METHODOLOGY

SHORT-TERM OUTLOOK FOR EU AGRICULTURAL MARKETS IN 2020 AND 2021

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 six calendar years for meat and dairy and five marketing years for crops and fruit and vegetables.

Sources

- DG Economic and Financial Affairs
  - Annual macroeconomic database (AMECO)[1]
  - European Economic Forecast (Summer 2020 – interim)[2]
- European Central Bank staff macroeconomic projections for the euro area (September 2020)[3]
- IHS Markit DataInsight database
- 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. This with the exception of the UK that still remains in the intra-EU trade reporting, even though it is not part anymore of the EU since February 2020 and therefore included in extra-EU trade figures. For intra-trade with the UK, only the declaration of the Member States are considered, both imports and exports.
- Weekly commodity prices communicated to DG Agriculture and Rural Development by the Member States.

[1] https://ec.europa.eu/economy_finance/ameco
[2] https://ec.europa.eu/info/business-economy-euro/economic-performance-and-forecasts/economic-forecasts/summer-2020-economic-forecast-deeper-recession-wider-divergences_en
[3] https://www.ecb.europa.eu/pub/projections/html/ecb.projections202009_ecbstaff~0940bca288.en.html

Macroeconomic forecast is based on sources provided by European Commission (DG Economic and Financial Affairs), with some additional insights from the European Central Bank and IHS Markit.

Production forecast for current and next year is based, depending on the sector, on Eurostat monthly data, official estimates of ministries, national statistical institutes, national or European organisations, MS notifications to DG Agriculture and Rural Development and on the Crop Monitoring and Yield Forecasting projections (JRC MARS AGRI4CAST[4]) 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 estimated and forecasted 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.

As Brexit took place on 31 January 2020, market outlooks reflect on the current EU-27 composition, with an exemption of sugar. During the transition period (2020), the trade flows between EU-27 and the UK are considered frictionless.

Forecast for 2021 calendar year is based on a purely technical assumption of status quo in terms of trading relations between the EU and the UK. This is for forecasting purposes only and reflects no anticipation or prediction of the outcome of the negotiations between the EU and the UK on their future relationship. This means that the 2021 forecast does not reflect the fact that, even in a scenario where a free trade agreement is concluded, the resulting situation will be less beneficial to EU-UK trading relations than when the UK was in the Internal Market and the Customs Union.

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.

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

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. Forecast is based on information about the ethanol production development. Stocks are closing the balance for cereals[5]. 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, soya beans 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 soya beans 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 soya bean meal and 55 % for sunflower meal and 41% for rape oil, 20 % for soya bean 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 sugar beet production processed into sugar[6] 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 sugar expressed in white sugar equivalent (e.g. no isoglucose) and take into account sugar beet production outside of the quota (up to 2016/2017). Trade of products containing sugar is reported under net exports in processed products under domestic uses of white sugar. These are estimated by applying conversion coefficients to trade volumes of over 400 processed food products. 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 (up to 2016/2017).

For confidentiality reasons with regard to Member States notifications on stocks, EU+UK sugar balances are presented in this report up to 2019/2020. For the same reason, only change in EU stocks is presented for 2020/2021.

Isoglucose: Production and stocks data originate from MS notifications under the Common Market Organisation (CMO) when they become available. The balance closes over consumption. 2019/2020 estimates and 2020/2021 forecast are based on trends and experts judgment.

Biodiesel: The balance sheet is based on calendar year. Production data comes from Eurostat. Data covers production from various feedstocks, including vegetable oils, used cooking oils, animal fats and waste (e.g. tall oil). Consumption includes fuel use data from Eurostat and own estimates of biodiesel for other uses. Trade figures include trade of pure biodiesel as well as biodiesel in blends. Biodiesel traded in blends is estimated using blending coefficients. Stock data is not available and therefore changes in stocks are presented as closing variable. 2019 estimates and 2020 forecast are based on trends and experts judgment.

Ethanol: The balance sheet is based on calendar year. Production and consumption data is taken from MS notifications. To these data, an estimate is added for ethanol produced from non-agricultural waste directed to fuel use. Production data covers production from various feedstocks, including cereals, sugar (beet) and molasses, other agricultural feedstocks (e.g. wine and potatoes) and (non-)agricultural residues and waste (e.g. straw). Consumption includes fuel use, use for food and beverages, and industrial and other use. Trade data covers undenatured and denatured ethyl alcohol, applying a conversion coefficient to pure alcohol of 92%, and excludes trade in blends. Stocks are the closing variable. 2019 estimates and 2020 forecast are based on trends and experts judgment.

