



## **SUMMARY - SURVEY OF MAIZE AREAS AND VOLUMES - OCTOBER 31, 2016**

The objective of this AIMI survey of maize growers was to determine, as at October 31, 2016:

- final figures for the 2016 harvest of maize grain and silage
- sales of the 2016 harvest of maize grain since June 1, 2016
- levels of unsold maize grain from the 2016 harvest
- sowings and sowing intentions for maize grown for grain and silage

Data from 66 survey farms who completed all of the last three maize surveys (October 2015 and June and October 2016) were scaled up to the national level using the most recent Agricultural Production Statistics (APS) which provided final 2015 data on harvest hectares of maize grain and maize silage, and harvest tonnes of maize grain. (Maize grown for green feed was not included in this survey. In the final 2015 APS data, maize green feed made up 9% of total harvest hectares of maize, as compared to 65% for maize silage and 26% for maize grain.)

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 31st October 2016 and there will have been changes since this time.

### **Key points as at the 31<sup>st</sup> October 2016 (figures have been rounded to nearest 100):**

- Final average yields of maize grain (11.9 t/ha) and maize silage (20.9 t DM/ha) for the 2016 harvest were slightly up on last season (at 11.4 t/ha and 19.7 t DM/ha respectively).
- For maize grain, the estimated final total tonnage of 210,200 tonnes was down 7% on last season's harvest tonnage (226,300 t), as the result of a higher yield (up 4%) from an 11% lower harvest area. About 96% of the total crop had been sold, leaving 8,900 tonnes unsold as at October 31, 2016 (as compared to 48,900 tonnes on June 1, 2016, and 21,200 tonnes on 31 October last year, 2015). Sales under pre-harvest contract were down markedly on the previous year, but this was more than compensated for by a marked increase in sales at a spot/free price. Spring 2016 sowings and sowing intentions as at 31 October, 2016 were an estimated 16% down on last season. Sowing was 84% complete as at October 31, 2016.
- For maize silage, the estimated final total tonnage of 951,400 tonnes DM was down 4% compared to last season's harvest tonnage (987,600 t), as the result of a higher yield (up 6%) from a reduced harvest area (9% down). Spring 2016 sowings and sowing intentions as at 31 October, 2016 were identical to last season. Sowing was 70% complete as at October 31, 2016.
- Many survey respondents commented that sowing had been delayed by wet weather. At the 31st October, 2016 about 74% of the total maize crop had been sown, with 15,900 ha of a total 60,500 ha left to sow.
- Since the June 2016 survey, the estimated area to be sown for maize grain has increased by 2,300 ha and the estimated area to be sown for maize silage has increased by 2,900 ha.

**Table 1. Detailed final estimated national figures for the 2016 harvest of maize grain and maize silage crops, plus sold and unsold tonnages of maize grain, as at October 31, 2016.**

	Units	Maize grain	Maize silage
<b>Number of farmers in the survey who harvested this crop in 2016</b>		22	47
<b>2015 harvest</b>			
Estimated NZ total hectares, 2015 harvest	Ha	19,778	50,086
Estimated NZ total tonnes, 2015 harvest	Tonnes	226,278	987,602
<b>2016 harvest</b>			
Estimated NZ total hectares, 2016 final harvest figures	Ha	17,674	45,466
Estimated NZ total tonnes, 2016 final harvest figures	Tonnes	210,243	951,404
Sold under pre-harvest contract by October 31, 2016	Tonnes	138,782	-
Sold at spot/free price by October 31, 2016	Tonnes	61,799	-
Used on own farm by October 31, 2016	Tonnes	718	-
Unsold stocks on hand (2016 harvest only) on October 31, 2016	Tonnes	8,944	-
<b>Total sales (2016 harvest)</b>			
Sold (grand total) by October 31, 2016 (includes used on farm)	Tonnes	201,299	-
Unsold stocks on hand (from 2016 harvest) on October 31, 2016	Tonnes	8,944	-
<b>Comparison of hectares and tonnages between the last two harvests</b>			
Estimated % change in hectares, 2015 to 2016 harvest	%	-10.6	-9.2
Estimated % change in tonnes, 2015 to 2016 harvest	%	-7.1	-3.7
<b>Comparison of final yields (t/ha) between the last two harvests</b>			
NZ-wide estimated yield, 2015 harvest	T/ha	11.4	19.7
NZ-wide estimated yield, 2016 harvest	T/ha	11.9	20.9
<b>Unsold stocks on hand on June 1, 2016, the last survey date (based upon matched data)</b>			
Unsold stocks on hand (from 2016 harvest) on June 1, 2016 (of total crop)	Tonnes	48,944	-
<b>Unsold stocks on hand on October 31, 2015, the same time last year (based upon matched data)</b>			
Unsold stocks on hand (from 2015 harvest) on October 31, 2015	Tonnes	21,243	-

