



REPORT ON NOTIFIABLE AVIAN INFLUENZA (NAI)
SURVEILLANCE MONITORING FOR THE SURVEILLANCE PERIOD:
January 2016 to June 2016
(1H 2016)

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1. OVERVIEW

The South African Poultry Association (SAPA) is an active participant in the surveillance monitoring process for highly pathogenic notifiable avian influenza (HPNAI) in the national poultry flock. Surveys are conducted on a six-monthly basis, according to a prescribed protocol, and all producers are encouraged to participate.

The Department of Agriculture, Forestry and Fisheries (DAFF) and the Poultry Disease Management Agency (PDMA) have jointly established precautionary measures and disease surveillance and control protocols, in order to reduce the likelihood of an outbreak of HPNAI and to minimise the impact of any outbreaks that might occur.

In the first half of 2016 there were reported cases of highly pathogenic avian influenza in the US, Mexico, France, Italy, Burkina Faso, Cameroon, Cote d'Ivoire, Ghana, Niger, Nigeria, Togo, Russia, Iraq, Lebanon, Bangladesh, Cambodia, China, Chinese Taipei, Hong Kong, India, Korea, Myanmar, Taiwan and Vietnam.

SAPA contact details

Silverpath Consulting has been contracted by SAPA to contact poultry farmers located in South Africa. Mrs Christel van der Merwe will be conducting the surveys. She can be contacted at 079 871 9085 during working hours, and via e-mail: christelvdm@mweb.co.za or 011 768 5126.

2. RESULTS OF NAI SURVEILLANCE MONITORING: 1H 2016

SAPA has completed the surveillance monitoring for January 2016 to June 2016. No AI positives were reported for the period. The South African broiler and layer flocks therefore remain HPAI-free.

The following cases of low pathogenic avian influenza (LPAI) in ostriches were reported by OIE.

Date	Region	Province	Strain	No. cases	Deaths	Resolved
2016/01/11	Hessequa	W. Cape	H5N2	305	0	2016/03/09
2016/01/11	Hessequa	W. Cape	H5N2	307	0	2016/03/09
2016/01/19	Camdeboo	E. Cape	H5N2	27	0	2016/02/22
2016/02/18	Mossel Bay	W. Cape	H5N2	714	0	
2016/03/30	Oudtshoorn	W. Cape	H5N2	133	0	
2016/06/22	Camdeboo	E. Cape	H5N2	1	0	
2016/06/24	Ikwezi	E. Cape	H5N2	9	0	

In addition, 3078 cases of H5N2 were diagnosed in commercial ducks near Cape Town and 175 deaths were reported.

2.1 Provincial distribution of layer and broiler birds in South Africa

The provincial distribution of chicken farms, in terms of broilers and layers, is given in Table 1. These figures were recorded during the course of the NAI survey. 'Broiler birds' refers to broiler breeders, broiler day-old chicks and broilers in rearing. 'Layer birds' refers to layer breeders, day-old pullets, pullets in rearing and layers in lay.

Table 1: Provincial distribution of chickens in South Africa

TABLE 1	BROILER INDUSTRY		EGG INDUSTRY		GRAND TOTAL	
	Broiler birds	% of total broiler birds	Layer birds	% of total layer birds	Total birds	% of total birds
Eastern Cape	7,397,087	7.3 %	855,783	3.3 %	8,252,870	6.5 %
Free State	5,903,000	5.8 %	3,661,903	13.9 %	9,564,903	7.5 %
Gauteng	10,014,233	9.9 %	6,337,591	24.1 %	16,351,824	12.8 %
KwaZulu-Natal	11,017,603	10.9 %	2,664,918	10.1 %	13,682,521	10.7 %
Limpopo	2,778,652	2.8 %	1,795,360	6.8 %	4,574,012	3.6 %
Mpumalanga	19,891,425	19.7 %	1,956,742	7.5 %	21,848,167	17.2 %
North West	22,459,376	22.2 %	2,608,882	9.9 %	25,068,258	19.7 %
N. and W. Cape	21,626,145	21.4 %	6,423,623	24.4 %	28,049,768	22.0 %
GRAND TOTAL	101,087,521	100%	26 304 802	100 %	127,392,323	100 %

Table 2 shows the poultry census figures as given by SAPA’s broiler and egg forecasting models.

