



Report on a survey conducted in October and November 2018 in respect of information supplied by milk producers in terms of the requirements as published in Regulations 42 and 46 of 22 January 2016 in terms of the Marketing of Agricultural Products Act (47 of 1996).

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1. Introduction

In terms of Regulations 42 and 46 of 2016, the Milk Producers' Organisation (MPO) is compelled to collect specific information from milk producers of raw milk. This survey was carried out in October and November 2018. The survey was conducted among all milk producers registered as such with the MPO in terms of Regulation 42 of 2016. It consisted of an initial email survey, followed by two additional email surveys and a telephone survey among persons who initially failed to respond and producers without email contact. Incomplete questionnaires were followed up by telephone in November 2018. In total 656 responses (48,0%) could be used. The total response is compared with the number of registered producers per province in Table 1.

Table 1: Survey response and registered producers per province, November 2018

Province	Responders	% of total	Producers	% of total	Response %
North West	78	11,9%	116	8,5%	67,2%
Free State	72	11,0%	167	12,2%	43,1%
Mpumalanga	35	5,3%	58	4,2%	60,3%
Northern Cape	4	0,6%	5	0,4%	80,0%
Limpopo	9	1,4%	11	0,8%	81,8%
Western Cape	194	29,6%	427	31,2%	45,4%
Gauteng	35	5,3%	84	6,1%	41,7%
KwaZulu-Natal	116	17,7%	254	18,6%	45,7%
Eastern Cape	113	17,2%	245	17,9%	46,1%
Total	656	100,0%	1 367	100,0%	48,0%

The response rate of the different regions varied between 41.7% and 80.0%. In the opinion of the Milk Producers' Organisation, the information in this report provides a reliable overview of the typical structure of milk production in South Africa.

2. Herd¹ composition and structure

The average composition of dairy herds per province is shown in Table 2 and the percentage composition in Table 3. The largest herds are in the Eastern Cape and KwaZulu-Natal and the smallest in North West and the Northern Cape.

Table 2: Herd composition average dairy herd per province, 2018

Province	Cows in milk	Dry cows	Heifers >1 year	Heifers < 1 year	Total herd
Eastern Cape	676	84	198	206	1164
KwaZulu-Natal	608	67	195	197	1067
Western Cape	337	66	130	171	704
Limpopo	257	34	110	96	497
Free State	250	59	92	92	493
Northern Cape	95	35	38	30	198
Mpumalanga	189	30	75	68	362
Gauteng	137	42	69	61	309
North West	112	28	30	31	201
National herd	388	61	131	145	725

¹ A dairy herd is defined as a number of dairy animals being farmed on a separate farm, irrespective of its ownership.

