



Report on a survey conducted in October and November 2019 in respect of information supplied by milk producers in terms of the requirements as published in Regulations 42 and 46 of 2 February 2020 in terms of the Marketing of Agricultural Products Act (47 of 1996).

Issued: April 2020

Contents

1	Introduction	2
2	Herd composition and structure	3
3	Milk production	8
4	Geographical distribution of milk production	11
5	Geographical distribution of cows	12

1. Introduction

In terms of Regulations 42 and 46 of 2020, 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 2019. The survey was conducted among all milk producers registered as such with the MPO in terms of Regulation 42 of 2020. 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 2019 and March 2020. In total 479 responses (36,5%) 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 2019

Province	Responders	% of total	Producers	% of total	Response %
North West	20	4,2%	110	8,4%	18,2%
Free State	24	5,0%	149	11,3%	16,1%
Mpumalanga	14	2,9%	55	4,2%	25,5%
Northern Cape	2	0,4%	5	0,4%	40,0%
Limpopo	4	0,8%	11	0,8%	36,4%
Western Cape	178	37,2%	409	31,1%	43,5%
Gauteng	14	2,9%	85	6,5%	16,5%
KwaZulu-Natal	111	23,2%	249	18,9%	44,6%
Eastern Cape	112	23,4%	241	18,4%	46,5%
Total	479	100,0%	1314	100,0%	36,5%

The response rate of the different regions varied between 16,1% and 46,5%. 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 Northern Cape and North West.

Table 2: Herd composition average dairy herd per province, 2019

Province	Cows in milk	Dry cows	Heifers >1 year	Heifers < 1 year	Total herd
Eastern Cape	682	80	219	196	1177
KwaZulu-Natal	606	72	185	180	1043
Western Cape	345	54	136	168	703
Limpopo	303	48	107	101	559
Free State	266	42	89	86	483
Northern Cape	145	32	39	37	253
Mpumalanga	209	55	68	66	398
Gauteng	196	42	72	54	364
North West	155	51	34	36	276
National herd	412	47	136	141	736

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, 2019

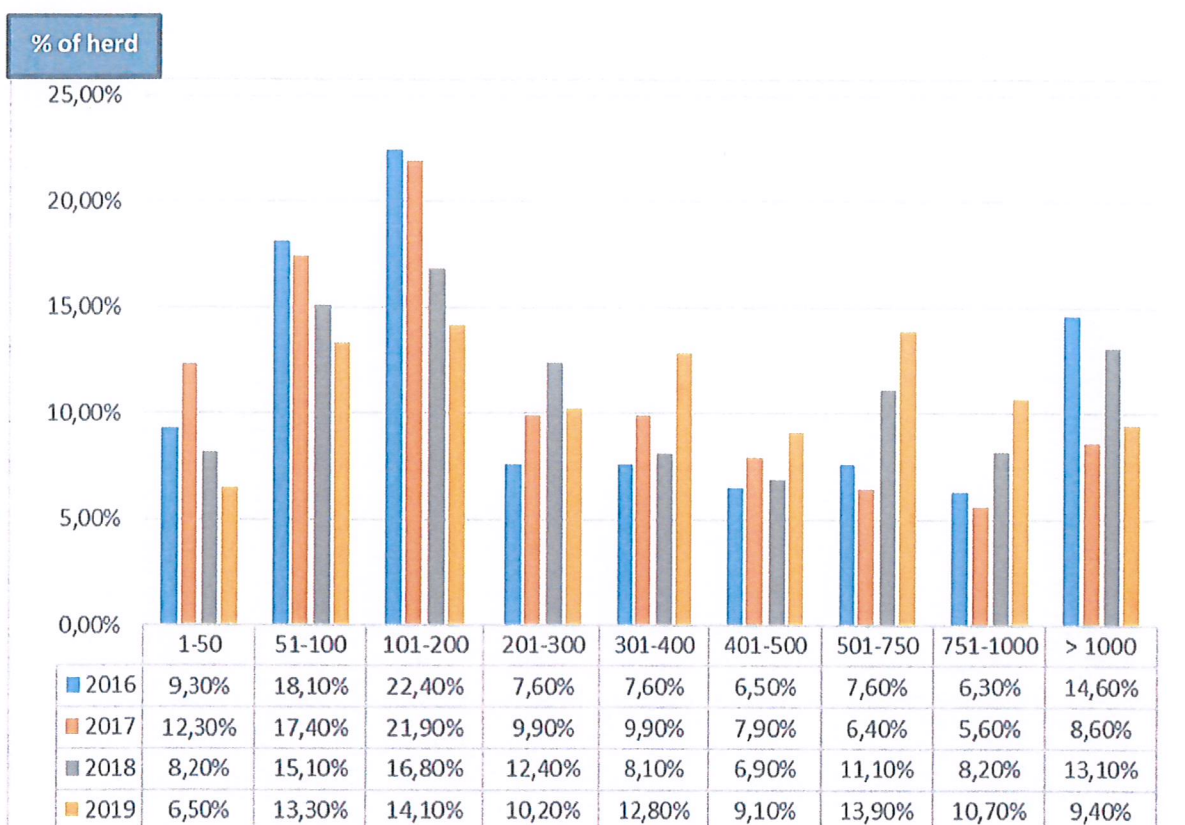
Province	Cows in milk	Dry cows	Heifers >1 year	Heifers < 1 year	Total herd
Eastern Cape	57,9%	6,8%	18,6%	16,7%	100,0%
KwaZulu-Natal	58,1%	6,9%	17,7%	17,3%	100,0%
Western Cape	49,1%	7,7%	19,3%	23,9%	100,0%
Limpopo	54,2%	8,6%	19,1%	18,1%	100,0%
Free State	55,1%	8,7%	18,4%	17,8%	100,0%
Northern Cape	57,3%	12,6%	15,4%	14,7%	100,0%
Mpumalanga	52,5%	13,8%	17,1%	16,6%	100,0%
Gauteng	53,8%	11,5%	19,8%	14,9%	100,0%
North West	56,2%	18,5%	12,3%	13,0%	100,0%
National herd	56,0%	6,4%	18,5%	19,1%	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 32% of the herds have more than 500 cows.

