



Happy Life Region
West Mediterranean



MILK and DAIRY PRODUCT SECTOR REPORT

WEST MEDITERRANEAN DEVELOPMENT AGENCY
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FOREWORD

Regional development agencies whose history dates back to old times in developed countries are the models newly adopted in Turkey. These agencies aim to accelerate regional development, ensure sustainability and reduce interregional development disparities in accordance with the principles and policies set in the development plans and programs, through a cooperative networking between local authorities, private sector and civil society.

One of the tasks given to agencies to achieve their aim is whether to do research on determining the resources and opportunities of the region, accelerating economic and social development and enhancing the competitiveness or to support the researches done by other individuals, organizations and institutions.

West Mediterranean Development Agency which largely completed its process of establishment and institutionalization is responsible for providing free consulting services to investors in Antalya, Isparta and Burdur. In addition, through a one-stop shop approach, the agency offers an extensive range of services including coordinating and following-up the permits, licensing procedures and other administrative works within the scope of public institutions and organizations of investors. Furthermore, the agency promotes the investment opportunities of the region both at national and international level in cooperation with relevant organizations.

In line with the mentioned task above, the sector reports were prepared to guide the investors willing to invest in the region and promote the investment opportunities of the region.

At first, Marble, Milk and Dairy Products, Solar Energy, Golf Tourism and Health Tourism Sector Reports of West Mediterranean Region, Tourism Potential of Egirdir Report and Antalya – Konya High Speed Rail-Line Report have been prepared. Over time, many sector reports related with the region will be prepared and investment opportunities of the region will continue to be promoted. Being helpful with these sector reports to investors and all other institutions operating in the region is our greatest wish.

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INTRODUCTION

Increase in the level of income in developing countries as well as increased promotion of milk and milk products, has led to a rise in milk consumption in developing nations. In turn, dairy industry becomes a market which presents growing investment opportunities that attracts national and international dairy firms.

In terms of production value, dairy industry composes 15 percent of the food sector in Turkey. Milk to be an essential nutrient that should be consumed, as well as its high contribution to the national income increases the importance of the dairy sector.

In this study, an overview of the dairy industry from Turkey and World will be presented. Although, milk production, milk quality, milk processing and the industrial sector under the headings of the advantages of investment in the Western Mediterranean region will be addressed as current situation and potential future investments.





1-DAIRY INDUSTRY IN TURKEY AND IN THE WORLD

1.1. Milk Production



As of 2010, the world's total milk production is 725 million tons. World's leading milk producing countries are EU-27 countries, the United States, India, China, Russia, Pakistan, Brazil, New Zealand, Ukraine, Turkey, Mexico and Australia. With 147.5 million tons of annual milk production EU is the world's largest milk producer. India is holding the second place with 105 million tons of milk annually. Turkey is in 15th place with 12.5 million tons of milk producing annually.

Germany, France and Great Britain produce approximately half of the milk collected in the EU. The collected milk distribution in EU Countries is as follows; Germany with 20.75%, France with 17.9%, UK with 11%, and the Netherlands with 8.2% followed by Italy and Poland with 7.8% and 5.5%.

The amount of milk production in the EU between the years does not show a significant change and fluctuate. This is because of the existing quota implementation of the squadron. In order to avoid extra



storage and marketing costs, EU applies milk production quotas since 1984. The purpose of the system is eliminating extra costs, making the production sustainable at acceptable limits.

84% of the world's total milk production is cow's milk followed by buffalo milk with 13%, 2% of sheep milk and goat milk with 1%.

In Turkey, 92% of the milk produced is cow milk, 6.1% sheep milk, 1.7% goat milk and 0.26% buffalo milk.

“The major countries are Iraq, Azerbaijan, the United Arab Emirates and Kuwait for Turkey's dairy products export market.”

“Turkey is in 15th place with 12.5 million tons of milk producing annually.”



1.2. Industrial Milk Processing



%53 of total produced milk is being processed in modern dairy facilities in the world. This rate is 94% in the EU. 1% to 5% of total milk production is being consumed in the home town and remaining is being industrialized in developed countries.

In Turkey, only 27% of total produced milk is being processed in modern industrial facilities. 33% is being processed in so-called small-scale dairy farms, 20% is being marketed in the streets and 20% of total production is being consumed right away in the home town.

1.3. Trade in Dairy Products



The EU and New Zealand are the world's largest exporter of milk and dairy products countries. Their total market share is 60%.

The main importing countries in the world of milk and milk products are the U.S, Mexico, Russia, Japan, Algeria and Saudi Arabia.

Turkey's export of dairy products was \$150 million in 2009. The major countries are Iraq, Azerbaijan, the United Arab Emirates and Kuwait for Turkey's dairy products export market.

1.4. Milk and Milk Products Consumption



Australia ranks the 1st place on consumption of milk with 107 kg per capita annually. Annual consumption of milk in the EU is 89 kg, 83 kg in the US and 26 kg in Turkey per capita.

Germany is in the 1st place on annual cheese consumption with 22 kg per capita. Average cheese consumption of EU is 18 kg, the US is 15 kg, Australia is 12 kg and in Turkey it is 10 kg.

The leading ice cream consumer is New Zealand with 28.1 liters per capita annually. This number gets lower in the United States to 25 liters, in Scandinavia 15 liters and 2.5 liters in Turkey.

1.5. Dairy Efficiency



The milk yield of EU is three and half times better than Turkey. The amount of milk obtained from a cow is 1.8 tons on average per year in Turkey whereas it is 5.89 tons in EU. The difference of milk yield between EU countries and Turkey comes from; dairy cow breeds, feeding stuff, cultivated environment, climate conditions, milking times and frequencies etc.

