



The objective of this AIMI survey of maize growers in New Zealand (NZ) was to determine:

- *the size of the 2019 NZ harvest of maize grain and maize silage*
- *the percentage of the 2019 NZ maize harvest which was sold as at June 1, 2019*
- *the sowing intentions for the spring of 2019*

Survey details

The data from 102 NZ survey farms as at June 1, 2019 were scaled up to the national level using the most recent NZ Agricultural Production Statistics (the 2018 APS) for maize grain and maize silage. As with all surveys, there is a margin of error which needs to be considered in relation to this report. These figures reflect the position at the 1st June 2019 and there will have been changes since this time.

Key Points as at 1 June 2019 (figures have been rounded to nearest 100):

- Average yields of maize grain (10.9 t/ha) and maize silage (21.3 t dry matter (DM)/ha) for the 2019 NZ harvest were similar to last season (at 11.1 t/ha and 20.7 t DM/ha respectively).
- The NZ **maize grain** harvest was 79% complete as at June 1, 2019 which was fairly average (over the six previous years, the average was 76% complete). The estimated total tonnage of 195,400 tonnes (including unharvested grain) was similar to last season's harvest tonnage (up 2%), as a result of a similar yield (1% down) from a similar harvest area (3% up). About 92% of the total crop had been sold, leaving 15,200 tonnes unsold as at June 1, 2019 (as compared to 39,300 tonnes at the same time last year, and 18,600, 44,900 and 34,600 tonnes at the same time in the three previous years). Spring 2019 sowing intentions as at June 1, 2019 were very similar to last season (an estimated 3% down).
- The NZ **maize silage** harvest was 100% complete as at June 1, 2019 on all surveyed farms. The estimated total tonnage of 1,146,200 tonnes DM was up 8% compared to last season's harvest, as the result of a slightly higher yield (3% up) from a slightly higher harvest area (5% up). About 60% of the total silage crop had been sold or used, leaving 456,000 tonnes DM unused/unsold as at June 1, 2019 (as compared to 349,000 tonnes DM at the same time last year, and 457,000, 365,000 and 458,000 tonnes DM at the same time in the three previous years). Spring 2019 sowing intentions as at June 1, 2019 were slightly down (3% down) on last season.

Table 1. Detailed estimated national figures for the 2019 NZ harvest, plus sold tonnages, for maize grain and maize silage as at June 1, 2019.

		Maize grain	Maize silage
Number of farmers in the survey who harvested this crop in 2019	Units	33	80
2018 harvest			
Estimated NZ total hectares, 2018 harvest	Ha	17,300	51,398
Estimated NZ total tonnes, 2018 harvest	Tonnes	192,000	1,063,167
2019 harvest			
Estimated NZ total hectares, 2019 harvest	Ha	17,876	53,853
Estimated NZ total tonnes, 2019 harvest	Tonnes	195,433	1,146,237
Estimated NZ total hectares already harvested by June 1, 2019	Ha	14,452	53,853
Estimated NZ total tonnes already harvested by June 1, 2019	Tonnes	154,441	1,146,237
Estimated NZ total hectares yet to harvest as at June 1, 2019	Ha	3,425	0
Estimated NZ total tonnes yet to harvest as at June 1, 2019	Tonnes	40,991	0
2019 crop already harvested (by June 1, 2019)			
Sold under pre-harvest contract by June 1, 2019	Tonnes	131,479	504,959
Sold at spot/free price by June 1, 2019	Tonnes	12,579	
Used on own farm (2019 harvested maize only) by June 1, 2019	Tonnes	692	185,315
Unsold/unused stocks on hand (2019 harvest only) on June 1, 2019	Tonnes	9,691	455,962
2019 crop yet to be harvested (as at June 1, 2019)			
Unharvested crop sold under pre-harvest contract by June 1, 2019	Tonnes	35,437	0
Unharvested crop unsold/unused as at June 1, 2019	Tonnes	5,554	0
Total sales (2019 harvest): includes unharvested grain			
Sold (of total crop) by June 1, 2019 (includes used on farm)	Tonnes	180,188	690,275
Unsold/unused (of total crop) on June 1, 2019	Tonnes	15,245	455,962
Comparison of hectares and tonnages between last two harvests			
Estimated % change in hectares, 2018 to 2019 harvest	%	3.3	4.8
Estimated % change in tonnes, 2018 to 2019 harvest	%	1.8	7.8
Comparison of yields (tonnes/ ha) between the last two harvests			
NZ-wide yield, 2018 harvest	T/ha	11.1	20.7
NZ-wide yield, 2019 harvest	T/ha	10.9	21.3
Comparison of unsold/unused tonnages between the last six harvests			
Unsold/unused (of total crop) on June 1, 2019 (as above)	Tonnes	15,245	455,962
Unsold/unused at the same time last year (AIMI report, June 1, 2018)	Tonnes	39,327	348,954
Unsold/unused at the same time, previous year (AIMI report, June 1, 2017)	Tonnes	18,636	456,678
Unsold/unused at same time, year before that (AIMI report, June 1, 2016)	Tonnes	44,883	365,115
Unsold/unused at same time, year before that (AIMI report, June 1, 2015)	Tonnes	34,645	457,641
Unsold/unused at same time, year before that (AIMI report, June 1, 2014)	Tonnes	23,869	386,917

