Introduction

These prospects for the olive oil sector until 2020 have been established on the basis of a detailed statistical analysis that takes into account the main historical trends and the foreseeable evolution of the sector over the next years. So, they are not based on a full-fledged modelling approach linking produced, consumed and traded volumes to an equilibrium price in the EU and on the world markets.

Projections are determined for three EU Member States separately (Spain, Italy and Greece).

The methodology used for the projections varies depending on the type and the detail of the sources of information available for each country. In particular, data differentiating for irrigated and non-irrigated plantations would be useful to obtain more accurate production projections; however, this information is available for Spain, but not for Italy and Greece.
SPAIN

On the basis of the trend registered in the last decade, we estimate that the area of irrigated olive grove could considerably expand between 2011 (681 000 ha) and 2020 (771 000 ha), to the partial detriment of non-irrigated area, which would decline by almost 20 000 ha over the same period, to settle at 1.77 mio ha in 2020.

Apart from the normal variability linked to erratic climatic conditions, yields are assumed to slightly increase until 2020, according to a historical trend. This would apply for both irrigated and non-irrigated areas, although the absolute level of yield for irrigated crops is more than twice as high as for non-irrigated ones.

Taking into account these developments, olive oil production in Spain could reach 1.68 mio tonnes by 2020\(^1\) under the assumption of "average" climatic conditions, this value varying possibly between 1.43 and 1.86 mio tonnes in case of extremely low or high yields seasons respectively.

Olive oil consumption in Spain over the projection period is assumed to remain stable in per-capita terms at 13.0 kg/year, which represents the average consumption over the past decade. Taking into account a modest population increase, this could bring Spanish olive oil consumption to 632 000 t by 2020.

Spanish olive oil exports until 2020 are expected to follow the increasing trend displayed in the recent past, with a stronger development for trade flows destined outside the EU compared to exports on the EU market. Overall, total exports would grow from 840 000 t in 2011 to 1.047 mio t in 2020.

Oil imports are projected to stay roughly unchanged over the projection period, at a level between 40 000 and 50 000 t, which coincides with the historical average of the recent past.

On the basis of these projections, we ran a scenario to simulate the possible development of olive oil stocks in Spain until 2020, assuming that the years from 2012 to 2020 would register 3 high-yield, 3 average-yield and 3 low-yield harvests\(^2\). According to this simulation, the cumulated production and imports over the projection period would outweigh the corresponding cumulated consumption and exports, with an average annual accumulation of 27 000 t of stocks. Total stocks of olive oil in Spain could therefore increase from 635 000 t at the end of the marketing year 2011/12 to 881 000 t at the end of 2020/21.

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\(^1\) For the aim of this medium-term exercise, the year 2020 refers to olive oil production realised during the marketing year 2020/21.

\(^2\) The high-yield, average-yield and low-yield years were selected randomly. We assumed that 2013, 2015 and 2019 would be average-yield years; the marketing years 2014, 2017 and 2020 would be high-yield, whereas the remaining years (2012, 2016 and 2018) would be low-yield harvests.
Graph 1: Projections for olive oil production in Spain (1997-2020)

Graph 2: Projections for the olive oil stock accumulation in Spain over the period 2012-2020
For Italy, available data does not allow to distinguish between irrigated and non-irrigated olive groves areas.

Since the evolution of total area over the last decade has not shown any significant trend, our projections assume that total area devoted to olive oil production would remain constant until 2020 at around 1.14 mio ha, which corresponds to the average value of the period 2000-2010.

Under the assumption of "average" weather conditions, oil yields in Italy are expected to slightly decrease from 459 kg oil/ha in 2011 to 418 kg in 2020, following the declining trend registered in the last years. As a result, total olive oil production would fall from 538 to 477 thousand tonnes over the same period.

Olive oil consumption has also been on a declining path for some years now, therefore we assume that it would continue to decrease, from 660 000 t in 2011 to about 620 000 t in 2020.

As regards trade, Italy is expected to remain a significant net importer of olive oil, despite the trade deficit becoming smaller at the horizon 2020. Given that the level of imports has shown high variability but no clear trend over the last decade, we assume that imports would amount to slightly less than 500 000 tonnes for the whole period until 2020. On the other hand, we project that Italian exports would continue the positive trend of the last decade to reach around 360 000 tonnes by 2020.

Graph 3: Projections for the imports and exports of olive oil in Italy
At the end of the projection period, the final stocks of olive oil in Italy would be approximately unchanged compared to the current situation, with an insignificant annual reduction of 2,700 tonnes per year. This means that we do not expect any major imbalance in the Italian olive oil sector, at least under the assumption of "normal" climatic conditions.

**Graph 4: Projection for the olive oil stock accumulation in Italy over the period 2011-2020**
GREECE

For Greece, annual data about the area devoted to olive groves is not available; therefore, the only available source of information is Eurostat Farm Structure Survey, which is carried out with a frequency of 3 years. According to this data, it appears that olive groves area has been expanding over the recent past. For the projection period, we expect a continuation of this growth trend - although at a slower pace – from 738 000 ha in 2007 to 767 000 ha in 2020. On the other hand, yields are projected to be significantly declining, to settle at 351 kg oil/ha in 2020. Thus, olive oil production would be slightly falling during the projection period, from 310 000 t in 2011 to 270 000 t in 2020.

Greek olive oil consumption is also projected to decrease - from 228 000 t in 2011 to 202 000 t in 2020 – following the trend of the previous years.

Graph 5: Projection for the olive oil stock accumulation in Greece over the period 2012-2020

In the past, Greek exports of olive oil have varied considerably from year to year, although a downward trend seems to emerge over the time. For the period until 2020, exports are assumed to continue the slight fall, to reach 82 000 at the end of the projection period. Finally, Greek oil imports are negligible and are projected to remain at around 3 000 tonnes over the period 2011-2020, similar to the average of the previous years.

Under the usual assumption of "average" harvests throughout the projection period, the olive oil sector in Greece would result to be roughly balanced, with a small deficit of 11 000 tonnes per year, or about 4% of the expected production.