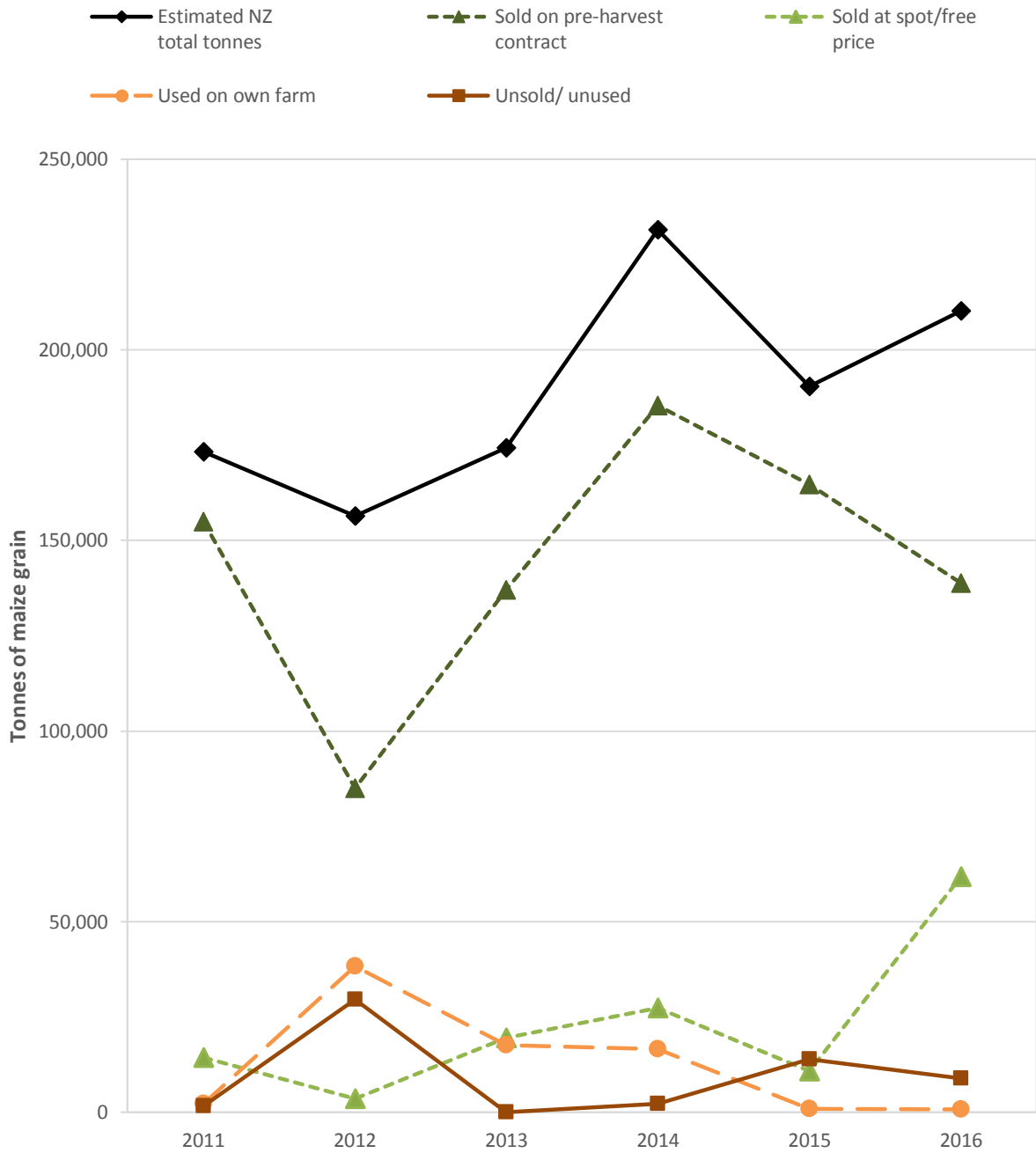
Statistics New Zealand is gratefully acknowledged for supplying 2015 APS figures on total hectares and tonnes for maize grain, and total hectares for maize silage.

