

2014

Israel Dairy Board Facts and Figures



ISRAEL DAIRY BOARD



The Dairy Industry in Israel

The dairy industry is one of the leading sectors in Israeli agriculture, and a source of pride to all Israelis. It supplies most of the domestic demand for milk and dairy products. The rest of the demand, about 20%, is covered by imported supplies.

In 2014, Israel had a total annual output of approx. 1,455 million liters of cow milk, 11.2 million liters of sheep milk and 15.9 million liters of goat milk.

The annual value of products being processed is about \$2.6 billion. The Israeli market is filled with over 1,000 different products which are healthy, tasty, innovative and in line with other state-of-the-art global dairy industries.

Milk is produced on 834 farms, spread countrywide. The national dairy herd is comprised of about 125,000 heads of the Israeli-Holstein breed, which has been developed by the Israeli genetic improvement system. Since this breed has been selected for generations in the harsh conditions of the Israeli climate, it is very well adapted to the local environment – a long and hot summer and several endemic diseases. All cows are bred by Artificial Insemination.

The Israeli cow has the highest national milk and milk solids yields in the world (production/cow/year). In 2014, the average annual milk yield per cow was 12,083 kg of milk, of which 3.27% is protein and 3.64% is fat.

The Israeli Dairy Farm is known as a source of knowledge and pride all over the world.

I am pleased to present you with this summary of the Israeli Dairy Industry for 2014.

Sincerely,
Mrs. Michal Kraus
CEO,
Israel Dairy Board





Green Aspects of Dairy Farming in Israel

Environmental improvement of Israel's dairy farm sector is a major achievement by world standards. At the beginning of 2010, most of Israel's dairy farms were environmentally friendly. They constitute a model for a comprehensive solution to one of the most difficult problems associated with cattle raising.

Following is a summary of some of the major achievements:

1. About 90% of Israel's dairy farms are regulated from an environmental viewpoint, equipped with infrastructure for the prevention of pollutant infiltration; prevention of manure, leachate and sewage overflow; prevention of rainwater contamination; organized collection of manure in containment facilities and environment-friendly solutions to wastewater, based, to a large extent, on existing sewage systems.
2. In terms of animal welfare, cows have benefited from a larger living area and better conditions than before (20 sq.m/cow instead of the previous 10 sq.m/cow), which impact milk production as well.
3. The general dispersion of dairy farms in Israel has been preserved, including fodder growth areas, which are considered to be open spaces and may be used for the application of effluents and sludge generated by urban wastewater.
4. The wastewater generated by the dairy farm sector, equal in scope to the wastewater produced by 6 million residents, is absorbed and treated in local or regional sewage systems.
5. Unique drying technologies based on local development, which reduce environmental nuisances such as stench and fly infestation associated with wet processes, were introduced.
6. More than 25 small wastewater treatment plants, on a village or regional level, for the treatment of wastewater and cowshed waste were upgraded. The financing came from the reform budget, according to the relative load of these cowsheds on the facilities.
7. Biogas facilities, which utilize cattle manure for renewable energy generation, were developed.



Israel Dairy Board (P.B.C.) Production & Marketing

The Israeli Dairy Board (IDB) is a private organization, jointly owned and managed by the Government of Israel, the major processing companies and the dairy farmers.

The IDB is working in accordance with the "Milk Law". The law regulates the dairy industry, states the principles of the quota regime, establishes the guaranteed price for milk ("target price") and defines the objectives of the Israel Dairy Board.

The Board consists of representatives from the following bodies:

The Government

- The Ministry of Agriculture and Rural Development
- The Ministry of Health
- The Ministry of Finance
- The Ministry of Economy

The processors

- Tnuva Dairy
- Strauss Dairy
- Tara Dairy
- Small dairies

The farmers

- The Israel Cattle Breeders Association
- Sheep and Goats Breeders Associations
- Israeli Farmers Association

The Consumers

- Two Consumers' Organizations

The IDB has the following objectives:

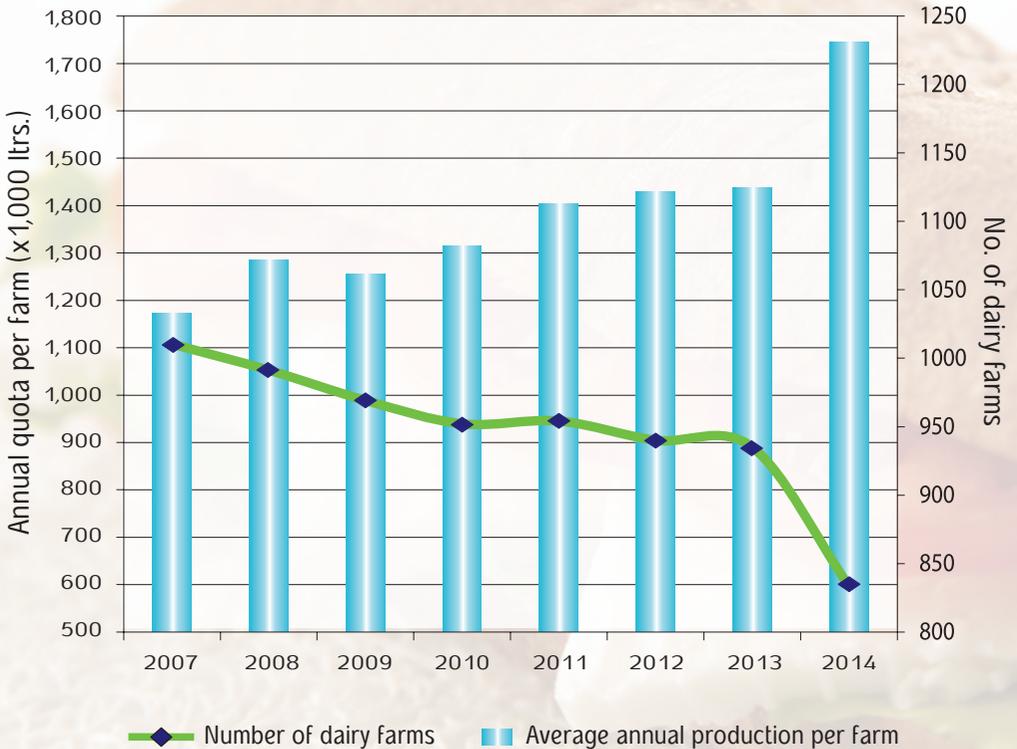
- To generate and organize cooperation among all entities active in the sector
- To implement government policy regarding milk production planning and marketing (including management of quotas)
- To properly manage surplus milk
- To improve the professional standards of the dairy industry
- To promote the consumption of milk and dairy products
- To initiate and support research in topics related to the dairy industry



