of bovine spongiform encephalopathy (BSE).

EU beef imports showed a steady 2% increase year on year. Imports from Brazil increased the most, a confirmation of their competitiveness and lower internal demand, leaving more beef available for export, although the appreciation of the real during the year 2016 eroded some of this advantage. Imports from the US declined compared to last year, probably due to their shift to more lucrative Asian markets (Japan) and the less favourable dollar/euro exchange rate. Overall Australian beef exports to the world market were down, mainly due to recapitalisation of the beef herd there and favourable pasture conditions. While Australian exports to the EU still increased in the beginning of 2016, they completely stopped in the second half of the year, ending 6% lower year on year. Despite a good start, the recapitalisation of the beef herd in Argentina led to a moderate increase in exports to the EU in 2016. By the end of 2016, EU imports had increased by 2%, with the largest proportion coming from Brazil (42%), Uruguay (17%) and Argentina (13%). Imports are expected to increase even further by 3% in 2017, driven mainly by larger supply on the world market at competitive prices. This translates into an EU net trade deficit of 50 000 t.

No recovery in EU beef prices despite tight world supply

Graph 25 EU price for certain bovine categories (EUR/100 kg)



Source: DG Agriculture and Rural Development

In 2016, EU cow prices (category O3) did not follow the characteristic seasonal pattern, staying relatively flat and low in summer (around 270 EUR/100 kg). Continued low cow prices and restructuring in the dairy sector had an impact on the prices of all categories. Prices of adult male bovines declined in the first half of 2016, increasing slightly in the second half of the year, but they were still below the level of

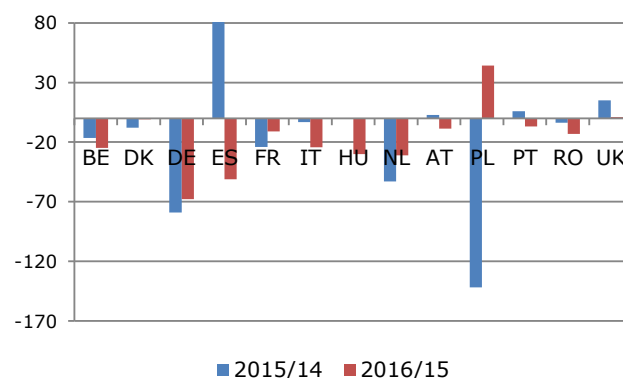
previous years. This trend was probably supported by strong world demand, driven by US and Chinese consumers, regardless of China's economic slowdown, in a context of supply shortages in Australia and Argentina due to herd restocking.

In 2016, the availability of beef for consumption in the EU increased by 2.2% and consumption is expected to continue to increase in 2017 (+1.2%) thanks to ample availability on the market. In 2018, there could be a potential shortage on the EU market, with a negative impact on EU consumption levels.

Pigmeat: steady decline in the number of breeding sows

In the December 2015 livestock survey, 248 000 fewer breeding sows were counted. The 2016 livestock survey confirmed the declining trend and recorded a drop in breeding sows (-228 000 heads) for a second year in a row. The largest drops were recorded in Germany (-68 000 heads) and Spain (-51 000 heads). Poland is the only country that gained a significant number of breeding sows (44 000 heads), but this has to be seen against the background of an enormous decline in 2015 (-142 000 heads). All other EU countries that had recorded a slight increase or decrease in 2015 experienced a decline in 2016. Denmark and the UK are the only large pigmeat producers that saw their sow herds stabilise or increase slightly.

Graph 26 Change in the number of breeding sows in the larger pig producing Member States (1000 heads)



Source: DG Agriculture and Rural Development based on Eurostat

In 2016¹⁰, total pigmeat slaughtering in the EU increased by 0.2% despite a significant reduction in the EU sow herd over the last two years: the surge in import demand from China, slightly 'delayed' the anticipated drop in pigmeat production. The average carcass weight of slaughtered pigs did not change significantly in 2016, leading to the assumption that sow productivity in the EU must have improved (e.g. piglets/sow, less non-productive sows). In the first

¹⁰ Pig meat production 2016 data are based on January – November 2016 Eurostat statistics and an estimate for December 2016.

half of 2016, the EU still recorded an increase of 2% in pigmeat slaughterings but a significant slowdown was noted in the second half, both in the EU-15 and EU-N13, resulting in a significant reduction in slaughterings in Belgium (-63 000 t) and Portugal (-23 000 t). Denmark is a special case. Although, the sow herd has been stable over the last five years, a decrease in pigmeat slaughterings was recorded in 2016 (-2% or 33 000 t), indicating a further specialisation in piglet production, at the expense of pig fattening. Spain was responsible for the largest increase in net production (+204 000 t), followed by Italy (+49 000 t) and UK (+24 000 t).

In 2017, EU pig production is expected to slow down further because of the decrease in the sow herd and the lack of availability of piglets. According to the December 2016 livestock survey, the number of pigs for fattening (all categories) in the EU has decreased by 360 000 heads¹¹ and the number of piglets by 374 000 heads. These overall figures hide wide discrepancies between Member States. The situation in Spain and Poland is quite different as these countries recorded an increase in pigs for fattening, +730 000 and +255 000 heads respectively, while numbers in Denmark and Romania were 340 000 and 168 000 heads down respectively. Although this is only a snapshot, it gives an indication of the potential production in coming months. Taking these factors into account, the EU pigmeat production in 2017 is expected to decrease slightly to around 23.4 million t (-0.3%) and stabilise in 2018 driven by sustained exports and rewarding margins.

EU pork exports at a record level

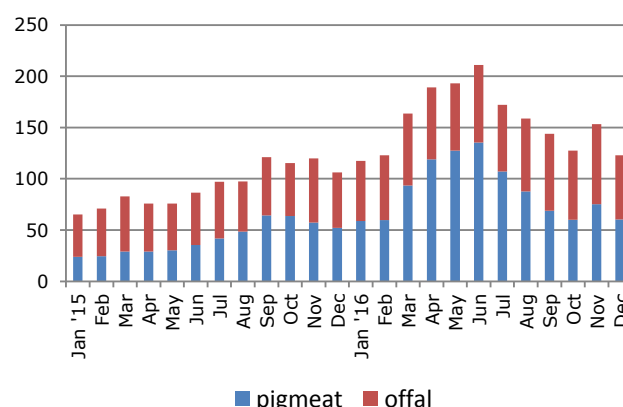
In 2016, EU pigmeat exports attained a record level of 2.8 million t (+28%) thanks to the boost in exports to China. The strong import demand from China is explained by the restructuring of its domestic pigmeat sector. The surge started in March 2016. However, the euro/yuan exchange rate, decreasing EU export potential, increasing competition from other exporters and the consequences of the economic slowdown on Chinese consumer demand and its meat sector, pushed EU pigmeat exports downwards in the second half of 2016. Despite the slowdown that started in the summer, export levels in the second half of 2016 stayed 40% above the 2015 level. EU exports of offal also benefited from this boost and recorded an increase of 34% year on year. The dependency on China was already relatively high in 2015 but increased further to 38% of EU pigmeat exports in 2016.

All EU countries exporting to China saw their exports more than double or triple in 2016. However, Poland was not able to take advantage of this opportunity as direct exports to China were banned due to African

Swine Fever (ASF). On the other hand, no new cases of ASF in domestic holdings have been reported in Poland or in the Baltic states. The new cases notified to the European Commission were found only in wild boars. Nevertheless, the outbreaks in wild boars have increased exponentially between 2014 and 2016. Since it is impossible to foresee how ASF will develop, a status quo has been assumed during the outlook period.

According to the Chinese Agricultural Outlook, the significant yearly import demand for pigmeat is projected to continue over the medium term but at a lower rate (close to 900 000 t by 2025). With this in mind, the current level of EU exports to China should be considered as a short-term opportunity rather than a constant over the medium-term. Other important exporters to China are the US and Canada, who clarified with the Chinese authorities the ractopamine-free status of their pigmeat exports.

Graph 27 EU pigmeat and offal exports to China (1000 t, product weight)



Source: DG Agriculture and Rural Development, based on Eurostat

Other notable increases in 2016 were recorded in EU shipments to Japan, Vietnam, the Philippines and the US. The dispute about tariffs on certain pigmeat exports to the Philippines has been settled and this was reflected in a 17% increase in exports in 2016 (meat and offal).

In 2017, EU pigmeat exports are expected to decline by 9%, but stay above 2.5 million t, mainly due to lower exports to China. The Russian sanitary import ban introduced in March 2014 is expected to remain in place during the outlook period (until 2018). The official WTO ruling on the sanitary ban was made public on 19 August 2016, but the Russian government launched a notice of appeal on the 23 September. The WTO's Appellate Body confirmed on 23 February 2017 that Russia's sanitary ban is illegal under international trade rules. Russia declared a second import ban on EU (and some third countries) food in August 2014, subsequently extending it to the end of 2017, but it is not clear when Russia will remove this ban. This second ban does not cover all pork products (e.g. lard and fat). Even if the second ban is lifted in 2018, the earlier sanitary ban makes

¹¹ This figure does not cover the data for France and Croatia, as these were not yet available in the livestock survey.