In Table 1, the unsold tonnage of the 2016 harvest of maize grain has reduced by 82% in the period between the AIMI surveys dated June 1, 2016 and October 31, 2016. The unsold tonnage is also lower than at the same time last year (8,900 t this year versus 21,200 t last year).

**Table 2. Sowings and sowing intentions for maize grain and maize silage as at October 31, 2016.**

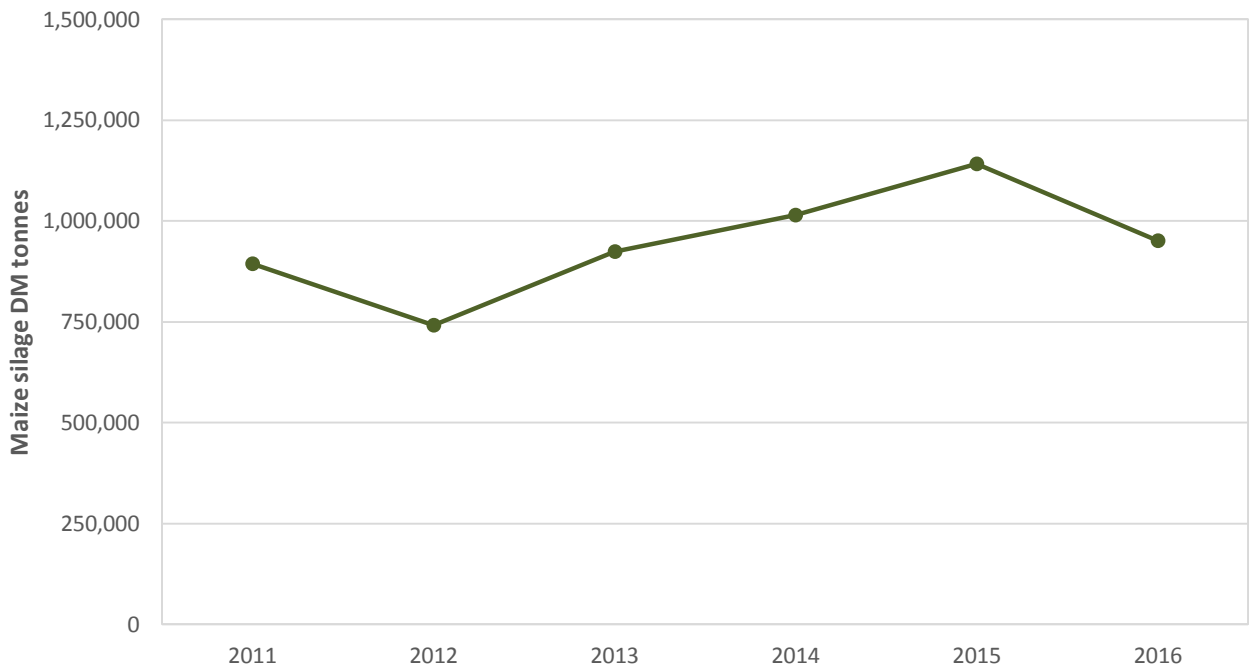
	Maize grain	Maize silage
	(ha)	(ha)
<b>Number of farmers in survey who have sown or intend to sow this crop as at October 31, 2016</b>	<b>20</b>	<b>44</b>
Estimated NZ total hectares, 2015 harvest	19,778	50,086
Estimated NZ total hectares, 2016 harvest	17,674	45,466
<b>Sowings and intentions, 2016/2017 season (hectares, for harvest in 2017)</b>		
Estimated NZ total hectares already sown by October 31, 2016	12,535	32,033
Estimated NZ total hectares intending to sow after October 31, 2016	2,390	13,496
Estimated NZ total hectares (sowings and intentions), 2017 harvest	14,925	45,529
<b>Comparison of hectares between the 2015, 2016 and 2017 (predicted) harvests</b>		
Estimated % change in NZ total sowings, 2015 to 2016 harvest	-10.6	-9.2
Estimated % change in NZ total sowings, 2016 to 2017 (predicted) harvest	-15.6	0.1
<b>Comparison of sowing intentions as at June 1, 2016 with sowings plus intentions as at Oct 31, 2016 (based upon matched data)</b>		
Estimated NZ total 2016 sowing intentions as at June 1, 2016 (hectares, for harvest in 2017)	12,618	42,594
Change in estimated NZ total 2016 sowings & intentions between June 1, 2016 and Oct 31, 2016 (hectares, for harvest in 2017)	2,307	2,935