Table 3: Herd composition, percentage of total dairy herd per province, 2018

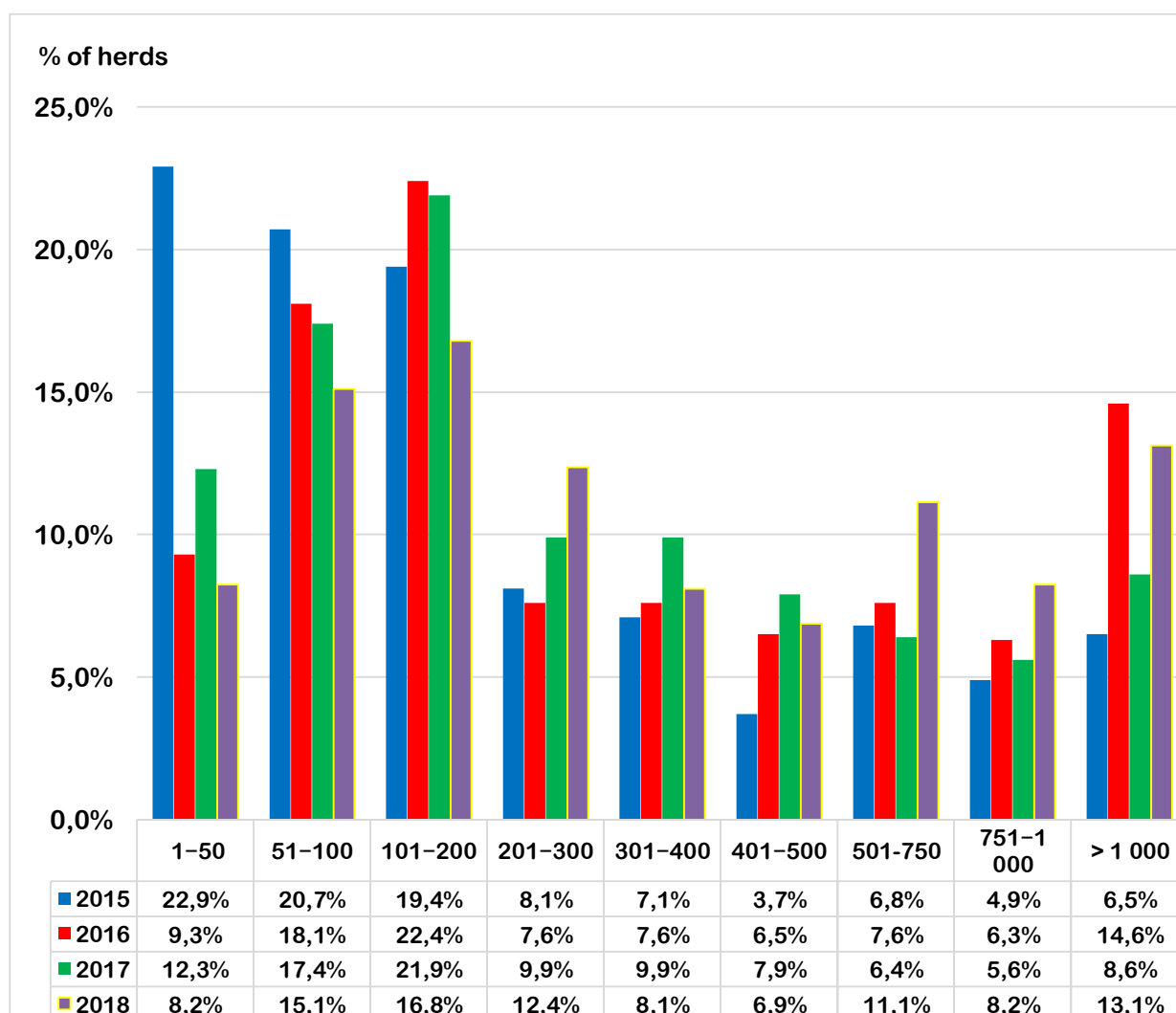
Province	Cows in milk	Dry cows	Heifers >1 year	Heifers < 1 year	Total herd
Eastern Cape	58,1%	7,2%	17,0%	17,7%	100,0%
KwaZulu-Natal	57,0%	6,3%	18,3%	18,5%	100,0%
Western Cape	47,9%	9,4%	18,5%	24,3%	100,0%
Limpopo	51,7%	6,8%	22,1%	19,3%	100,0%
Free State	50,7%	12,0%	18,7%	18,7%	100,0%
Northern Cape	48,0%	17,7%	19,2%	15,2%	100,0%
Mpumalanga	52,2%	8,3%	20,7%	18,8%	100,0%
Gauteng	44,3%	13,6%	22,3%	19,7%	100,0%
North West	55,7%	13,9%	14,9%	15,4%	100,0%
National herd	53,5%	8,4%	18,1%	20,0%	100,0%

The distribution of dairy herds per herd size interval is shown in Table 4 and Figure 1. Fifty-three per cent of the dairy herds comprise 300 or fewer cows in the herd while 33% of the herds have more than 500 cows.

Table 4: Distribution of dairy herds per herd size group (cows in herd), 2015 – 2018

Cows in herd	% of herds				Cumulative % of herds			
	2015	2016	2017	2018	2015	2016	2017	2018
1-50	22,9%	9,3%	12,3%	8,2%	22,9%	9,3%	12,3%	8,2%
51-100	20,7%	18,1%	17,4%	15,1%	43,6%	27,4%	29,7%	23,4%
101-200	19,4%	22,4%	21,9%	16,8%	63,0%	49,8%	51,6%	40,2%
201-300	8,1%	7,6%	9,9%	12,4%	71,1%	57,4%	61,5%	52,5%
301-400	7,1%	7,6%	9,9%	8,1%	78,1%	65,0%	71,5%	60,6%
401-500	3,7%	6,5%	7,9%	6,9%	81,9%	71,5%	79,4%	67,5%
501-750	6,8%	7,6%	6,4%	11,1%	88,6%	79,1%	85,8%	78,6%
751-1 000	4,9%	6,3%	5,6%	8,2%	93,5%	85,4%	91,4%	86,9%
> 1 000	6,5%	14,6%	8,6%	13,1%	100,0%	100,0%	100,0%	100,0%
Total	100,0%	100,0%	100,0%	100,0%				