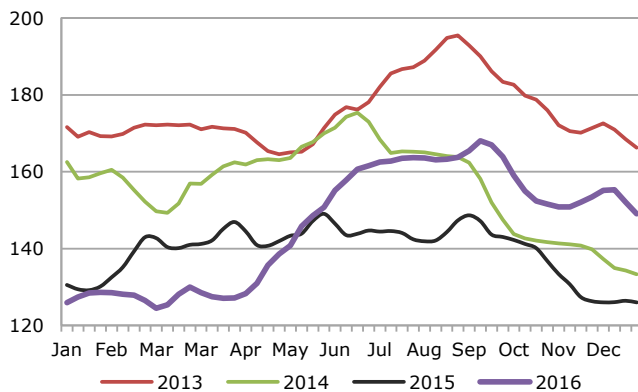
trade impossible. Therefore, the assumption that the import ban for all pork products will remain in place for 2017 and 2018 is retained.

Imports of pigmeat were around 12 000 t in 2016. In the short run, 2017-2018, EU imports are not expected to increase substantially. Even if small amounts of imports from Canada can be expected, the timeframe of this outlook is probably too short for the Comprehensive Economic and Trade Agreement (CETA) to have any visible effects.

Recovery in EU pigmeat prices in 2016

In April 2016, pigmeat prices started to recover, one month after the surge in exports to China started, and stabilised in the summer around 165 EUR/100 kg. By the end of September, prices followed their seasonal decline but remained above 2014 and 2015 levels. The price outlook is relatively good as supply and demand are more balanced, but there is uncertainty as to whether China will continue to import at recent high levels.

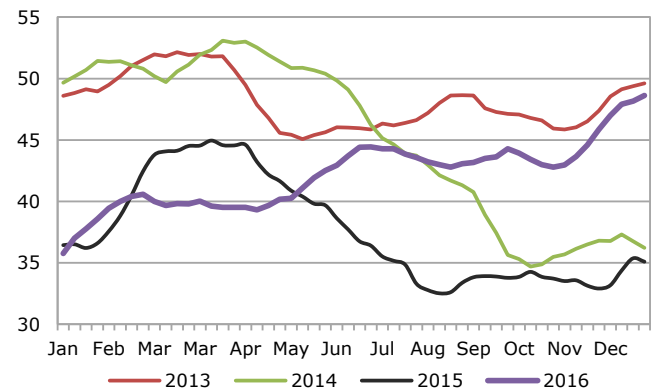
Graph 28 EU pigmeat prices, class E (EUR/100 kg)



Source: DG Agriculture and Rural Development

In the second half of 2016, the piglet price stabilised between 43 and 44 EUR/head, which was 30% higher than the same period the year before. In the last two months of 2016 and the first weeks of 2017, piglet prices continued to go up, reaching the high price levels as of 2013 and reflecting the short supply on the market.

Graph 29 EU average piglet prices (EUR/head)



Source: DG Agriculture and Rural Development

Despite a brief surge, feed prices, especially soya, came down again, reducing feed costs and improving the profitability of pigmeat production.

EU consumption of pigmeat reached 32.4 kg *per capita* in 2015 (retail weight), almost 1 kg above 2014. In 2016, the opportunity to export to China and a slowdown in EU production meant that less pigmeat was available on the EU market. *Per capita* consumption decreased significantly by 2.4% (31.5 kg *per capita*) and is expected to stabilise in 2017 and 2018.

Poultry: expansion of EU production pushes domestic prices downward

Despite lower broiler prices throughout 2016, EU poultry production¹² expanded by 4.4%. In the first half of 2016, poultry production was up by 6% but contrary to expectations given the lower prices, growth only slowed (by 1 percentage point) in the second half. Except for France (-3%), which was affected by avian influenza, all main producing Member States reported increases: Poland (+13%), Spain (+5%), Italy (+6%), the Netherlands (+6%), Germany (+1%) and the UK (+1%). Investments in broiler production in Poland have been significant in recent years and farmers keep on producing to cover at least their fixed costs. This could explain the minimal price effect on production (in the short-run). The outbreak of avian influenza in several Member States had little direct effect on the production quantities of broilers. Geese and duck producers, as well as free range chicken producers, have been more affected by the extra biosecurity measures¹³. At EU level, placings of broiler chicks in November 2016 (-50 million chicks year on year or -10%) and provisional numbers for placings in December showed the first signs of a downward adjustment. Therefore, the

¹² Poultry production 2016 data are based on January – November 2016 Eurostat statistics and an estimate for December 2016

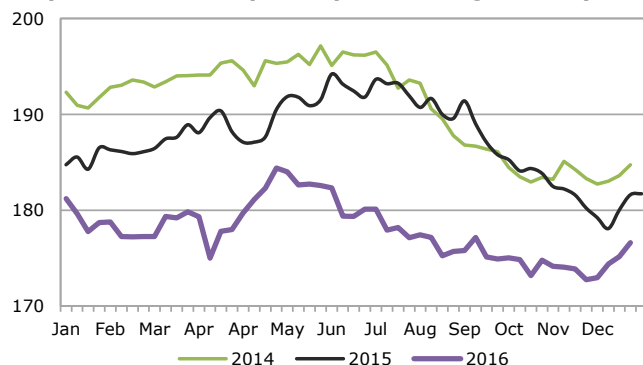
¹³ Measures include the obligation to keep all poultry (commercial and non-commercial) inside. Open-air and free-range production systems have been the most affected, even causing problems in meeting certain production requirements (e.g. broiler or egg production).

increase in EU poultry production is expected to slow down significantly to +1% in 2017 and in 2018.

Lower EU prices allow poultry exports to increase in a highly competitive market

Broiler prices in the EU stayed below 185 EUR/100kg for the whole of 2016, more than 10 EUR/100kg lower in certain months compared to the same period in 2014 or 2015. From May 2016 onwards, poultry prices followed a downward path to reach 172 EUR/100kg due to the abundant supply, 8% below the previous year's price level. Only in December was a small price recovery noted. On the other hand, these lower prices improved EU competitiveness on the international market. Direct price competition with Brazil is nearly impossible as its price level fluctuated around 120 EUR/100kg in the second half of 2016. Anyhow, the EU exports mainly brown meat and keeps the breast filets for the domestic market. As consumption in the EU is reaching a more mature level and competition on the world market from Brazil and US (both avian influenza-free so far) is expected to limit further development of EU exports, prices might continue to experience downward pressure or stay relatively low.

Graph 30 EU broiler prices (EUR/100 kg carcass)



Source: DG Agriculture and Rural Development

Over the year as a whole, EU exports saw an increase of 9.4% year on year. In the first half of 2016, EU poultry meat exports increased by 11% year on year. In the second half of 2016, exports slowed down only slightly mainly due to the outbreaks of avian influenza that started at the end of October and the temporary restrictions imposed by trade partners on some Member States as a result. The sudden surge in exports to South Africa by more than 5 000 t per month can be explained by exporters' attempts to anticipate the possible introduction of safeguard measures (additional taxes) as was announced by the South African authorities (ITAC). The effective introduction of a safeguard duty of 13.9% in mid-December 2016 on imports from the EU might have favoured imports from the US, which has started to use its new annual TRQ of 65 000 t of bone-in chicken pieces since the beginning of 2016. Moreover, South Africa introduced a country-wide import ban on EU poultry and poultry products from countries affected by avian influenza. Therefore, the EU might be losing

market share in South Africa to the US, which is set to continue in 2017. Exports to Benin declined drastically (-16%) due to concerns regarding the re-export of EU commodities to Nigeria, which is blocking imports of EU products. At the same time, competition with Brazil led to a 15% decrease in EU exports to Saudi Arabia.

In 2017, EU poultry exports are expected to stabilise (+1%) due to the strong international competition and the different outbreaks of avian influenza¹⁴ in the EU, restricting trade to third countries. Uncertainty about the level of Chinese poultry production due to a lack of breeding stock could change the picture radically in 2017. Chinese imports are likely to increase, giving opportunities mainly to Brazilian poultry meat exports as they are already currently their largest supplier. Nevertheless, EU countries such as Poland with direct access to the Chinese market could also benefit from this situation, but due to avian influenza, China is currently blocking these imports (and faces avian influenza domestically as well). From previous experience, it can be deduced that re-opening the Chinese market could take more than a year. US poultry exports are getting back on track but a first case of avian influenza on a commercial poultry farm in Tennessee could change the outlook. An additional disadvantage for the moment is the stronger US dollar, hampering their export competitiveness.

EU poultry meat imports increased by 6% in the first half of 2016, mainly due to an increase in imports from Brazil. Imports slowed down in the second half of 2016, resulting in a yearly import increase of only 3% year on year. The main suppliers continue to be Brazil and Thailand. Ukraine used 100% of its 16 000 t TRQ for poultry meat and preparations, while it used less than half of the 20 000 t quota for chicken carcasses. It is worth noting that in 2016 Ukraine also exported around 27% of its total poultry exports to the EU via the *erga omnes* quota and almost 20% of them out of quota. In general, the filling rate of the poultry TRQs is very high and out-of-quota imports are taking place, but probably because of commercial longer term interests (to maintain trade relations) rather than pure financial reasons. Exporters are willing to pay the full duty on part of the exported product and to maintain the trade flow (also because of contractual obligations). In that way, they pay a weighted average duty, which is (much) lower than the full duty. Paying full duty on all exported product is still not economically interesting.