In Table 2, there is an estimated drop of 16% in sowings and intentions for maize grown for grain between the last two seasons. By comparison, the estimated change in sowings and intentions for maize grown for silage is virtually zero (0.1% up).

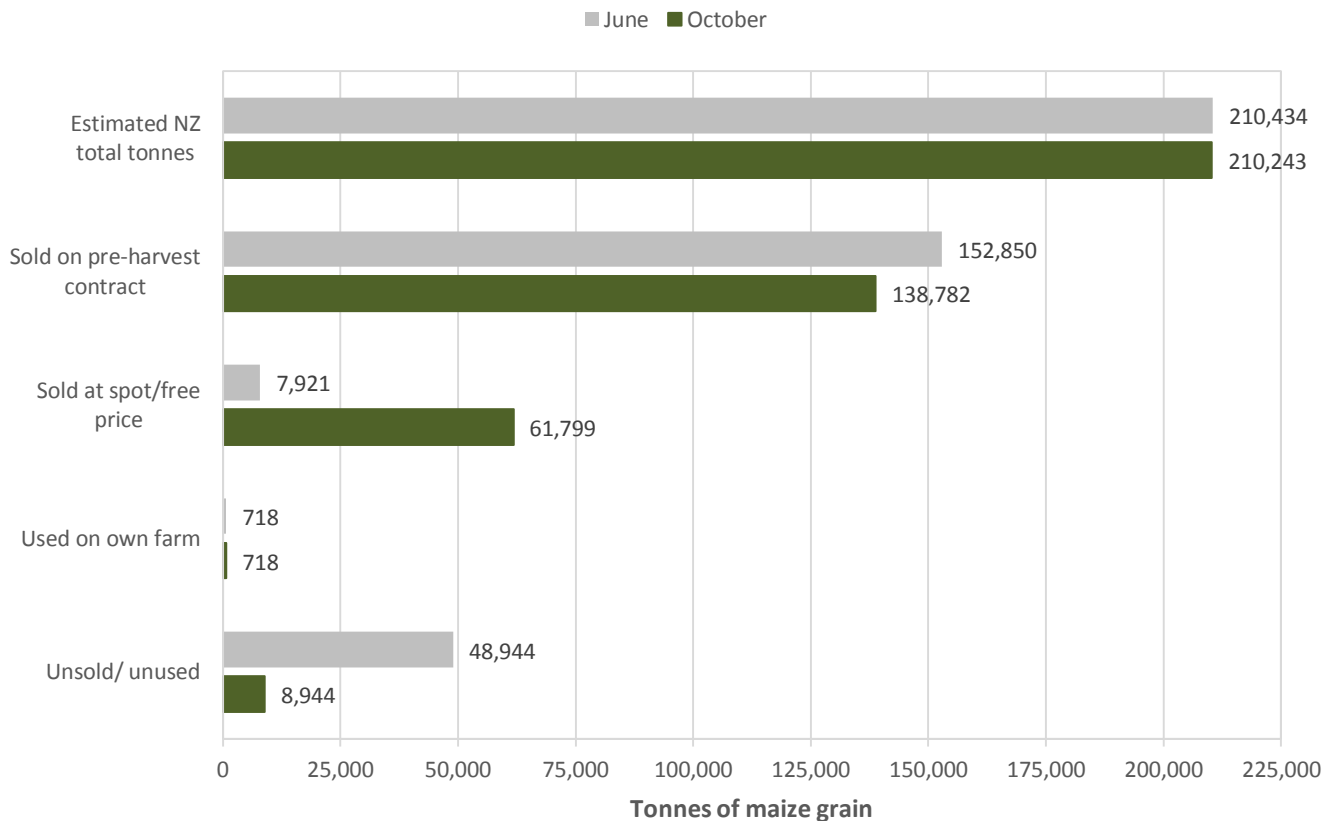


**Figure 1. Maize grain final harvest tonnages and sales by October each year.**

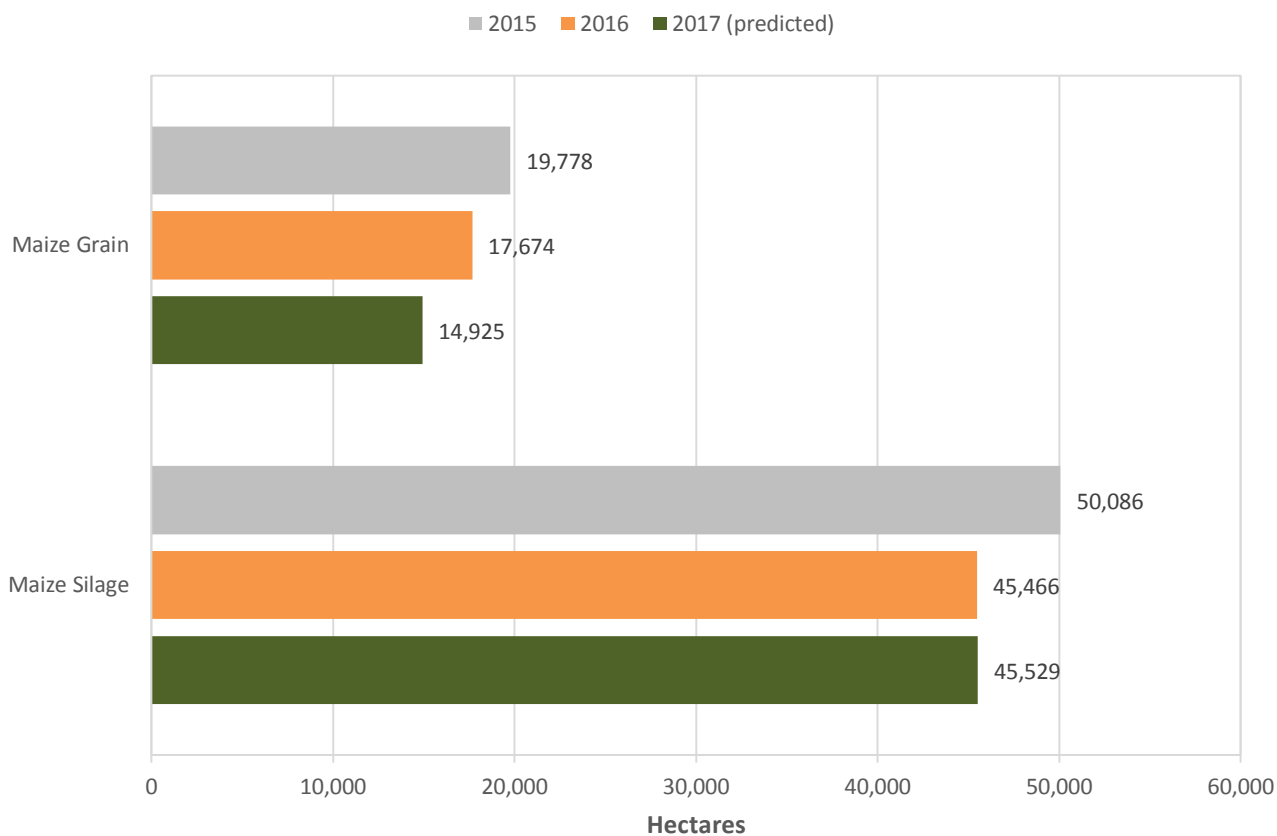
**Note:** data are sourced from the annual October AIMI reports.