Table 4: Distribution of dairy herds per herd size group (cows in herd), 2016 – 2019

Cows in herd	% of herds				Cumulative % of herds			
	2016	2017	2018	2019	2016	2017	2018	2019
1-50	9,3%	12,3%	8,2%	6,5%	9,3%	12,3%	8,2%	6,5%
51-100	18,1%	17,4%	15,1%	13,3%	27,4%	29,7%	23,3%	19,8%
101-200	22,4%	21,9%	16,8%	14,1%	49,8%	51,6%	40,1%	33,9%
201-300	7,6%	9,9%	12,4%	10,2%	57,4%	61,5%	52,5%	44,1%
301-400	7,6%	9,9%	8,1%	12,8%	65,0%	71,4%	60,6%	56,9%
401-500	6,5%	7,9%	6,9%	9,1%	71,5%	79,3%	67,5%	66,0%
501-750	7,6%	6,4%	11,1%	13,9%	79,1%	85,7%	78,6%	79,9%
751-1000	6,3%	5,6%	8,2%	10,7%	85,4%	91,3%	86,8%	90,6%
> 1000	14,6%	8,6%	13,1%	9,4%	100,0%	99,9%	99,9%	100,0%
Total	100%	100%	100%	100%				

Figure 1: Distribution of herds per herd size group (cows in herd), 2016 – 2019

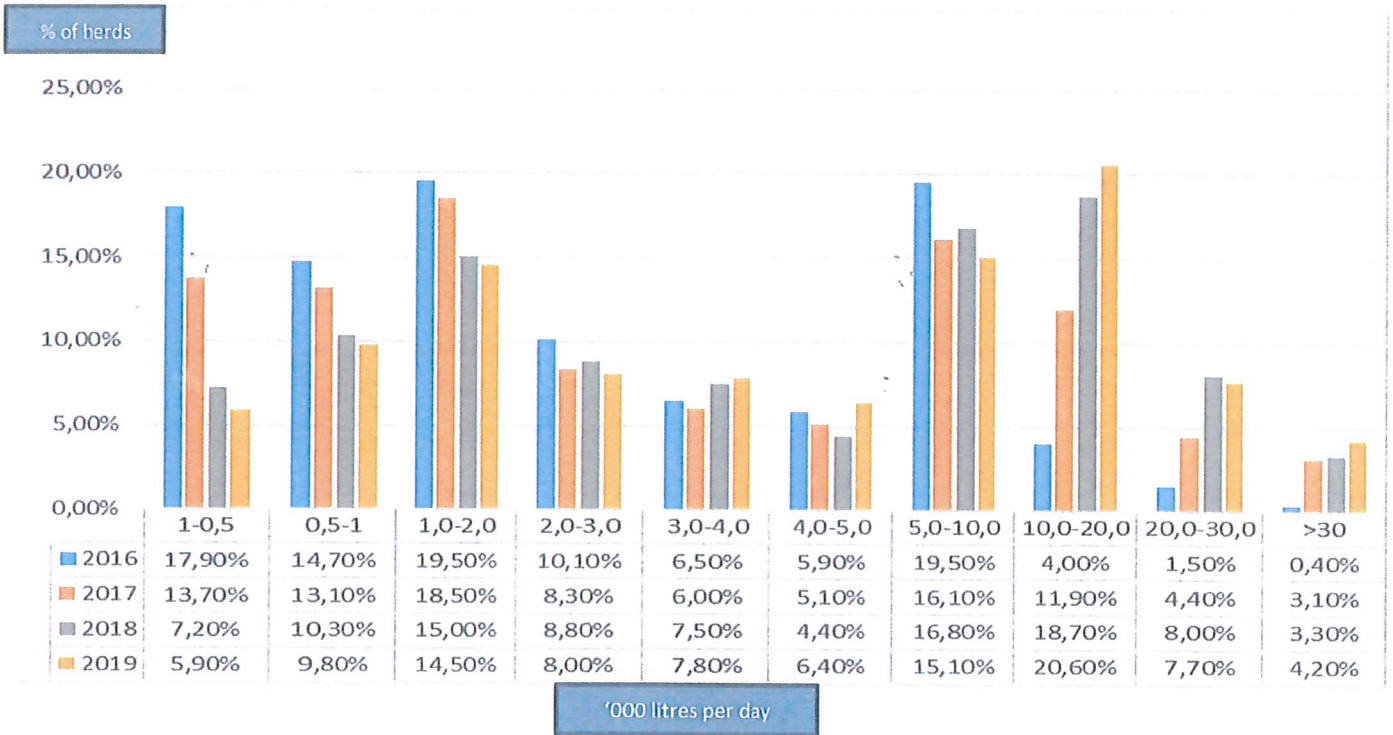


