FORECAST 2030

Analysis of the Portuguese dairy sector to 2030

Production could stay globally stable until 2030 but with annual variation

Dairy 4 future

WORK PACKAGE 4
DAIRY SECTOR ANALYSIS

INTRODUCTION

Similarly, to the rest of Europe, the Portuguese dairy sector is undergoing major changes over the last decade. Moreover, it has been subjected to several external specific limitations to its development and growth. Furthermore, there is a lack of accurate and specific data regarding the dairy sector on an annual or monthly basis As such, conducting forecast on the evolution of the dairy sector in Portugal is extremely difficult.

One can assume that the maintenance of the present tendency for many of the indicators will be the norm. However, and subjected to several imponderable factors related, for instance, with price policies, the reduced number of processing companies or putative restrictive EU legislation on animal welfare or environmental policies, such stability scenario may easily turn into a crisis in the dairy sector.

GEOGRAPHICAL IMPORTANCE OF THE DAIRY SECTOR

In Portugal, the dairy sector comprises three species, bovine, sheep and goat. Bovine milk represents roughly 95% of the overall milk production in the country. For the purpose of this report, only bovine milk will be considered that will thus be termed simply as milk. In 2019, milk production in Portugal was approximately 1800 million liters. Approximately 67% was produced in the continent whilst 33% was produced in the Azores Autonomous region. The production in the Madeira Autonomous region was negligible. The continental milk production was concentrated mostly in the North Region (33% of the national production) and roughly 34% in the Alentejo and the Lisbon and Tagus valley regions. It is likely that over the next decade, such proportions might have a small change. Indeed, it could be expectable that the North region's importance might have a small decrease because the average size of rural properties in this region is very small to allow scale economies, particularly in a low milk prices and high production costs scenario. The Azores Autonomous regions also has the same scale problems. However, and as the locally produced milk is sold at higher prices due to several differentiation factors and the region is heavily subsidized due to its ultra-periphery status, local farmers will not be as affected as their counterparts in Northern Portugal. Based on the above, one can expect the North region may lose importance in the context of the overall production, whilst the other three major regions will increase their shares. As such, it is likely that the Northern share of milk production will have a minor decrease to 28-30% by 2030 of the total Portuguese milk production, while in the other two regions, it may increase in 2.5-4%.

This report was prepared in the framework of European Project Dairy4future. The projections herein suggested are a mere interpretation of the tendencies shown for the Portuguese dairy sector over the last decade(s), based on available statistical data at the national and regional level. Such tendencies were interpreted, and projections made into the 2021-2030

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TOTAL MILK PRODUCTION

Overall milk production in Portugal was roughly between 1780 and 1800 million liters per year over the last decade. Such milk production has been relatively stable, despite the existence of several fluctuations from year to year. It is noteworthy that after the 2011 finance crisis, there was a slight decrease in milk production. Nevertheless, that decrease was somehow compensated in the 2015-2018 period where milk productions were slowly increasing. It is expectable that such tendency for stability will continue over the next decade. Nevertheless, it should be highlighted that the Pandemic may likely cause a decrease in milk demand and production. As such, a small decrease in the national milk production in the 2020-2023 period and after that the figures may resume the current tendency for production stabilization around 1800 million liters. In the Azores region, many farmers tend to move from dairy to beef production due to the low price of the milk. A consequence of this transition might be a decrease of the amount of milk produce over the next years and hopefully an increase of the milk price.

NATIONAL AND REGIONAL DAIRY CATTLE INVENTORIES

The national dairy cattle inventory for Portugal has witnessed a sharp decrease in the 2000-2010 period. Indeed, of the 329,000 dairy cows in 2000, by 2010 the number had decreased to 243,000, a 28% decrease. Such decrease was chiefly due to production improvements that occurred during this period, particularly in the intensive production systems of continental Portugal, that allowed the production to remain stable, albeit with a decrease in inventories. Since 2010, the national inventory has remained stable with approximately 243-245,000 animals.

It must be highlighted however, that there are two major tendencies in Portugal regarding the dairy cattle inventories in Portugal. Indeed, the continental inventory (decrease in the 2000-2010 period and the stabilization in the 2010-2020 period) mimicked the national tendency. In the Azores Autonomous Region, however, the inventories have remained stable (90-95,000 animals) for the first two decades of the century. However, as referred above, a decrease of the dairy cows is expected for the next years.