Due to the ample supply of poultry meat, EU *per capita* consumption increased in 2016 by 4%, partly replacing pork consumption. Growth in 2017 is expected to slow down, resulting in an increase of less than 1%.

¹⁴ Updates on the situation of avian influenza can be found here: http://ec.europa.eu/food/animals/animal-diseases/control-measures/avian-influenza_en

Sheep meat: slow down in EU production increase in 2016...

According to the 2016 December livestock survey, sheep flocks in the UK, Romania and Ireland showed growth of 437 000, 268 000 and 113 000 heads respectively, while Greece noted a second consecutive year of decrease (-117 000 heads). Figures were not available for Spain although it has the second biggest sheep flock in the EU.

The goat herd in Greece dropped below 4 million heads (-27 000 heads) for the first time in years, while countries such as the Netherlands and Italy saw their herd increasing by 36 000 and 65 000 heads respectively.

EU gross sheep and goat production stabilised around 929 000 tonnes in 2016. This number hides contrasting developments as gross production went down by 1% in the EU-15 and increased by 10% in the EU-N13. Because a much larger proportion of gross production was exported live in the EU-15 and EU-N13 (+38%), domestic slaughterings showed a decline of 1.3%.

Even though sheep and goat meat net production went up by 1.6% in the first half of 2016, it fell back in the second half, triggered by a slowdown in slaughterings in France and Spain. A second factor that played a major role is the fact that the expected increase in the UK (+1%) did not materialise. In fact, the UK recorded a significant decrease of 5% year on year. This is partly explained by a carry forward of slaughterings to 2017. Moreover, the number of ewes put to the ram stabilised in the UK between 2014 and 2016, according to the December livestock survey, despite the more favourable pasture conditions in summer and the increased sheep flock.

EU live exports continued to do well throughout 2016. Four export partners, all located around the Mediterranean, represented almost 95% of trade, the most important being Libya (1 million heads) and Jordan (1.2 million heads). Live exports are expected to stabilise at this level in 2017.

By contrast, meat exports declined by almost 6 % year on year in 2016 and remained far below pre-2015 levels. The main trading partners are now Switzerland and Hong Kong. In general, however, exports go to many destinations with monthly trade flows of less than 50 t, and there are seasonal peaks around the religious festivities.

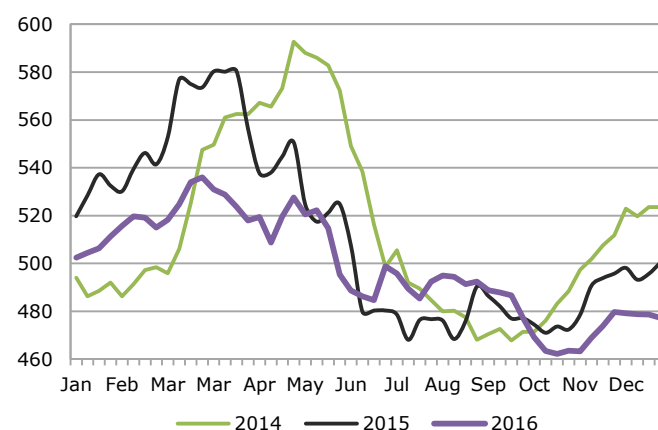
In the first half of 2016, sheep meat imports increased by almost 8% year on year but this was not confirmed in the second half, and imports for the year

overall were stable. This was mainly due to a lower-than-expected lamb crop in New Zealand and the devaluation of sterling after the British referendum, which made competition with British lamb slightly tougher. New Zealand still accounts for 86% of total EU sheep meat imports. The second biggest exporter to the EU is Australia with almost 19 000 t.

... following lower prices

While heavy lamb carcass prices stayed between their 2014 and 2015 levels from January until March 2016 (see graph), they started their seasonal decline earlier and never reached the high levels of the two previous years. However, by summer prices had regained the average level of previous years, around 490 EUR/100 kg. Towards the end of September, there was a second price drop from which prices had not fully recovered by the end of year. There was a similar decline for light lamb carcass prices at the beginning of 2016. From May, the seasonal upward trend could again be observed but at a level 20 EUR below that for previous years. From October, the price development was very similar to 2015, around 620 EUR/100kg.

Graph 31 EU heavy lamb prices (EUR/100 kg carcass)



Source: DG Agriculture and Rural Development

Due mainly to increased exports of live animals not compensated by higher imports, less sheep meat was available on the EU market and therefore, EU *per capita* consumption dropped by almost 1%. It is expected that consumption will catch up again in 2017, following the developments in EU production. Since consumption in the EU accounts for only 2.5% of total meat consumption, or 1.9 kg *per capita*, small changes have a negligible effect, compared to the bigger meat consumption basket.

6. STATISTICAL ANNEX

ARABLE CROPS

Table 5.1 EU cereal, oilseed and protein crop area (1000 ha)

	EU-28					% variation			
	2013	2014	2015	2016e	2017f	16/15	16 vs 5-year av.*	17/16	17 vs 5-year av.*
Common wheat	23 388	24 418	24 325	24 236	23 762	-0.4	1.8	-2.0	-0.9
Durum	2 392	2 295	2 435	2 708	2 527	11.2	15.1	-6.7	2.1
Rye	2 654	2 171	1 964	1 928	2 119	-1.8	-14.6	9.9	-2.2
Barley	12 370	12 434	12 217	12 349	12 506	1.1	0.1	1.3	1.0
Oats	2 666	2 546	2 527	2 584	2 602	2.3	-1.6	0.7	0.1
Maize	9 775	9 615	9 255	8 448	9 255	-8.7	-11.6	9.6	-3.1
Triticale	2 749	2 953	3 116	2 920	2 641	-6.3	3.2	-9.6	-8.1
Sorghum	145	158	137	127	137	-6.9	-4.7	7.6	0.5
Others	1 452	1 339	1 297	1 302	1 357	0.4	-12.3	4.2	-0.5
Cereals	57 591	57 929	57 273	56 603	56 907	-1.2	-1.6	0.5	-1.0
Rapeseed	6 711	6 714	6 465	6 493	6 620	0.4	-0.3	2.0	1.0
Sunflower	4 623	4 263	4 197	4 179	4 284	-0.4	-3.1	2.5	0.6
Soybeans	465	568	893	844	844	-5.5	40.2	0.0	34.9
Linseed	64	50	66	69	60	4.8	22.6	-12.3	-6.4
Oilseeds	11 862	11 595	11 621	11 585	11 808	-0.3	-0.3	1.9	1.8
Field peas	462	530	744	873	873	17.4	49.5	0.0	45.6
Broad beans	356	389	624	664	664	6.3	57.0	0.0	45.4
Lupines	95	118	258	258	258	0.2	76.5	0.0	64.6
Protein crops	912	1 037	1 626	1 795	1 795	10.4	56.8	0.0	49.0
Sugar beet	1 661	1 632	1 419	1 497	na	5.5	-8.4		
Total	72 028	72 193	71 938	71 480	70510**	-0.6	-0.4		

*The 5-year average is a trimmed average in all tables. ** sugar beet excluded

Table 5.2 EU cereal, oilseed and protein crop yields (t/ha)

	EU-28					% variation			
	2013	2014	2015	2016e	2017f	16/15	16 vs 5-year av.*	17/16	17 vs 5-year av.*
Common wheat	5.82	6.13	6.27	5.59	6.06	-10.9	-4.9	8.6	3.7
Durum	3.38	3.36	3.44	3.38	3.50	-2.0	-0.6	3.7	3.9
Rye	3.94	4.18	3.97	3.87	3.99	-2.4	0.3	3.0	1.5
Barley	4.94	4.88	5.07	4.87	5.06	-3.8	1.9	3.9	3.3
Oats	3.14	3.05	3.01	3.14	3.11	4.5	4.3	-0.9	1.5
Maize	6.86	8.10	6.40	7.18	7.23	12.2	3.3	0.6	6.1
Triticale	4.20	4.48	4.10	4.04	4.30	-1.6	-2.0	6.5	4.3
Sorghum	5.01	5.89	5.26	5.34	5.47	1.5	-0.4	2.4	5.1
Others	2.79	2.98	2.67	2.81	2.90	5.6	0.7	3.0	2.1
Cereals	5.34	5.71	5.49	5.25	5.55	-4.4	-1.5	5.7	3.5
Rapeseed	3.13	3.61	3.37	3.08	3.34	-8.7	-3.7	8.5	4.4
Sunflower	2.01	2.17	1.88	2.03	2.12	8.3	4.5	4.1	7.4
Soybeans	2.62	3.23	2.66	2.95	2.92	11.2	10.1	-1.0	6.6
Linseed	2.10	2.30	1.95	1.79	2.14	-8.0	-12.7	19.6	4.4
Oilseeds	2.66	3.06	2.77	2.69	2.86	-3.0	1.5	6.5	5.7
Field peas	2.77	2.62	2.79	2.46	2.71	-11.9	-4.8	10.3	3.6
Broad beans	2.86	3.17	3.13	2.90	3.06	-7.4	-2.6	5.6	2.4
Lupines	1.61	1.77	1.49	1.47	1.61	-1.3	-5.1	9.9	4.3
Protein crops	2.68	2.73	2.71	2.48	2.68	-8.7	-5.4	8.2	2.2
Sugar beet	65.60	80.26	71.73	71.87	na	0.2	-1.3		