The distribution of herds based on total daily production per herd is shown in Table 5 and Figure 2. Fifty-two per cent of the herds produce 5 000L and less per day, 35,7% of the herds produce between 5001L and 20 000L and 11,9% produce more than 20 000L per day.

Table 5: Distribution of herds per production group, 2016 – 2019

Daily production	% of dairy herds				Cumulative %			
	2016	2017	2018	2019	2016	2017	2018	2019
1– 500	17,90%	13,70%	7,2%	5,9%	17,90%	13,70%	7,2%	5,9%
501–1 000	14,70%	13,10%	10,3%	9,8%	32,60%	26,70%	17,6%	15,7%
1 001–2 000	19,50%	18,50%	15,0%	14,5%	52,10%	45,20%	32,6%	30,2%
2 001–3 000	10,10%	8,30%	8,8%	8,0%	62,20%	53,50%	41,4%	38,2%
3 001–4 000	6,50%	6,00%	7,5%	7,8%	68,70%	59,40%	48,9%	46,0%
4 001–5 000	5,90%	5,10%	4,4%	6,4%	74,60%	64,50%	53,3%	52,4%
5 001–10 000	19,50%	16,10%	16,8%	15,1%	94,10%	80,70%	70,1%	67,5%
10 001–20 000	4,00%	11,90%	18,7%	20,6%	98,10%	92,60%	88,7%	88,1%
20 001–30 000	1,50%	4,40%	8,0%	7,7%	99,60%	96,90%	96,7%	95,8%
>30 000	0,40%	3,10%	3,3%	4,2%	100,00%	100,00%	100,0%	100,0%
Total	100,00%	100,00%	100,0%	100,0%				

