# LACTO DATA

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A Milk SA publication compiled by the Milk Producers' Organisation







# MILK SOUTH AFRICA IS THE INSTRUMENT THROUGH WHICH ITS MEMBERS, THE MPO AND SAMPRO DEAL WITH COMMON CHALLENGES.

#### **VISION**

To promote a healthy South African dairy community.

#### **MISSION**

- To promote the image and consumption of South African dairy products among consumers and the broader population; and
- To develop the dairy industry through rendering value-added services to industry participants, consumers and the broader South African population.

#### STRATEGIC DIRECTION

- Broaden the market for milk and other dairy products.
- Improve the international competitiveness of the dairy industry.
- Empower previously disadvantaged individuals.

#### STRATEGIC OBJECTIVES

The strategic direction of Milk SA resulted in strategies that are financed by the levies implemented in terms of regulations promulgated in terms of the Marketing of Agricultural Products Act, as well as other strategies that are not financed from levy income, which include:

- consumer education.
- improvement of the quality of milk and other dairy products,
- empowerment of previously disadvantaged individuals, through actions that improve knowledge and skills,
- promotion/facilitation of research and development,
- collection and publication of industry information,
- promotion of South Africa's trade dispensation regarding milk and other dairy products,
- constructive cooperation with the industry role players and government.



### Milk SA foreword

The purpose of this publication is to make information available regarding the structure and performance of the dairy industry, with a view to promote the optimal development of the industry to the benefit of the South African dairy industry and consumers.

Milk SA is proud to present this publication, which was made possible through the contributions of especially the persons or entities sharing their information via the statutory regulations, the SA Milk Processors' Organisation (SAMPRO), the Milk Producers' Organisation (MPO) and the Milk SA Advisory Committee.

A special word of thanks to the MPO for the compilation of the information contained in Lacto Data.

### **Executive summary**

International dairy prices were volatile in 2011. Prices increased during the first two quarters. Thereafter prices decreased to lower levels by year-end. This trend has continued during the first quarter of 2012. Local milk production during 2011 is marginally higher than during 2010 while there was substantial growth in dairy demand. Retail prices at the end of 2011 were higher than at the beginning of the year.

Both imports and exports increased during 2011. On a mass base total exports exceeded total imports. Producer prices were stagnant during 2011 and price increases only occurred from the end of 2011.

#### Lacto Data is also available on www.milksa.co.za and www.dairyconnect.co.za

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## The primary industry

#### **Industry structure**

The number of milk producers has decreased from 3 899 in January 2007 to 2 474 in January 2012. The number of producers per province is

shown in Table 1. Since 1997, the number of producers has decreased by 65%. The biggest decrease in producer numbers occurred in Northern Cape (84,2%), while the number of producers

Table 1: Number of milk producers per province, 1997 - 2011

	Number of producers per province							
Province	Dec '97	Jan '06	Jan '07	Jan '08	Jan '09	Jan '11	Jan '12	%
Western Cape	1 577	878	827	815	795	683	647	-58,9
Eastern Cape	717	422	420	407	387	314	283	-60,5
Northern Cape	133	39	37	34	37	28	21	-84,2
KwaZulu-Natal	648	402	385	373	373	323	322	-50,3
Free State	1 204	1 067	987	919	884	601	535	-55,6
North West	1 502	649	596	549	540	386	352	-76,6
Gauteng	356	275	245	228	217	127	126	-64,6
Mpumalanga	866	407	357	302	286	201	164	-81,1
Limpopo	74	45	45	38	32	23	24	-67,6
TOTAL	7 077	4 184	3 899	3 665	3 551	2 686	2 474	-65,0

Source: MPO statistics

Table 2: Milk production and cows per producer, specific years

•					
	% Distribution o	of milk production	Number of cows per producer, 2010		
Province	Dec 1997	Feb 2011	Mean	Median	
Western Cape	22,9	26,6	203	150	
Eastern Cape	13,8	24,5	468	313	
Northern Cape	1,2	0,3	141	100	
KwaZulu-Natal	15,7	23,6	367	310	
Free State	18	13,5	113	82	
North West	12,6	4,8	96	77	
Gauteng	4,4	2,6	99	62	
Mpumalanga	11	3,8	116	88	
Limpopo	0,4	0,6	175*	71	
TOTAL	100	100	209	145	