Table 5.3 EU cereal, oilseed and protein crop gross production (1000 t)

	EU-28					% variation			
	2013	2014	2015	2016e	2017f	16/15	16 vs 5-year av.*	17/16	17 vs 5-year av.*
Common wheat	136 207	149 675	152 514	135 400	144 115	-11.2	-3.3	6.4	2.6
Durum	8 097	7 704	8 389	9 141	8 851	9.0	13.9	-3.2	6.7
Rye	10 454	9 073	7 797	7 467	8 452	-4.2	-12.4	13.2	-0.9
Barley	61 101	60 695	61 886	60 164	63 280	-2.8	1.6	5.2	4.3
Oats	8 384	7 759	7 594	8 117	8 095	6.9	3.3	-0.3	2.0
Maize	67 037	77 915	59 246	60 695	66 891	2.4	-7.9	10.2	7.0
Triticale	11 559	13 222	12 774	11 785	11 345	-7.7	2.2	-3.7	-5.8
Sorghum	728	929	720	680	750	-5.5	-4.0	10.3	5.8
Others	4 053	3 995	3 456	3 664	3 932	6.0	-12.1	7.3	0.7
Cereals	307 619	330 968	314 375	297 113	315 711	-5.5	-2.5	6.3	3.0
Rapeseed	20 979	24 267	21 811	20 010	22 128	-8.3	-3.3	10.6	5.7
Sunflower	9 272	9 268	7 882	8 502	9 077	7.9	-0.8	6.8	6.2
Soybeans	1 216	1 834	2 371	2 491	2 467	5.1	54.8	-1.0	36.5
Linseed	134	115	128	123	129	-3.6	-3.3	4.9	0.6
Oilseeds	31 601	35 483	32 191	31 126	33 800	-3.3	0.4	8.6	6.8
Field peas	1 277	1 389	2 073	2 146	2 366	3.5	49.1	10.3	49.8
Broad beans	1 019	1 233	1 956	1 925	2 033	-1.6	47.3	5.6	46.0
Lupines	153	209	383	379	416	-1.1	70.5	9.9	68.6
Protein crops	2 448	2 831	4 412	4 450	4 815	0.9	49.6	8.2	49.0
Sugar beet	108 979	131 009	101 769	107 587	na	5.7	-7.5		

Table 5.4 EU overall cereal balance sheet (million t)

	EU-28					% variation vs. 16/17
	2013/14	2014/15	2015/2016	2016/2017e	2017/2018f	
Beginning stocks	31.4	38.1	48.6	45.5	38.0	-16.6
Gross production	307.6	331.0	314.4	297.1	315.7	6.3
Usable production	304.8	328.0	311.6	294.5	313.0	6.3
Imports	19.2	15.6	20.6	18.5	18.3	-1.3
Availabilities	355.4	381.7	380.8	358.6	369.2	3.0
Total domestic uses	271.6	279.2	282.3	283.2	284.4	0.4
- Human	64.8	65.0	65.1	65.4	65.7	0.4
- Seed	9.5	9.6	9.6	9.6	9.5	-0.8
- Industrial	32.4	32.6	33.1	33.4	34.2	2.4
o.w. bioethanol	11.3	11.5	12.0	12.2	12.9	5.7
- Animal feed	164.9	172.0	174.4	174.8	175.0	0.1
Losses (excl on-farm)	2.2	2.2	2.2	2.2	2.2	0.0
Exports	43.5	51.7	50.8	35.2	42.8	21.8
Total uses	317.3	333.1	335.3	320.6	329.4	2.8
End stocks	38.1	48.6	45.5	38.0	39.8	4.8
- Market	38.1	48.6	45.5	38.0	39.8	4.8
- Intervention	0.0	0.0	0.0	0.0	0.0	
Self-sufficiency rate %	112	117	110	104	110	

Table 5.5 EU-28 cereal balance sheet 2017/2018 (forecast) (million t)

	Common wheat	Barley	Durum	Maize	Rye	Sorghum	Oats	Triticale	Others	EU-28
Beginning stocks (01.07.2017)	10.3	8.0	2.6	11.1	0.6	0.2	1.4	1.9	2.0	38.0
Gross production	144.1	63.3	8.8	66.9	8.5	0.8	8.1	11.3	3.9	315.7
Usable production	143.0	62.7	8.8	66.6	8.3	0.7	8.0	11.1	3.7	313.0
Import ¹	3.3	0.2	2.0	12.4	0.1	0.2	0.0	0.0	0.2	18.3
Total availabilities	156.6	70.9	13.3	90.1	8.9	1.0	9.4	13.0	5.9	369.2
Total domestic use	116.6	52.6	9.1	73.3	7.9	0.9	8.2	11.6	4.3	284.4
- Human	48.0	0.4	8.0	4.9	3.1	0.2	1.1	0.1	0.0	65.7
- Seed	4.9	2.2	0.5	0.4	0.4	0.0	0.4	0.5	0.1	9.5
- Industrial	10.8	9.1	0.1	11.9	1.7	0.0	0.1	0.4	0.1	34.2
<i>o.w. bioethanol</i>	4.7	0.4	0.0	6.5	1.0	0.0	0.0	0.3	0.0	12.9
- Animal feed	53.0	40.9	0.5	56.0	2.7	0.7	6.5	10.6	4.1	175.0
Losses (excl on-farm)	0.9	0.4	0.0	0.6	0.1	0.0	0.1	0.1	0.0	2.2
Export ¹	28.9	9.5	1.5	2.6	0.2	0.0	0.2	0.0	0.0	42.8
Total use	146.4	62.5	10.6	76.4	8.1	0.9	8.4	11.7	4.3	329.4
End stocks (30.06.2018)	10.2	8.5	2.7	13.7	0.8	0.1	0.9	1.3	1.6	39.8
- Market	10.2	8.5	2.7	13.7	0.8	0.1	0.9	1.3	1.6	39.8
- Intervention	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in stocks	-0.1	0.4	0.1	2.6	0.2	0.0	-0.4	-0.6	-0.4	1.8
Change in public stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Self-sufficiency rate %	123	119	96	91	105	81	98	96	88	110

¹ Grains equivalent (grain, groats and flour).

Note: estimated export quantities for all wheat = 30.4 million t, for coarse grains = 12.4 million t.

Table 5.6 EU-28 cereal balance sheet 2016/2017 (estimate) (million t)

	Common wheat	Barley	Durum	Maize	Rye	Sorghum	Oats	Triticale	Others	EU-28
Beginning stocks (01.07.2016)	14.8	7.6	2.7	12.3	1.0	0.2	1.7	2.3	3.0	45.5
Gross production	135.4	60.2	9.1	60.7	7.5	0.7	8.1	11.8	3.7	297.1
Usable production	134.3	59.7	9.0	60.4	7.3	0.6	8.0	11.5	3.5	294.5
Import ¹	3.3	0.4	1.5	13.0	0.0	0.1	0.0	0.0	0.2	18.5
Total availabilities	152.4	67.7	13.3	85.7	8.3	1.0	9.7	13.9	6.6	358.6
Total domestic use	117.2	52.2	9.1	71.7	7.6	0.8	8.2	11.9	4.6	283.2
- Human	47.8	0.4	8.0	4.8	3.0	0.2	1.1	0.1	0.0	65.4
- Seed	5.0	2.2	0.5	0.4	0.4	0.0	0.4	0.6	0.1	9.6
- Industrial	10.5	9.0	0.1	11.5	1.6	0.0	0.1	0.4	0.1	33.4
<i>o.w. bioethanol</i>	4.5	0.4	0.0	6.0	0.9	0.0	0.0	0.3	0.0	12.2
- Animal feed	53.9	40.6	0.5	55.0	2.5	0.6	6.5	10.8	4.4	174.8
Losses (excl on-farm)	0.9	0.4	0.0	0.6	0.1	0.0	0.1	0.1	0.0	2.2
Export ¹	24.0	7.1	1.6	2.3	0.1	0.0	0.1	0.0	0.0	35.2
Total use	142.1	59.6	10.7	74.6	7.7	0.8	8.4	12.0	4.6	320.6
End stocks (30.06.2017)	10.3	8.0	2.6	11.1	0.6	0.2	1.4	1.9	2.0	38.0
- Market	10.3	8.0	2.6	11.1	0.6	0.2	1.4	1.9	2.0	38.0
- Intervention	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in stocks	-4.5	0.4	-0.2	-1.2	-0.4	0.0	-0.4	-0.4	-1.0	-7.5
Change in public stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Self-sufficiency rate %	115	114	99	84	96	82	98	97	76	104

¹ Grains equivalent (grain, groats and flour).

Note: estimated export quantities for all wheat = 25.6 million t, for coarse grains = 9.6 million t.