Statistics New Zealand is gratefully acknowledged for supplying final 2018 NZ Agricultural Production Survey data on total hectares and tonnes for maize grain, and total hectares for maize silage.

In Table 1 above, the estimated 2019 harvest tonnes of maize grain were 2% up on the 2018 harvest, with similar harvest hectares (3% up) and similar yield (1% down). For maize silage, harvest tonnes were up 8% on the previous season, with slightly higher harvest hectares (5% up) and a slightly higher yield (3% up).

Unsold stocks on hand of maize grain (15,200 tonnes), as at 1 June 2019, were down as compared to the average of the previous five seasons (see the last five rows of Table 1). Unsold/unused maize silage stocks on hand (456,000 tonnes DM) were not unusually high or low, being very similar to two out of the five previous seasons (see the last five rows of Table 1).

As at 1 June 2019, maize grain and maize silage sowing intentions (hectares) for 2019/20 were both similar to last season (both were 3% down) (Table 2). On the survey farms, 31 growers intended growing maize for grain this coming season, as compared to 33 growers this last season (Table 1). Also on the survey farms, 76 growers intended growing maize for silage this coming season, as compared to 80 growers this last season (Table 1).

Table 2. NZ maize sowing intentions as at June 1, 2019, in comparison with previous years' estimates.

	Maize grain (ha)	Maize silage (ha)
Number of survey farmers who intend to sow in the 2019/2020 season	31	76
Estimated NZ total hectares, 2018 harvest	17,300	51,398
Estimated NZ total hectares, 2019 harvest	17,876	53,853
Estimated NZ total sowing intentions for 2019/2020 season (for harvest in 2020) (hectares)	17,258	52,010
Estimated % change in sowings, 2018/2019 to 2019/2020 seasons	-3.5	-3.4

