METHODOLOGY

SHORT-TERM OUTLOOK FOR EU AGRICULTURAL MARKETS IN 2018 AND 2019

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.

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 and intra-EU trade statistics).

  Due to some inconsistencies in intra EU trade reporting, intra-trade is based on export figures only, i.e. imports of France are calculated as extra-EU imports plus exports of EU partners to France.
- 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 AGRI4CAST[1]), 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. Thus, area, yield and production figures of crops refer to the year of harvest.

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 cereals[2]. 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: For sugar beet area, yield and production, the procedure is similar to the other arable crops. It includes sugar beets for sugar production and for ethanol production. The balance sheet includes only

[1] http://mars.jrc.ec.europa.eu/mars/About-us/AGRI4CAST/Crop-Monitoring-and-Yield-Forecasting

[2] 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.

sugar beet production processed into sugar[3] and white sugar. 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.

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 equivalent[4].

Production forecasts for the year 2018 and 2019 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 production[5]. Production of EU-28 total dairy products and in particular for SMP and WMP are estimated, where necessary since the concentration in the dairy processing industry has resulted in an increasing number of Member States not publishing their (monthly) production statistics due to confidentiality.

- Dairy products production for year 2017 is based on Eurostat annual statistics and projections for 2018 and 2019 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.

Glossary

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

EU-N13 includes EU Member States, which joined the EU as from 2004.

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

[3] Sugar beet production processed directly into ethanol is not accounted for in the white sugar production.
[4] 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.
[5] 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.