AHDB

POTATOES

GB Potatoes

Market Intelligence 2016-2017

Foreword

With lifting now complete, yields are down, resulting in a tight GB supply picture for the 2016/17 season, even considering the increase in planted area. This is supporting free-buy prices which, while welcomed by some parts of the industry, will be challenging for others. Quality of crops in store will be key for the season ahead and we'll know more about availability when AHDB's estimate of end-November grower held stocks is published. Another year of lower production also on mainland Europe, despite increased plantings and coupled with the change in the currency situation since the Brexit vote, will bring international trade into focus. Strong export opportunities created by the currency situation could continue to be an attractive option for GB growers, if the demand is there. Consumer retail demand for fresh potatoes is steady and for processed potato products demand remains strong.

Regardless of market conditions, we can ensure that the market information we provide equips our levy payers and stakeholders with the information needed to make the best possible business decisions. Compiled by the AHDB Potato Market Intelligence team, the aim of this annual publication is to provide trusted, key information about the GB potato market, in order to inform decision-making and provide answers for common questions about the industry. This publication provides final figures for the 2015/16 crop year and area figures for the 2016/17 season (as of December 2016).

AHDB Market Intelligence's role is to communicate accurate, timely, independent and transparent information on markets and prices. Senior Analyst Sara Maslowski and Analyst's Amber Cottingham and Arthur Marshall provide potato expertise in the Market Specialists team, an integral part of MI. They can draw on the support of consumer specialist Rebecca Gladman and our database teams to give their work context and assured quality. Their role is to provide information to help growers and purchasers understand the business environment for potatoes, giving them the tools to make fully informed business decisions, for example the new look and feel Potato Weekly. The information they provide also aims to support a sustained demand for potatoes grown by AHDB levy payers. We would like to express our thanks to the many individuals and organisations that have provided us with information and support for this publication.

Rob Clayton
Strategy Director, AHDB Potatoes

R C Clayton

Contents

Source: Gary Naylor Photography

Section 2
The European market 21

Section 3
World overview 24

Appendices 26

Season overview

The 2016/17 season has shaped up to be another year of lower production and so far, higher than average farmgate prices. The 2015/16 season saw the lowest planted area on record but also saw record yields, which helped to lessen the impact of the lower planted area. Even though yields were very high, production was still less than it had been in the previous two seasons. This became apparent around Easter time when supplies tightened and market prices firmed. Prices continued to rise until the end of the season and old crop supplies were still commanding a premium over new crop well into this season, in some sectors.

Due to the higher prices at the end of last season, the 2016/17 season got off to a high priced start. This was followed by the usual trend of decreasing prices as more new season crop came on to the market. However it soon became apparent as reports of “average at best” yields and “high field waste” came to light, that production was unlikely to be as high as the previous season, despite the increased area. Many growers became confident about the season to come and prices once again started to climb. Current WAPS prices are the highest they have been, for this point in the season, excluding 2012, since the year 2000.

The fluctuations in yields and planted area from year to year has driven volatility in prices between seasons. While it remains to be seen how price trends will develop in 2016/17, the past four seasons have featured the widest range in average GB farmgate prices ever recorded by AHDB.

This time last year saw one of the warmest winters on record which caused many issues for stored crops, especially in ambient stores. There were many reports of crops having to be cleared early to prevent breakdown. This caused scarcity of supplies in some markets, especially the chipping market, later on in the season and subsequently added pressure to prices. Other areas where supplies were tight were Grade 1 whites and baking potatoes in the packing market. Prices for best whites and good quality baking potatoes were, in some cases, making well over £400/t at the end of the season. Unusually this meant Grade 1 whites were priced higher than Maris Piper and King Edward, which typically command a higher price.