Figure 1: Distribution of herds per herd size group (cows in herd), 2015 – 2018

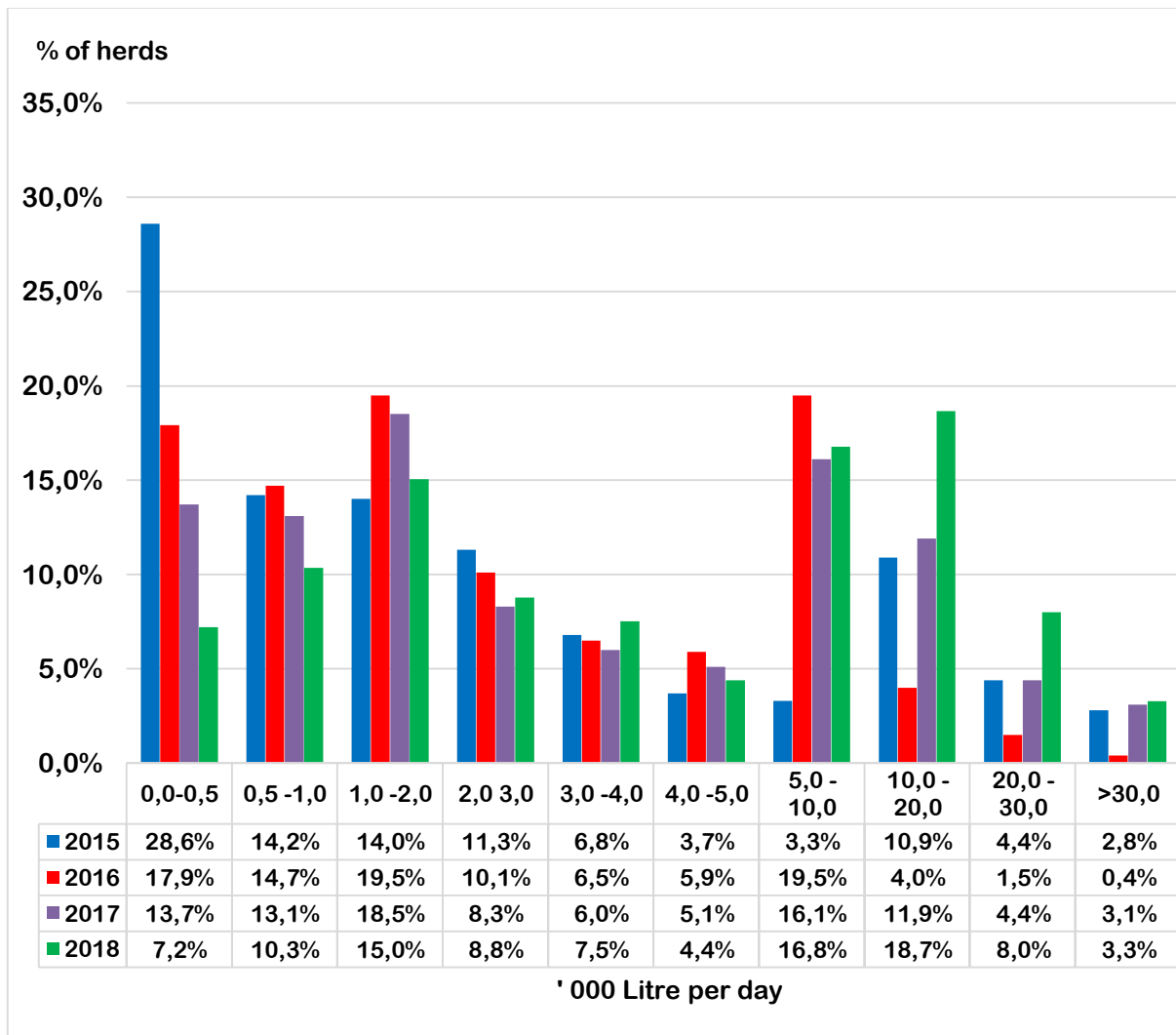


The distribution of herds based on total daily production per herd is shown in Table 5 and Figure 2. Fifty-four per cent of the herds produce 3 000 £ and less per day and 41% produce more than 4 000 £ per day.