Table 5.7 EU-28 cereal balance sheet 2015/2016 (million t)

	Common wheat	Barley	Durum	Maize	Rye	Sorghum	Oats	Triticale	Others	EU-28
Beginning stocks (01.07.2015)	12.2	8.4	2.0	17.5	1.6	0.3	1.3	2.0	3.3	48.6
Gross production	152.5	61.9	8.4	59.2	7.8	0.7	7.6	12.8	3.5	314.4
Usable production	151.3	61.4	8.3	59.0	7.6	0.7	7.5	12.5	3.3	311.6
Import ¹	4.1	0.3	2.5	13.3	0.0	0.1	0.0	0.0	0.2	20.6
Total availabilities	167.7	70.0	12.8	89.8	9.3	1.1	8.9	14.5	6.8	380.8
Total domestic use	119.3	47.8	8.8	74.7	8.0	0.9	6.9	12.1	3.8	282.3
- Human	47.6	0.4	8.0	4.8	3.0	0.2	1.1	0.1	0.0	65.1
- Seed	5.0	2.2	0.5	0.4	0.4	0.0	0.4	0.6	0.1	9.6
- Industrial	10.9	9.0	0.1	10.9	1.6	0.0	0.1	0.4	0.1	33.1
<i>o.w. bioethanol</i>	4.9	0.4		5.5	0.9			0.3		12.0
- Animal feed	55.8	36.3	0.3	58.5	3.0	0.7	5.2	11.0	3.6	174.4
Losses (excl on-farm)	0.9	0.4	0.0	0.6	0.1	0.0	0.1	0.1	0.0	2.2
Export ¹	32.7	14.2	1.2	2.2	0.2	0.0	0.2	0.0	0.0	50.8
Total use	152.9	62.4	10.1	77.5	8.3	0.9	7.1	12.2	3.8	335.3
End stocks (30.06.2016)	14.8	7.6	2.7	12.3	1.0	0.2	1.7	2.3	3.0	45.5
- Market	14.8	7.6	2.7	12.3	1.0	0.2	1.7	2.3	3.0	45.5
- Intervention	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in stocks	2.5	-0.7	0.8	-5.2	-0.6	-0.1	0.4	0.3	-0.4	-3.1
Change in public stocks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Self-sufficiency rate %	127	128	94	79	95	77	109	104	87	110

¹ Grains equivalent (grain, groats and flour).

Note: estimated export quantities for all wheat = 33.9 million t, for coarse grains = 16.9 million t.

Table 5.8 EU-28 oilseeds balance sheets (million t)

	EU-28					% variation				
	2013/14	2014/15	2015/16	2016/17e	2017/18f	16/17 vs 15/16	% 5-yr.av.	17/18 vs 16/17	% 5-yr.av.	
Production	31.5	35.4	32.1	31.0	33.7	-3.3	0.5	8.6	6.9	
Rape	21.0	24.3	21.8	20.0	22.1	-8.3	-3.3	10.6	5.7	
Soybean	1.2	1.8	2.4	2.5	2.5	5.1	74.2	-1.0	36.5	
Sunflower	9.3	9.3	7.9	8.5	9.1	7.9	-0.8	6.8	6.2	
Total domestic use	47.6	48.9	49.8	48.8	49.9	-2.1	4.2	2.2	3.0	
Rape	24.1	25.9	24.9	23.5	25.2	-5.8	-2.5	7.4	4.3	
<i>of which crushing</i>	23.4	25.1	24.1	22.7	24.4	-5.8	-2.3	7.4	4.2	
Soybean	14.6	14.0	16.9	16.6	15.7	-1.7	17.6	-5.3	4.3	
<i>of which crushing</i>	13.1	12.5	15.0	14.8	14.0	-1.2	17.2	-5.5	3.9	
Sunflower	8.8	8.9	8.1	8.8	9.0	8.8	5.8	2.4	5.0	
<i>of which crushing</i>	7.8	7.9	7.0	7.7	7.9	9.7	5.9	2.2	4.9	
Imports	17.4	15.4	18.6	18.6	17.3	0.3	13.2	-7.2	-0.2	
Rape	3.5	2.4	3.5	3.8	3.5	8.8	10.0	-9.1	0.0	
Soybean	13.5	12.8	14.6	14.1	13.5	-3.3	9.4	-4.6	0.0	
Sunflower	0.3	0.3	0.5	0.7	0.4	50.7	144.2	-49.5	0.0	
Exports	1.1	1.3	0.9	0.9	0.9	6.0	-0.8	0.0	-3.2	
Rape	0.3	0.6	0.3	0.4	0.4	19.6	58.8	-15.6	0.0	
Soybean	0.1	0.1	0.1	0.1	0.1	4.2	64.2	-20.5	0.0	
Sunflower	0.7	0.6	0.4	0.4	0.5	-5.3	-33.1	25.8	0.0	
End stocks	2.6	3.2	3.1	2.9	3.0	-4.4	0.0	4.2	7.0	
Rape	1.0	1.1	1.1	1.0	1.1	-6.1	0.0	2.7	4.9	
Soybean	0.9	1.4	1.4	1.2	1.3	-9.9	2.8	8.7	14.4	
Sunflower	0.7	0.7	0.6	0.7	0.7	11.1	-2.4	-1.7	-2.5	
Self-sufficiency rate %	66	72	64	64	68					

Table 5.9 EU oilmeals balance sheets (million t)

	EU-28					% variation			
	2013/14	2014/15	2015/16	2016/17e	2017/18f	16/17 vs 15/16	% 5-yr.av.	17/18 vs 16/17	% 5-yr.av.
Production	28.0	28.5	29.5	28.9	29.3	-1.9	5.2	1.4	2.9
Rape	13.4	14.3	13.7	13.0	13.9	-5.8	-2.3	7.4	4.2
Soybean	10.4	9.9	11.9	11.7	11.1	-1.2	17.2	-5.5	3.9
Sunflower	4.3	4.4	3.9	4.3	4.3	9.7	5.9	2.2	4.9
Total domestic use	49.4	49.4	51.9	51.4	51.6	-1.1	4.1	0.4	3.0
Rape	13.4	14.3	13.7	12.8	13.9	-6.4	-3.9	8.7	4.5
Soybean	28.7	27.8	31.4	31.1	30.2	-0.8	8.4	-2.9	3.5
Sunflower	7.2	7.3	6.9	7.4	7.4	8.0	4.0	0.0	3.0
Imports	22.1	22.0	23.5	23.4	23.2	-0.3	4.0	-0.8	3.3
Rape	0.5	0.5	0.4	0.3	0.4	-24.4	-27.4	37.7	0.0
Soybean	18.5	18.3	19.8	19.7	19.5	-0.7	4.4	-1.0	3.6
Sunflower	3.1	3.2	3.2	3.4	3.3	5.2	3.4	-3.1	0.0
Exports	0.9	1.0	1.0	1.0	0.9	-4.4	-6.3	-2.6	-5.5
Rape	0.4	0.4	0.5	0.5	0.4	-2.5	29.9	-10.3	0.0
Soybean	0.3	0.3	0.3	0.3	0.3	-8.7	-37.4	12.8	0.0
Sunflower	0.2	0.3	0.2	0.2	0.2	-2.4	23.1	-6.0	0.0
End stocks	0.5	0.5	0.5	0.5	0.5	-3.3	-6.5	2.3	0.0
Rape	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Soybean	0.3	0.4	0.4	0.3	0.3	-4.8	-9.1	3.3	0.0
Sunflower	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0
Self-sufficiency rate %	57	58	57	56	57				

Table 5.10 EU vegetable oils balance sheets (million t)

	EU-28					% variation			
	2013/14	2014/15	2015/16	2016/17e	2017/18f	16/17 vs 15/16	% 5-yr.av.	17/18 vs 16/17	% 5-yr.av.
Production	15.5	16.1	15.8	15.5	16.1	-2.0	2.2	3.8	3.1
Rape	9.6	10.3	9.9	9.3	10.0	-5.8	-2.3	7.4	4.2
Soybean	2.6	2.5	3.0	3.0	2.8	-1.2	17.2	-5.5	3.9
Sunflower	3.3	3.3	3.0	3.2	3.3	9.7	5.9	2.2	4.9
Palm	0.0	0.0	0.0	0.0	0.0				
Total domestic use	21.9	22.6	23.0	21.9	22.6	-4.8	1.2	3.5	2.4
Rape	9.4	10.2	9.8	9.2	9.9	-6.2	-3.5	8.0	4.9
Soybean	2.1	1.8	2.4	2.3	2.2	-1.0	12.2	-7.6	2.9
Sunflower	3.7	3.9	3.9	4.0	4.0	1.3	6.1	0.9	4.2
Palm	6.7	6.6	6.9	6.4	6.6	-7.7	0.0	2.7	0.4
Imports	8.4	8.3	8.9	8.2	8.3	-7.9	1.3	1.4	0.3
Rape	0.3	0.3	0.2	0.2	0.2	-0.8	-23.3	13.7	0.0
Soybean	0.3	0.3	0.3	0.3	0.3	-7.6	-5.7	0.3	0.0
Sunflower	0.9	1.0	1.3	1.2	1.1	-10.7	23.0	-9.9	0.0
Palm	6.9	6.8	7.1	6.5	6.7	-7.6	-0.9	3.2	0.0
Exports	1.6	1.9	1.8	1.8	1.8	0.1	3.0	-0.7	-1.3
Rape	0.3	0.4	0.3	0.3	0.3	-4.4	-1.7	4.1	0.0
Soybean	0.8	0.9	1.0	0.9	0.9	-3.9	1.8	1.5	0.0
Sunflower	0.3	0.4	0.4	0.4	0.4	9.0	31.5	-8.6	0.0
Palm	0.1	0.2	0.1	0.1	0.1	15.3	1.6	-3.4	0.0
End stocks	1.6	1.6	1.5	1.5	1.5	2.2	8.9	-0.4	0.0
Rape	0.6	0.6	0.6	0.6	0.6	4.3	14.3	-1.4	0.0
Soybean	0.2	0.2	0.2	0.2	0.2	0.0	5.0	0.0	0.0
Sunflower	0.3	0.3	0.3	0.3	0.3	13.3	9.7	-4.9	0.0
Palm	0.4	0.5	0.5	0.5	0.5	-5.0	7.5	3.5	5.4
Self-sufficiency rate %	71	71	69	71	71				