Table 2: Estimated Census of Chickens in South Africa as at 30 June 2016

Broiler GGP's & GP's	242 000	
Broiler parents in rearing	3 947 200	
Broiler parents in lay	7 781 800	
Broiler rearing	98 758 300	
TOTAL BROILER INDUSTRY		110 729 300
Comm. Layer GP's	8 900	
Layer parent hens	327 000	
Layer replacement pullets	7 447 700	
Commercial Layers	25 058 500	
TOTAL EGG INDUSTRY		32 842 100
TOTAL INDUSTRY		143 571 400

Figure 1 gives the total number of chickens per province at 30 June 2016, as per Table 1. The Northern Cape has a very small number of poultry producers, thus in order to disguise their bird numbers the province is combined with the Western Cape. These two provinces are home to the largest number of birds with 22.0% of the national total, followed by the North West with 19.7%.

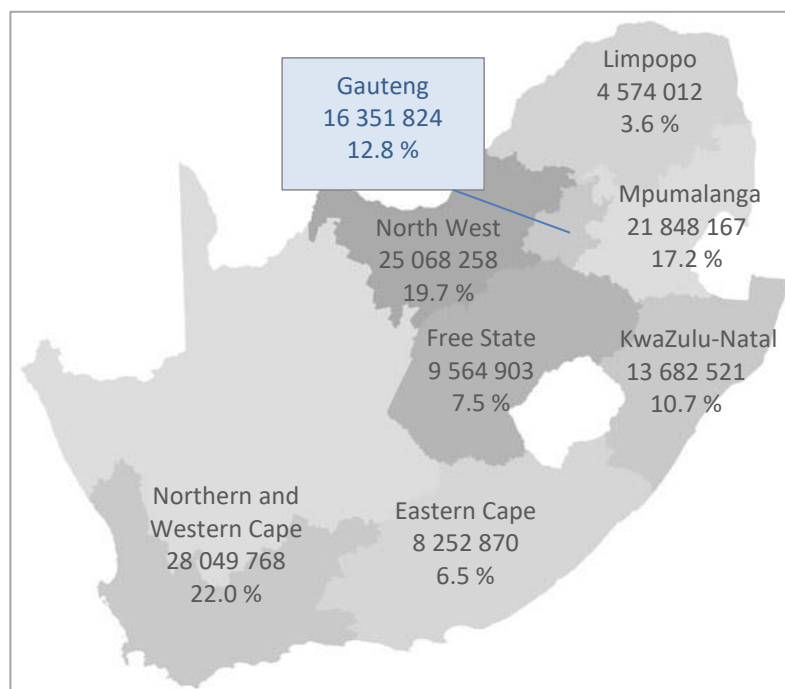


Figure 1: Provincial distribution of the national chicken flock in South Africa at June 2016; numbers per province and percentage of total flock.

The proportion of broiler birds and layer birds in each province is illustrated in Figure 2. In Gauteng, Free State and Limpopo the ratio of broilers to layers is 1.6:1, 1.6:1 and 1.5:1 respectively. In other provinces broiler production dominates, with the ratio of broilers to layers being 10.2:1, 8.6:1 and 8.6:1 in Mpumalanga, North West and E. Cape respectively.

