National Apple Orchard Census
2017

Bord Bia
Irish Food Board

An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

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National Apple Orchard Census 2017

Introduction

The National Apple Orchard Census 2017 was compiled from information provided by the 50 commercial apple growers operating in Ireland in 2017. The census provides an important overview of apple production, and comparisons are made to previous censuses (2012, 2007, 2002 and 1997) where possible.

The census surveyed all commercial orchards, defined as follows:
- a production area of at least 0.2 hectares of apples, including cider apples
- the fruit from the orchard is sold every year
- the orchard is sprayed against pests/diseases every year, or maintained to organic standards

Within the 50 growers, there are four organic growers who indicated that their orchard is certified organic.

Production areas are based on areas planted up to March 2017. Sales value and volume reflects the 2016 crop, harvested in autumn 2016 and sold in 2016/17.

Bord Bia and the Department of Agriculture, Food and the Marine wish to thank all apple growers surveyed, and Teagasc, for their assistance in compiling this census.

Notes:
For convenience, figures in this report are rounded.
Statistical analysis for this census was carried out by Franklin Research, Dun Laoghaire, Co. Dublin.

Executive Summary

In 2017 there are 50 Irish apple producers, up from 45 producers in the previous census of 2012.

Total apple production area in 2017 is 713 hectares, which represents a 16% increase from the previous census (615 hectares in 2012). Forty percent (40%) of the total production area is accounted for by the culinary variety *Bramley's Seedling.* Culinary varieties in total account for 42% of total production area, followed by dessert varieties at 30% and cider varieties at 28%.

Dessert apple production area is up 75% from the previous census (from 122 hectares in 2012 to 214 hectares in 2017), reversing the downward trend that had been seen in previous censuses. The increase is partly attributable to new opportunities for dessert apples in juicing and cider markets. Culinary apple production area shows a 7% decrease since the previous census, while cider apple production area increased by 15%.

The value of Irish apples harvested in 2016 is €5.94 million. This is a 22% increase in farmgate value since the last census (€4.88 million for apples harvested in 2011). Culinary apples account for 49% of total production value, dessert apples account for 26% and cider apples account for 25%.

There are 69 people in full-time employment on Irish orchards in 2017 and 313 people in part-time employment. The 313 part-times jobs correspond to 55 full-time equivalent jobs, meaning that the sector employs a total of 124 full-time equivalent jobs.

Dublin, Tipperary, Waterford, Kilkenny and Kildare are the principal counties for apple production.

Dublin is the main producer of culinary apples, accounting for 59% of total culinary apple production area. Tipperary is the main producer of cider apples, accounting for 42% of total cider apple production area. Dublin, Kilkenny, Waterford and Kildare are the main producers of dessert varieties.

Growers with larger orchards dominate apple production. Of the 50 orchards in 2017, the top 10 (in terms of orchard area) account for 65% of total production area. The production area of the dessert variety *Jonagold* has tripled since the last census, increasing from 35 hectares in 2012 to 107 hectares in 2017. *Jonagold* now represents 15% of total apple production area. The production area of the main culinary variety, *Bramley's Seedling,* decreased 7% since the last census (from 309 hectares in 2012 to 288 hectares in 2017). The production area of the main cider variety, *Dabinett*, increased 17% (from 90 hectares in 2012 to 106 hectares in 2017).

The age profile of apple trees varies by apple type. Dessert varieties have seen significant new planting, with 129 hectares (60% of dessert production area) planted within the last 5 years. Culinary and cider trees have older age profiles, with 47% of culinary production area and 52% of cider production area being trees aged 20+ years (i.e. past their most productive years). The Department of Agriculture Food and the Marine, Commercial Horticulture Grant Aid Scheme continues to provide vital support towards the development of the apple sector. In the period from 2013 to 2016 the apple sector received over €740,000 in grant aid support. This grant aid supported new plantings, investments into growing equipment, harvesting equipment and storage facilities.

In terms of production equipment and facilities, 55% of growers have refrigerated storage, 46% have mechanical harvesting equipment and 45% have pack-houses.

Grower comments on factors affecting competitiveness and limiting expansion are dominated by profitability, opportunity and cost issues. The top-three factors were *profitability* (indicated by 58% of growers), *market opportunities* (54% of growers) and *establishment costs* (46% of growers).

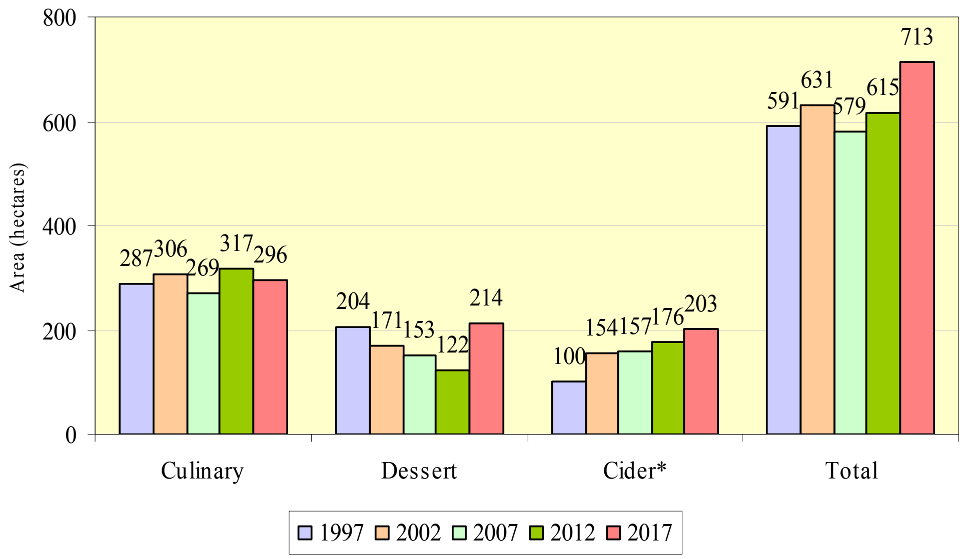
For further information contact:

Lorcan Bourke,	John Eivers
Bord Bia,	Horticulture & Plant Health Division,
Clanwilliam Court, Lower Mount St,	Dept. of Agriculture, Food & the Marine,
Dublin 2.	Backweston Campus, Celbridge, Co Kildare.
Tel: (01) 668 5155	Tel: (01) 5058688
Email: lorcan.bourke@bordbia.ie	Email: john.eivers@agriculture.gov.ie

Section 1 Orchard Area, Sales, Growers and Markets

This section provides an overview of apple production in Ireland. The charts illustrate the key trends in orchard area, sales, number of growers and markets.

Chart 1: Apple Production Area in Ireland by Apple Type 1997 - 2017 (Hectares)



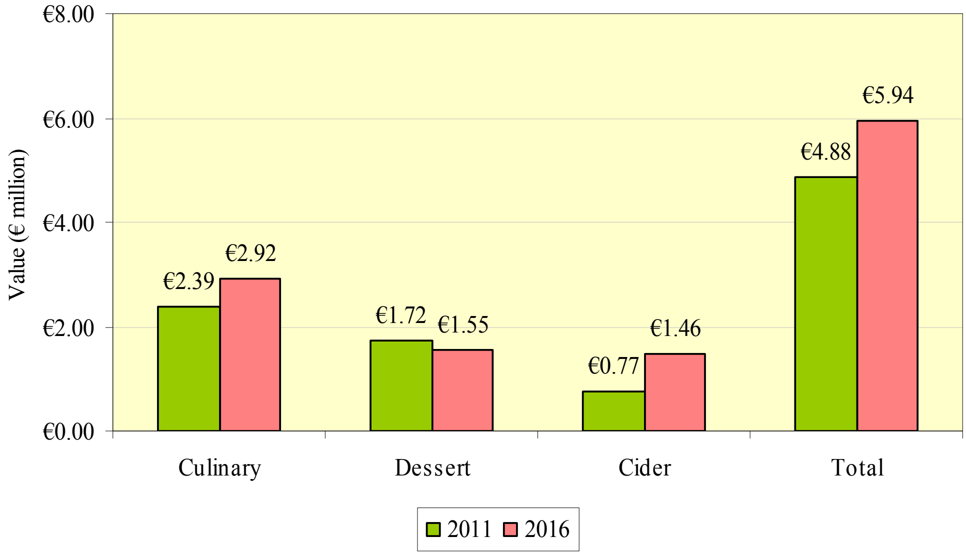
* The 1997 cider apple figure is based on a Teagasc estimate.