Summary results in June each year

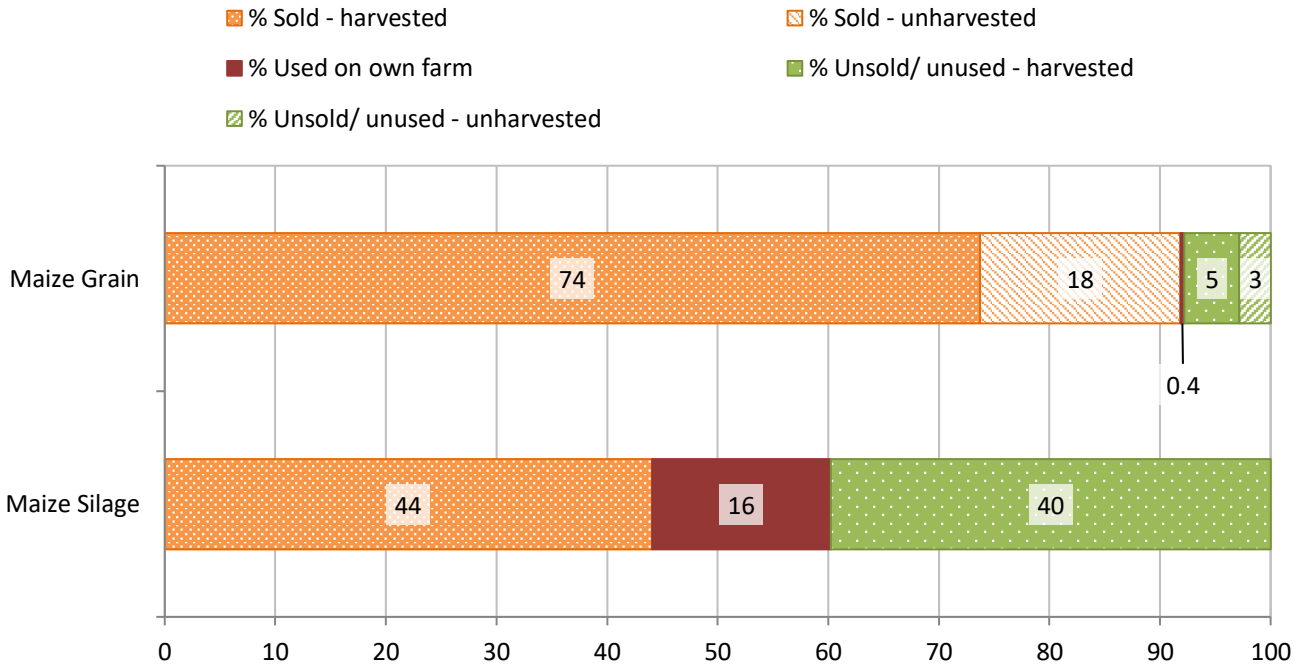


Figure 1. Percentage of maize crop sold, used on own farm and unsold/unused from the 2019 NZ harvest, including unharvested grain, as at June 1, 2019.

