# **Executive summary**

Agricultural market developments have attracted considerable attention recently, due to increasing consumer food prices and sharp short term price fluctuations of agricultural commodity prices. This medium term outlook provides a projection for major EU agricultural commodity markets and agricultural income until the year 2022, based on a set of coherent assumptions. Under these assumptions agricultural commodity prices are expected to stay firm over the medium term, supported by factors such as the growth in global food demand, the development of the biofuel sector and a prolongation of the long term decline in food crop productivity growth.

EU commodity markets are projected to remain balanced - on average - over the outlook period, without the need for market intervention. Prospects for agricultural income grow at EU level during the outlook period, resulting from continuing decline in labour input rather than from income increases at sector level.

## Policy and macroeconomic assumptions

The present medium term outlook for EU agricultural markets and income is based on a status quo assumption for agricultural and trade policy. The present proposals of the Commission to reform the Common Agricultural Policy (CAP) are not taken into account, but the CAP is assumed to follow the Health-Check decisions and global trade policy is assumed to respect the Uruguay Round Agreement on Agriculture. Macroeconomic assumptions include negative EU GDP growth of -0.3% in 2012, followed by a gradual return to a modest growth of about 2% per year as of 2015, and the exchange rate remaining at current levels until 2014, with a subsequent slight appreciation of the Euro to around 1.35 USD/EUR in 2022.

# Arable crops

The medium term prospects depict a relatively positive outlook for arable crops in the EU as a result of solid world demand and firm prices. In the EU, market developments for arable crops are driven by the biofuel market, which is the most dynamic demand factor, as EU feed and food demand are expected to show only a marginal increase.

The medium term outlook for EU cereal markets is characterised by tight market conditions, low stock levels and prices remaining above historical levels. These developments are driven by moderate supply growth reaching 309 million t by 2022, mainly the result of low annual yield growth rates (0.9% on average), and an increase in the domestic use of cereals in the EU, most notably due growing demand by the ethanol and biomass industry in the framework of the Renewable Energy Directive (RED). Some reallocation between crops in the context of a stable overall cereal area is expected, with maize and common wheat further increasing their share (up to 17% and 42% respectively) at the expense of other cereals. The growing demand for rice will be satisfied by increasing imports further reducing the EU self-sufficiency to 56%.

Similar drivers impact upon the medium term prospects for the EU oilseed markets, which show a positive outlook for producers with strong demand and high oilseed oil prices. Supply growth is driven by moderate yield growth and to a lesser extent

from a slightly expanding oilseed area. The expected increase in domestic use of oilseeds in the EU would also be driven by additional demand for vegetable oil as biodiesel feedstock.

Prospects for EU sugar markets are mixed. The growing demand for ethanol in the framework of the RED supports a growth in sugar beet production geared towards ethanol. On the other hand, for food consumption, isoglucose is expected to increasingly replace beet sugar, following the expiry of quotas in 2015. The expiry of the sugar quota will lead to a reduction of the domestic sugar price in the EU and make imports, including preferential access, less attractive.

Overall, the projected growth in domestic consumption of cereals, oilseeds and sugars is largely dependent on the assumptions for bioenergy use. Regarding biofuel, it is assumed that progress towards meeting the Renewable Energy Directive (RED) target of 10% of renewables in energy share will continue, but the target will be met after 2020. Nevertheless, the production and use of biofuels will increase by about two-thirds, reaching a 8.5% share by 2022.

#### Meat

The EU market is likely to be affected by the on-going economic downturn and historically high levels of unemployment, which tend to push EU demand towards cheaper meat options. The new animal welfare requirements in the pig sector are also expected to play an important role in the near future. As a consequence, total EU meat production, after having increased during both 2010 and 2011, will contract by 2% over the next two years. After this reduction, total meat production is projected to steadily recover over the ten year horizon and to reach almost 45 million tonnes in 2022, approximately the same level recorded in 2011.