Total apple production area (culinary, dessert and cider) in 2017 is 713 hectares. This is a 16% increase from the last census (615 hectares in 2012). The average (median) orchard size in 2017 is 8 hectares.

Culinary apple production area in 2017 is 296 hectares, representing 42% of total production area. Dessert apple production area is 214 hectares (30% of total production area) and cider apple production area is 203 hectares (28% of total production area).

Culinary apple production area is marginally down (7% decrease) since the 2012 census (from 317 hectares in 2012 to 296 hectares in 2017) but is broadly unchanged over the past five censuses. Dessert apple production is up 75% from the previous census (from 122 hectares in 2012 to 214 hectares in 2017), reversing the downward trend that had been seen in previous censuses. This may be due in part to new opportunities in the juice and cider markets, which have seen increased tonnage of dessert apples (see Appendix Tables 1.5 and 1.6). Cider apple production has increased by 15% since the last census (from 176 hectares in 2012 to 203 hectares in 2017).

Chart 2: Farmgate Value of Apples in Ireland from Autumn Harvests of 2011 & 2016 (€ million)*



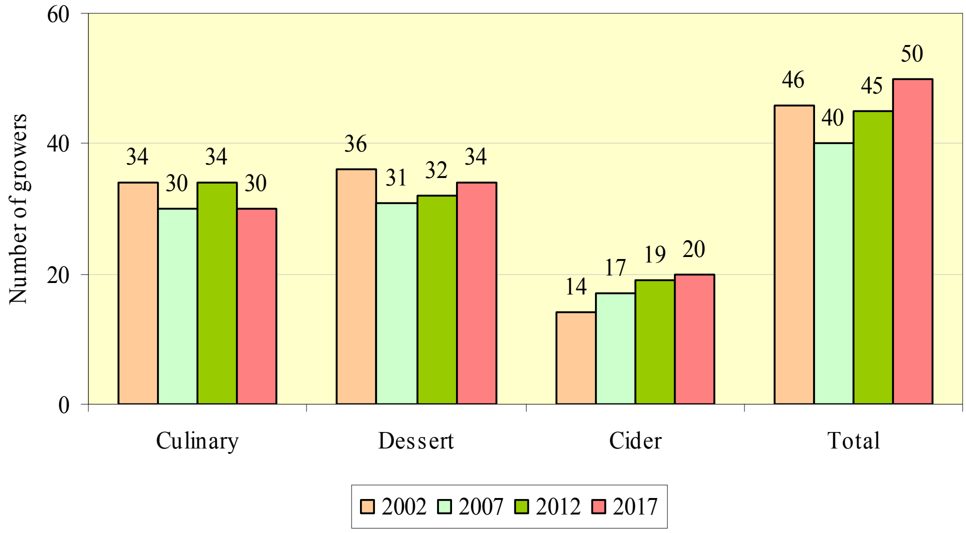
* Apple value figures for the three apple types were not asked in earlier censuses.

Total farmgate sales value of Irish apples harvested in 2016 is €5.94 million. This is a 22% increase in farmgate value since the last census (€4.88 million for apples harvested in 2011).

Culinary apples sales in 2016/17 were €2.92 million (representing 49% of total farmgate value), dessert apple sales were €1.55 million (26% of total farmgate value) and cider apples sales were €1.46 million (25% of total farmgate value).

Culinary apple sales value increased by 22% since the last census (from €2.39 million in 2011/12 to €2.92 million in 2016/17), while dessert apple sales value decreased by 10% (from €1.72 million in 2011/12 to €1.55 million in 2016/17). Cider apple sales value increased by 90%, rising from €0.77 million in 2011/12 to €1.46 million in 2016/17. This reflects the increased production area for cider apples (see Chart 1) and increased price per tonne for cider apples (see Chart 7b).

Chart 3: Number of Apple Growers in Ireland by Apple Type 2002 - 2017



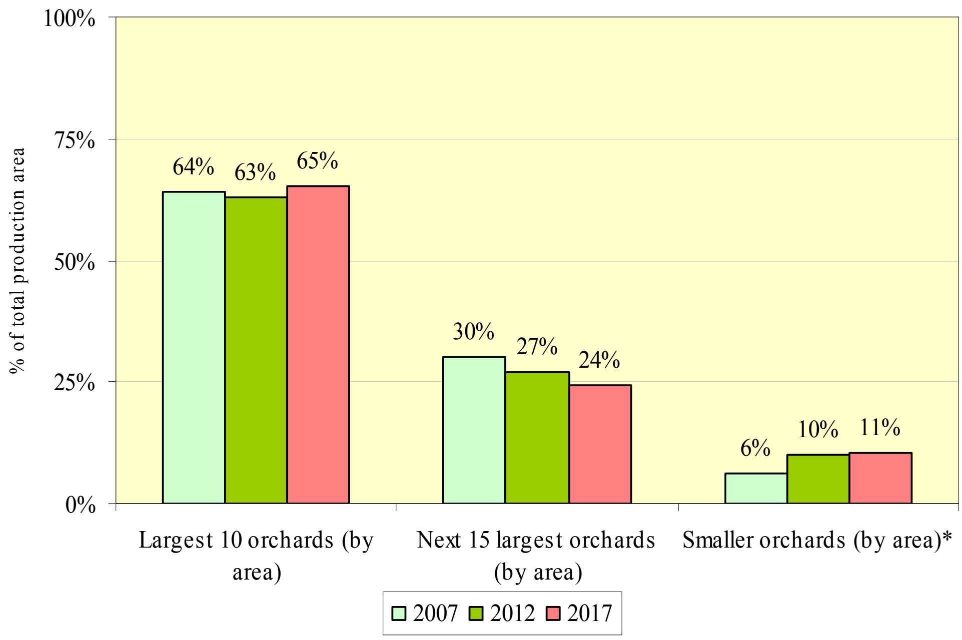
Note: growers can be in more than one apple category.

The total number of growers in 2017 is 50. This shows a continuing increase in the number of apple producers, up from 45 growers operating in 2012 and 40 growers operating in 2007.

Of the 50 growers operating in 2017, 30 grow culinary apples, 34 grow dessert apples and 20 grow cider apples.

The number of growers growing culinary apples is down 12% (from 34 growers in 2012 to 30 growers in 2017). There is very little change in the numbers of growers growing dessert apples (from 32 growers in 2012 to 34 growers in 2017) or cider apples (from 19 growers in 2012 to 20 growers in 2017).