2016 planting was characterised by imperfect weather conditions at critical periods for many areas. To begin with, in some regions, it was too wet or too cold to plant and so growers fell behind their usual progress. In April and June there was higher than average rainfall for much of the country and in June and July there were fewer sunshine hours than average, causing slow progress for crop development. Disease pressure was high and cases of blight were reported up and down the country. All of these conditions proved wearing on the growing crop and as a result there was higher than average field waste for many, including greens and growth cracks, as well as lower yields. Anecdotally, the East of the country came off the worst and there were some parts of the country that didn’t fare as badly, like much of Scotland and some areas in the west where yields seem unaffected.

Over the water in North West Europe there were similar issues this growing season. Despite an increased planted area to fulfil the ever increasing processing need, production decreased by 3%. Approximately 1% of the Belgian potato area was lost to flooding early on. There were also extended periods of drought in many areas of North-west Europe, which had a detrimental effect on crop yields and delayed harvest for some areas. The 2016/17 production figure for the NEPG area suggests production is down 750 thousand tonnes on the previous year, driven by a 7.5% decrease in average yield. This could suggest there may be good export opportunities for GB growers, especially with the GB Pound having fallen against the euro since June’s vote to leave Europe.

Section 1

The GB potato industry

2016/17 saw a 4% increase in planted area from 112,000ha in 2015/16 to 116,000ha, although still the second lowest area on record after 2015. With yields down on the previous season, production has decreased once again and is much lower than in some previous years, at 5.22Mt.

Considering long-term trends, while the planted area has decreased considerably, production had remained at around the 6 million tonne mark. This was because yields had risen over the same period and compensated for the reduction in area.

These increases in yield were driven largely by improved agronomy, crop protection, fertiliser regimes, change in varieties and irrigation.

Weather is the largest driver of short-term annual fluctuations in yield and production. This can be seen this season, where yields have dropped to just below 45t/ha and more noticeably in 2012/13, when the second wettest year on record caused GB potato production to fall to the lowest level since the drought year of 1976.

Figure 1: Yield per ha and total production 1960-2016

Source: AHDB Potatoes Grower Panel (Crop Data Forms)

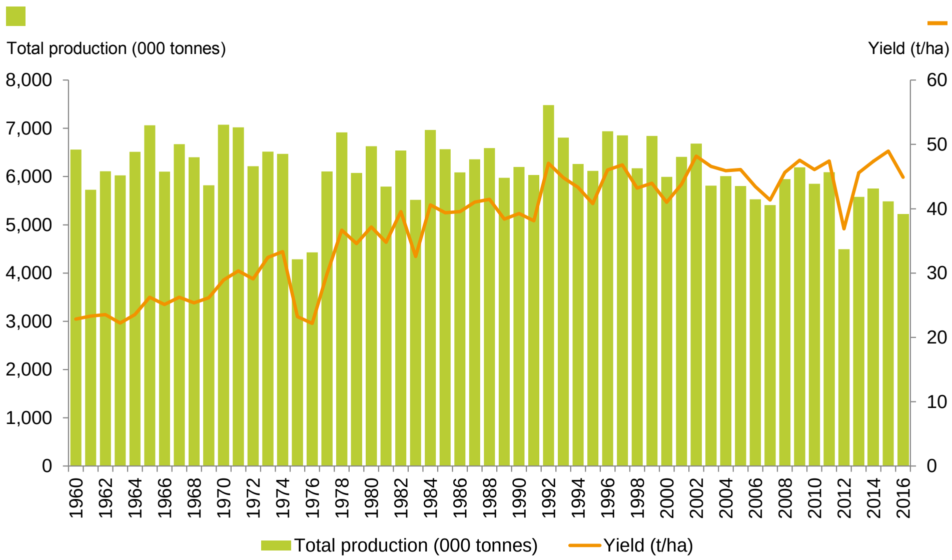
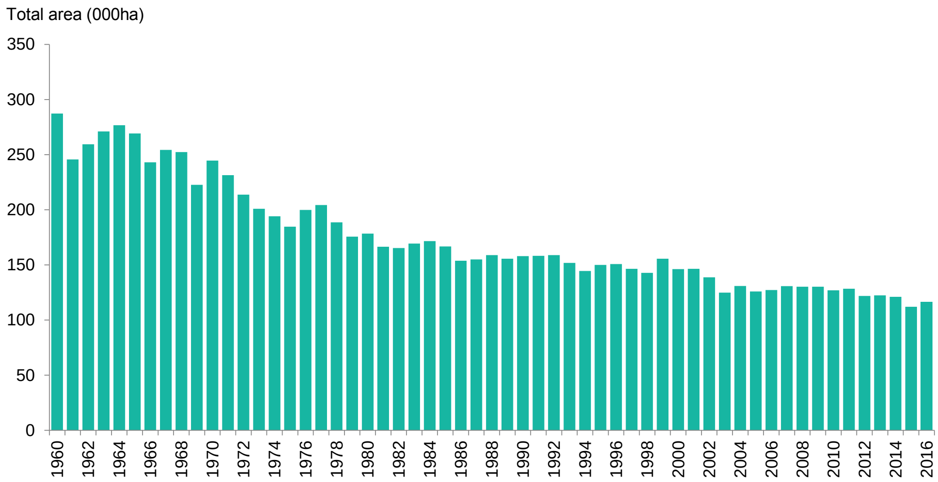


