NOTE TO THE READERS

The outlook presented in this publication consist of a set of market and sector income prospects elaborated on the basis of specific assumptions regarding macroeconomic conditions, the agricultural and trade policy environment, weather conditions and international market developments. They are not intended to constitute a forecast of what the future will be, but instead a description of what may happen under a specific set of assumptions and circumstances, which at the time of projections were judged plausible. As such, they should be seen as an analytical tool for medium-term market and policy issues, not as a short-term forecasting tool for monitoring market developments and addressing short-term market issues.

The present projections and analyses have been carried out on the basis of economic models available in the European Commission (at the Directorate-General for Agriculture and Rural Development (AGRI) and in the Joint Research Centre – Institute for Perspective Technological Studies (IPTS)). This report is based on the information available at the end of September 2010. The changes in legislation proposed or adopted since that date have not been taken into account. Moreover the projections do not take account of any potential outcome of ongoing bilateral/regional/multilateral trade negotiations. The analysis covers the period between 2010 and 2020.

The present medium term prospects for agricultural markets and income in the EU feature some considerable improvements, including an extended time horizon (beyond the usual 7 years) and product coverage (including biofuels, detailed oilseed complex and whole milk powder) as well as an attempt to identify and quantify the main areas of uncertainty: a separate part has been added to the publication dealing with scenarios on various uncertainties.

The modelling approach has been improved by increasing the number of market and modelling experts involved and by relying on agro-economic models that represent the state of the art. The validation procedure was extended to an external review of the baseline and uncertainty scenarios in a workshop on 5-6 October 2010 in Brussels, gathering high-level policy makers, modelling and market experts from the EU, the United States and international organisations such as the Organisation for Economic Co-operation and Development, the United Nation's Food and Agriculture Organisation and the World Bank.

These changes are to be seen as an attempt to improve the accuracy, usefulness and relevance of baseline market prospects that are more important this year as the projections and analyses presented in this publication will feed into the ongoing Common Agriculture Policy post-2013 impact assessment process, as a reference (baseline) for future policy options.

For the first time, the publication involved joint efforts by AGRI and the IPTS. While the authorship and responsibility for the contents of the publication rest with AGRI, acknowledgement is due for the staff at the IPTS working on the modelling background and baseline projections, as well as the uncertainty scenarios in Part II of the publication.
The medium-term outlook for EU agriculture depicts a mixed picture with regard to commodity market developments. The outlook for EU agricultural markets remains subject to a number of uncertainties regarding future market developments as well as the macroeconomic and policy settings.

They concern in particular the drivers of demand and supply of agricultural commodities, the linkage between agriculture and energy markets and the path of economic recovery; uncertainties whose possible impacts on the baseline are addressed in Part II of the publication. Climate change will remain to influence the market outlook, with unpredictable weather patterns leading to supply fluctuations. Other factors such as future changes in agricultural and trade policies as well as the outcome of the current Doha Development Round of trade negotiations and bilateral/regional trade discussions and the policies on renewable energy could also have far reaching implications for the future pattern of EU agricultural markets.

While the expected demand growth resulting from the assumed economic recovery and mandatory biofuel mandates should support production expansion, EU output would remain under its full potential as the expected increase in input costs would limit the profitability of production. In addition, crop yields are expected to grow at a slow pace, continuing the decline in the rate of growth observed during the previous decade.

The assumed appreciation of the EUR would further weaken the competitiveness of EU exports on world markets, leading to a loss in world market share at a time when global demand is growing at a relatively fast pace. The deteriorating competitiveness of the EU under the current setting is further emphasized in the analysis of alternative assumptions on yield and global demand growth rates.

On the other hand, commodity markets are expected to remain balanced over the outlook period, without the need for market intervention, (only the SMP market will remain sensitive to global supply-demand developments over the near term). Prospects for agricultural income remain positive, displaying a modest growth rate at the EU level, driven by the decline in labour input which is expected to continue.