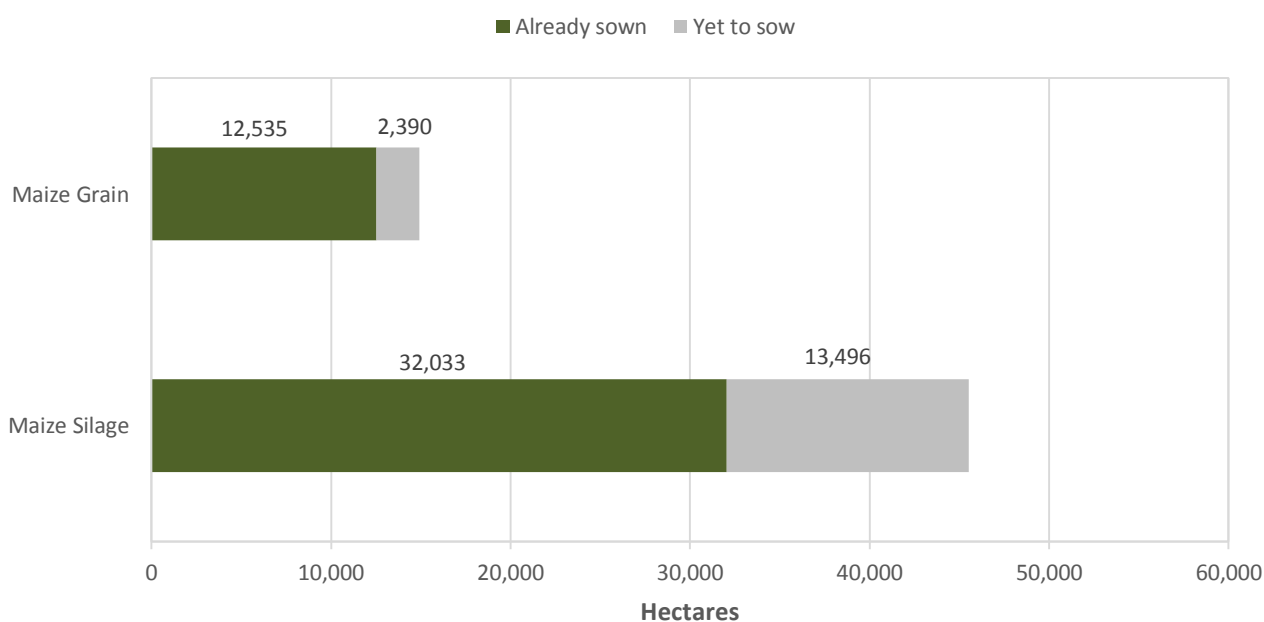
**Figure 2. Maize silage harvest tonnages (dry matter) estimated in October each year.**  
**Note:** data are from the annual October AIMI reports (except that estimates for 2011 to 2014 have been retrospectively adjusted in the light of recently obtained APS hectare estimates for each preceding year).



