



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

- *the size of the 2020 NZ harvest of maize grain and maize silage*
- *the percentage of the 2020 NZ maize harvest which was sold as at June 1, 2020*
- *the sowing intentions for the spring of 2020*

Survey details

The data from 102 NZ survey farms as at June 1, 2020 were scaled up to the national level using the most recent NZ Agricultural Production Statistics (the Final 2019 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 2020 and there will have been changes since this time.

Key Points as at 1 June 2020 (figures, from Table 1 and 2, have been rounded to nearest 100):

- The average yield of maize grain (11.7 t/ha) for the 2020 NZ harvest was identical to last season (at 11.7 t/ha). The average yield of maize silage (20.2 t dry matter (DM)/ha) for the 2020 NZ harvest was slightly down on last season (at 21.4 t DM/ha), primarily due to the dry conditions in parts of the North Island. (Note that these are averages across New Zealand and there will be differences across regions).
- The NZ **maize grain** harvest was 89% complete as at June 1, 2020 which was earlier than normal (over the previous seven years, the average was 76% complete). The estimated total tonnage of 181,800 tonnes (including unharvested grain) was down on last season's harvest tonnage (down 7%), as a result of an identical yield from a reduced harvest area (down 7%). Almost all (99.7%) of the total crop had been sold, leaving only 600 tonnes unsold, as held by growers, as at June 1, 2020 (as compared to 15,200 tonnes at the same time last year, and even higher tonnages at the same time in all of the five previous years). (Note that the quantity of maize grain held by merchants has not been determined in this survey). Spring 2020 sowing intentions as at June 1, 2020 were similar to last season (an estimated 1% up).
- The NZ **maize silage** harvest was 100% complete as at June 1, 2020 on all surveyed farms. The estimated total tonnage of 1,178,900 tonnes DM was down 1% compared to last season's harvest, as the result of a lower yield (6% down) from a higher harvest area (5% up). About 67% of the total silage crop had been sold or used, leaving 390,400 tonnes DM unused/unsold as at June 1, 2020 (as compared to 456,000 tonnes DM at the same time last year, and 349,000, 457,000, 365,000 and 458,000 tonnes DM at the same time in the four previous years). Spring 2020 sowing intentions as at June 1, 2020 were similar to last season (1% up).

Table 1. Estimated national figures for the 2020 NZ harvest, plus sold tonnages, for maize grain and maize silage as at June 1, 2020.

		Maize grain	Maize silage
Number of farmers in the survey who harvested or will harvest this crop in 2020	Units	27	78
2019 harvest			
Estimated NZ total hectares, 2019 harvest	ha	16,700	55,827
Estimated NZ total tonnes, 2019 harvest	tonnes	196,000	1,196,350
2020 harvest			
Estimated NZ total hectares, 2020 harvest	ha	15,575	58,369
Estimated NZ total tonnes, 2020 harvest	tonnes	181,770	1,178,869
Estimated NZ total hectares already harvested by June 1, 2020	ha	14,052	58,369
Estimated NZ total tonnes already harvested by June 1, 2020	tonnes	162,146	1,178,869
Estimated NZ total hectares yet to harvest as at June 1, 2020	ha	1,523	0
Estimated NZ total tonnes yet to harvest as at June 1, 2020	tonnes	19,624	0
Percentage of estimated 2020 NZ crop tonnage which had been harvested by June 1, 2020	%	89%	100%
2020 crop already harvested (by June 1, 2020)			
Sold under pre-harvest contract by June 1, 2020	tonnes	160,708	523,705
Sold at spot/free price by June 1, 2020	tonnes	660	
Used on own farm (2020 harvested maize only) by June 1, 2020	tonnes	147	264,791
Unsold/unused stocks on hand (2020 harvest only) on June 1, 2020	tonnes	631	390,373
2020 crop yet to be harvested (as at June 1, 2020)			
Unharvested crop sold under pre-harvest contract by June 1, 2020	tonnes	19,624	0
Unharvested crop unsold/unused as at June 1, 2020	tonnes	0	0
Total sales (2020 harvest): includes unharvested grain			
Sold (of total crop) by June 1, 2020 (includes used on farm)	tonnes	181,139	788,496
Unsold/unused (of total crop) on June 1, 2020	tonnes	631	390,373
Comparison of hectares and tonnages between last two harvests			
Estimated % change in hectares, 2019 to 2020 harvest	%	-6.7%	4.6%
Estimated % change in tonnes, 2019 to 2020 harvest	%	-7.3%	-1.5%
Comparison of yields (tonnes/ ha) between the last two harvests			
NZ-wide yield, 2019 harvest	t/ha	11.7	21.4
NZ-wide yield, 2020 harvest	t/ha	11.7	20.2
Comparison of unsold/unused tonnages between the last seven harvests			
Unsold/unused (of total crop) on June 1, 2020 (as above)	tonnes	631	390,373
Unsold/unused at the same time last year (June 2019 AIMI Report)	tonnes	15,245	455,962
Unsold/unused at the same time, previous year (June 2018 AIMI Report)	tonnes	39,327	348,954
Unsold/unused at same time, year before that (June 2017 AIMI Report)	tonnes	18,636	456,678
Unsold/unused at same time, year before that (June 2016 AIMI Report)	tonnes	44,883	365,115
Unsold/unused at same time, year before that (June 2015 AIMI Report)	tonnes	34,645	457,641
Unsold/unused at same time, year before that (June 2014 AIMI Report)	tonnes	23,869	386,917