SUGAR BALANCE

Table 5.11 Sugar beet production and white sugar balance in the EU (million t white sugar equivalent)

	EU-27	EU-28				% variation
	2012/2013	2013/2014	2014/2015	2015/2016e	2016/2017f	vs. 15/16
Beginning stocks	2.4	3.2	2.6	3.9	1.9	-51
White sugar production	17.4	16.7	19.5	14.9	16.7	12
Imports	3.9	3.7	2.9	2.9	2.9	0
Availabilities	23.6	23.6	25.0	21.7	21.5	-1
Total domestic uses white sugar	18.9	19.5	19.6	18.4	19.1	4
- Human	16.6	17.5	17.0	16.2	16.9	4
- Industrial	2.3	2.0	2.6	2.2	2.2	4
<i>o.w. bioethanol</i>	1.5	1.2	1.8	1.4	1.4	5
Exports	1.5	1.5	1.4	1.4	1.5	6
Total uses	20.5	21.0	21.0	19.8	20.6	4
End stocks	3.2	2.6	3.9	1.9	0.9	-54
- Market	3.2	2.6	3.9	1.9	0.9	-54
- Intervention	0.0	0.0	0.0	0.0	0.0	
Self-sufficiency rate %	92	86	99	81	87	
Sugar beet production	114	109	131	102	108	6

OLIVE OIL BALANCE

Table 5.12 EU Olive oil balance sheets (1000 t)

	EU-28					% variation	
	2012/13	2013/14	2014/15	2015/16e	2016/17f	16/17 vs 15/16	% 5- yr.av.
Production	1463	2483	1434	2322	1793	-23	-13
Total domestic use	1601	1730	1569	1634	1541	-6	-7
Imports	153	53	225	98	160	64	38
Exports	489	601	508	574	550	-4	1
End stocks	427	632	213	426	288	-32	-42
Self-sufficiency rate %	91	143	91	142	116	-18	49

MILK AND DAIRY PRODUCTS

Table 5.12 Milk supply and utilisation in the EU-28

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Dairy cows (million heads)¹	23.3	23.3	23.4	23.3	22.9	22.6	0.3	0.2	-0.4	-1.6	-1.2
of which EU-15	17.8	17.9	18.1	18.1	17.9	17.8	0.7	1.2	-0.2	-1.2	-0.6
of which EU-N13	5.4	5.4	5.2	5.2	5.0	4.8	-1.0	-3.1	-0.9	-3.4	-3.2
Milk yield (kg/dairy cow)²	6 489	6 737	6 863	6 926	7 066	7 211	3.8	1.9	0.9	2.0	2.0
of which EU-15	7 040	7 272	7 359	7 409	7 520	7 632	3.3	1.2	0.7	1.5	1.5
of which EU-N13	4 684	4 951	5 134	5 233	5 443	5 660	5.7	3.7	1.9	4.0	4.0
Milk production (million t)	153.9	159.7	163.0	163.8	164.3	165.5	3.8	2.0	0.5	0.3	0.8
of which EU-15	125.7	130.7	133.8	134.4	134.8	136.0	4.0	2.4	0.5	0.3	0.8
of which EU-N13	28.3	29.0	29.2	29.4	29.5	29.6	2.6	0.5	0.8	0.2	0.4
Feed use (million t)	3.5	3.7	3.4	3.5	3.4	3.3	3.1	-6.3	1.4	-1.8	-1.8
On farm use and direct sales (mio t)	8.5	7.2	6.8	7.0	6.7	6.6	-15.4	-4.9	3.1	-4.6	-2.1
Delivered to dairies (million t)	141.9	148.9	152.7	153.3	154.2	155.6	4.9	2.6	0.4	0.6	0.9
of which EU-15	122.0	127.4	130.8	131.1	131.7	132.9	4.4	2.7	0.2	0.5	0.9
of which EU-N13	19.9	21.5	21.9	22.2	22.419	22.688	8.3	1.8	1.4	1.0	1.2
Delivery ratio (%)³	92.2	93.2	93.7	93.6	93.8	94.0	1.1	0.5	-0.1	0.3	0.2
of which EU-15	97.1	97.5	97.8	97.5	97.7	97.8	0.4	0.3	-0.3	0.2	0.1
of which EU-N13	70.2	74.1	75.0	75.5	76.1	76.8	5.5	1.3	0.6	0.8	0.8
Fat content of milk (%)	4.03	3.98	3.99	4.03	4.03	4.05	-1.2	0.5	1.0	0.0	0.3
Protein content of milk (%)	3.36	3.35	3.36	3.36	3.36	3.36	-0.1	0.2	0.0	0.0	0.0

¹ Dairy cow numbers refer to the end of the year (historical figures from the December cattle survey).² Milk yield is dairy cow production per dairy cows (dairy cows represent around 99.7% of EU total production).³ Delivery ratio is milk delivered to dairies per total production.

Table 5.13 EU-28 fresh dairy products market balance (1000 t)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	13/12	14/13	15/14	16/15	17/16
Production	46 761	46 467	46 920	47 080	47 174	47 268	-0.6	1.0	0.3	0.2	0.2
of which Drinking Milk	31 767	31 404	31 344	31 272	31 209	31 147	-1.1	-0.2	-0.2	-0.2	-0.2
of which Cream	2 575	2 624	2 713	2 690	2 717	2 744	1.9	3.4	-0.8	1.0	1.0
of which Acidified Milk	8 076	7 969	8 045	8 246	8 328	8 412	-1.3	1.0	2.5	1.0	1.0
of which Other Fresh Products ²	4 342	4 471	4 817	4 872	4 919	4 965	3.0	7.7	1.1	1.0	0.9
of which EU-15	40 372	40 057	40 325	40 446	40 486	40 527	-0.8	0.7	0.3	0.1	0.1
of which EU-N13	6 389	6 410	6 595	6 634	6 687	6 741	0.3	2.9	0.6	0.8	0.8
Imports (extra EU)	33	19	12	14	14	14	-43	-36	19	0	0
Exports (extra EU)	635	773	908	1 120	1 288	1 417	22	18	23	15	10
Domestic use¹	46 159	45 714	46 024	45 974	45 900	45 865	-1.0	0.7	-0.1	-0.2	-0.1
p.c. consumption (kg)	91.2	90.0	90.4	89.9	89.4	89.0	-1.3	0.4	-0.5	-0.6	-0.4
Self-sufficiency rate (%)	101	102	102	102	103	103					

¹ Domestic use includes stock changes.² Includes buttermilk, drinks with milk base and other fresh commodities.

Note: The figures on imports and exports are referring to total trade, i.e. including inward processing.

Table 5.14 EU-28 cheese market balance (1000 t)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Production (in dairies)	9 011	9 213	9 550	9 682	9 869	10 083	2.2	3.7	1.4	1.9	2.2
of which from pure cow's milk	8 298	8 478	8 703	8 817	8 985	9 180	2.2	2.7	1.3	1.9	2.2
of which from other milk ¹	713	735	847	865	884	903	3.1	15.2	2.2	2.2	2.2
EU-15 (in dairies)	7 661	7 843	8 122	8 196	8 323	8 490	2.4	3.6	0.9	1.5	2.0
EU-N13 (in dairies)	1 350	1 370	1 428	1 486	1 546	1 593	1.5	4.2	4.0	4.0	3.1
Processed cheese impact ²	358	350	343	348	348	348	-2.3	-1.9	1.4	0.0	0.0
Total production	9 369	9 563	9 893	10 030	10 217	10 431	2.1	3.5	1.4	1.9	2.1
Imports (extra EU)³	75	77	61	71	74	78	2.5	-20	14.8	5.0	5.0
Exports (extra EU)	786	721	719	800	824	898	-8.3	-0.3	11.4	3.0	9.0
Total domestic use	8 657	8 874	9 206	9 361	9 482	9 611	2.5	3.7	1.7	1.3	1.4
Stock changes	0	45	30	- 60	- 15	0					
Processing use	311	306	303	303	303	303	-1.6	-1.2	0.0	0.0	0.0
Human consumption	8 346	8 567	8 903	9 058	9 179	9 308	2.6	3.9	1.7	1.3	1.4
of which EU-15	7 050	7 241	7 502	7 577	7 649	7 728	2.7	3.6	1.0	0.9	1.0
of which EU-N13	1 296	1 327	1 402	1 481	1 531	1 580	2.4	5.6	5.6	3.4	3.2
p.c. consumption (kg)	16.5	16.9	17.5	17.7	17.9	18.1	2.3	3.6	1.3	0.9	1.1
Self-sufficiency rate (%)	108	108	107	107	108	109					

¹ Other milk includes goat, ewe and buffalo milk.² Processed cheese impact includes production and net exports of processed cheese.³ Imports and exports include processed cheese.**Table 5.15 EU-28 whole milk powder market balance (1000 t)**

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Production	732	766	732	759	744	747	4.6	-4.5	3.7	-2.0	0.5
of which EU-15	666	694	667	692	678	682	4.3	-3.9	3.7	-2.0	0.5
of which EU-N13	67	72	64	67	66	66	7.6	-10	4.0	-2.0	0.0
Imports	3	1	4	6	5	4	-58	181	39	-10	-20
Exports	374	390	400	380	361	361	4.1	2.7	-4.9	-5.0	0.0
Domestic Use¹	361	378	336	384	387	390	4.5	-11	14	0.9	0.6
Self-sufficiency rate (%)	203	203	218	198	192	192					

¹ Domestic use includes stock changes.