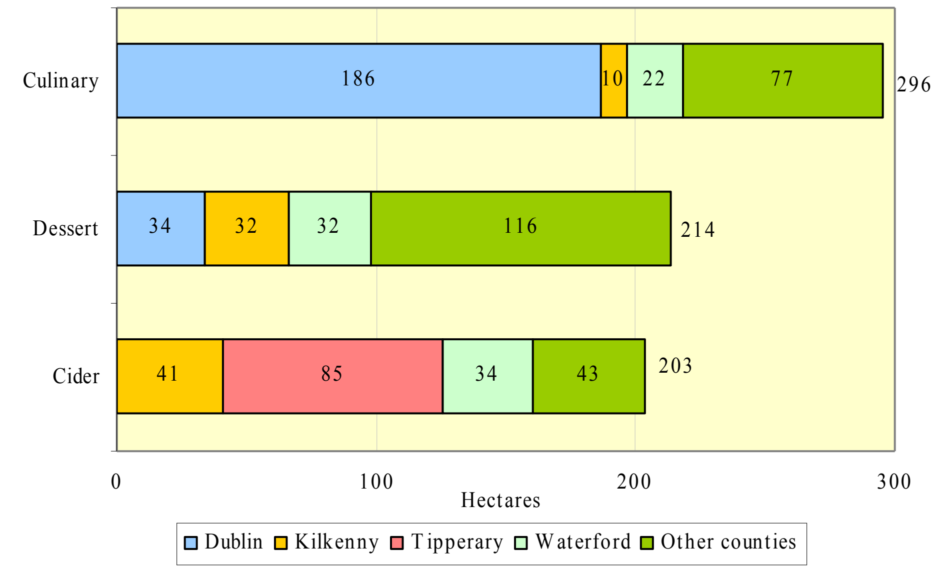
Chart 4: Apple Production in Ireland by Orchard Size 2007 – 2017



* 15 smaller orchards in 2007, 20 in 2012, 25 in 2017.

Apple production is dominated by growers with larger orchards. Of the 50 apple producers in 2017, the top 10 (in terms of orchard area) account for 65% of total production area. The next 15 orchards account for 24% of total production area, while the smallest 25 orchards account for 11%. However, the proportion of total production area accounted for by the top 10 growers shows little change since the 2007 census, indicating that the larger orchards are not increasing their share of the apple market.

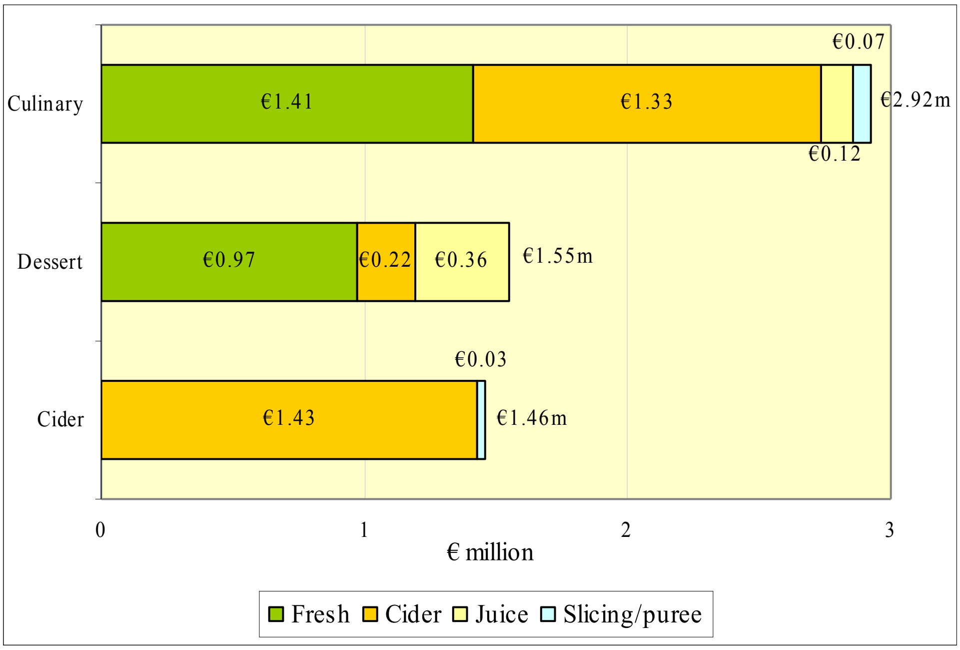
Chart 5: Production Area for Each Apple Type by County 2017 (Hectares)



* In order to protect grower confidentiality, county production area is shown only if the county has at least 3 apple producers for that apple type.

Dublin is the main producer of culinary apples, with a production area of 186 hectares which represents 59% of total culinary apple production area. For dessert varieties, the top-four counties in terms of production area are Dublin, Kilkenny, Waterford and Kildare (not shown as fewer than 3 producers in the county). Tipperary is the main producer of cider apples, with a production area of 85 hectares which represents 42% of total cider apple production area.

Chart 6: Market Destination of Apples Harvested in 2016 (€ million)

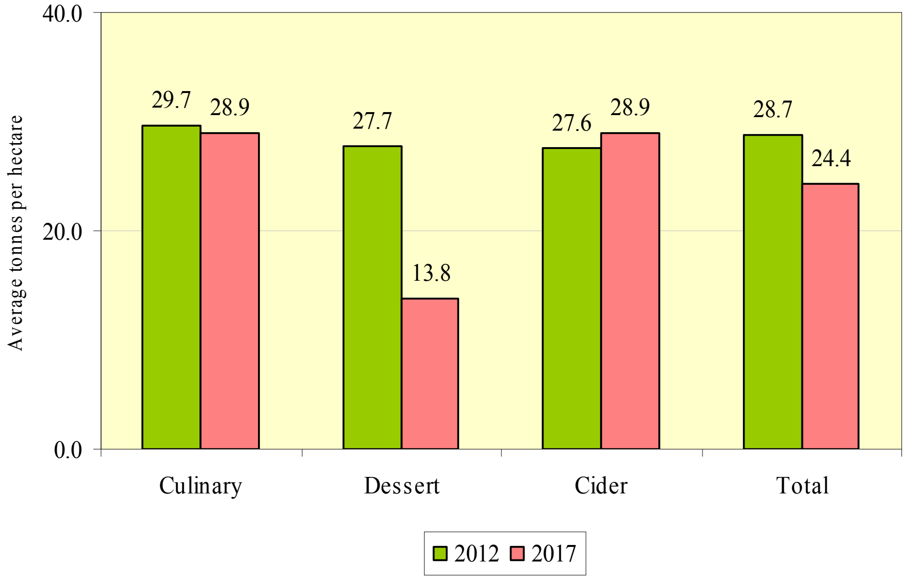


Culinary apples are sold both to the fresh market and to the cider market. The farmgate value of culinary apples sold to the fresh market was €1.41 million in 2016/17, while the farmgate value of culinary apples sold to the cider market was €1.33 million. A small amount of culinary apples are also sold into the juice and the slicing/puree markets.

Most dessert apples are sold to the fresh market. The farmgate value of dessert apples sold to the fresh market was €0.97 million in 2016/17, representing 63% of dessert apple sales value. However, an increasing proportion of dessert apples are being sold to the juice and cider markets (see Appendix Tables 1.5 and 1.6).

Cider apple sales are almost entirely sold to the cider market, with a small amount also sold to the slicing/puree market.

Chart 7a: Average Yield for 2011 and 2016 Harvests



The total average yield for the 2016 harvest was 24.4 tonnes per hectare, down from 28.7 tonnes per hectares for the 2011 harvest.

Average yields for culinary and cider apples for the 2016 harvest were broadly similar to those of 2011. However, the average yield for dessert apples was only 13.8 tonnes per hectare, as compared to 27.7 tonnes in 2011. The low yield is explained by a high proportion of dessert production area being trees aged 0-4 years that have not reached maturity (see Chart 12 in Section 3).