Statistics New Zealand is gratefully acknowledged for supplying final 2019 NZ Agricultural Production Statistics data on total hectares and tonnes for maize grain, and total hectares for maize silage.

In Table 1 above, the estimated 2020 harvest tonnes of maize grain were 7% down on the 2019 harvest, with reduced harvest hectares (7% down) and identical yield. For maize silage, harvest tonnes were down 1% on the previous season, with higher harvest hectares (5% up) and a lower yield (6% down).

Unsold stocks on hand of maize grain, as held by growers, (600 tonnes), as at 1 June 2020, were down markedly as compared to the previous six seasons (see the last six rows of Table 1). Unsold/unused maize silage stocks on hand (390,400 tonnes DM) were not unusually high or low, being higher than three out of the six previous seasons, and lower than three out of the previous six seasons (see the last six rows of Table 1).

As at 1 June 2020, maize grain and maize silage sowing intentions (hectares) for 2020/21 were both similar to last season (both were 1% up) (Table 2). On the survey farms, 29 growers intended growing maize for grain this coming season (Table 2), as compared to 27 growers this last season (Table 1). Also on the survey farms, 74 growers intended growing maize for silage this coming season (Table 2), as compared to 78 growers this last season (Table 1).

Table 2. NZ maize sowing intentions as at June 1, 2020, in comparison with previous years' estimates.

	Maize grain	Maize silage
Number of farmers in the survey who intend to sow in the 2020/2021 season	29	74
Estimated NZ total hectares, 2019 harvest	16,700	55,827
Estimated NZ total hectares, 2020 harvest	15,575	58,369
Estimated NZ total sowing intentions for 2020/2021 season (for harvest in 2021) (hectares)	15,693	59,014
Estimated % change in sowings, 2019/2020 to 2020/2021 seasons	0.8%	1.1%