Figure 2: Distribution of herds per production group ('000 L/day), 2016 – 2019



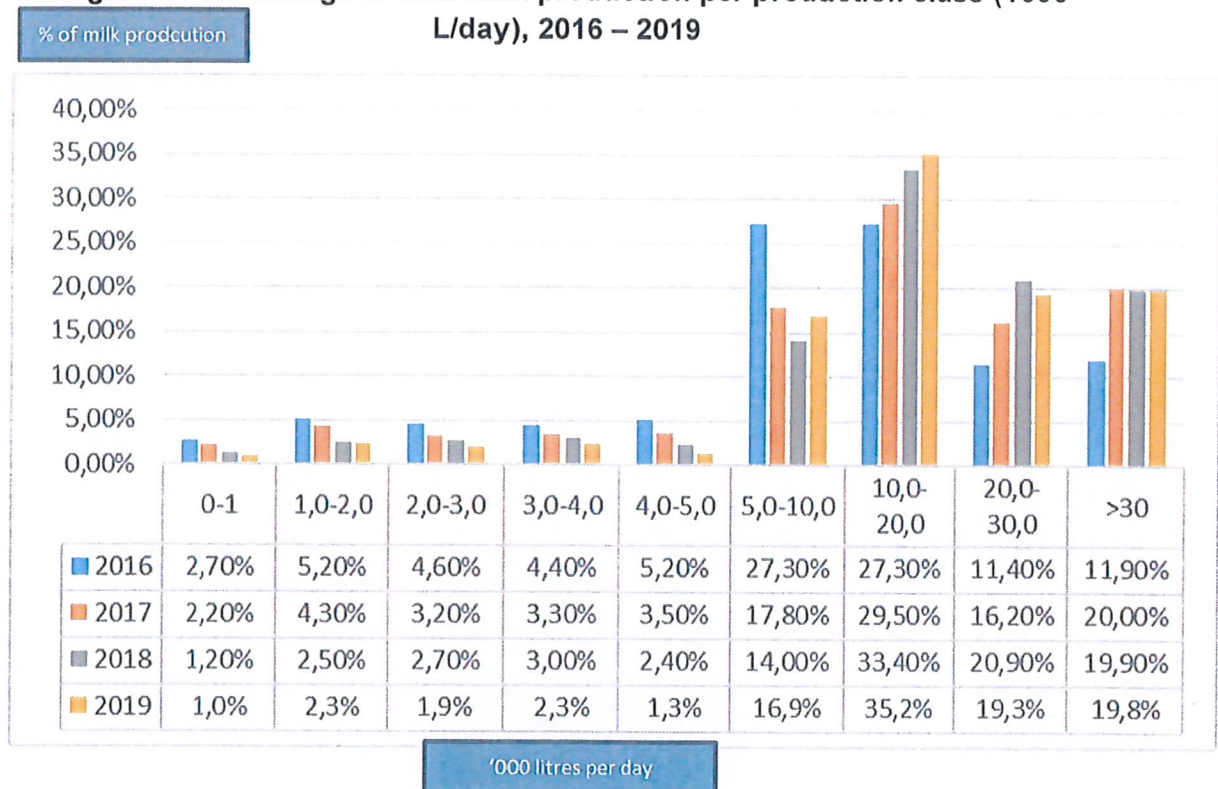
2. Milk production

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), 2016 – 2019

Daily production	% of total milk production				Cumulative %			
	2016	2017	2018	2019	2016	2017	2018	2019
1–1 000	2,70%	2,20%	1,2%	1,0%	2,70%	2,20%	1,2%	1,0%
1 001–2 000	5,20%	4,30%	2,5%	2,3%	8,00%	6,40%	3,7%	3,3%
2 001–3 000	4,60%	3,20%	2,7%	1,9%	12,50%	9,70%	6,4%	5,2%
3 001–4 000	4,40%	3,30%	3,0%	2,3%	17,00%	13,00%	9,4%	7,5%
4 001–5 000	5,20%	3,50%	2,4%	1,3%	22,10%	16,50%	11,8%	8,8%
5 001–10 000	27,30%	17,80%	14,0%	16,9%	49,40%	34,20%	25,9%	25,7%
10 001–20 000	27,30%	29,50%	33,4%	35,2%	76,70%	63,80%	59,2%	60,9%
20 001–30 000	11,40%	16,20%	20,9%	19,3%	88,10%	80,00%	80,1%	80,2%
>30 000	11,90%	20,00%	19,9%	19,8%	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), 2016 – 2019



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, 2019

Province	Daily production	Delivered to market	On-farm use	% Delivered
Eastern Cape	10 724	10 638	86	99,2%
KwaZulu-Natal	10 556	10 387	169	98,4%
Western Cape	7 119	7 076	43	99,4%
Limpopo	4 494	4 476	18	99,6%
Free State	3 736	3 691	45	98,8%
Northern Cape	1 181	1 151	30	97,5%
Mpumalanga	3 352	3 295	57	98,3%
Gauteng	3 275	3 236	39	98,8%
North West	2 059	2 016	43	97,9%
National herd	7 208	7 114	94	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, 2019