Chart 7b: Average Farmgate Price per Tonne for 2011 and 2016 Harvests

Note: average prices per tonne are based on all sales, including a small proportion of output sold on-farm at very high prices per tonne. See Appendix Table 1.6 for average prices excluding on-farm sales.

The total average farmgate price for apples harvested in 2016 was €342 per tonne, up from €276 per tonne in 2011. This gives an average sales value of €8,328 per hectare (€7,936 in 2011).

For culinary apples harvested in 2016, the average farmgate price per tonne is also €342, giving an average sales value of €9,887 per hectare.

For dessert apples, the average farmgate sales price per tonne is €525, giving an average sales value per hectare of €7,258 per hectare.

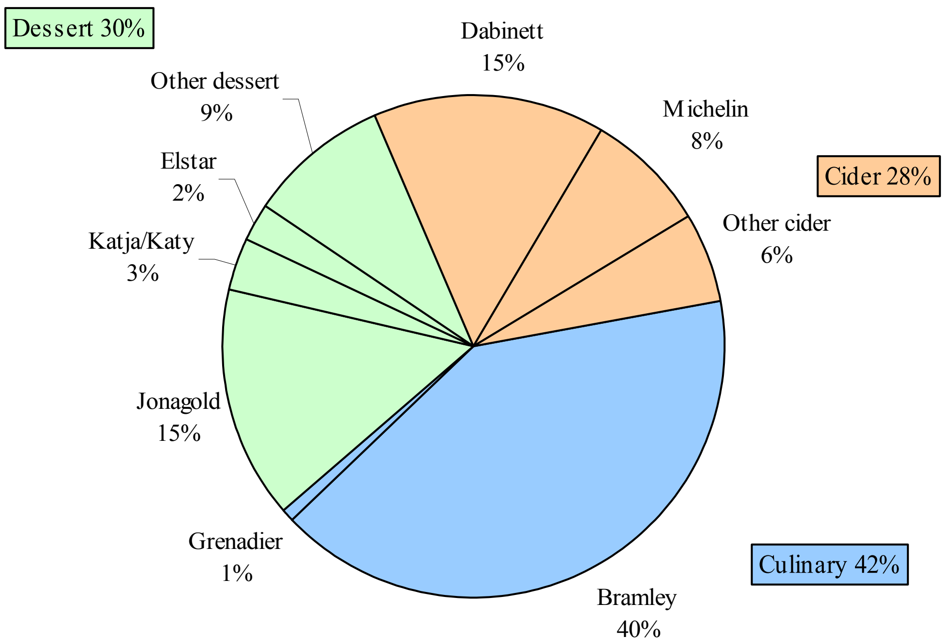
For cider apples, the average farmgate sales price per tonne is €249, giving an average sales value per hectare of €7,185 per hectare.

<u>Average prices per tonne by market are shown in Table 1.8 of the appendix</u>.

Section 2 Varieties Grown and Orchard Age

This section provides a breakdown of the census information by variety of apple grown. Information about the age profile of apple trees is also provided.

Chart 8: Apple Production Area in Ireland by Variety in 2017



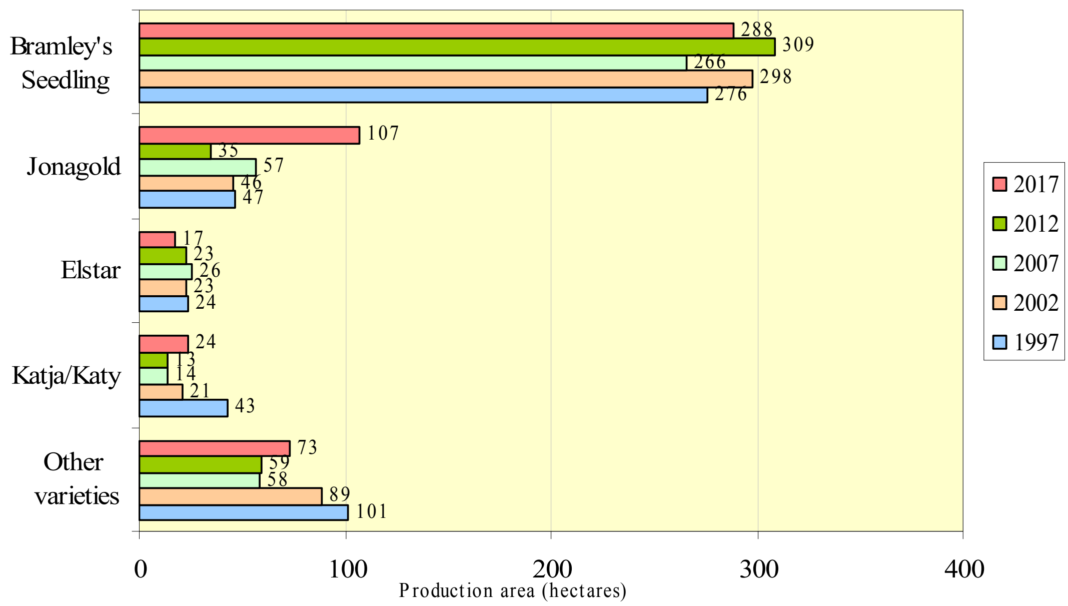
Production area in 2017 = 713 hectares.

Culinary production: culinary apples account for 42% of total apple production area in 2017. *Bramley's Seedling* accounts for virtually all culinary apple production (296 hectares of culinary apples, of which 288 hectares are *Bramley's Seedling*).

Dessert production: dessert apples account for 30% of total apple production area. *Jonagold* is the most widely produced dessert variety accounting for 15% of total apple production area, followed by *Katja* (3% of total apple production area) and *Elstar* (2%).

Cider production: cider apples account for 28% of total apple production area. *Dabinett* is the most produced cider variety accounting for 15% of total apple production area, followed by *Michelin* (8% of total apple production area).

Chart 9: Production Area for Most Important Culinary & Dessert Apple Varieties Grown in Ireland in 1997 - 2017 (hectares)

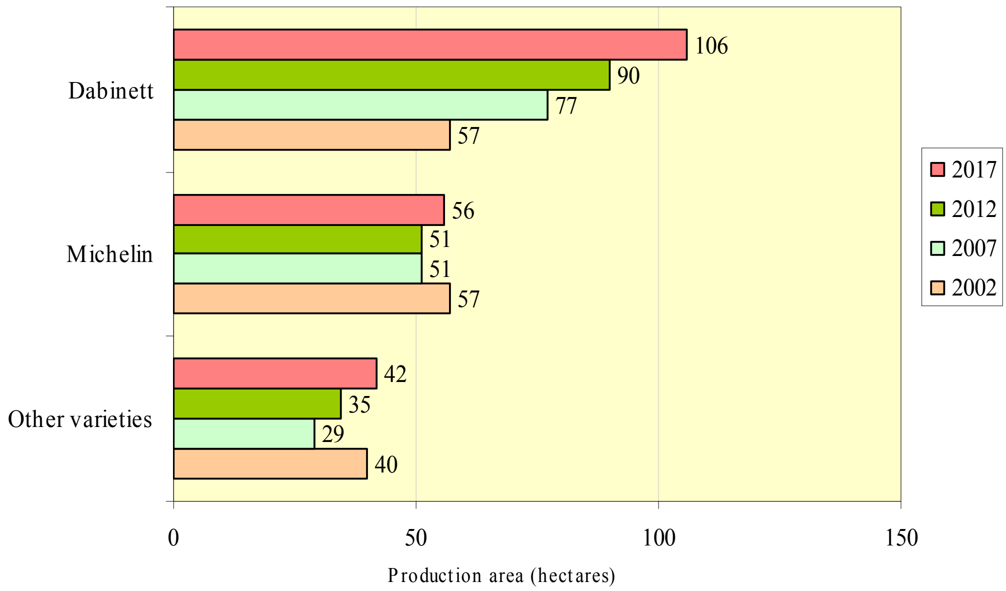


The production area of the culinary variety *Bramley's Seedling* in 2012 is 288 hectares, a 7% decrease since the previous census (309 hectares in 2012).