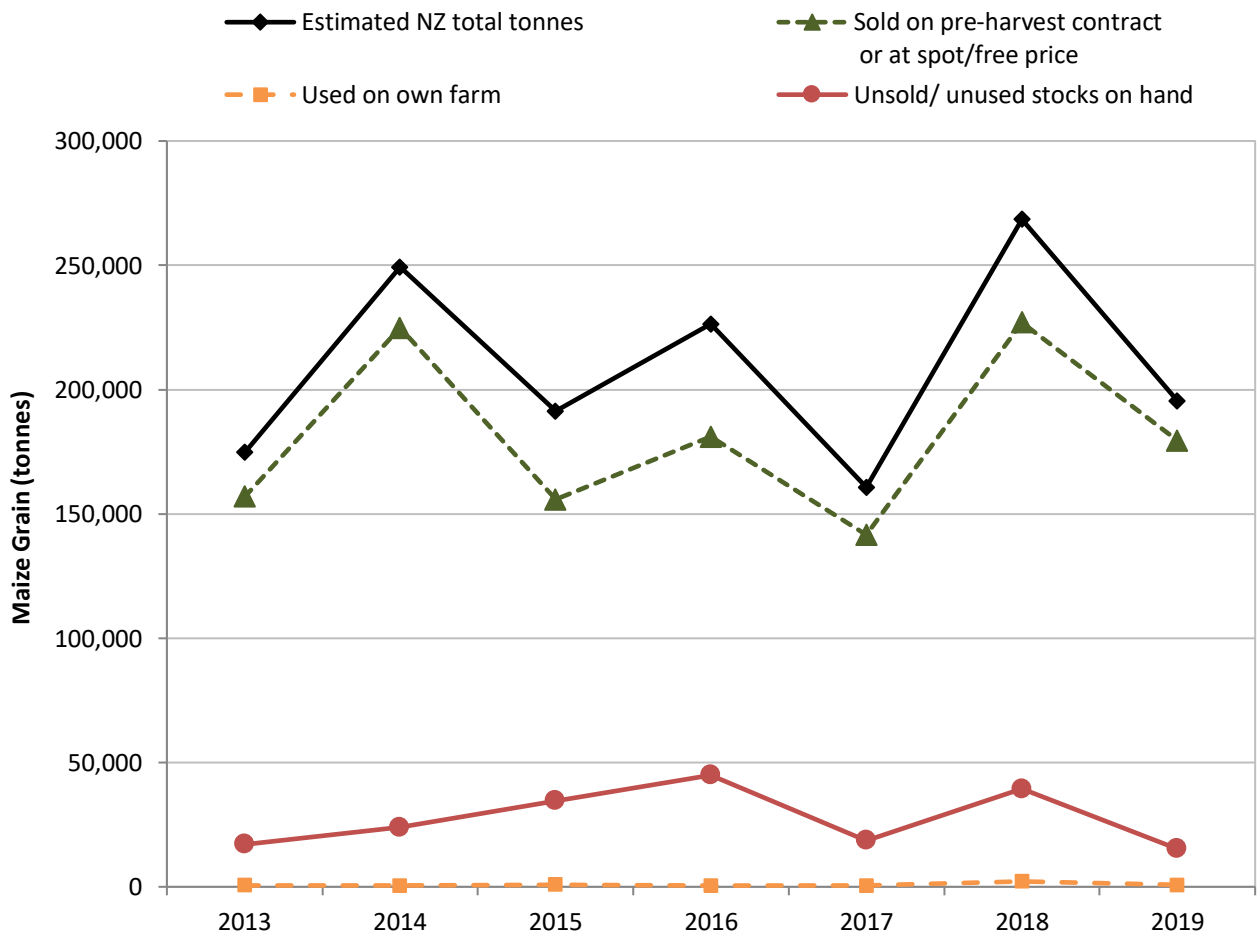


Figure 2. NZ harvest tonnages and sales for maize grain by June 1 from 2013 to 2019. Unharvested grain is included. (Data are sourced from annual June AIMI Maize reports.)