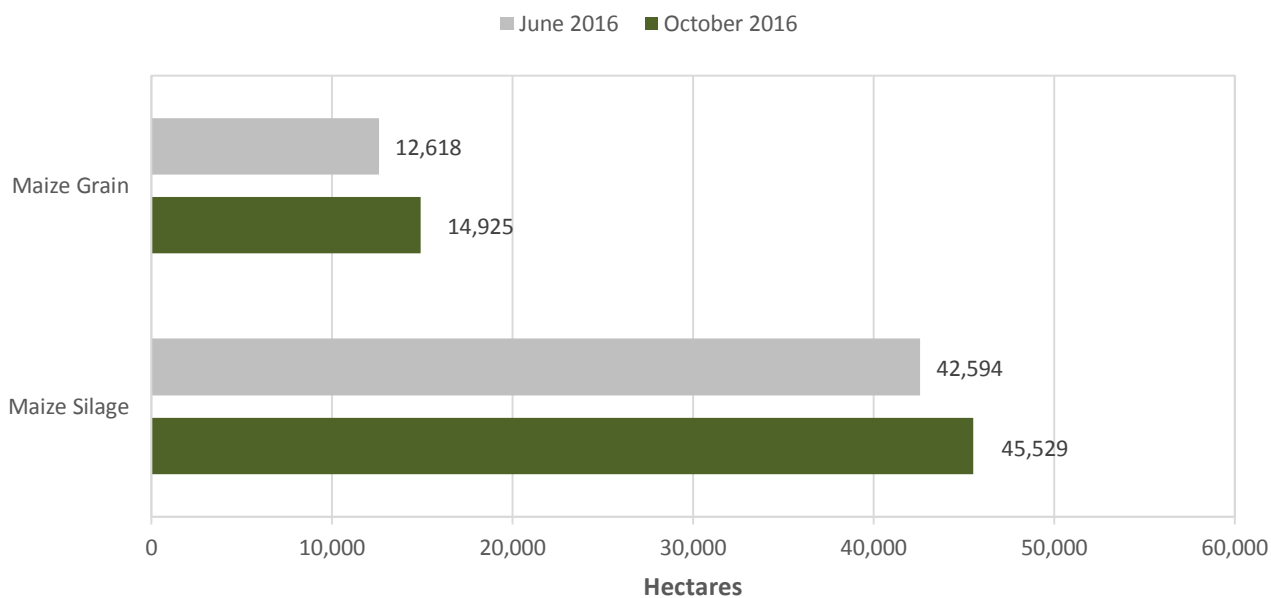
**Figure 3. Comparison of maize grain tonnages and sales for the 2016 harvest between June 1 and October 31, 2016.** All estimates are based upon scaling up data from growers in the current survey sample, so provide a more precise matched comparison.



**Figure 4. Estimated total hectares sown or intended to be sown in 2016 (for harvest in 2017) as compared to total hectares harvested in 2015 and 2016.** All estimates are based upon scaling up from the current survey sample, which consists of only those growers who responded to all of the last three AIMI maize surveys; these estimates therefore provide more precise matched comparisons.



**Figure 5. Estimated hectares of maize already sown in spring 2016, together with hectares yet to sow (spring intentions) for harvest in 2017, based on data collected on October 31, 2016.**



**Figure 6. Comparison of spring maize sowing intentions as at June 1, 2016 with actual sowings plus intentions as at October 31, 2016. As in Figures 3 and 4, this is a matched comparison.**

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