Specialised crops

Olive oil

The balance sheet is based on a campaign starting with the harvest: October/September.

Production estimates present MS notifications for an ongoing campaign. Exports and imports are based on seasonal trends and trends observed in previous years in main export destinations. Consumption estimates take into account different trends in main producing countries (Spain, Italy, Greece and Portugal) and the rest of the EU. In the former, the link between a variation of annual production and consumption change is taken into account. The balance closes on ending stocks.

Wine

The balance sheet is based on a campaign from August to July.

The forecast of vinified production is based on MS notifications for an ongoing campaign. An estimate of the vinified production used for 'other uses' is based on total vinified production as well as the consumer demand for products such as vermouth, cleaning products etc.

Exports and imports are based on trends and market expertise.

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

Consumption estimates take into account different trends in main consuming countries (Spain, Italy, France and Germany) and the rest of the EU. The balance closes on ending stocks.

Apples

The balance sheet is based on marketing year starting with the harvest: August/July. It includes apples both for fresh consumption and for processing.

The forecast of total apple production is based on forecasts of national or European sectoral organisations. These data, as well as last years' production and consumption, are used to estimate use of apples for processing.

When MS information on stocks is avaialable via World Apple and Pear Association (WAPA), the balance closes on consumption.

Exports and imports are based on seasonal trends and trends observed in previous years in main export destinations. Trade of processed appels is expressed in fresh apple equivalent. The conversion coefficients used to convert processed products into fresh apple weight rates vary between 1.3 and.6[7].

Tomatoes

The balance sheet is based on a calendar years It includes tomatoes both for fresh consumption and for processing.

The total production of tomatoes consists of the production of 'tomatoes for fresh consumption' and the production of 'tomatoes for processing'. Eurostat is used for the production of fresh tomatoes and World Tomato Processing Council figures for the production of tomatoes for processing.

The production forecast for 2020 for fresh tomatoes is based on trends and market expertise. The forecast for tomatoes for processing is based on forecasts from the World Tomato Processing Council.

Trade of processed tomatoes is expressed in fresh tomato equivalent. Conversion coefficients used to convert processed products into fresh tomato weight s vary between 1.13 and.19.5[8].

Trade projections are based on production, consumption estimates and trends observed in previous years in main export destinations.

Stocks of both fresh and processed tomatoes are assumed to be zero. Consumption is calculated as a residual.This imples that stock changes are included in consumption figures.

[7] Conversion coefficients are laid down in Working Document 'Handbook for compiling supply balance sheets – fruits (ESTAT/ASA/PE/641rev3_WPM)

[8] Conversion coefficients are laid down in Working Document 'Handbook for compiling supply balance sheets – vegetables (ESTAT/ASA/PE/640rev3_WPM)

Peaches and Nectarines

The balance sheet is based on a calendar year. It includes peaches and nectarines both for fresh consumption and for processing.

Historal data are based on Eurostat. The total production of peaches and nectarines adds up the production of 'peaches' and the production of 'nectarines'. The production of peaches and nectarines for fresh consumption is calculated as the total production of peaches and nectarines minus peaches for processing.

The production forecast is based on estimated production changes by Europeche and applied to the Eurostat data.

Trade of processed peaches is expressed in fresh peach equivalent (conversion coefficient is 1 for all processed products, but 6 for dried peaches and nectarines). Projections are based on information about production and trends in consumption as well as trends in main export destinations.

Stocks of fresh peaches are assumed zero. Consumption is calculated as a residual.

Oranges

The balance sheet is based on a campaign starting with the harvest: October/September. The balance sheet includes fresh oranges and processed oranges (mainly juice and jams) and is expressed in fresh equivalent.

Area, yield and production data comes from Eurostat. Own estimates are used for oranges produced for processing. Trade of processed oranges is estimated using conversion coefficients into fresh equivalent[9]. No stock data is currently available. The balance closes over apparent consumption. 2020/2021 forecast is based on trends and experts judgment.

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 unless specified otherwise[10].

Production forecast for the year 2020 is 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

[9] Conversion coefficients are laid down in Working Document 'Handbook for compiling supply balance sheets – vegetables (ESTAT/ASA/PE/640rev3_WPM)

[10] 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.

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.

Production of EU-27 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 2019 is based on Eurostat annual statistics, estimates for 2020 are based on the available monthly statistics, taking into account the country coverage and sample characterstics. Forecast in 2021 is based on current market developments, price expectations, 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 forecast is 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.

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