Based on the two regional inventory tendencies, it is likely that in the Azores Autonomous Region, the number of cows will be of approximately 90,000-95,000 animals by 2030, whereas in the continent the figures should be of approximately 145-150,000 animals. Nevertheless, it cannot be excluded that increases or decreases of 5-10% in such figures may occur. Such changes could be due to a decrease in dairy product consumption, a tendency in the urban younger generations, or to a decrease in family expenditures caused by the COVID-19 pandemic.

INVENTORIES PER FARM

Over the last 25 years, the number of dairy cows per dairy farm has increased substantially. Indeed, if in 1997, each farm had, on average, eight cows; by 2007 that number had increased to 20 cows per farm and in 2016 to 34 cows per farm. It is likely that this tendency will remain stable in the next decade. Indeed, due to a likely stagnation on milk prices and to the increase in production factors prices, farms will have to gain scale-economy dimension in order to compete and remain viable. That will likely be achieved in the continent by an increase in the number of animals per farm and with an optimization of production, with smaller farms going out of business or reconverting to other activities. In the Azores, the system is based on pasture and due to the limited areas suitable for dairy farming; the possibilities for increasing the number of cows per farm are very low. As such, it is likely that in this region, the number of cows per farm in the Azores will remain stable in the next decade. At the national level however, an increase to 55 to 60 dairy cows per farm could be suggested as likely based on the growth tendencies shown over the last 2 decades.

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NUMBER OF DAIRY FARMS

Over the last two decades, Portugal has witnessed an overall decrease in dairy farms, particularly dairy farms with small inventories. Indeed, and from 2003 until 2016, the number of dairy farms with less than 50 cows has decreased from 25,626 to 6,411, a 75 % decrease. On the contrary, farms with more than 100 animals have increased from 255 in 2003 to 520 in 2016, almost the double. Such tendency will likely continue in the next decade, with farms with up to 50 cows decreasing in number whereas farms with larger inventories (over 100 animals) will likely increase to, respectively, 3500 and 750 farms.

DAIRY COW PRODUCTIVITY

Over the last decades, the productivity per cow has increased substantially from 6000 litres/cow/year in 2004 to 7700 litres/cow/year in 2015. Since then, the production has stabilized around 7500 litres/cow/year. It is likely that a tendency towards a slight increase will continue over the next decade and values of 8000 litres/cow/year will be reached by 2030. However, it is also likely that this will only happen for the farms in the continent. Indeed, and as the majority of the dairy farmers in the Azores Autonomous Region have production systems based on the use of pastures, the production per cow in this region will likely remain stable over the next decade. However, and as production intensification has also been occurring in the region over the last years, it cannot be excluded that small increases in productivity per cow may occur.

MILK CONSUMPTION

Overall, dairy product consumption per capita has been decreasing over the last two decades. Indeed, from 132 kg/inhabitant in 2010, it has decreased to 117 kg/inhabitant in 2017, a 12% decrease in seven years. However, in the last 5 years the figures have been stabilizing. There are numerous reasons for this decline, particularly human health, environmental and animal welfare concerns. It is expectable that a trend towards a small decrease will continue to 2030 where a level of consumption of 100-110 kg/inhabitant may occur.

MILK PRICES

In the 2010-2018 period, milk prices have ranged between 28 and 35€/100 kg milk. Such prices were generally 5-10% lower than those paid in the EU as an average. The prices are, however, extremely variable and it is difficult to establish a tendency over the last decade. Based on these figures and on the fact that the number of processing companies is relatively low, it is expectable that such intervals will likely continue into the next decade, with prices fluctuating around the 30-37.5€/100 kg at the national level. Regional differences may however be considered, particularly in the Azores Autonomous Region where, due to the nature of the extensive production system, valued by consumers, and to the existence of periphery agriculture subsidies unavailable elsewhere, milk is traditionally paid at higher prices than in the continent.

CONCLUSIONS

This report draws the major tendencies for the evolution of the dairy sector in Portugal for the 2021-2030 period. Overall, the existing tendencies will likely continue into the next decade. Such tendencies include a small decrease in the inventories, a small increase in national milk production and an overall decrease in the consumption of dairy products, albeit with a tendency towards stabilization. The evolution of the sector may however be affected by a number of factors. Those include, for instance, the consumer attitude towards animal products, particularly bovine products, the increase in production factor prices or the concentration of processing companies. These factors may negatively influence the prospects of the dairy sector for the next decade.

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