Among the dessert varieties, the production area of *Jonagold* has increased, from 35 hectares in 2012 to 107 hectares in 2017. The production areas of *Elstar* and *Katja* show little change (*Elstar:* from 23 hectares in 2012 to 17 hectares in 2017; *Katja:* from 13 hectares in 2012 to 24 hectares in 2017).

Table 2.2 in the appendix provides production areas for other culinary and dessert varieties.

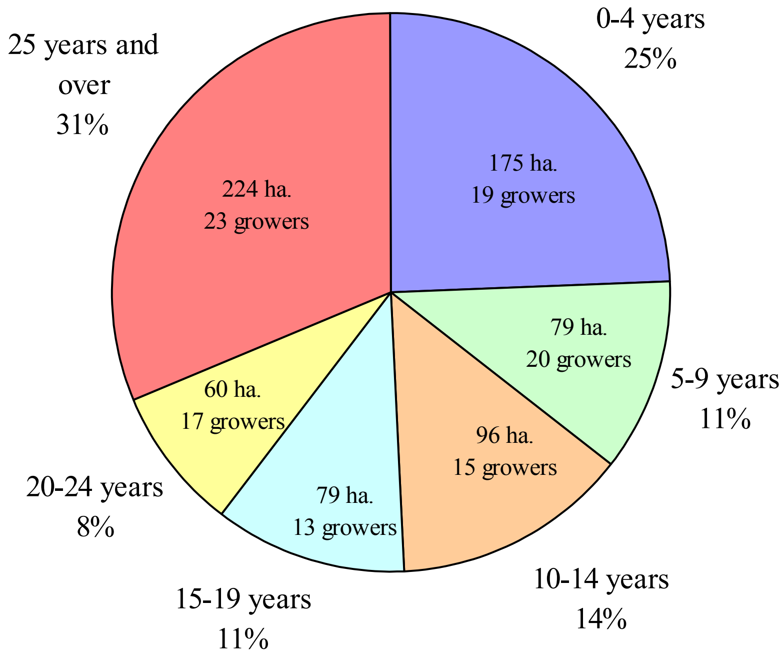
Chart 10: Production Area for Most Important Cider Apple Varieties Grown in Ireland in 2002 - 2017 (hectares)



Among the cider varieties, the production area of Dabinett is up 17% from the previous census (from 90 hectares in 2012 to 106 hectares in 2017), while the production area of Michelin is up 10% (from 51 hectares in 2012 to 56 hectares in 2017).

Chart 11: Age Profile of Apple Trees in Ireland

in March 2017 (percent of total apple production area)

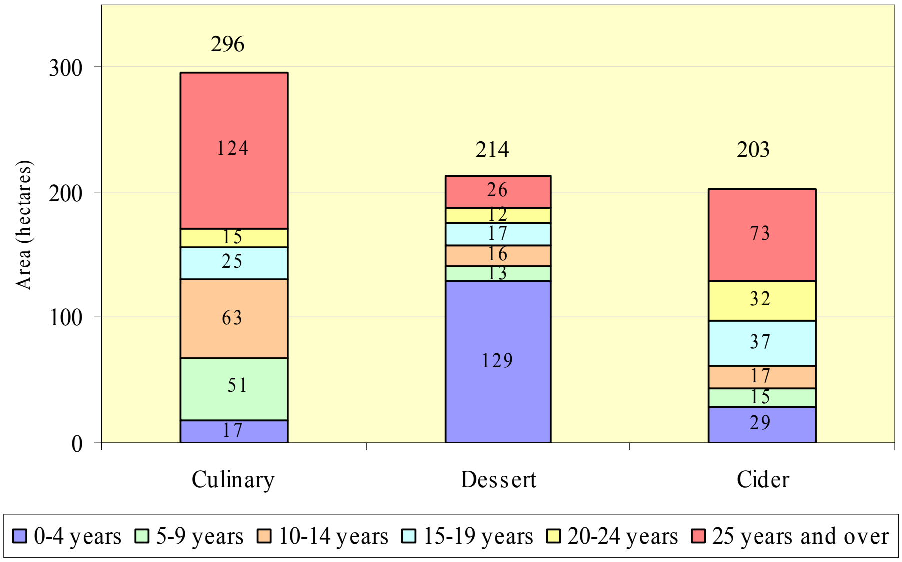


Production area in 2017 = 713 hectares. Number of growers in 2017 = 50 growers.

Overall, Irish orchards have a varied age profile between younger trees and trees that have reached maturity. However, only 36% are in their most productive years (5-19 years). While 25% of trees are aged 0-4 years a further 39% are aged over 20 years and as such have reducing production capacity.

The 25% of production area that are trees aged 0-4 years is comprised of 19 separate growers. The investment of these growers in these new trees indicates a degree of confidence in the future viability of their orchards.

Chart 12: Age Profile of Apple Trees in Ireland by Apple Type in March 2017 (hectares)

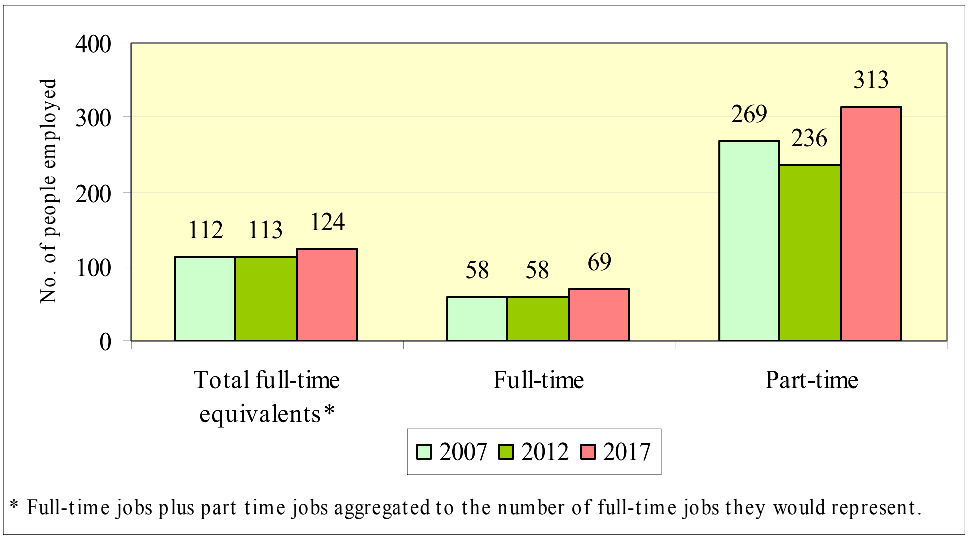


The majority of apple trees planted within the last 5 years are dessert (129 hectares of dessert apple trees aged 0-4 years, versus 17 hectares for culinary trees and 29 hectares for cider trees).

Both culinary and cider trees have a somewhat older profile. For culinary trees, 139 hectares (47% of culinary production area) are aged 20+ years. For cider trees, 105 hectares (52% of cider production area) are aged 20+ years.