Summary results in June each year

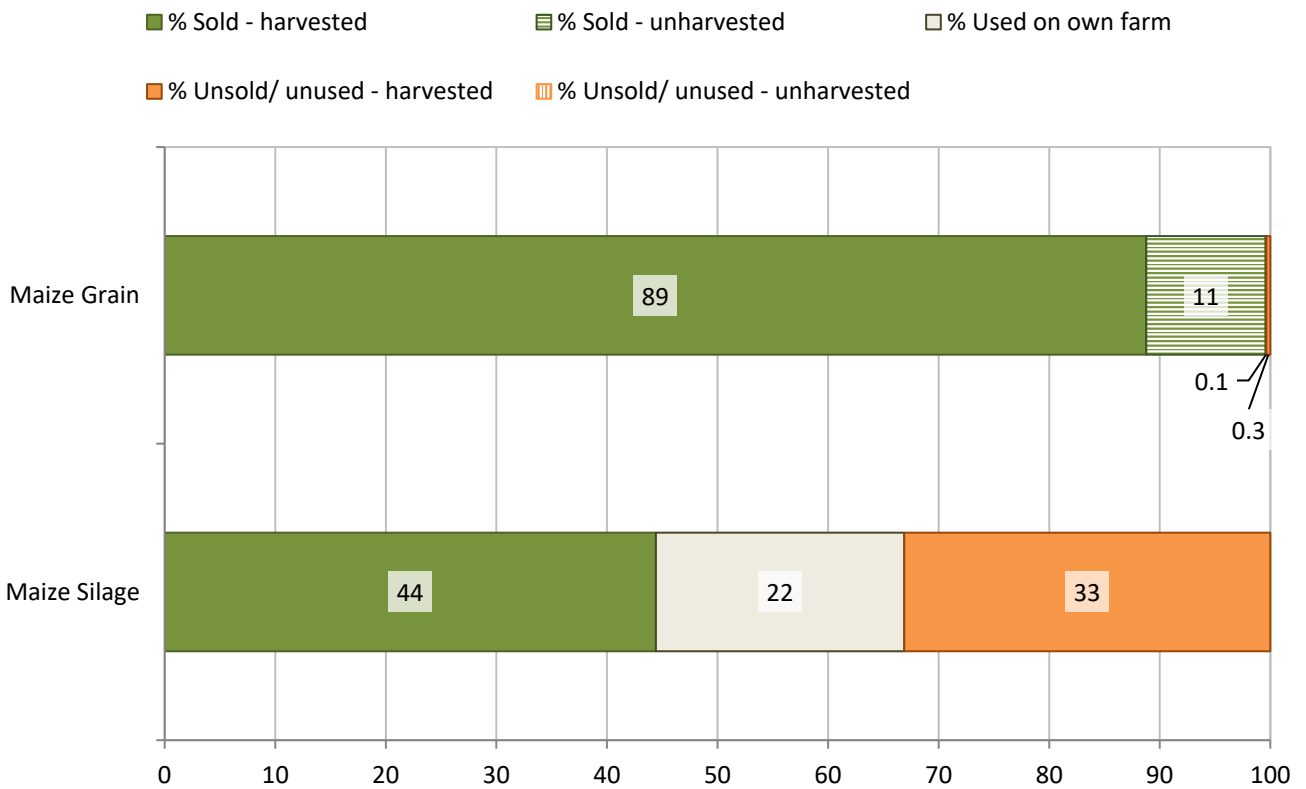


Figure 1. Percentage of maize crop sold, used on own farm and unsold/unused from the 2020 NZ harvest, including unharvested grain, as at June 1, 2020.