Table 5: Distribution of herds per production group, 2015 – 2018

Daily production	% of dairy herds				Cumulative %			
	2015	2016	2017	2018	2015	2016	2017	2018
1– 500	28,60%	17,90%	13,70%	7,2%	28,60%	17,90%	13,70%	7,2%
501–1 000	14,20%	14,70%	13,10%	10,3%	42,80%	32,60%	26,70%	17,6%
1 001–2 000	14,00%	19,50%	18,50%	15,0%	56,80%	52,10%	45,20%	32,6%
2 001–3 000	11,30%	10,10%	8,30%	8,8%	68,10%	62,20%	53,50%	41,4%
3 001–4 000	6,80%	6,50%	6,00%	7,5%	74,90%	68,70%	59,40%	48,9%
4 001–5 000	3,70%	5,90%	5,10%	4,4%	78,60%	74,60%	64,50%	53,3%
5 001–10 000	3,30%	19,50%	16,10%	16,8%	81,90%	94,10%	80,70%	70,1%
10 001–20 000	10,90%	4,00%	11,90%	18,7%	92,80%	98,10%	92,60%	88,7%
20 001–30 000	4,40%	1,50%	4,40%	8,0%	97,20%	99,60%	96,90%	96,7%
>30 000	2,80%	0,40%	3,10%	3,3%	100,00%	100,00%	100,00%	100,0%
Total	100,00%	100,00%	100,00%	100,0%				

Figure 2: Distribution of herds per production group ('000 L/day), 2015 – 2017



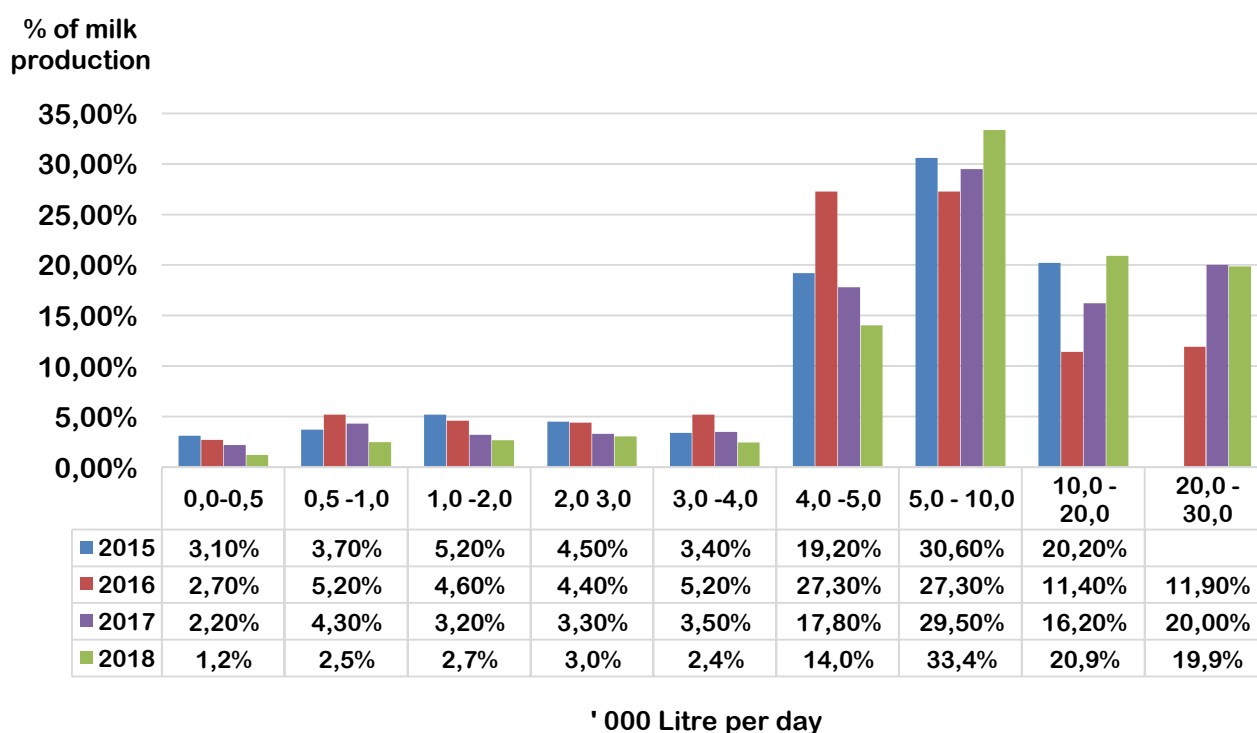
2. Milk production

The share of total milk production per production class is shown in Table 6 and Figure 3. Large herds (producing more than 10 000 l./day) produce 74% of the total volume of milk in South Africa.