Number of Dairy Farms, by farm type

	2007	2008	2009	2010	2011	2012	2013	2014
Family Farms (Moshav)	830	811	787	774	776	762	756	657
Cooperative Farms (Kibbutz)	165	165	167	163	163	163	164	163
Agric. School Farms	15	15	15	15	15	15	15	14
Total								
Number of Farms	1,010	991	969	952	954	940	935	834
Average milk production	1,174	1,285	1,256	1,315	1,403	1,430	1,438	1,745

Number of Dairy Farms & Average milk production



MILK QUALITY

Average Somatic Cell Count, by year



94% of supplied milk is under 300,000 somatic cell count

35% of supplied milk is under 200,000 somatic cell count

99% of supplied milk is under 50,000 bacterial count

58% of supplied milk is under 10,000 bacterial count

Annual Production of Milk (x1,000 ltrs.)

Year	Cow Milk	Sheep Milk	Goat Milk
2010	1,251,732	8,540	11,852
2011	1,338,346	8,835	11,374
2012	1,344,272	9,702	13,750
2013	1,371,886	10,732	14,862
2014	1,455,393	11,193	15,936

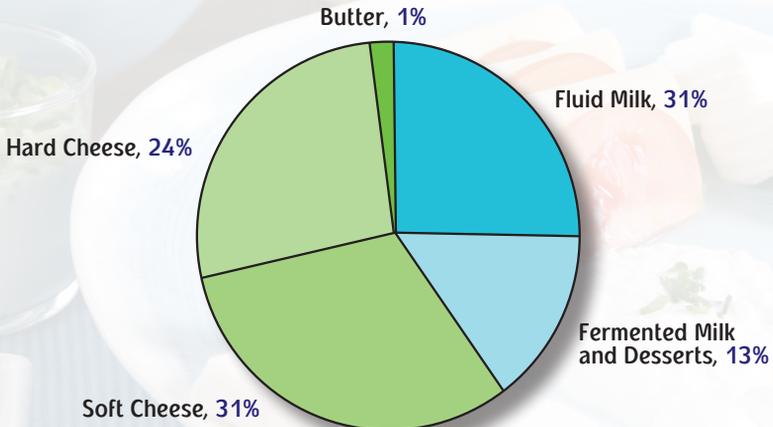


Annual Marketed Milk, by dairy products

Year	Cow Milk					Sheep & Goat Milk		
	Fluid Milk 1,000 Lt.	Fermented Milk and Desserts, 1,000 Lt.	Soft Cheese, Ton	Hard Cheese, Ton	Butter, Ton	Soft Cheese, Ton	Hard Cheese, Ton	Yogurt and others, Ton
2010	422,035	179,708	94,564	29,023	5,016	1,857	1,080	3850
2011	424,281	180,523	96,152	30,709	5,906	2,062	1,118	3159
2012	437,969	186,600	97,537	31,422	5,894	2,124	1,215	3523
2013	440,539	178,876	96,149	33,486	6,122	1,905	1,325	3698
2014	439,187	175,852	96,862	34,683	6,231	1,549	1,279	3359

Annual consumption of dairy products per capita in Israel - 178 liters

Annual Marketed Milk, by dairy products (% of total based on skim milk equivalent)





Udder Health & Milk Quality

Consultations, Instructions and Technical Testing

Background:

The National Service for Udder Health & Milk Quality is the operative branch of the Israel Dairy Board. The staff of this department are veterinarians, milking management advisers and laboratory assistants proficient in udder health and milk quality. The department is ISO 9000 certified and the laboratory is certified by the highest international laboratory standard of ISO 17025.

Functions Definition:

■ **Milking Management Advisers** – responsible for milking machine checking and authorization including ancillary equipment (bulk milk tanks, washing systems, vacuum pumps etc.) in accordance with ISO and other international standards.

The milking management advisers are also responsible for cow comfort and environment, cow sheds and milking parlors' ventilation. Also sample cows for bacteriological culturing.

■ **Laboratory Assistants** – specialize in milk bacteriology, mainly in mastitis pathogens diagnosis and bulk tank analysis (PCR). They also perform antibiotic sensitivity test (antibiogram) and different milk tests like ELISA testing for MAP (Paratuberculosis) and BLV antibodies. Other related tests are teat disinfectant concentration, bedding and teat wiping towels analysis.

■ **Veterinarians National Service** – Highly experienced and knowledgeable on udder health topics, udder treatment, laboratory management, risk factor analysis as well as analysis results of laboratory culturing and other management related factors. Dairy farmers are advised on how to improve or maintain the present level of udder health on a short and long term basis.

For more information:

Israel Dairy Board – Dr. Tova Avrech

Tel: 972-3-956-4750 | Fax: 972-3-956-4766

tova@milk.org.il | www.israeldairy.com