**Policy, economic and world market environment**

The outlook for EU agricultural markets and income over 2010-2020 assumes a status quo policy environment, stable macroeconomic conditions and relatively favourable world market perspectives. The Common Agricultural Policy is assumed to follow the Health-Check decisions, and global trade policy to respect the Uruguay Round Agreement on Agriculture. Macroeconomic assumptions include a gradual and modest EU GDP growth at around 2% p.a. and a steady appreciation of the EUR to around 1.47 USD/EUR. 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 the long-term decline in food crop productivity growth.

**Arable crops**

The medium-term prospects for the EU cereal markets depict a relatively positive picture with tight market conditions, low stock levels and prices remaining above long term averages. Supply growth is expected to result mostly from very moderate yield growth (just above 0.5% per year on average) with some reallocation between crops in a stable cereal area.
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The domestic use of cereals in the EU is expected to increase, most notably thanks to the growth in the emerging bioethanol and biomass industry in the wake of the initiatives taken by Member States in the framework of the 2008 Renewable Energy Directive (RED).

The medium-term prospects for the EU oilseed markets depict a positive picture with strong demand and high oilseed oil prices. Supply growth is expected to result mostly from moderate yield growth and to a lesser extent from a slightly expanding oilseed area, with some reallocation between crops. The expected increase in domestic use of oilseeds in the EU would also be driven by the growth in the emerging biodiesel and biomass industry following the initiatives taken by Member States in the framework of the RED. The trade balance is not expected to improve over the medium term as additional imports are required to meet the biofuel targets.

Meat

Total meat production is expected to recover over the near term from the decline suffered in the wake of the economic crisis, but longer term growth prospects remain modest at an annual rate of 0.3% on average. Aggregate meat production would reach 44.4 mio t in 2020, exceeding the 2009 level by 4%. The situation differs between ruminant and non-ruminants, as beef/veal and sheep/goat meat production would drop by 7% and 11% respectively while pig and poultry meat production would expand by 7% each. The potential growth in non-ruminant meat production would remain constrained by the expected increase in production costs.

The driving factor for production growth would be the increasing poultry and pig meat consumption. On a per capita basis, overall EU meat consumption would reach 85.4 kg in 2020, 2% higher than 2009. Poultry meat consumption would increase most, above 6% and pig meat growth would remain below 5% on aggregate between 2009 and 2020. Pig meat would remain the most preferred meat in the EU at 43.3 kg/capita in 2020, compared to 24.7 kg for poultry, 15.4 kg for beef and veal and less than 2 kg for sheep and goat meat.

The net trade position of the EU is projected to deteriorate over the outlook driven by a steady increase in meat imports (of beef and poultry meats) and a parallel decline in meat exports (of beef, pig and poultry meats). Aggregate meat imports would grow by 14% altogether, while meat exports would decline by almost 23% by 2020, leaving the EU with net exports of around 200 thousand t, with pig meat as the single commodity with a positive net trade balance.

Milk and dairy products

Milk production is expected to return to an increasing path, driven by a fairly optimistic demand outlook based on improved macroeconomic prospects. The rate of increase will be rather moderate, with EU-27 milk production in 2020 projected to exceed the 2009 level by less than 4%. Milk deliveries would increase by a slightly higher rate (of almost 5%), the difference being due to the gradually declining on-farm consumption in the EU-12. The quota abolition is expected to lead to a very modest reaction of EU-27 milk deliveries at the end of the quota regime in 2015.

The outlook appears favourable for higher value added dairy commodities, driven by growing demand for cheese and fresh dairy products. Production of fresh dairy products (including drinking milk, cream, yoghurts, etc.) is projected to increase by about 8% (from 2009 to 2020) and cheese output is depicted to grow by about 10%. Prospects for cheese exports are favourable despite the strengthening EUR, with the EU maintaining a steady share in global cheese exports above 30%.
WMP production is expected to fall only marginally below its 2009 level and EU exports would remain firm over the medium term, driven by strong global demand. Nevertheless, the EU is expected to lose market share of global exports that would decline to 21% in 2020 (from 24% in 2009).

The outlook depicts continued market stability for butter, conditional on firm domestic demand around the level of 2 mio t. The projected increase in production for 2015 (year of quota abolition) would lead to a temporary increase in EU exports.