Table 5.16 EU-28 skimmed milk powder market balance (1000 t)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Production	1 108	1 457	1 534	1 596	1 427	1 427	31	5.3	4.0	-10.6	0.0
of which EU-15	958	1 235	1 321	1 374	1 223	1 223	29	7.0	4.0	-11.0	0.0
of which EU-N13	150	222	213	222	204	204	48	-3.9	4.0	-8.0	0.0
Imports (extra EU)	5	2	3	4	4	4	-54	50	7	0	0
Exports (extra EU)	407	648	692	574	712	805	59	6.8	-17	24	13
Domestic use	697	721	737	762	791	822	3.5	2.2	3.3	3.8	3.9
Ending stocks	80	170	279	543	471	275					
Private (industry)	80	170	250	190	140	155					
Public (intervention)	0	0	29	353	331	120					
Stock changes	10	90	109	264	- 72	- 196					
Self sufficiency rate (%)	159	202	208	209	180	174					

Table 5.17 EU-28 butter market balance (1000 t)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Production	2 127	2 237	2 341	2 403	2 433	2 491	5.2	4.6	2.7	1.2	2.4
of which EU-15	1 877	1 976	2 063	2 109	2 130	2 177	5.3	4.4	2.2	1.0	2.2
of which EU-N13	250	261	277	294	303	315	4.2	6.3	6.0	3.0	4.0
Imports	21	25	3	3	5	11	23	-90	9	100	100
Exports	116	135	172	211	233	242	16	27	23	10	4
Domestic use	2 037	2 098	2 161	2 204	2 235	2 261	3.0	3.0	2.0	1.4	1.1
p.c. consumption (kg)	4.0	4.1	4.2	4.3	4.4	4.4	2.7	2.7	1.6	1.0	0.8
Ending stocks	95	125	135	125	95	105					
Private	95	125	135	125	95	95					
Public (intervention)	0	0	0	0	0	0					
Stock changes	- 5	30	10	- 10	- 30	0					
Self-sufficiency rate (%)	104	107	108	109	109	110					

Note: Data refer to butter, butter oil and other yellow fat products expressed in butter equivalent. Figures on imports and exports do not include inward/outward processing.

MEAT

Table 5.18 EU-28 overall meat balance (1000 t carcass weight equivalent)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Gross Indigenous Production	43 577	44 434	45 849	46 722	46 876	46 910	2.0	3.2	1.9	0.3	0.1
Live Imports	1	2	2	2	2	2					
Live Exports	179	197	247	290	311	316	10.3	25.1	17.7	7.0	1.7
Net Production	43 399	44 238	45 604	46 433	46 567	46 596	1.9	3.1	1.8	0.3	0.1
<i>EU-15</i>	36 349	36 728	37 654	38 235	38 262	38 117	1.0	2.5	1.5	0.1	-0.4
<i>EU-N13</i>	7 051	7 510	7 950	8 198	8 305	8 479	6.5	5.8	3.1	1.3	2.1
Meat Imports	1 310	1 332	1 368	1 401	1 429	1 463	1.6	2.7	2.4	2.0	2.4
Meat Exports	3 728	3 515	3 790	4 530	4 305	4 293	-5.7	7.8	19.5	-5.0	-0.3
Consumption	40 982	42 055	43 182	43 305	43 691	43 766	2.6	2.7	0.3	0.9	0.2
Population (mio)	507	509	510	512	513	515	0.3	0.3	0.3	0.3	0.4
Per Capita Consumption¹ (kg)	64.5	66.0	67.6	67.6	68.0	67.9	2.4	2.4	0.1	0.6	-0.2
Self-sufficiency rate %	106	106	106	108	107	107					

¹ In retail weight. Coefficients to transform carcass weight into retail weight are 0.7 for beef and veal meat, 0.78 for pigmeat and 0.88 for both poultry meat and sheep and goat meat.

Table 5.19 EU-28 beef/veal market balance (1000 t carcass weight equivalent)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Gross Indigenous Production	7 499	7 695	7 863	8 082	8 201	8 068	2.6	2.2	2.8	1.5	-1.6
Live Imports	0	0	0	0	0	0					
Live Exports	109	114	178	219	241	246	5.3	55.6	22.9	10.0	2.0
Net Production	7 391	7 580	7 685	7 863	7 960	7 822	2.6	1.4	2.3	1.2	-1.7
<i>EU-15</i>	6 678	6 791	6 831	6 959	7 028	6 902	1.7	0.6	1.9	1.0	-1.8
<i>EU-N13</i>	712	789	854	904	932	920	10.8	8.2	5.9	3.0	-1.2
Meat Imports	304	308	300	306	315	326	1.4	-2.5	2.0	3.0	3.5
Meat Exports	160	206	207	244	256	259	28.3	0.5	18.1	5.0	1.0
Consumption	7 534	7 682	7 778	7 925	8 019	7 890	2.0	1.2	1.9	1.2	-1.6
Per Capita Consumption¹ (kg)	10.4	10.6	10.7	10.8	10.9	10.7	1.7	0.9	1.6	0.9	-2.0
<i>Share in total meat cons. (%)</i>	18.4	18.3	18.0	18.3	18.4	18.0					
Self-sufficiency rate (%)	100	100	101	102	102	102					

¹ In retail weight. Coefficient to transform carcass weight into retail weight is 0.7 for beef and veal meat.

Table 5.20 EU-28 pigmeat market balance (1000 t carcass weight equivalent)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Gross Indigenous Production	22 384	22 568	23 276	23 319	23 242	23 289	0.8	3.1	0.2	-0.3	0.2
Live Imports	. 05	. 11	. 25	. 25	. 25	. 25					
Live Exports	26	36	21	10	9	9	36.2	-42.0	-52.0	-10.0	5.0
Net Production	22 358	22 533	23 256	23 309	23 233	23 280	0.8	3.2	0.2	-0.3	0.2
<i>EU-15</i>	19 054	19 074	19 716	19 891	19 792	19 752	0.1	3.4	0.9	-0.5	-0.2
<i>EU-N13</i>	3 304	3 459	3 540	3 418	3 442	3 528	4.7	2.4	-3.5	0.7	2.5
Meat Imports	15	14	11	12	12	13	-8.3	-19.7	6.2	2.0	8.0
Meat Exports	2 238	1 947	2 217	2 795	2 543	2 492	-13.0	13.9	26.0	-9.0	-2.0
Consumption	20 134	20 600	21 050	20 526	20 703	20 801	2.3	2.2	-2.5	0.9	0.5
Per Capita Consumption¹ (kg)	31.0	31.6	32.2	31.3	31.5	31.5	2.1	1.8	-2.8	0.6	0.1
<i>Share in total meat cons. (%)</i>	49.1	49.0	48.7	47.4	47.4	47.5					
Self-sufficiency rate (%)	111	110	111	114	112	112					

¹ In retail weight. Coefficient to transform carcass weight into retail weight is 0.78 for pigmeat.

Table 5.21 EU-28 poultry meat market balance (1000 t carcass weight equivalent)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Gross Indigenous Production	12 792	13 270	13 784	14 392	14 490	14 604	3.7	3.9	4.4	0.7	0.8
Live Imports	1	1	1	2	2	2					
Live Exports	10	11	10	10	10	10	5.7	-3.3	-7.6	0.0	0.0
Net Production	12 783	13 261	13 775	14 384	14 482	14 596	3.7	3.9	4.4	0.7	0.8
<i>EU-15</i>	9 829	10 082	10 303	10 594	10 639	10 656	2.6	2.2	2.8	0.4	0.2
<i>EU-N13</i>	2 954	3 178	3 472	3 790	3 843	3 940	7.6	9.3	9.2	1.4	2.5
Meat Imports	791	821	855	880	898	916	3.8	4.1	3.0	2.0	2.0
Meat Exports	1 293	1 331	1 346	1 472	1 487	1 523	2.9	1.1	9.4	1.0	2.4
Consumption	12 282	12 751	13 284	13 792	13 893	13 989	3.8	4.2	3.8	0.7	0.7
Per Capita Consumption¹ (kg)	21.3	22.1	22.9	23.7	23.8	23.9	3.6	3.8	3.5	0.4	0.3
<i>Share in total meat cons. (%)</i>	29.9	30.3	30.7	31.9	31.8	32.0					
Self-sufficiency rate (%)	104	104	104	104	104	104					

¹ In retail weight. Coefficient to transform carcass weight into retail weight is 0.88 for poultry meat.