Table 6: Percentage of total milk production per production class (1000 L/day), 2015 – 2018

Daily production	% of total milk production				Cumulative %			
	2015	2016	2017	2018	2015	2016	2017	2018
1–1 000	3,10%	2,70%	2,20%	1,2%	3,10%	2,70%	2,20%	1,2%
1 001–2 000	3,70%	5,20%	4,30%	2,5%	6,80%	8,00%	6,40%	3,7%
2 001–3 000	5,20%	4,60%	3,20%	2,7%	12,00%	12,50%	9,70%	6,4%
3 001–4 000	4,50%	4,40%	3,30%	3,0%	16,50%	17,00%	13,00%	9,4%
4 001–5 000	3,40%	5,20%	3,50%	2,4%	19,90%	22,10%	16,50%	11,8%
5 001–10 000	19,20%	27,30%	17,80%	14,0%	39,10%	49,40%	34,20%	25,9%
10 001–20 000	30,60%	27,30%	29,50%	33,4%	69,70%	76,70%	63,80%	59,2%
20 001–30 000	20,20%	11,40%	16,20%	20,9%	89,90%	88,10%	80,00%	80,1%
>30 000	10,10%	11,90%	20,00%	19,9%	100,00%	100,00%	100,00%	100,0%
Total	100,00%	100,00%	100,00%	100,0%				

Figure 3: Percentage of total milk production per production class (1000 L/day), 2015 – 2018



The daily average production and utilisation of milk per dairy farm per province are shown in Table 7. The Eastern Cape has the highest production per day, followed by KwaZulu-Natal.

Table 7: Daily milk production and utilisation per dairy farm per province, 2018

Province	Daily production	Delivered to market	On-farm use	% Delivered
Eastern Cape	12 630	12 535	95	99,2%
KwaZulu-Natal	12 573	12 367	206	98,4%
Western Cape	7 245	7 199	46	99,4%
Limpopo	7 379	7 353	26	99,6%
Free State	5 109	5 050	59	98,8%
Northern Cape	1 180	1 151	29	97,5%
Mpumalanga	4 549	4 472	77	98,3%
Gauteng	3 276	3 236	40	98,8%
North West	2 059	2 016	43	97,9%
National herd	8 281	8 175	106	98,7%

Average daily milk production per cow in milk per day is shown in Table 8.