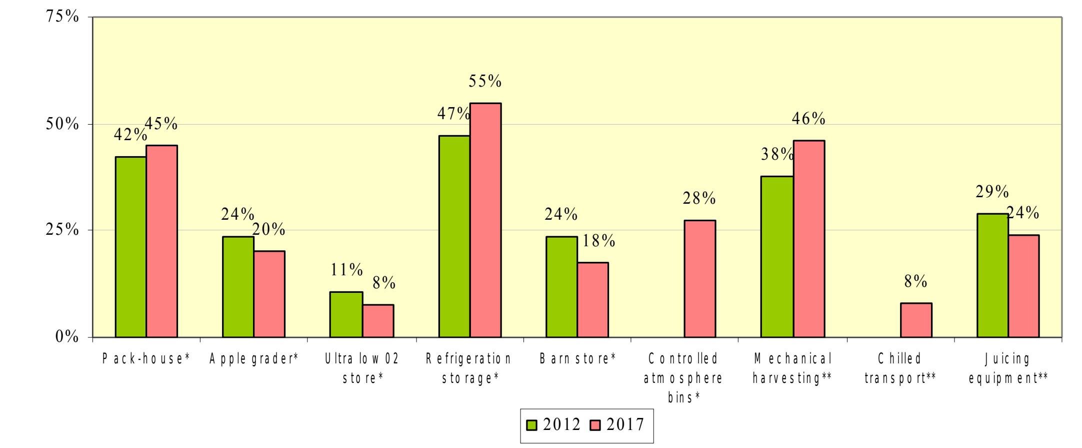
Section 3 Employment, Facilities, Business Development and Plant Sourcing

Chart 13: Apple Orchard Employment in Ireland 2007 - 2017



There are 69 people in full-time employment on Irish orchards in 2017 and 313 people in part-time employment. The 313 part-times jobs correspond to 55 full-time equivalent jobs, meaning that the sector employs a total of 124 full-time equivalent jobs. This indicates a small increase in employment in Irish orchards since the last census (113 full-time equivalent jobs in 2012).

Chart 14: Percentage of Irish Apple Growers with Different Facilities 2012 - 2017



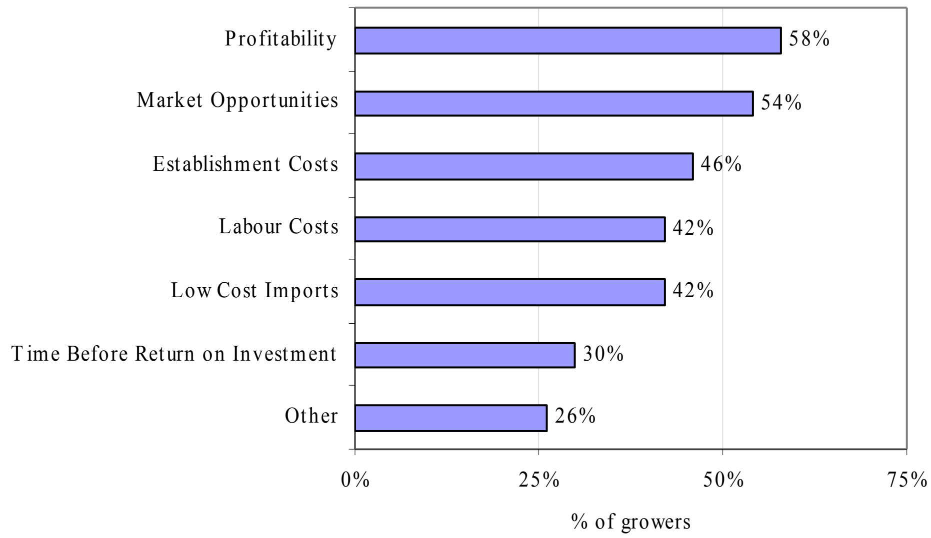
* Percents based on growers of dessert and/or culinary apples (34 growers in 2012, 40 growers in 2017).
** Percents based on all growers (45 growers in 2012, 50 growers in 2017).
Chilled transport and Controlled atmosphere bins not asked in 2012. . Earlier censuses used different facilities questions.

Among dessert and culinary growers*, 45% have pack-houses, 20% have apple graders, 8% have ultra-low O_2 stores, 55% have refrigerated stores, 18% have barn stores and 28% have controlled-atmosphere bins.

Among all growers, 46% have mechanical harvesters, 8% have chilled transport and 24% have juicing equipment.

* Percents for these facilities are based on dessert and culinary growers because cider growers typically do not require these facilities.

Chart 15: Stated Barriers to Expansion for Irish Apple Growers in 2017

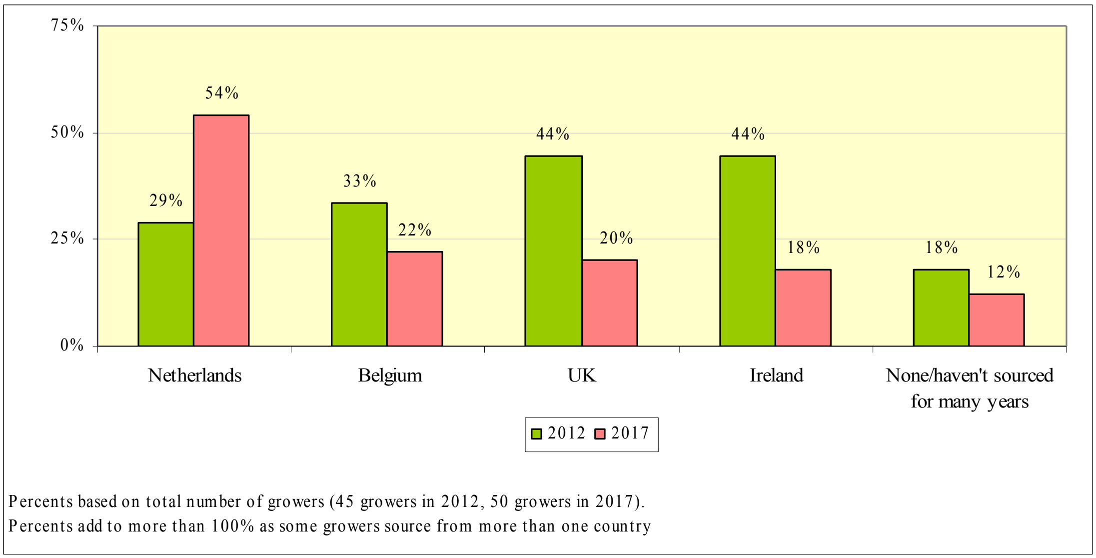


Number of growers in 2017 is 50.
Note: growers were asked to choose up to 3 barriers from a provided list of barriers.

Grower comments on barriers to expansion are dominated by cost and profitability issues. In the above chart, *profitability, establishment costs, labour costs, low cost imports* and *time before return on investment* all relate to making a profitable return on investment.

Market opportunities were cited as the second most important barrier to expansion (indicated as a barrier by 54% of growers), indicating a keen interest in developing new opportunities.

Chart 16: Sources of Plant/Propagating Material for Irish Apple Growers 2012 - 2017



The 2017 census shows more growers sourcing plant/propagating materials from the Netherlands and fewer sourcing from the UK. 54% of Irish apple growers in 2017 source their plant/propagating materials from the Netherlands, up from 29% in 2012. 22% source plants from Belgium (down from 33% in 2012) and 20% source from the UK (down from 44% in 2012). The proportion of plants sourced from the UK in the future may depend on trading relations with Britain post-Brexit.