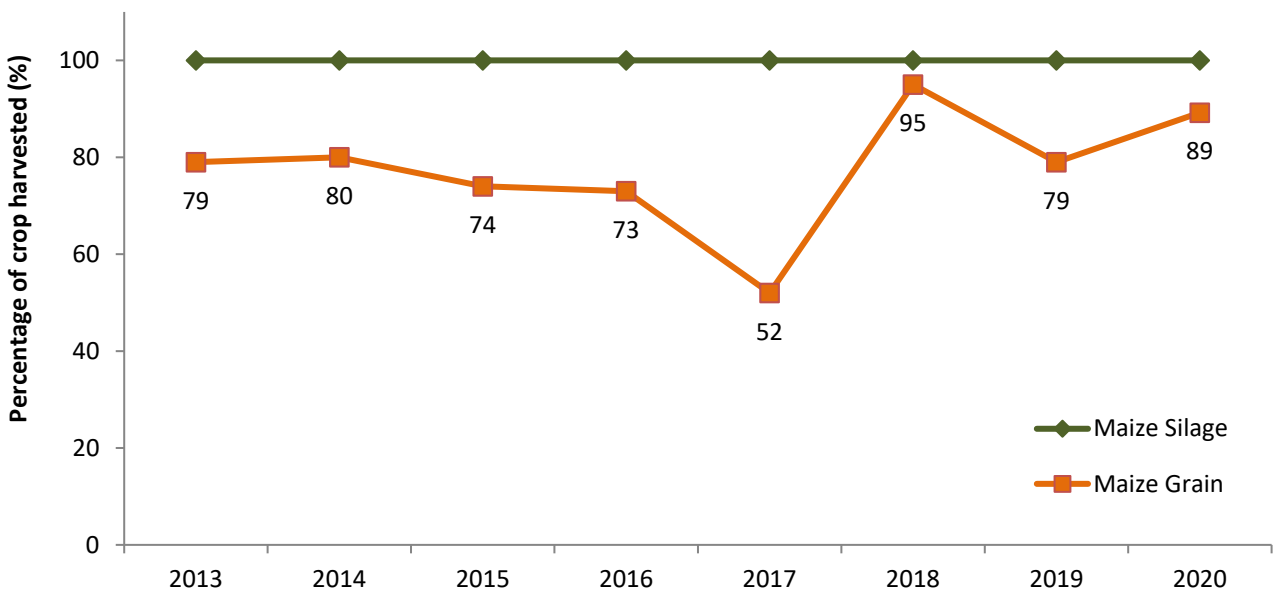


Figure 2. Comparison of percentage of tonnes harvested by June 1 from 2013 to 2020. (Data are sourced from annual June AIMI Maize reports.)