**Source: MPO statistics** 

<sup>\*</sup> Limpopo samples not representative

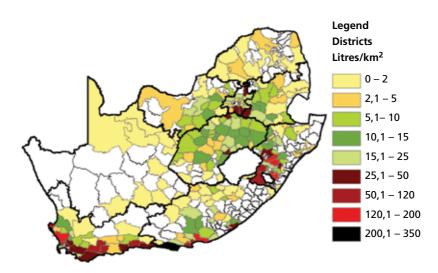


The number of milk producers has decreased from 3 899 in January 2007 to 2 474 in January 2012. Since 1997, the number of producers has decreased by 65%

in the Mpumalanga decreased by 81%. The trend towards higher total production in the pasturebased areas continued. The concentration of milk production per district is shown in Figure 1. Milk production per province, according to the latest MPO statutory information, is shown in Table 2. The number of cows varies widely among different producers. The percentage distribution of herd size is shown in Figure 2. The average herd size per producer in the different provinces is shown in Table 2 and the concentration of cows per district in Figure 3.

Average milk production per cow per day was 18.5 litres in 2011. A total of 98% of milk was sold in the formal market and 2% informally. The rest was used for own consumption and calves. The distribution of herds on a production basis is shown in Figure 4.

Figure 1: Milk production density (litres/km<sup>2</sup>) per district, 2009





Source: MPO statutory information

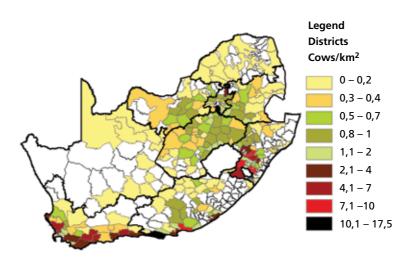


120 100% 100 80 73,4% % of herds 61.7% 60 35.9% 40 25,7% 26.6% 23,3% 20 12,6% 12,6% 11,7% 0 0-50 51-100 101-200 201-300 > 300 Number of cows in herd % of herds Cumulative % of herds

Figure 2: Size distribution of dairy herds, 2009

Source: MPO statutory survey, 2009

Figure 3: Cow density per district (cows/km²), 2009





Source: MPO statutory information



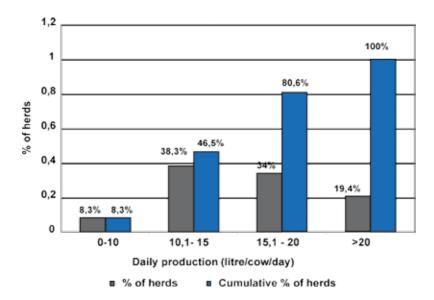
Average milk production per cow per day was 18,5 litres in 2011. A total of 98% of milk was sold in the formal market and 2% informally. The rest was used for own consumption and calves

#### Milk production and consumption

production Annual milk shows steady linear upward trend over time. production for 2008 to 2011, is shown in Total milk to market for 2011 is 2,647 billion

a litres, up 0,4% on the previous year. Milk Figure 5.

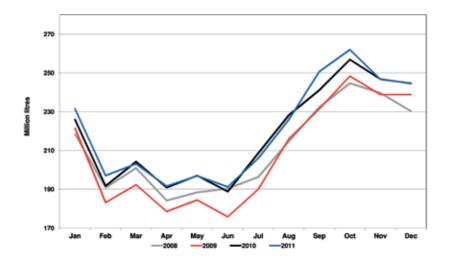
Figure 4: Distribution of herds based on daily production per cow in herd, 2009



Source: MPO statutory survey, 2009

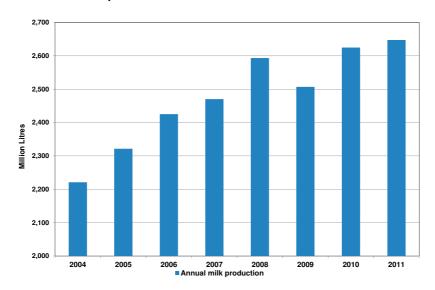


Figure 5: South African monthly milk production, 2008 - 2011



Source: Milk SA statistics

Figure 6: Annual milk production, 2004 - 2011



Source: 2004 - 2005 MPO; 2006 - 2011 Milk SA



The South African secondary industry consists of a few larger processors operating nationally, a large number of smaller processors who operate in specific areas and a number of producers who sell their own produce directly to retailers and consumers – known as producer-distributors (PDs). The number of milk buyers has decreased by 53% since 2003