Milk yield varies between different regions of Turkey very importantly while commercial and professional enterprises in Western Region can obtain 4-5 tons of milk per cow annually.





2-DAIRY INDUSTRY IN THE WESTERN MEDITERRANEAN

2.1. Milk Production



With its current socio-economic and geographical features; West Mediterranean Region of Turkey has a substantial potential in the dairy sector and dairy farming is carried out intensively in the whole region, primarily in Burdur province. According to Turkish Statistical Institute in 2009, there are 358.398 cattle in the region, 160.701 of them are in Burdur, 70.477 of them are in Isparta, 127.220 of them are in Antalya and 148.716 of these animals are milked. %92 of the cattle population is cross breed or pure breed of European Holstein-Friesian or Simmentals which have high milk potential.





A total of 508.039 tons of milk is produced within the region. With this figure, WMR supplies the 4.4 percent of the total milk production of Turkey. The distribution of the milk production inside the region is as; 258.000 tons in Burdur, 140.000 tons in Antalya and 110.000 tons in Isparta.

TURKEY, TOTAL (2009)	DOMESTIC CATTLE	CULTURE CATTLE	BREED CATTLE	TOTAL
Number Of Cattle	2.594.334	3.723.583	4.406.041	10.723.958
Amount Of Milk Produced (Tons)	1.284.450	5.713.004	4.585.859	11.583.313

Source: Turkish Statistical Institute, 2009

WMR, TOTAL (2009)	DOMESTIC CATTLE	CULTURE CATTLE	BREED CATTLE	TOTAL
Number Of Cattle	27.672	232.643	98.083	358.398
Amount Of Milk Produced (Tons)	13.951	397.163	98.083	508.039

Source: Turkish Statistical Institute, 2009

“With its current socio-economic and geographical features; West Mediterranean Region of Turkey has a substantial potential in the dairy sector and dairy farming.”





Most of the dairy farming units in Turkey are small sized. These enterprises are doing herbal production and livestock production at the same time. When the number of cattle per each farming unit is examined, 72% of the all enterprises have 1-4 cattle, 20% of the enterprises have 5-9 cattle, and 7% of the enterprises have 10-19 cattle. Share of the enterprises which have more than 20 cattle, called big-sized enterprises, is just 1 percent. However in European Union, share of the big-sized enterprises in the dairy business is 83 percent. As it is seen; scale of the dairy farming units is so small in Turkey and for the sector to improve more, expansion of the business scale is required.

In line with the general perspective of the Turkey, scale of the dairy farming units are also small-sized in WMR. However, in recent years, with active promotion and organizations, number of big-size enterprises is growing in the region, mainly in Burdur province.

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2.2. Milk Quality



Milk produced within the region is at EU standards in terms of hygiene. Due to Turkish Food Codex about Raw Milk and Drinking Milk, acceptable upper limit for the bacteria number in the raw milk is 100.000 per/ml. In the region, the figure for this criterion was 10 million in 2005. However; as a result of the increase in the number of milk collection centers and the common milking centers, this figure declined to 32.000 per/ml. Number of bacteria reduced to 3.800 per/ml in the milk obtained from the İgdeli village of Burdur province.

There are 8 common milking centers (İgdeli-Murseller-Kılavuzlar-Elmacık-Kucukalan-Kayı-Pınarbası-Buyukyaka Villages) and 210 milk collection centers, 8 of which belongs to the dairy firms, in Burdur. In addition, there are 3 common milking centers and 15 milk collection centers in Isparta.

Acceptable upper limit for the number of somatic cells is 500.000 per/ml. Figure for this criteria in the milk produced within the region is 308.568 per/ml. Since this figure is well below the acceptable limit, somatic cell control is excluded from routine checks. Firms dealing with milk collection are doing bacteria and somatic cell controls periodically.





2.3. Milk Processing



Milk processing units transform milk into high value added products. By this way they encourage both milk production and milk consumption. Also, by transporting industry to rural areas, they provide significant contributions to rural development and employment.

In Burdur province, 258.000 tons of milk is produced annually. There are 13 milk processing units. Total capacity of these enterprises is 184.807 tons per year. However, only 69.480 tons of this capacity is being utilized.

Also there is one milk powder and whey powder producing unit and the capacity of this facility is 4.554 tons per year.

When the total milk processing capacity is proportioned to the total milk produced, %68.44 of the total milk produced can be processed within the province. However only 26.9 percent of the total milk produced is processed within Burdur. Remaining part is processed outside the region.

In Isparta province, 110.000 tons of milk is produced annually. There are 5 milk processing units. Total capacity of these enterprises is 73.796 tons per year. However, only 17.620 tons/year of this capacity is being utilized.

In Antalya province, 140.000 tons of milk is produced annually. There are 40 milk processing units. Total capacity of these enterprises is 246.375 tons per year.



3. CONCLUSION

A large scale dairy processing plant that will be established in the WMR will be advantageous and a high profit margin investment for reasons such as;

- The presence of adequate and quality milk production
- Milk produced within the region is at EU standards in terms of hygiene
- More than 10 million tourists are visiting the region in a year. This has a very strong positive effect on the consumption and the product market.
- Products will address to a market size of 70 million consumers.
- There are 2 international airports within the region
- Freight transportation can be made by railway from Burdur and Isparta provinces.
- The presence of widespread road network
- Products can be transported to international markets by seaway via Antalya port.



Sources

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