SMP export perspectives are less favourable given the assumed strengthening of the EUR and strong supply from other exporters. As EU demand prospects are also fairly weak, the outlook for price growth is rather constrained over most of the projection period. However, supply pressure on the market would be mitigated by reduced EU production.

All in all, and despite the relatively favourable outlook and apparent short- and long term market stability for SMP, the nearer term prospects remain sensitive to global supply-demand developments and the market's ability to absorb the release of intervention stocks.

**Agricultural income**

Agricultural income (expressed as real factor income per labour unit) is expected to recover from the significant low in 2009 with an outlook for a gradual, albeit modest growth in aggregate EU income over most of the projection period that would exceed the 2005-2009 average (base) level by around 20% in 2020. This overall gain would mask uneven developments for the EU-15 and EU-12; whereas agricultural income in the EU-15 would show a more moderate increase to almost 10% above the base level, it is foreseen to display a more pronounced picture in the EU-12 rising 45% above the base level by 2020 and converging towards the EU average. While the assumed decline in agricultural labour remains an important factor behind the income prospects for both EU-15 and EU-12, the increase in the subsidies granted to agricultural producers in the EU-12 over the phasing-in period should remain a key driver of income growth in this group of Member States.

**Caveats**

Notwithstanding the efforts to base the outlook for agricultural markets and income on the latest statistics and information as well as the most plausible assumptions and expectations on the future, the outlook presented in this publication has to be interpreted in the context of the underlying assumptions on the global market, economic and policy setting as well as the additional assumptions and expectations specific to the income estimation, for which strong assumptions are made for sectors not covered by the model. These assumptions have far reaching implications on the prospects for agricultural markets and income, particularly considering the elevated level of uncertainties regarding future market, economic, policy and climate conditions.

An additional element to consider is that despite the improvements in the economic model (modified version of the AGLINK-COSIMO from OECD/FAO) used to generate the market prospects, there are still remaining limitations that need to be addressed in future exercises (e.g. aggregation of demand for coarse grains and oilseed sector, developments in farm structure, trends at other levels of the supply chain, processing and retail in particular).
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Quantitative analysis of uncertainties

Part II of the publication aims to address a number of the uncertainties by providing a quantitative assessment of alternative assumptions on supply and demand drivers, the macroeconomic environment and crude oil price developments. The analysis looks at how alternative assumptions may affect the outlook for EU agricultural markets described in Part I (baseline).

The scenario assuming higher crop yield growth in Europe due to higher input use shows that lower prices resulting from the increase in EU supply improves the trade position of the EU on world markets, but leaves agricultural income unaffected at the EU level. While the livestock sector gains from lower feed costs, the cereal sector is worse off due to the lower prices and higher costs.

The scenario assuming faster technological progress worldwide emphasizes the sensitive trade position of the EU, as the EU export gain becomes less pronounced when yield growth spreads on a global scale.

The scenario on alternative variable costs shows the relevance of the level of input costs on the competitiveness of the EU on world markets, while having a fairly limited effect on the aggregate EU agricultural income (less than 1.5%).

The demand scenario assuming higher GDP growth rates in emerging economies shows that the resulting price effects on the EU commodity markets is relatively small (in general less than 5%). This is because increases in the demand in emerging economies are only partly transmitted to world market prices, and because only a small share of the EU domestic consumption is sourced from the world market which in turn makes the EU domestic market to be less sensitive to changes in world markets.

The macroeconomic scenario assuming faster/slower economic growth and a higher/lower crude oil price leads to an increase/decrease of the world agricultural prices. The magnitude of price transmission to the EU is unequal among the different sectors, with the most pronounced effect observed for oilseeds and vegetable oil.

The biofuel scenario assuming a higher crude oil price combined with lower transport fuel demand requires less biofuels to fulfil the EU blending targets and drives prices up, mainly for biofuels and less for feedstock commodities. The results show a shift in favour of biodiesel with respect to ethanol in EU biofuel consumption in the EU. The reactions in feedstock markets are more limited and are driven by the higher input costs due to the higher crude oil price. The land use effect both in the EU as well as worldwide is limited (in general the differences of the harvested area for feedstocks are below +/- 1%).