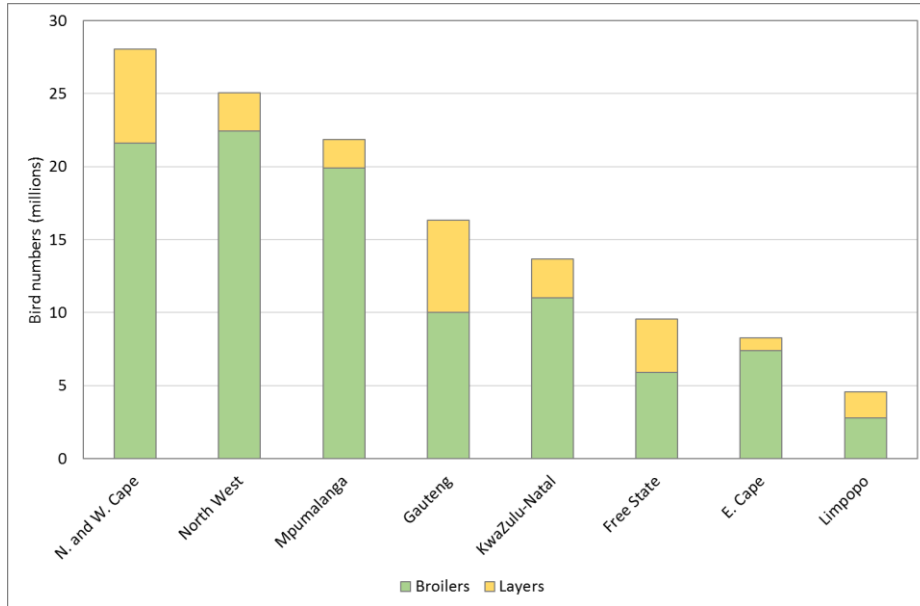


Figure 2: Provincial distribution of layer and broiler birds in South Africa in 1H 2016

The provincial distributions (%) of broiler and layer chickens are given in Figures 3 and 4 respectively. Bird numbers are shown in Table 1.

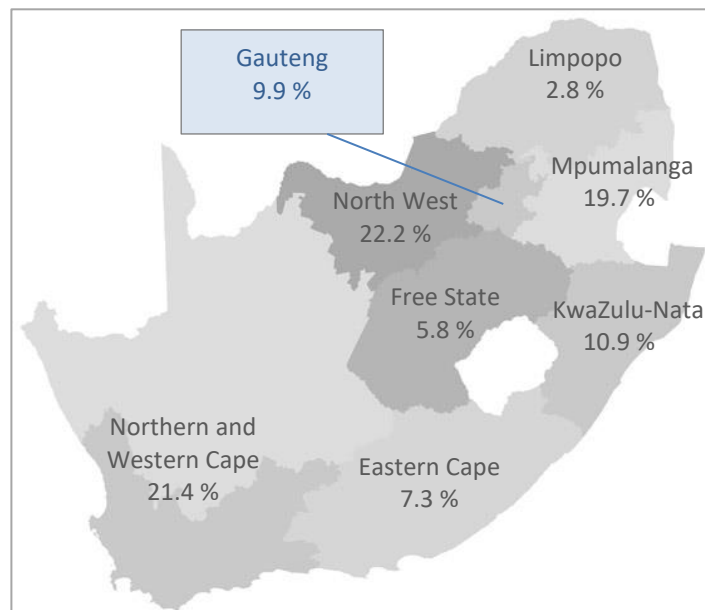


Figure 3: Provincial distribution of the national broiler flock in South Africa at June 2016, as a percentage of the total flock.