18% of growers source plant/propagating materials in Ireland. Growers sourcing plant/propagating material in Ireland are more likely to be those with smaller orchards. Among the 25 smallest growers by production area, 9 growers source plant/propagating material in Ireland. In contrast, none of the 10 largest growers by production area source plant/propagating material in Ireland.

Appendix Tables

Appendix One: Apple Production Area, Output and Value

Table 1.1: Summary of Apple Production in Ireland in 2011/12

	Number of growers in 2012*	Production area (ha.) as at March 2012	Production output from 2011 harvest (tonnes)	Production value from 2011 harvest (€ '000s)	Production value per hectare from 2011 harvest
Dessert	32	121.6	3,373.5	€1,721.7	€14,159
Culinary	34	317.3	9,425.0	€2,389.4	€7,530
Cider specific varieties	19	175.6	4,851.7	€765.3	€4,358
TOTAL	**45**	**614.5**	**17,650.2**	**€4,876.4**	**€7,936**

* Growers can be in more than one apple category.

Table 1.2: Summary of Apple Production in Ireland in 2016/17

	Number of growers in 2017*	Production area (ha.) as at March 2017	Production output from 2016 harvest (tonnes)	Production value from 2016 harvest (€ '000s)	Production value per hectare from 2016 harvest
Dessert	34	214.0	2,958.5	€1,552.9	€7,258
Culinary	31	295.7	8,547.4	€2,923.7	€9,887
Cider specific varieties	20	203.2	5,873.8	€1,460.2	€7,185
TOTAL	**50**	**712.9**	**17,379.7**	**€5,936.7**	**€8,328**

* Growers can be in more than one apple category.

Table 1.3: Apple Production Area and Number of Trees by Year of Planting 2012

	Area (hectares) by year of planting							Number of trees by year of planting							Average number of trees per hectare
	1986 and before	**1987-1992**	**1992-1997**	**1997-2002**	**2002-2007**	**2007-2012**	**Total**	**1986 and before**	**1987-1992**	**1992-1997**	**1997-2002**	**2002-2007**	**2007-2012**	**Total**	
Culinary	112	26	35	14	5	124	317	51,834	12,984	38,433	11,032	7,219	183,806	305,307	962
Dessert	17	17	13	18	37	20	122	14,159	21,341	14,331	26,508	46,598	37,754	160,690	1,322
Cider	29	25	22	71	13	16	176	8,886	8,100	15,744	44,467	6,835	12,205	96,238	548
Total	158	68	70	104	55	160	615	74,879	42,425	68,508	82,007	60,651	233,765	562,235	915
% of total	26%	11%	11%	17%	9%	26%	100%	13%	8%	12%	15%	11%	42%	100%	

Table 1.4: Apple Production Area and Number of Trees by Year of Planting 2017

	Number of growers*	Area (hectares) by year of planting							Number of trees by year of planting							Average number of trees per hectare
		1992 and before	**1992-1997**	**1997-2002**	**2002-2007**	**2007-2012**	**2012-2017**	**Total**	**Before 1992**	**1992-1997**	**1997-2002**	**2002-2007**	**2007-2012**	**2012-2017**	**Total**	
DESSERT																
Jonagold	19	6.0	3.3	7.5	3.3	4.6	82.5	107.2	7,095	7,691	15,265	5,285	6,853	117,495	159,685	1,490
Katja/Katy	15	6.1	2.0	2.0	2.3	0.3	11.2	23.8	5,298	1,508	800	1,238	438	11,849	21,130	889
Elstar Strains	19	1.8	1.2	2.7	3.9	0.9	6.6	17.1	2,439	1,326	4,625	7,664	1,507	12,980	30,541	1,784
Golden Delicious	6	3.2	1.0	-	2.0	0.8	8.1	15.1	1,732	500	-	1,400	2,000	10,663	16,295	1,081
Worchestershire	4	4.7	-	-	-	3.0	1.6	9.3	1,754	-	-	-	5,400	592	7,746	829
Discovery	13	1.0	2.2	0.9	0.3	0.2	0.9	5.5	900	3,406	1,050	438	400	1,921	8,115	1,489
Ida Red	5	2.5	0.3	1.6	-	-	0.0	4.4	1,750	292	2,560	-	-	56	4,658	1,059
Red Windsor	5	-	-	-	0.2	0.3	1.6	2.1	-	-	-	450	538	3,560	4,548	2,187
Topaz	4	-	-	-	0.4	0.6	-	1.0	-	-	-	788	1,500	-	2,288	2,311
All others	n/a	1.1	2.4	2.6	3.9	2.0	16.6	28.5	380	3,430	5,200	8,203	1,488	31,882	50,583	1,772
Dessert total	**34**	**26.5**	**12.4**	**17.3**	**16.1**	**12.7**	**129.0**	**214.0**	**21,348**	**18,153**	**29,501**	**25,464**	**20,124**	**190,997**	**305,587**	**1,428**
CULINARY																
Bramley	30	121.4	15.4	25.1	63.2	45.9	17.4	288.4	51,552	7,647	13,045	40,585	97,348	22,004	232,180	805
Grenadier	6	2.5	-	-	-	4.8	-	7.3	715	-	-	-	11,414	-	12,129	1,653
Culinary total	**30**	**123.9**	**15.4**	**25.1**	**63.2**	**50.7**	**17.4**	**295.7**	**52,267**	**7,647**	**13,045**	**40,585**	**108,763**	**22,004**	**244,310**	**826**
CIDER SPECIFIC																
Dabinet	18	27.6	18.2	24.1	12.0	7.7	16.2	105.7	14,628	11,303	14,465	6,750	5,541	10,027	62,713	593
Mitchelin	15	17.6	12.5	12.5	5.0	6.7	1.5	55.7	7,778	4,783	8,145	3,000	5,135	938	29,779	534
Ashton Bitter	5	4.6	1.6	-	-	1.0	-	7.2	2,480	944	-	-	625	-	4,049	566
All others	n/a	23.6	-	-	-	-	11.0	34.6	6,000	-	-	-	-	11,581	17,581	508
Cider specific total	**20**	**73.4**	**32.2**	**36.6**	**17.0**	**15.4**	**28.7**	**203.2**	**30,886**	**17,030**	**22,610**	**9,750**	**11,301**	**22,545**	**114,121**	**562**
TOTAL	**50**	**223.8**	**59.9**	**79.0**	**96.3**	**78.8**	**175.1**	**712.9**	**104,501**	**42,830**	**65,155**	**75,799**	**140,188**	**235,546**	**664,018**	**931**

* Growers can be in more than one apple category.

Table 1.5: Production Area, Output and Value by Market for Most Commonly Grown Apple Varieties 2011/12*

Apple variety	Number of growers	Area (hectares) (as at March 2012)	Tonnes by market for 2011 harvest					Value by market for	
			Fresh	Cider	Juice	Slicing/puree	Total	Total sales value	Average sales value per tonne
Culinary									
Bramley's Seedling	34	309	3,274	3,337	162	2,422	9,195	€2,350,716	€256
Grenadier	7	8		183	3	24	210	€35,362	€168
Dessert									
Elstar	19	23	449	86	49		583	€310,921	€533
John of Gold Strains	17	35	982	192	77		1,251	€629,378	€503
Katja/Katy	13	13	169	102	9		279	€79,660	€285
Discovery	12	7	40	40	21		101	€51,358	€510
Golden Delicious	5	11	70	17	9	206	301	€74,724	€249
Ida Red	4	3	92	10			102	€32,965	€324
Red Windsor	3	1	9				9	€6,813	€801
Worchester Permain	3	6	90				90	€55,740	€619
Cider									
Dabinet	18	90		2,371		27	2,398	€389,268	€162
Michelin	13	51		1,626			1,626	€253,072	€156
Aston Bitter	5	5		76	4		80	€14,278	€178

* Varieties grown by at least 3 producers.