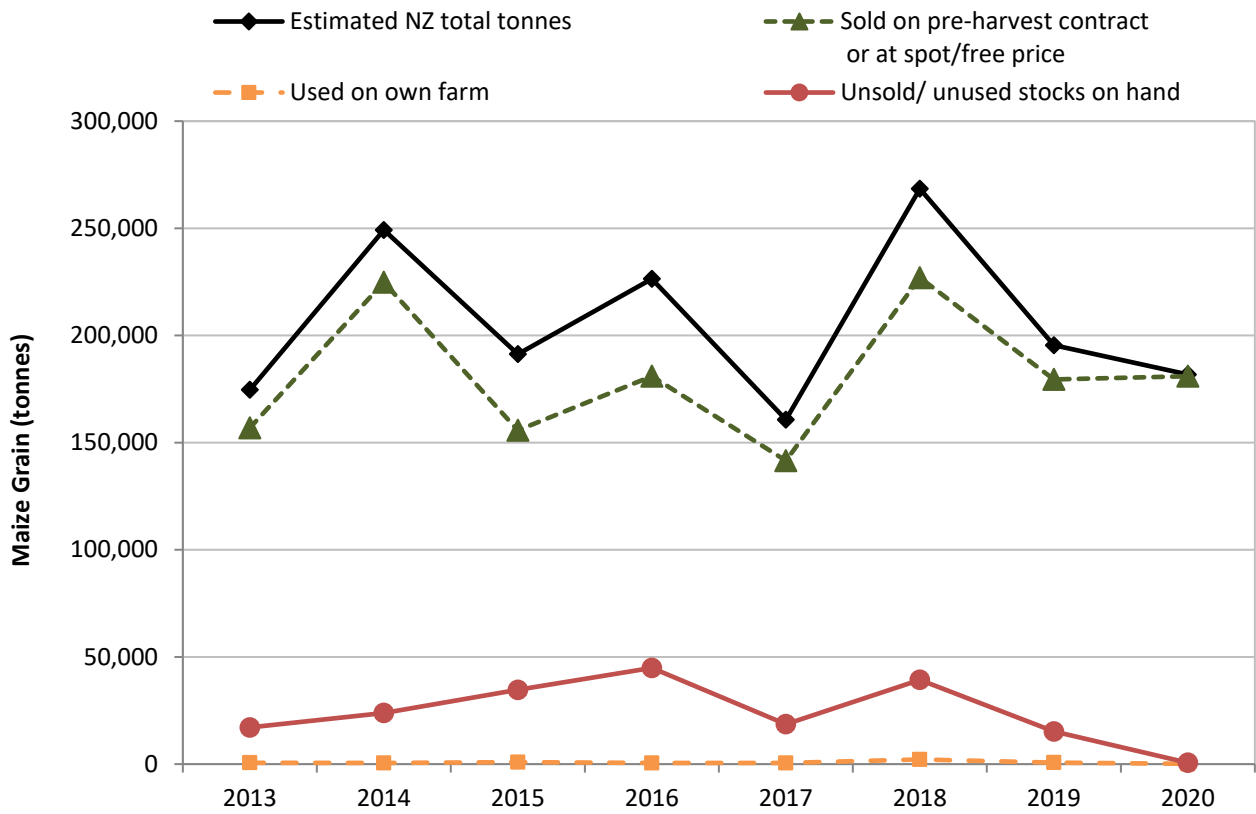


Figure 3. NZ harvest tonnages and sales for maize grain by June 1 from 2013 to 2020. Unharvested grain is included. (Data are sourced from annual June AIMI Maize reports.)