Figure 2: Planted area 1960-2016

Source: AHDB Potatoes Planting Returns



Trends in planted area

In 2015, the number of registered growers was down again, at 1,998. A figure for 2016 will not be published until early 2017.

The area per grower has been steadily increasing since the 1960s. However, provisional estimates suggest that the average area per grower in 2013, 2014 and 2015 has remained steady at around 53 hectares. This continues to support the idea that the consolidation of the industry is slowing.

The largest proportion of the planted area grown is intended for use in the pre-pack market at around 37%, up 2% from last year. High free-buy prices paid for pre-pack whites and baking potatoes towards the end of last season have made this an attractive option for growers and so it's not surprising that the area planted this year has increased.

Potatoes grown intended for the processing sector make up the second largest area, with 30% of the total area in 2016. This is the same percentage of total area as the previous year.

Figure 3: Planted area and number of growers 2000-2015

Source: AHDB Potatoes Planting Returns

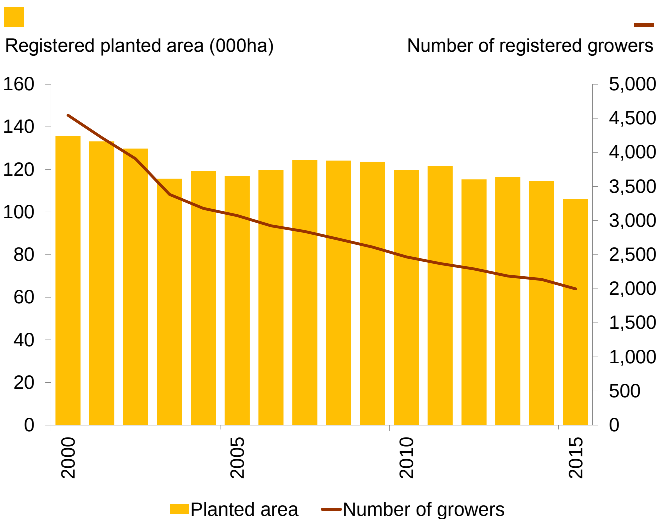


Figure 4: Planted area per grower 2000-2015

Source: AHDB Potatoes Planting Returns

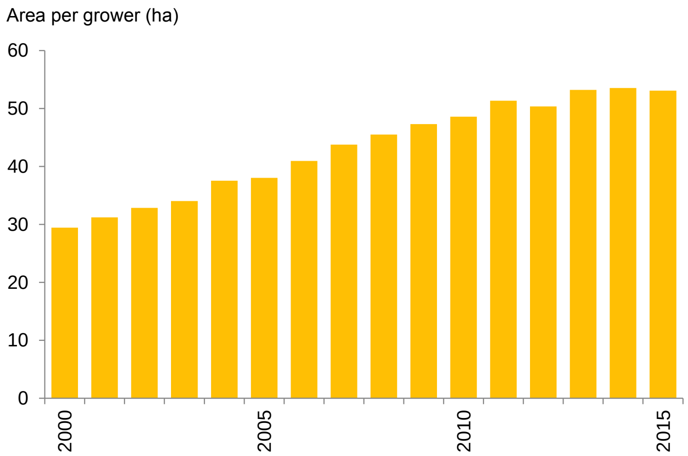


Table 1: Planted area by intended market sector in hectares

Source: AHDB Potatoes Planting Returns

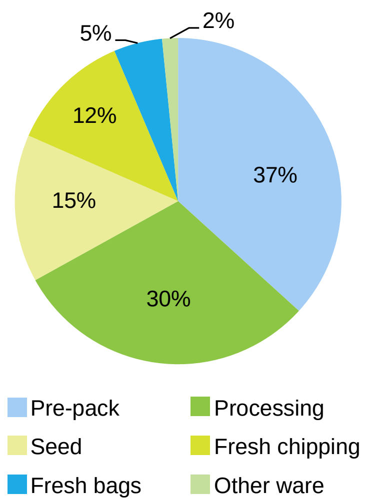
† Totals may not tally exactly due to rounding

Market sector	2012	2013	2014	2015	2016
Fresh bags	6,920	7,040	7,030	6,110	5,580
Fresh chipping	14,540	14,380	13,940	12,900	14,000
Pre-pack	44,960	46,030	43,030	38,630	42,710
Processing	34,630	33,790	34,320	34,440	35,100
Other ware	4,750	5,180	6,260	4,820	1,830
Seed	16,040	16,030	16,490	15,140	17,010
Total †	**121,820**	**122,440**	**121,070**	**112,040**	**116,230**

Figure 5: Proportion of planted area by intended market sector 2016

Source: AHDB Potatoes Planting Returns

Totals may not equal 100% due to rounding



The GB potato industry

Consolidation of the industry

In 2015, 14% of all registered growers were estimated to have planted 100ha of potatoes or more, representing over half of the total planted area (53%). This compares to just 5% of growers in 1999, representing 28% of the planted area.

The number of smaller growers is in decline, with an estimated 22% of registered growers planting 3-9ha in 2015, compared to 36% in 1999.