## The secondary industry

#### **Industry structure**

The South African secondary industry consists of a few larger processors operating nationally, a large number of smaller processors who operate in specific areas, and a number of producers who sell their own produce directly to retailers and consumers – known as producer-distributors (PDs). The number of PDs and milk buyers per province is shown in Table 3. The number of milk buyers has decreased by 53% since 2003.

#### **Production and consumption**

South African dairy market divided into 58% 42% liquid and concentrated products. Pasteurised liquid milk and UHT milk are the major liquid products, while hard cheese is the major concentrated product. The estimated composition of the markets for liquid and concentrated products, is shown in Figures 7 and 8

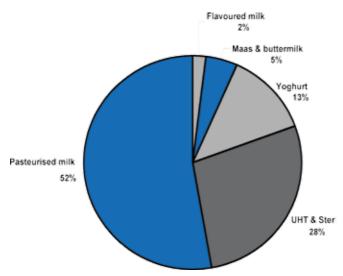
Table 3: Number of producer-distributors (PDs) and milk buyers per province, as registered by Milk SA, March 2012

Province	Number of PDs	Number of milk buyers
Western Cape	21	36
Eastern Cape	20	13
Northern Cape	9	2
KwaZulu-Natal	13	20
Free State	14	13
North West	12	17
Gauteng	19	48
Mpumalanga	12	12
Limpopo	11	2
Total	131	163

Note: Milk buyers indicated according to position of registered head office

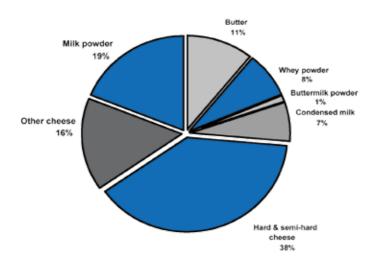
Source: Milk SA

Figure 7: Composition of the South African liquid products market, 2010\*



**Source:** Industry estimate \* Milk equivalent basis

Figure 8: Composition of the South African concentrated products market, 2010\*\*



**Source:** Industry estimate \*\* Mass basis

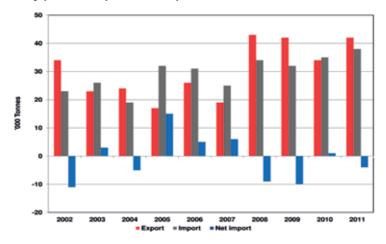


#### Imports and exports

Total dairy product imports and exports are shown in Figure 9. During 2011, 37 700 tonnes of products were imported. On a

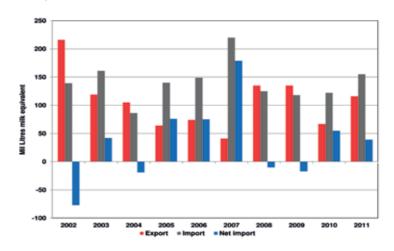
milk equivalent basis, the positive growth of exports since 2008 resulted in a decrease in net imports. Total exports during 2011 were 41 800 tonnes.

Figure 9: Dairy product imports and exports ('000 tonnes), 2002 - 2011\*



Source: SARS data, SAMPRO

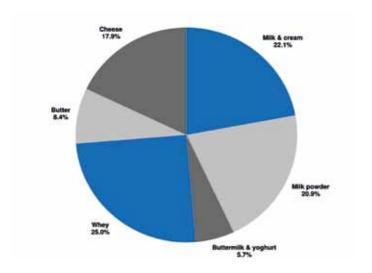
Figure 10: Dairy product imports and exports, milk equivalent base, 2002 - 2011\*