Table 8: Average daily milk production per cow in milk per province, 2018

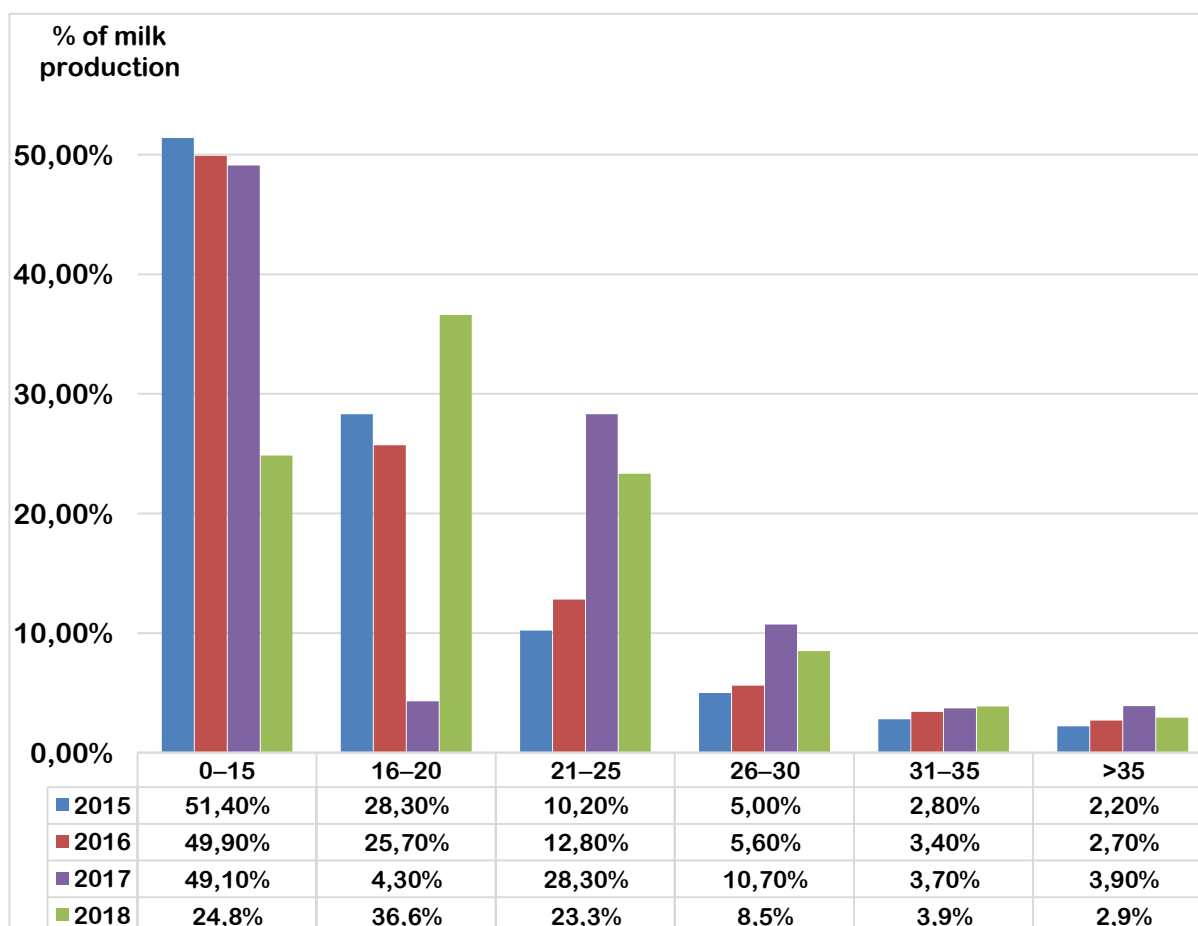
Province	Average Production ℓ/cow/day
Eastern Cape	15,1
KwaZulu-Natal	21,2
Western Cape	22,0
Limpopo	28,6
Free State	20,1
Northern Cape	15,1
Mpumalanga	24,3
Gauteng	24,0
North West	19,5
National herd	21,0

The distribution of herds, based on average milk production per cow per day, is shown in Table 9 and Figure 4. Ninety per cent of the herds have an average daily production per cow in milk of less than 26 ℓ.

Table 9: Herd distribution based on average production per cow in milk per day

Production/day (L)	% of herds			
	2015	2016	2017	2018
0–15	51,40%	49,90%	49,10%	24,8%
16–20	28,30%	25,70%	4,30%	36,6%
21–25	10,20%	12,80%	28,30%	23,3%
26–30	5,00%	5,60%	10,70%	8,5%
31–35	2,80%	3,40%	3,70%	3,9%
>35	2,20%	2,70%	3,90%	2,9%

Figure 4: Herd distribution, based on average production per cow in milk per day, 2015–2018