Meat production is mainly driven by increasing poultry and pork meat consumption, as well as by a firm external demand and higher prices. On a per capita basis, EU meat consumption in 2022, at 82.6 kg, would be at approximately the same level as it was in 2009 and 1% lower than in 2011, despite the improved macroeconomic prospects. Pig meat is expected to remain the preferred meat in the EU with 40.8 kg/capita consumption in 2022, compared to 24.1 kg for poultry, 15.7 kg for beef/veal and less than 2.0 kg for sheep and goat meat.

The net trade position of the EU is projected to deteriorate over the outlook period, driven by an increase in meat imports (of beef/veal, sheep and goat and poultry meats) and a parallel decline in exports of poultry. Aggregate meat imports would grow by 5.2% (2022 vs. 2011) and exports would decline by 6.8%, leaving the EU, nevertheless, a net exporter of pig and poultry meats in 2022.

## Milk and dairy products

Medium term prospects for milk and dairy products appear favourable due to the continuing expansion of world demand.

Global population and economic growth, and increasing preference for dairy products are expected to be the main drivers, fuelling EU exports and sustaining commodity prices. The best export performance is shown by cheese and SMP, whose exports over the outlook period would expand by two thirds and triple respectively. Milk production is projected to continue increasing from 2012 onwards, at a moderate growth rate. Aggregate EU production would remain below the potential growth rate provided by the gradual elimination of the quota regime. EU milk production is projected to reach 159.3 million tonnes in 2022, accounting for a cumulative increase of 5% since 2011.

Cheese output is seen to grow by almost 7% on aggregate from 2011 to 2022, reaching 9.6 million tonnes by the end of the outlook. Consumer preference towards fresh dairy products, in particular drinking milk, cream and yogurt, would sustain an expansion in production up to 49.6 million tonnes in 2022 (+8% compared to 2009 and +6.3% compared to 2011) EU skimmed milk powder production is projected to increase by 23% throughout the outlook to reach around 1.3 million tonnes in 2022; Exports would reach 678 000 tonnes by the end of the outlook (30% more than in 2011). Total butter production is expected to remain constant in the short run, and to recover in the years soon after the quota expiry, reaching 2.4 million tonnes in 2022 (+8% with respect to 2011).

## Agricultural income

While the medium term changes in the price and volume components of the arable crops and major livestock sectors have been established in line with the market projections, in the remaining agricultural sectors – such as fruit, vegetables, wine and olive oil – it was assumed that income would follow a development related to its historical trend. Compared to a five year average of the period 2008-2012, the EU-27 agricultural income per annual working unit in real terms would be 17.5% higher in 2022 compared to the base period. This positive trend is the result of an expected sharp deterioration of the factor income in real terms at sector level (-15.6%), which is more than compensated by a reduction in the workforce employed in agriculture (-28.4%).

Against the background of an overall positive trend in real agricultural income per worker, marked differences appear between the EU-15 and EU-N12 aggregates. In the EU-15, agricultural income in 2022 is expected to be roughly unchanged (+0.1%) compared the base period. On the other hand, in the EU-N12, agricultural income continues to display a positive trend, almost 55% higher than the reference period by 2022, thus slightly converging towards the EU average.

## Caveats

The outlook for EU agricultural markets and income presented in this publication is based on a specific set of assumptions regarding the future economic, market and policy environment. In addition, the baseline assumes normal weather conditions, steady yield trends and no disruptions caused by factors like animal disease outbreaks or food safety issues.

The projections are not intended as a forecast of future outcomes, but instead as a description of what may happen given a specific set of assumptions and circumstances, which at the time of making the projections were judged plausible. As such, they serve as a reference for policy simulations. It follows that the baseline projections depict rather smooth market developments, while in reality markets tend to move along a more volatile path as observed in the past and particularly over recent years.

An uncertainty analysis accompanies the presented baseline to quantify some of the uncertainties and to provide background on variation of the results. The uncertainty scenarios analysed focus on the impacts of i) the variability of input costs at regional level on farmers' income, ii) climate change on the agricultural sector, and iii) different EU biofuel policy scenarios on feedstock markets.