Table 1.6: Apple Production Output and Value by Variety and Market 2017

	Number of growers*	Tonnes by market for 2016 harvest: Fresh	Cider: On-farm	Cider: Ex-farm	Juice: On-farm	Juice: Ex-farm	Slicing/puree	Total	Value by market for 2016 harvest (€'000s): Fresh	Cider: On-farm	Cider: Ex-farm	Juice: On-farm	Juice: Ex-farm	Slicing/puree	Total	Average price per tonne: Excluding on-farm sales**	All sales (i.e. including on-farm)
DESSERT																	
Jonagold	23	562.7	9.7	132.5	60.0	200.0	-	964.9	€360.3	€29.5	€20.0	€71.9	€42.2	-	€523.9	€472.0	€543.0
Elstar Strains	20	272.4	4.0	42.1	36.2	20.0	-	374.6	€176.7	€8.0	€6.2	€46.3	€6.0	-	€243.3	€565.0	€649.4
Katja/Katy	12	122.4	1.2	118.5	9.0	7.0	-	258.1	€36.4	€2.4	€17.2	€12.7	€2.1	-	€70.8	€224.7	€274.2
Discovery	9	31.5	1.2	9.7	20.6	7.0	-	70.0	€27.5	€2.4	€1.8	€25.7	€2.1	-	€59.5	€652.8	€850.6
Golden Delicious	5	55.5	20.0	200.0	24.0	-	-	299.5	€14.3	€40.0	€29.0	€48.0	-	-	€131.3	€169.5	€438.4
Red Windsor	5	16.0	-	3.5	12.4	-	-	31.9	€9.8	€0.0	€0.5	€24.3	-	-	€34.6	€528.5	€1,084.2
Ida Red	4	55.7	18.2	0.0	5.0	5.0	-	83.9	€24.7	€36.4	€0.0	€10.0	€1.3	-	€72.4	€428.2	€862.8
Topaz	3	4.9	-	-	4.5	2.0	-	11.4	€2.6	-	-	€9.0	€0.6	-	€12.2	€463.8	€1,070.2
Worchestershire	3	155.0	-	-	-	30.0	-	185.0	€74.3	-	-	-	€5.1	-	€79.4	€429.1	€429.1
All others	n/a	443.2	0.0	129.5	16.5	90.0	-	679.2	€247.8	€0.0	€21.9	€28.8	€27.0	-	€325.5	€447.8	€479.3
Dessert total	**34**	**1,719.3**	**54.3**	**635.8**	**188.2**	**361.0**		**2,958.5**	**€974.5**	**€118.7**	**€96.7**	**€276.6**	**€86.4**		**€1,552.9**	**€426.2**	**€524.9**
CULINARY																	
Bramley	30	5,458.7	465.0	1,841.2	104.1	108.0	310.0	8,286.9	€1,409.4	€930.0	€305.7	€102.9	€15.7	€69.8	€2,833.4	€233.6	€341.9
Grenadier	6	-	22.5	238.0	-	-	-	260.5	-	€48.3	€42.0	-	-	-	€90.3	€176.5	€346.5
Culinary total	**30**	**5,458.7**	**487.5**	**2,079.2**	**104.1**	**108.0**	**310.0**	**8,547.4**	**€1,409.4**	**€978.3**	**€347.7**	**€102.9**	**€15.7**	**€69.8**	**€2,923.7**	**€231.9**	**€342.1**
CIDER SPECIFIC																	
Dabinet	18	-	143.0	2,970.5	-	-	87.5	3,201.0	-	€301.8	€429.6	-	-	€26.3	€757.7	€144.6	€236.7
Mitchelin	15	-	151.0	1,715.8	-	-	-	1,866.8	-	€332.9	€250.3	-	-	-	€583.1	€145.9	€312.4
Ashton Bitter	5	-	-	164.5	-	-	12.5	177.0	-	-	€24.4	-	-	€3.8	€28.2	€148.5	€159.2
All others	n/a	-	-	629.0	-	-	-	629.0	-	-	€91.2	-	-	-	€91.2	€145.0	€145.0
Cider specific total	**20**		**294.0**	**5,479.8**			**100.0**	**5,873.8**		**€634.7**	**€795.5**			**€30.0**	**€1,460.2**	**€145.2**	**€248.6**
TOTAL	**50**	**7,177.9**	**835.8**	**8,194.8**	**292.2**	**469.0**	**410.0**	**17,379.7**	**€2,383.9**	**€1,731.6**	**€1,239.9**	**€379.5**	**€102.1**	**€99.8**	**€5,936.7**	**€235.2**	**€341.6**

* Growers can be in more than one apple category.

** A small proportion of apple output is sold on-farm at high proces per tonne. These are therefore excluded so as to give a better indication of normal market prices.

Table 1.7: Apple Production by County 2017

	Number of Growers*				Area (hectares)				Value (€'000s)			
	Dessert	**Culinary**	**Cider**	**Total**	**Dessert**	**Culinary**	**Cider**	**Total**	**Dessert**	**Culinary**	**Cider**	**Total**
Dublin	6	5	0	6	34.0	186.3	-	220.3	€208.0	€851.7	-	€1,059.7
Kilkenny	6	6	5	8	32.2	10.4	41.2	83.8	€113.7	€86.8	€219.7	€420.2
Tipperary	2	2	5	6	*	*	84.8	*	*	*	€821.8	*
Waterford	7	6	5	10	32.1	21.6	34.1	87.8	€524.3	€344.6	€186.8	€1,055.8
Wexford	3	3	0	3	*	*	-	*	*	*	-	*
Other counties	10	9	5	17	98.2	54.8	43.2	196.2	€257.2	€1,410.8	€231.8	€1,899.7
TOTAL	**34**	**31**	**20**	**50**	**214.0**	**295.7**	**203.2**	**719.3**	**€1,552.9**	**€2,923.7**	**€1,460.2**	**€5,936.7**

* Growers can be in more than one apple category.

Table 1.8: Average Price per Tonne by Market for 2016 harvest

	Market				
	Fresh	Cider (Ex-farm)	Juice (Ex-farm)	Slicing/ puree	Total**
Culinary	€258	€167	*	*	€342
Dessert	€567	€152	€239	*	€525
Cider	*	€145	*	*	€249

* not a significant market for that apple type

** based on all sales, which includes some on-farm sales at high values.

Table 1.9: Apple Production Area (hectares) in Ireland in 1980-2017

Year	Area (hectares)
2017	713
2012	615
2007	579
2002	631
1997	591
1990	732*
1985	662*
1980	699*

* estimated figures, not based on census of apple growers. Estimates might not have included cider apple production.

Appendix Two: Development Plans, Organic Production and Age of Orchard Owners

Table 2.1: Apple Growers' Orchard Development Plans for Next 5 Years

	Number of growers	Planned area (ha.)
Plant new	8	40.5
Re-plant	6	27.5
Plant new or re-plant total	**12**	**68.0**
Grub out	8	17.1

Table 2.2: Organic Apple Production in 2017

	Certified organic production
Number of certified producers	4
Production area (ha.)	15.3

Table 2.3: Age Profile of Orchard Owners 2017

	Percent of growers
Under 35	0%
35-44	6%
45-54	47%
55-64	18%
65+	29%

50 producers in 2017, one of whomdid not provide age information.