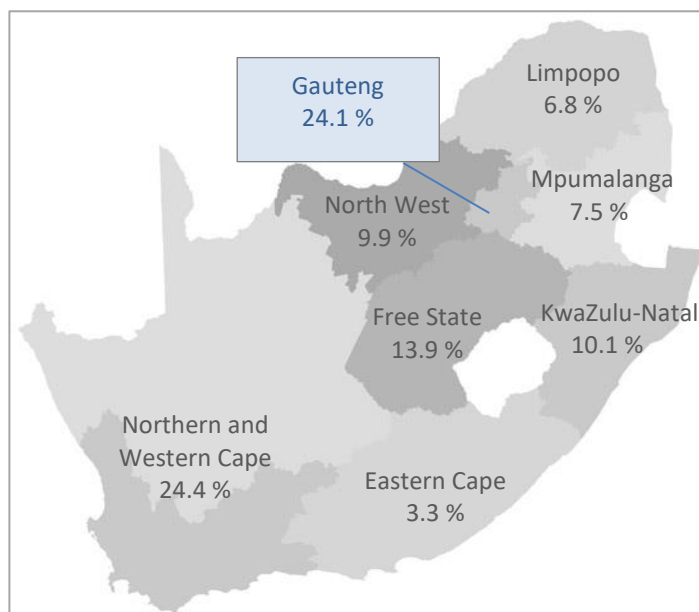


Figure 4: Provincial distribution of the national layer flock in South Africa at June 2016, as a percentage of the total flock.

2.2 The number, type and distribution of poultry farms in South Africa

The number of farms participating in the 1H 2016 NAI survey is given in Table 3.

Table 3: Number of farms participating in the survey

BROILER INDUSTRY	
Broiler breeder farms	124
Broiler rearing farms	418
TOTAL	542
EGG INDUSTRY	
Layer breeder farms	21
Layer rearing farms	28
Layer farms (egg producing)	150
TOTAL	199
BROILER AND EGG INDUSTRIES	
GRAND TOTAL	741

For this surveillance period, the number of broiler farms decreased by 100; this was brought about by the closure of 121 farms and the start of 21 new farms. The number of layer farms decreased by 8 over 2H 2015 levels. A total of 12 farms closed and 4 new layer farms were reported. The nationwide distribution of broiler and layer farms that participated in the avian influenza survey is shown in Figures 5 and 6 respectively.