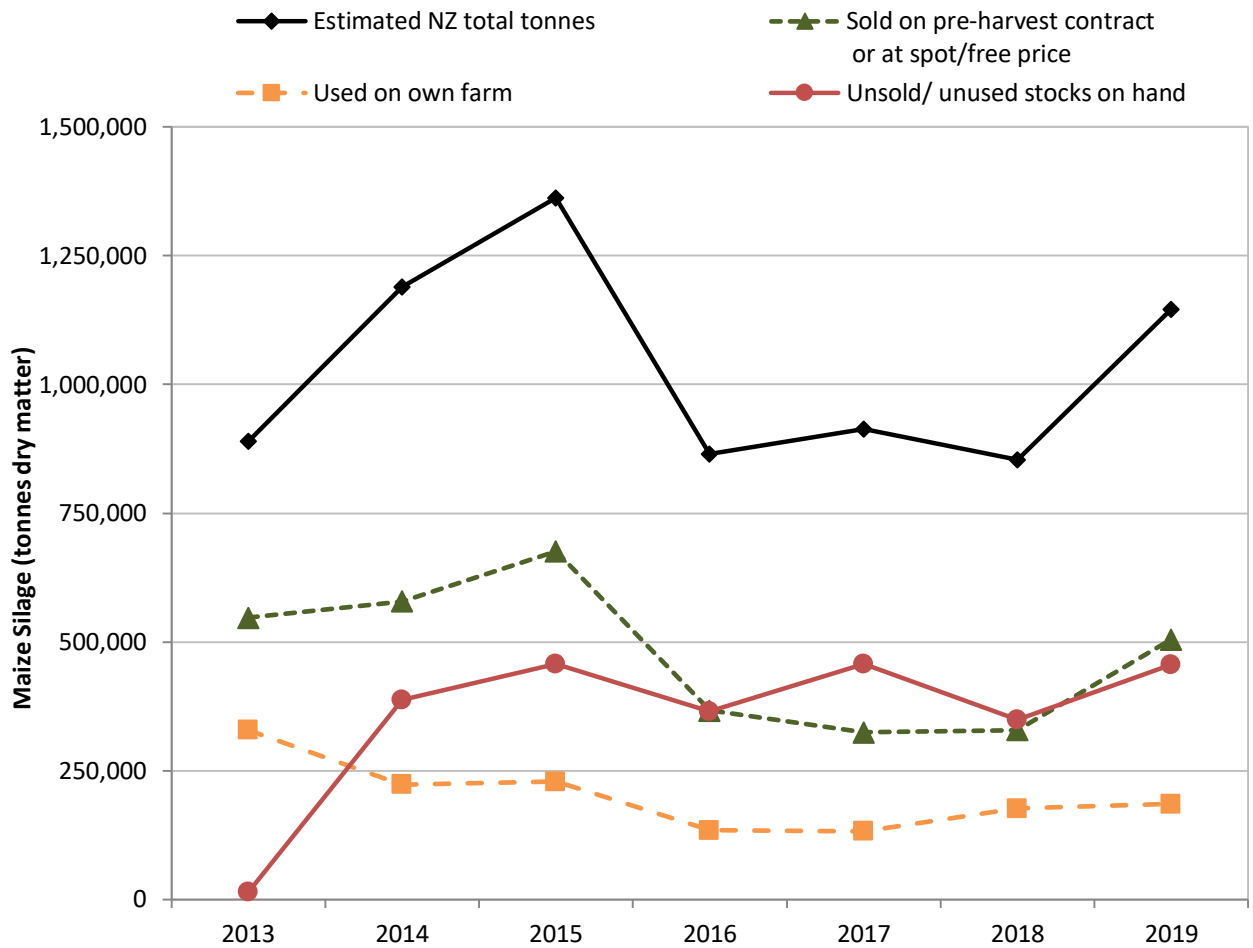


Figure 3. NZ harvest tonnages (dry matter) and sales for maize silage by June 1 from 2013 to 2019. Unharvested grain is included. (Data are sourced from annual June AIMI Maize reports.)