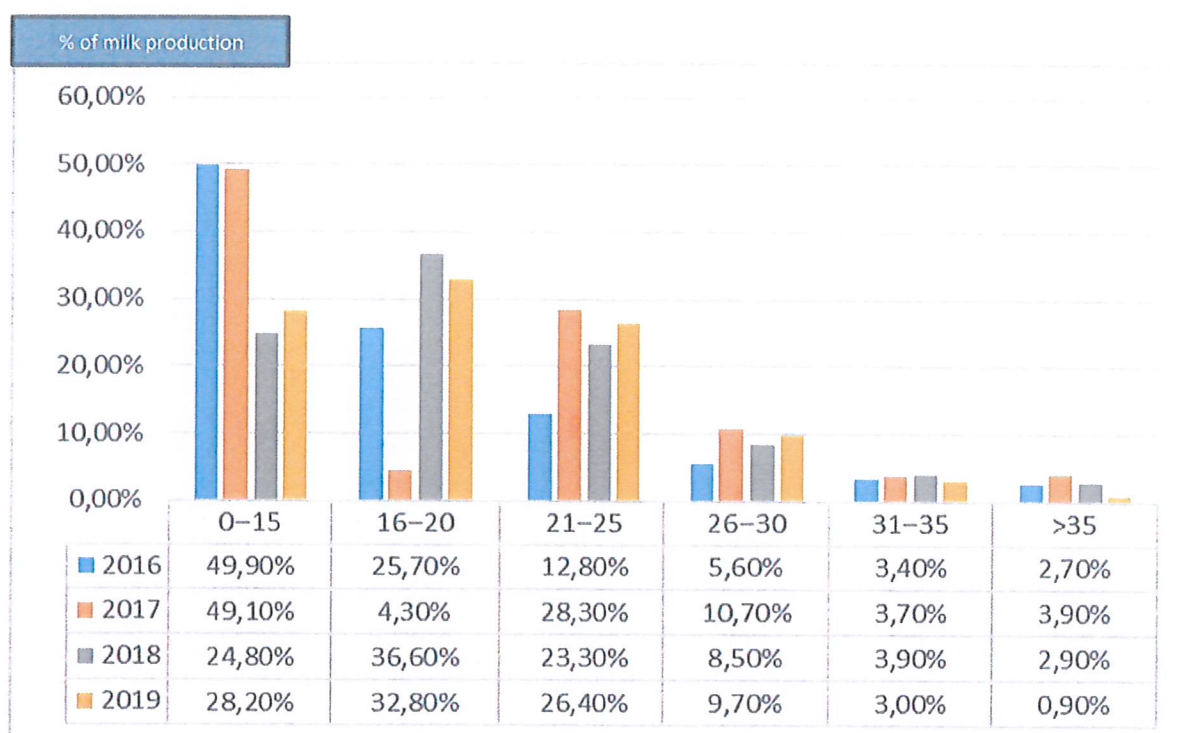
Province	Average Production ℓ/cow/day
Eastern Cape	13,1
KwaZulu-Natal	16,4
Western Cape	20,0
Limpopo	28,6
Free State	20,1
Northern Cape	15,1
Mpumalanga	24,3
Gauteng	24,0
North West	11,5
National herd	15,1

The distribution of herds, based on average milk production per cow per day, is shown in Table 9 and Figure 4.

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

Production/day (L)	% of herds			
	2016	2017	2018	2019
0–15	49,90%	49,10%	24,8%	28,2%
16–20	25,70%	4,30%	36,6%	32,8%
21–25	12,80%	28,30%	23,3%	26,4%
26–30	5,60%	10,70%	8,5%	9,7%
31–35	3,40%	3,70%	3,9%	3,0%
>35	2,70%	3,90%	2,9%	0,9%

Figure 4: Herd distribution, based on average production per cow in milk per day, 2016–2019