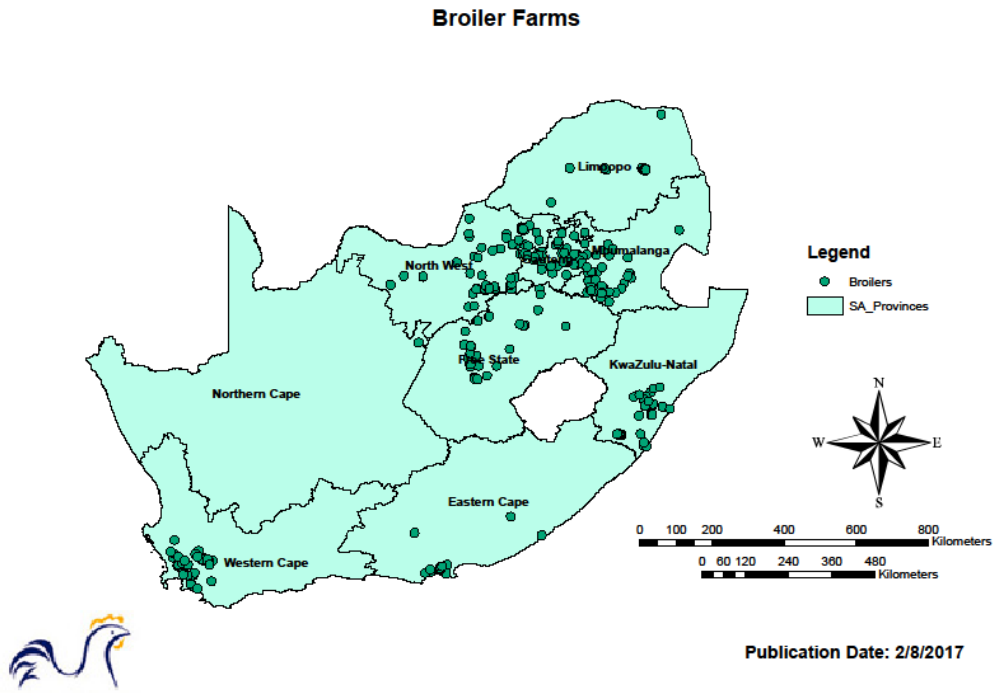


Figure 5: Geographical location of broiler farms

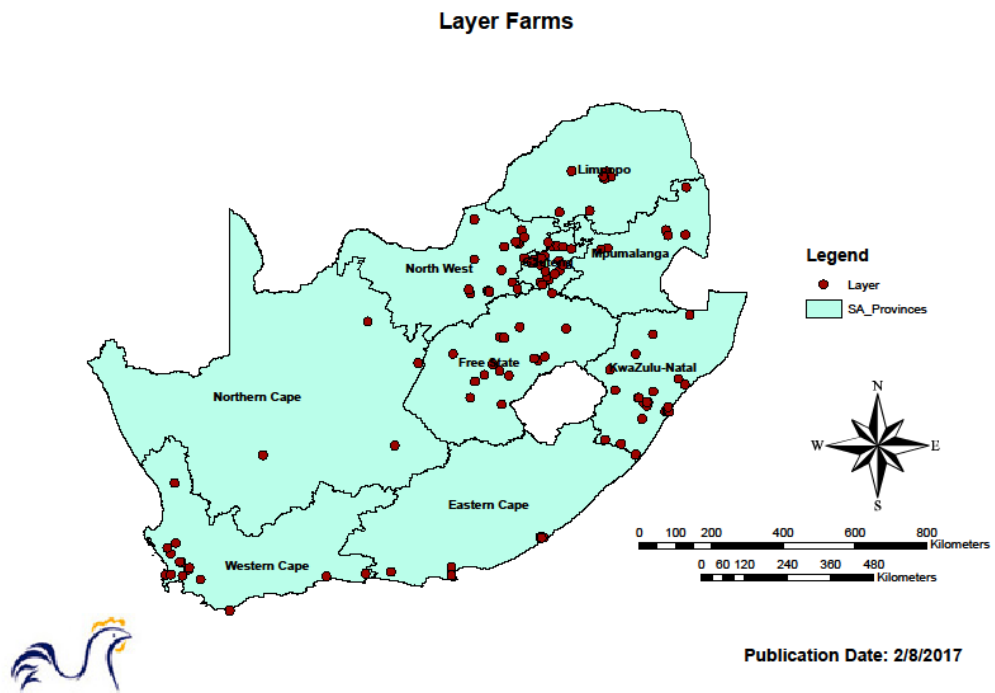


Figure 6: Geographical location of layer farms

2.3 Distribution of farms according to volumes recorded in the NAI survey

Table 4 shows the distribution of farms according to size of operation. Over 47 % of the farms fall in the 100 000 to 400 000 bird range (354 farms out of a total of 741).

Table 4: The distribution of farms according to the average number of birds on the farms

VOLUME: NUMBER OF BIRDS		1H 2016
From	To	Number of farms
700 000	AND MORE	15
600 000	699 999	6
500 000	599 999	17
400 000	499 999	20
300 000	399 999	45
200 000	299 999	137
100 000	199 999	172
90 000	99 999	28
80 000	89 999	12
70 000	79 999	12
60 000	69 999	27
50 000	59 999	25
40 000	49 999	32
30 000	39 999	80
20 000	29 999	31
15 000	19 999	15
10 000	14 999	29
5 000	9 999	23
100	4 999	15
		741

3. CHALLENGES

The past few years have seen a large emphasis placed on precautionary measures, disease surveillance and control, in order to reduce the incidence of NAI and minimise the impact of outbreaks when they do occur.

The surveillance monitoring in the poultry industry is enormous and complex. The following challenges remain critical:

- Our biggest challenge is to contact poultry farmers who do not currently participate in the surveillance monitoring.
- We want to encourage you to participate and can assure you of the confidentiality of any information supplied.
- The correctness of GPS co-ordinates as to the location of the farm. We ask respondents to take special care in providing correct co-ordinates for location of the farm/s.