Table 5.22 EU-28 sheep and goat meat market balance (1000 t carcass weight equivalent)

	EU-28						% variation				
	2013	2014	2015	2016e	2017f	2018f	14/13	15/14	16/15	17/16	18/17
Gross Indigenous Production	902	901	925	929	943	950	-0.1	2.7	0.3	1.5	0.7
Live Imports	0	0	0	0	0	0					
Live Exports	34	36	38	52	52	52	7.7	3.4	38.2	-1.0	0.0
Net Production	868	865	888	877	891	898	-0.4	2.7	-1.3	1.7	0.7
<i>of which on-farm slaughterings</i>	108	112	120	122	121	121	3.7	6.7	2.0	-1.0	0.0
<i>EU-15</i>	787	780	805	791	803	807	-0.9	3.2	-1.8	1.5	0.5
<i>EU-N13</i>	81	84	83	86	89	91	4.4	-1.9	3.5	3.5	3.0
Meat Imports	200	189	202	203	204	208	-5.6	7.3	0.3	0.5	2.0
Meat Exports	36	32	20	19	19	19	-11.2	-37.7	-5.6	1.5	0.5
Consumption	1 032	1 021	1 070	1 061	1 076	1 087	-1.0	4.8	-0.9	1.5	1.0
Per Capita Consumption¹ (kg)	1.8	1.8	1.8	1.8	1.8	1.9	-1.3	4.4	-1.2	1.2	0.6
<i>Share in total meat cons. (%)</i>	2.5	2.4	2.5	2.4	2.5	2.5					
Self-sufficiency rate (%)	87	88	86	88	88	87					

¹ In retail weight. Coefficient to transform carcass weight into retail weight is 0.88 for sheep and goat meat.

7. METHODOLOGY

This outlook takes into account the most recent macroeconomic information and the domestic and international market developments and expectations. Data is subject to retrospective review.

The balance sheets refer to five calendar years for meat and dairy and five marketing years for crops (July/June). Crop marketing years start with the harvest. Thus, area, yield and production figures of crops refer to the year of harvest.

Sources

- Eurostat
 - Agricultural production yearly for historical data and monthly data for previous and current year for meat and dairy production.
 - Farm livestock survey.
 - Gross Indigenous Production (GIP) forecast for meat.
 - Early estimates for crop products.
- Comext database (extra-EU trade statistics).
- Weekly commodity prices communicated to DG Agriculture and Rural Development by the Member States.

Production projections for current and next year are based, depending on the sector, on Eurostat monthly data, official estimates of ministries or national statistical institutes, and on the Crop Monitoring and Yield Forecasting projections (JRC MARS AGRI4CAST¹⁵), in the case of cereals; on expert forecasts for Gross Indigenous Production (in heads) sent by Member States (MS) to Eurostat in the case of meat; on monthly milk deliveries for dairy.

The projected external trade figures are derived from the latest monthly data available by applying trends and annual profiles as well as from trade licences and import quotas, when applicable.

Arable crops

Crop areas: For MS in which data is not yet available, a percentage variation is estimated on the basis of those MS which communicated data or area is estimated through the trimmed average of the last five marketing years or assuming no changes compared to the previous year.

Yields: MS estimates or AGRI4CAST projections are used if available. If these data are not available, preferably the yield trend over the 12 last years is retained, otherwise the trimmed average of the last five marketing years is used.

Trade: Cereal trade figures include cereals as such, plus flour and groats (in cereal equivalent). In the former editions of the Short Term Outlook maize trade included additional processed products. This has been revised backward and the balance is closed via an adjustment of the processing demand.

Balance sheets are based on a marketing year starting with the harvest: July/June for cereals and Oct/Sept for sugar.

Cereals: Human consumption, seed use and other industrial use is based on historic relations regarding population and planted area in the relevant marketing year. Feed use is based on calculations with FeedMod, an in-house model for feed ration optimisation. Projections are based on information about the ethanol production development. Stocks are closing the balance for cereals¹⁶. Intervention stocks equal official figures of the Directorate-General for Agriculture and Rural Development for the past and estimates based on past experience for the current marketing year, if applicable.

Oilseeds: The balance sheets include rape, soybean and sunflower seed meal and oil, plus palm oil. Stock data represent own estimates based on expert judgement and market information. Thus, the balances close on the domestic use. A coefficient is used to determine the share of oilseeds used in the crushing industry. These crushing coefficients range from 94% to 98% for rapeseed, 89-91% for soybeans and 85-89% for sunflower seed. The balance sheets are interlinked, as oilseeds are crushed into meals and oils on the basis of processing coefficients, used to determine the percentage of meals and oils obtained from oilseeds in the crushing process. These processing coefficients equal 57% for rape meal, 79% for soybean meal and 55% for sunflower meal and 41% for rape oil, 20% for soybean oil and 42% for sunflower oil.

Sugar: The balance sheet includes both sugar beet and white sugar. For sugar beet the procedure is similar to the other arable crops. The link with white sugar production is made through the white sugar production as notified under the Common Market Organisation (CMO) for sugar. The presented balances do only consider white sugar (e.g. no isoglucose or products containing sugar) and take into account sugar beet production outside of the quota. Industrial and biofuel use is based on historical data and projections based on information about ethanol production development. Stocks are taken from Member States notifications when they become available and therefore the balance closes over human consumption. When Member State information on stocks is not yet available or for the projections they are closing the balance. The reported stocks include carry-forward sugar.

¹⁵ <http://mars.jrc.ec.europa.eu/mars/About-us/AGRI4CAST/Crop-Monitoring-and-Yield-Forecasting>

¹⁶ For all crops this refers to a situation as of end-June, which may differ from other balances, e.g. IGC for maize, USDA for corn.

Meat

The meat balance sheets cover the beef, pig, poultry, sheep and goat meat categories. Trade data is divided into live animals and meat products ('fresh and chilled', 'frozen', 'salted' and 'prepared'). The offal and fat categories are excluded (with the exception of pork lard). All data is expressed in carcass weight equivalent¹⁷.

Production forecasts for the year 2017 and 2018 are based on annual and monthly data on slaughtering, livestock numbers, Member States expert forecast, on the trends in livestock numbers and meat consumption patterns.

Net production refers to data on slaughtering taking place in the registered slaughterhouses as well as in other establishments. The other slaughterings are subject to constant reviews; therefore, data on the net production might be sensitive to these changes.

GIP is calculated as net production plus live exports minus live imports. Consumption is calculated as a residual, i.e. sum of production plus imports less exports plus stock change.

Milk and dairy products

The commodity balance sheets cover production of dairy products taking place in dairy processing plants and so far do not include on-farm production¹⁸. Production of EU-28 total dairy products and in particular for SMP and WMP are estimated, where necessary since the concentration in the dairy

¹⁷ Carcasses of bovine animals, pigs, sheep, goats and poultry are defined at point 3 ('carcass weight' at point 4) of Annex I of Regulation (EC) No 1165/2008 concerning livestock and meat statistics. For more details as regards the conversion coefficients of product weight into carcass weight equivalent please refer to the Eurostat document ASA/TE/F/655.

¹⁸ Milk statistics for the EU-N13 on-farm production of butter, cheese and other products has only recently become complete and has yet to be validated.

Glossary

EU-15 includes EU Member States in 2003: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg, the Netherlands, Austria, Portugal, Finland, Sweden and the United Kingdom.

EU-N12 includes the Members States that joined the EU in 2004: the Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia and Slovakia, and in 2007: Bulgaria and Romania.

EU-N13 includes EU-N12 plus Croatia, which joined the EU the 1st July 2013.

EU-27 includes EU-15 plus EU-N12, i.e. the European Union between 2007 and 2013.

EU-28 includes EU-15 plus EU-N13, i.e. the European Union since 2013.

Data

Balance sheets for the EU and production figures at Member State level are available on Europa (http://ec.europa.eu/agriculture/markets-and-prices/short-term-outlook/index_en.htm)

processing industry has resulted in an increasing number of Member States not publishing their milk (monthly) production statistics due to confidentiality.

Milk production estimates for year 2015 are based on Eurostat annual statistics, estimates for 2016 and projections for 2017 and 2018 are based on the available monthly statistics, on price expectations, on the trends stemming from the medium term projections and on consumption patterns. Assumptions are made on the dairy herd and cow milk yield, milk demand for direct sales, feed and on-farm use, and milk fat and protein content developments.

Milk uses for dairy products are balanced with availabilities of total milk fat and proteins through a 'residual approach'. Market forecasts are first made for milk deliveries and the production of dairy products. The forecast production figures are then converted into protein and fat equivalents and subtracted from the available dairy fat and protein of the milk delivered.

In the dairy products balances, consumption is calculated as a residual, i.e. sum of production plus imports less exports plus stock change. Knowledge of private (commercial) stocks and consumption levels is incomplete or lacking for most dairy products. The developments in domestic use may hide considerable changes in private (industry/trade) stocks.

Trade is expressed in milk equivalent using the total solid methodology accounting for the non-fat and protein components of milk such as lactose. As a consequence, the milk coefficient of cheese (composed of fat and protein only) is lower with this methodology (3.58) than when accounting for fat and protein only (5.97). The other coefficients used are: 6.57 for butter, 7.57 for SMP, 7.56 for WMP, 7.48 for whey powder, 0.85 for drinking milk, 3.21 for cream and 0.98 for yogurts.

DISCLAIMER: While all efforts are made to reach robust estimates, uncertainties on results may still remain. This publication does not necessarily reflect the official opinion of the European Commission.

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