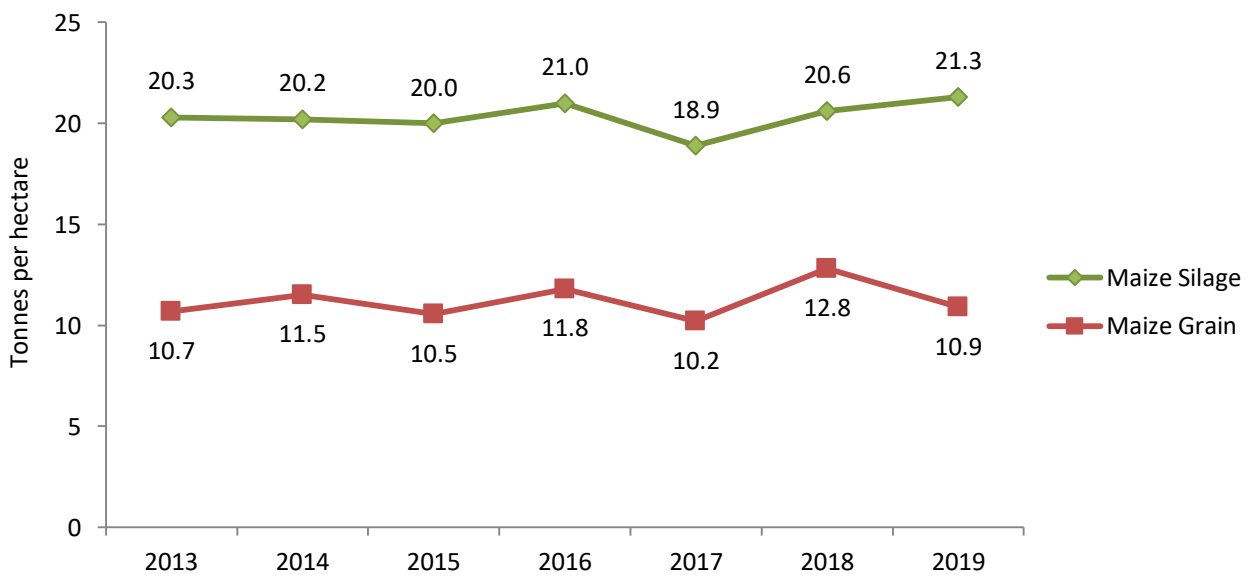


Figure 4. Comparison of estimated NZ-wide yields (tonnes per hectare) from 2013 to 2019. (Data are sourced from annual June AIMI Maize reports.)

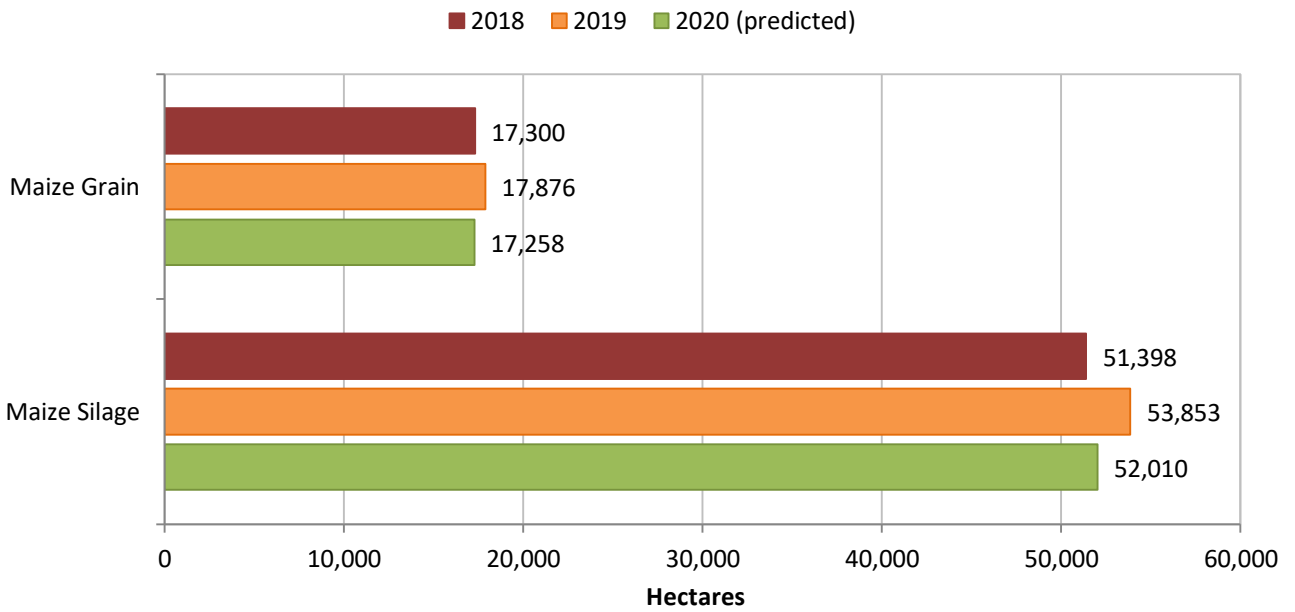


Figure 5. Estimated national NZ hectares of maize grain and maize silage for the 2018, 2019 and predicted 2020 harvests, as at 1 June 2019. This is a precise, matched comparison based upon a common (the current) set of survey respondents.

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