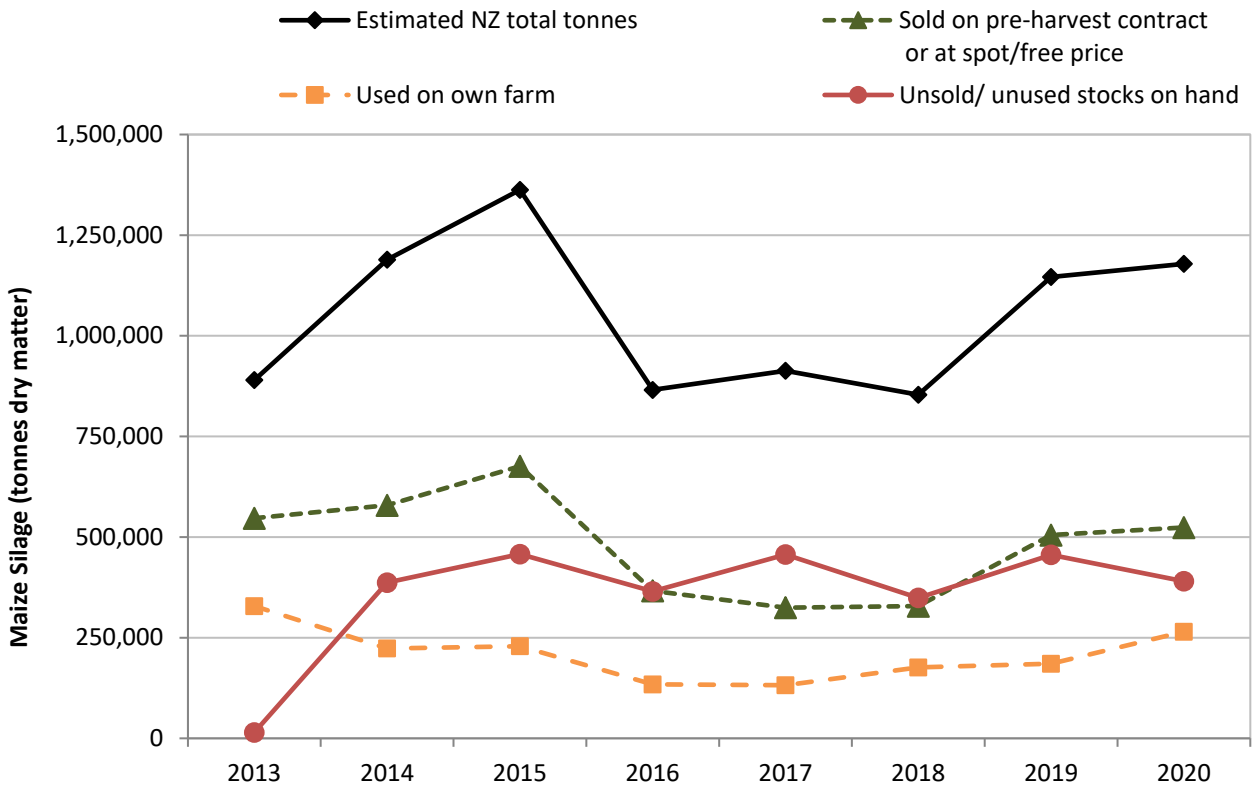


Figure 4. NZ harvest tonnages (dry matter) and sales for maize silage by June 1 from 2013 to 2020. Unharvested grain is included. (Data are sourced from annual June AIMI Maize reports.)

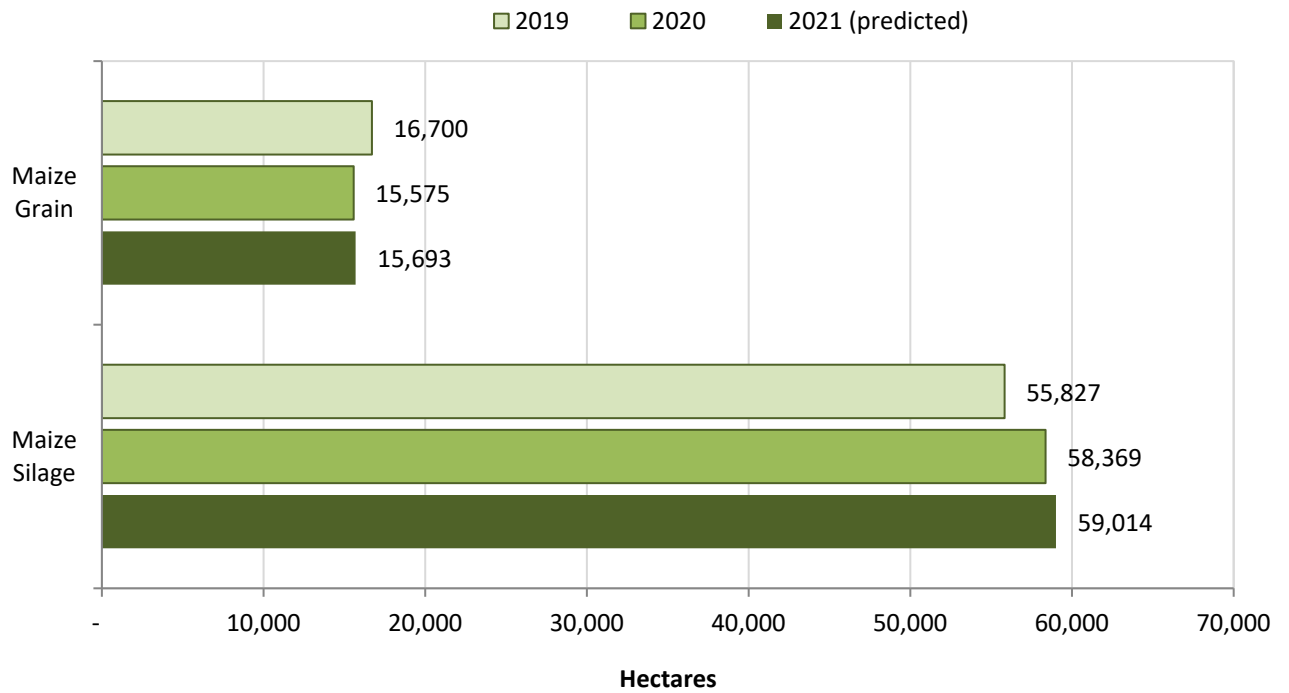


Figure 5. Estimated national NZ hectares of maize grain and maize silage for the 2019, 2020 and predicted 2021 harvests, as at 1 June 2020. This is a precise, matched comparison based upon a common (the current) set of survey respondents.

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