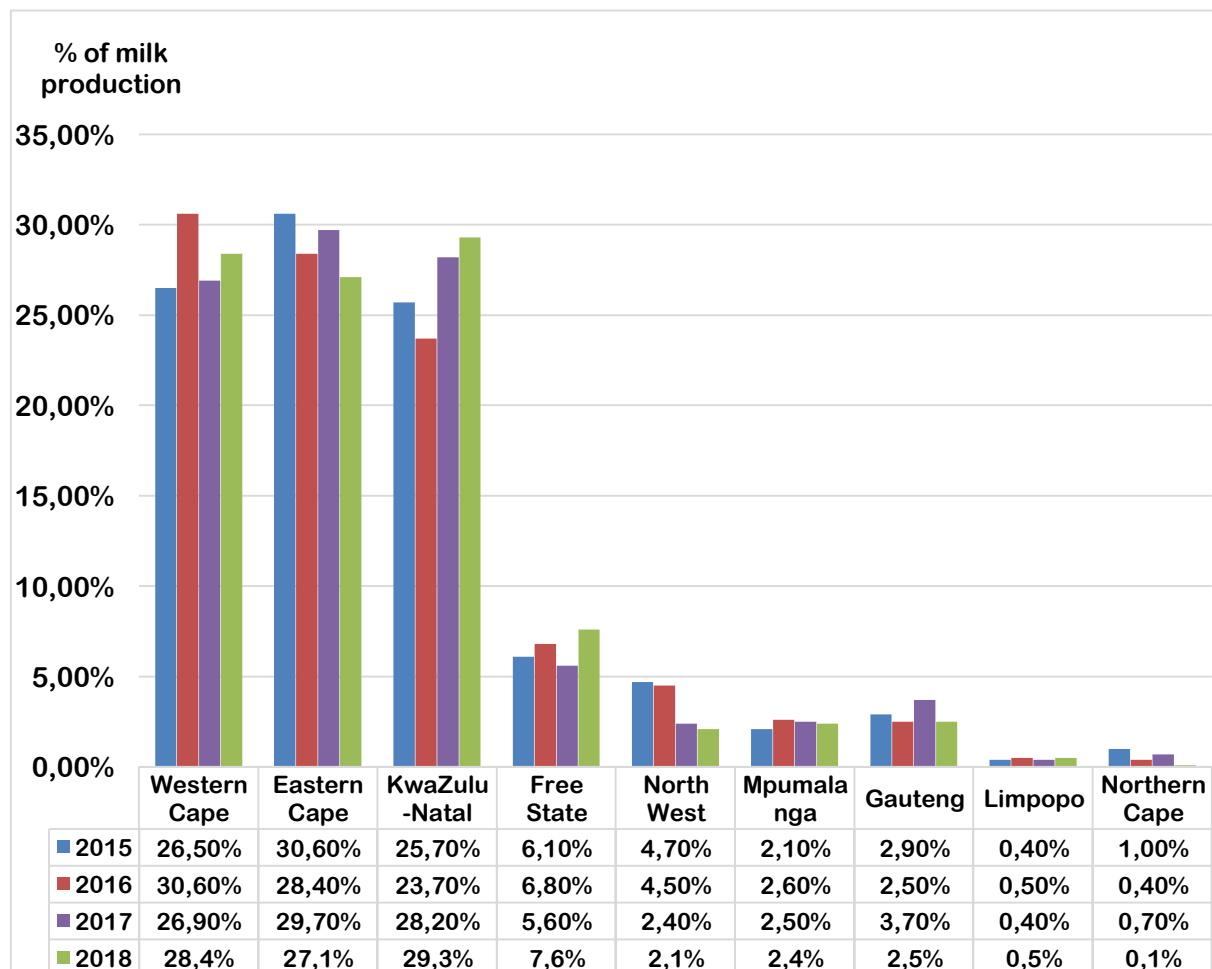
4. Geographical distribution of milk production

The geographical distribution of total milk production based on received questionnaires and on additional information received from milk processors is shown in Table 10 and Figure 5. More than 84% of total milk is produced in the three coastal provinces (2009 = 74%).

Table 10: Geographical distribution of milk production per province, 2015 – 2018

Province	2015	2016	2017	2018
Western Cape	26,50%	30,60%	26,90%	29,40%
Eastern Cape	30,60%	28,40%	29,70%	30,11%
KwaZulu-Natal	25,70%	23,70%	28,20%	24,66%
Free State	6,10%	6,80%	5,60%	7,71%
North West	4,70%	4,50%	2,40%	3,00%
Mpumalanga	2,10%	2,60%	2,50%	1,78%
Gauteng	2,90%	2,50%	3,70%	2,91%
Limpopo	0,40%	0,50%	0,40%	0,41%
Northern Cape	1,00%	0,40%	0,70%	0,02%
Total	100,00%	100,00%	100,00%	100,0%

Figure 5: Milk production per province, 2015–2018



5. Geographical distribution of dairy cows

The geographical distribution of dairy cows (in milk and dry) per province is shown in Table 11. The cow distribution closely follows the distribution of total milk production. Total milking herd (cows in milk plus dry cows) is estimated at 570 000.

Table 11: Geographical distribution of dairy cows, 2017 & 2018

Province	2017	2018
Western Cape	26,90%	26,5%
Eastern Cape	29,70%	30,5%
KwaZulu-Natal	28,20%	28,5%
Free State	5,60%	7,7%
North West	2,40%	2,3%
Mpumalanga	2,50%	2,0%
Gauteng	3,70%	2,1%
Limpopo	0,40%	0,3%
Northern Cape	0,70%	0,1%
Total	100,00%	100,0%