Source: SARS data, SAMPRO

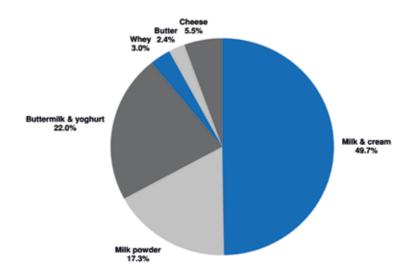


Figure 11: Percentage composition of imports (mass base), 2011



Source: Data supplied by SAMPRO

Figure 12: Percentage composition of exports (mass base), 2011



Source: Data supplied by SAMPRO



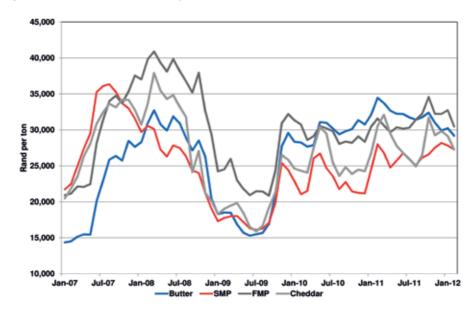
In spite of price decreases in 2011, prices are substantially higher than in mid-2009, but still lower than the 2008 peak. High volatility is currently present in the market

## Dairy price trends

#### International product prices

International product prices peaked in March/ April 2008. Since then to late 2009 prices decreased sharply. Prices recovered during 2009 and 2010. In spite of price decreases in 2011, prices are substantially higher than in mid-2009, but still lower than the 2008 peak. High volatility is currently present in the market.

Figure 13: International FOB dairy product prices, rand/tonne, Jan 2007 - Feb 2012



Source: USDA, Reserve Bank



Table 4: International calculated standardised raw milk producer prices, 2008 – 2012

Country	Jan '09	Jan '10	Jan '11	Jan '12
Belgium	3,23	2,89	3,06	3,23
Germany	3,50	2,80	2,96	3,35
Denmark	3,51	2,81	2,90	3,35
Finland	5,39	3,79	3,54	4,14
France	4,65	3,37	3,01	3,58
Great Britain	3,80	2,82	2,69	3,47
Ireland	3,17	2,47	3,16	3,40
Netherlands	3,46	2,91	3,05	3,55
New Zealand	2,05	2,44	3,03	3,22
USA	2,59	2,59	2,27	3,25
* South Africa	2,79	3,14	2,97	3,10

Source: LTO Nederland

Based on 4% fat-corrected milk

Exchange rates: Reserve Bank monthly middle rates

\* Based on MPO price survey

See www.milkprice.com for detailed definition of LTO standardised price.

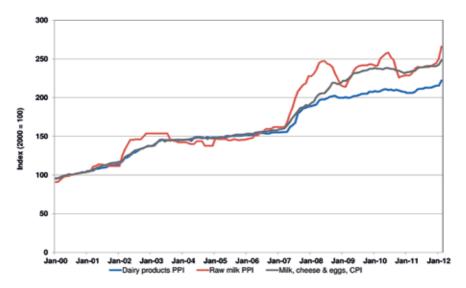
#### **International producer prices**

International producer prices largely followed the decrease in product prices during 2009 and the recovery in 2010. South African producer prices did not increase as sharply as international prices during 2008 and were more stable during 2009. South African producer prices decreased from June 2010 to October 2011. Since then SA prices increased again.

International producer prices largely followed the decrease in product prices during 2009 and the recovery in 2010



Figure 14: Price index of raw milk on farm level, dairy products at processor level and milk and eggs at consumer level, 2000 – 2012



Source: DAFF and Stats SA data

Table 5: Farm requisite price indexes, base 2005 = 100

Period	Machinery and implements	Material for fixed improvement	Intermediate goods and services	All farming requisites
2005	100,0	100,0	100,0	100,0
2006	103,8	100,1	107,2	106,5
2007	101,6	118,2	118,8	116,8
2008	115,0	130,9	160,8	154,0
2009	133,3	141,6	172,9	166,8
2010	154,9	142,0	193,5	186,6
2011	178,4	153,6	218,6	210,4
CAGR*	10,1%	7,4%	13,9%	13,1%
Oct '10	162,4	143,7	201,6	194,2
Oct '11	182,6	157,4	227,5	218,9
% change	12,4%	9,5%	12,8%	12,7%

Source: Department of Agriculture, Forestry and Fisheries

<sup>\*</sup> Computed annual growth rate, 2005 to 2011



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