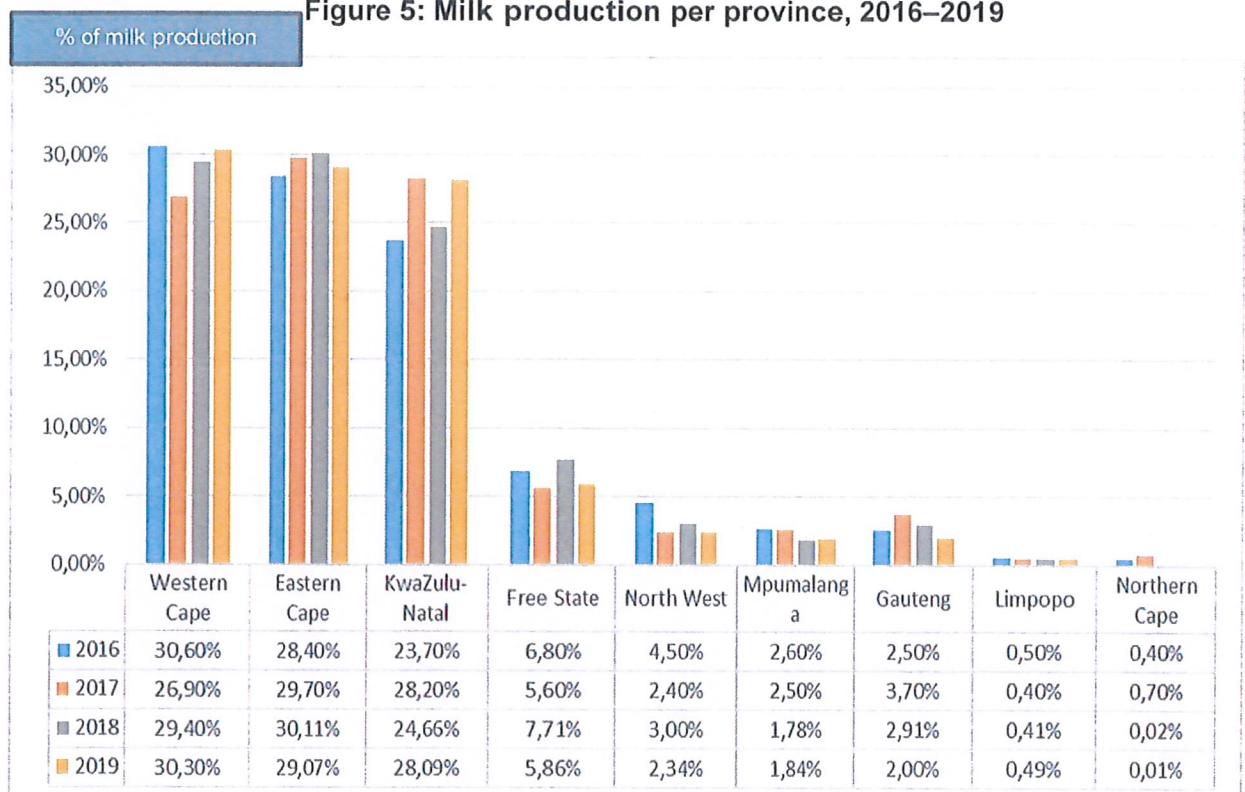
4. Geographical distribution of milk production

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 87% of total milk is produced in the three coastal provinces (2009 = 74%).

Table 10: Geographical distribution of milk production per province, 2016 – 2019

Province	2016	2017	2018	2019
Western Cape	30,60%	26,90%	29,40%	30,30%
Eastern Cape	28,40%	29,70%	30,11%	29,07%
KwaZulu-Natal	23,70%	28,20%	24,66%	28,09%
Free State	6,80%	5,60%	7,71%	5,86%
North West	4,50%	2,40%	3,00%	2,34%
Mpumalanga	2,60%	2,50%	1,78%	1,84%
Gauteng	2,50%	3,70%	2,91%	2,00%
Limpopo	0,50%	0,40%	0,41%	0,49%
Northern Cape	0,40%	0,70%	0,02%	0,01%
Total	100,00%	100,00%	100,00%	100,0%

Figure 5: Milk production per province, 2016–2019



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 603 000.

Table 11: Geographical distribution of dairy cows, 2018 & 2019

Province	2018	2019
Western Cape	26,5%	23,5%
Eastern Cape	30,5%	32,5%
KwaZulu-Natal	28,5%	25,9%
Free State	7,7%	8,1%
North West	2,3%	3,1%
Mpumalanga	2,0%	3,2%
Gauteng	2,1%	3,5%
Limpopo	0,3%	0,5%
Northern Cape	0,1%	0,0%
Total	100,00%	100,0%