Figure 6: Number of potato growers by size band in hectares

Source: AHDB Potatoes Planting Returns

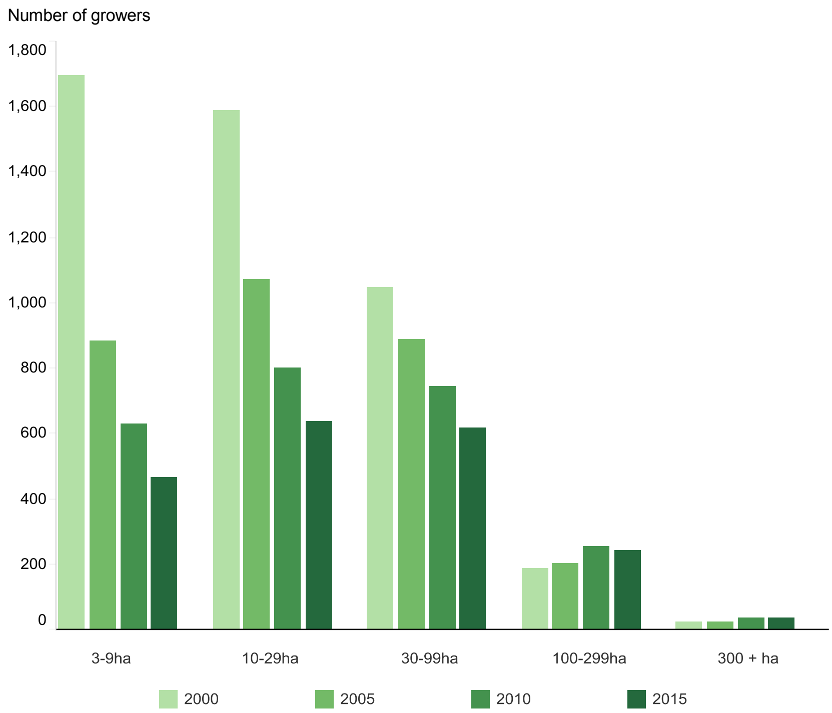


Figure 7: Total number of registered potato growers (greater than or equal to 3ha)

Source: AHDB Potatoes Planting Returns

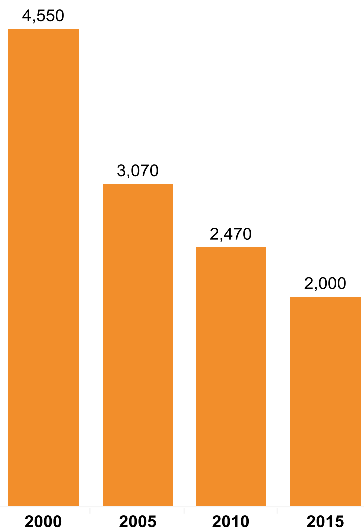
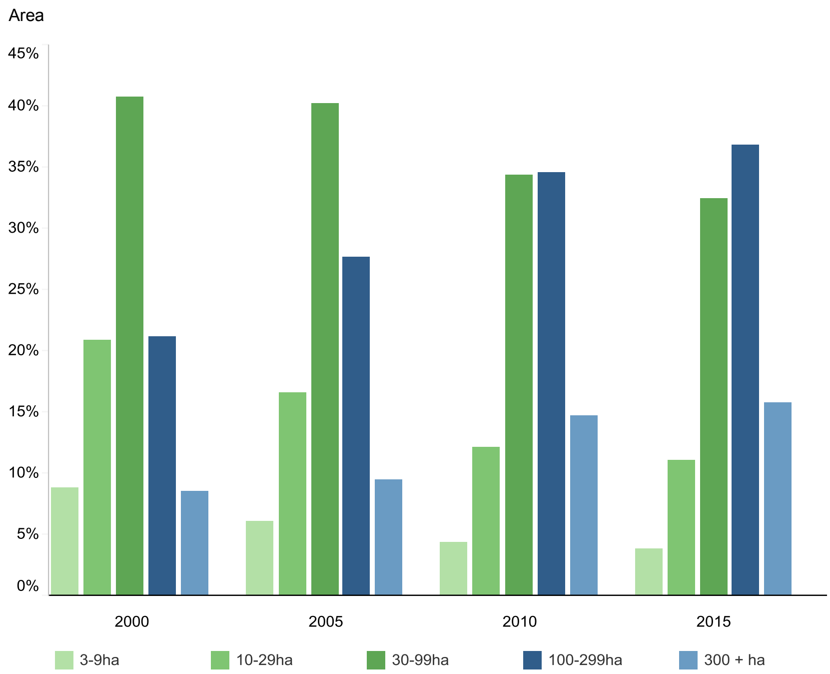


Figure 8: Percentage of area grown by size band in hectares

Source: AHDB Potatoes Planting Returns



35%

decline in registered potato producers growing over three hectares in the last decade

14%

of registered growers planted just over half of the potato area in 2015

How price affects planting decisions

A range of factors drive planting decisions such as price, grower confidence and contract arrangements. The chart below illustrates the lagged relationship between price and planted area, comparing the influence of the previous year's price on the following year's area.

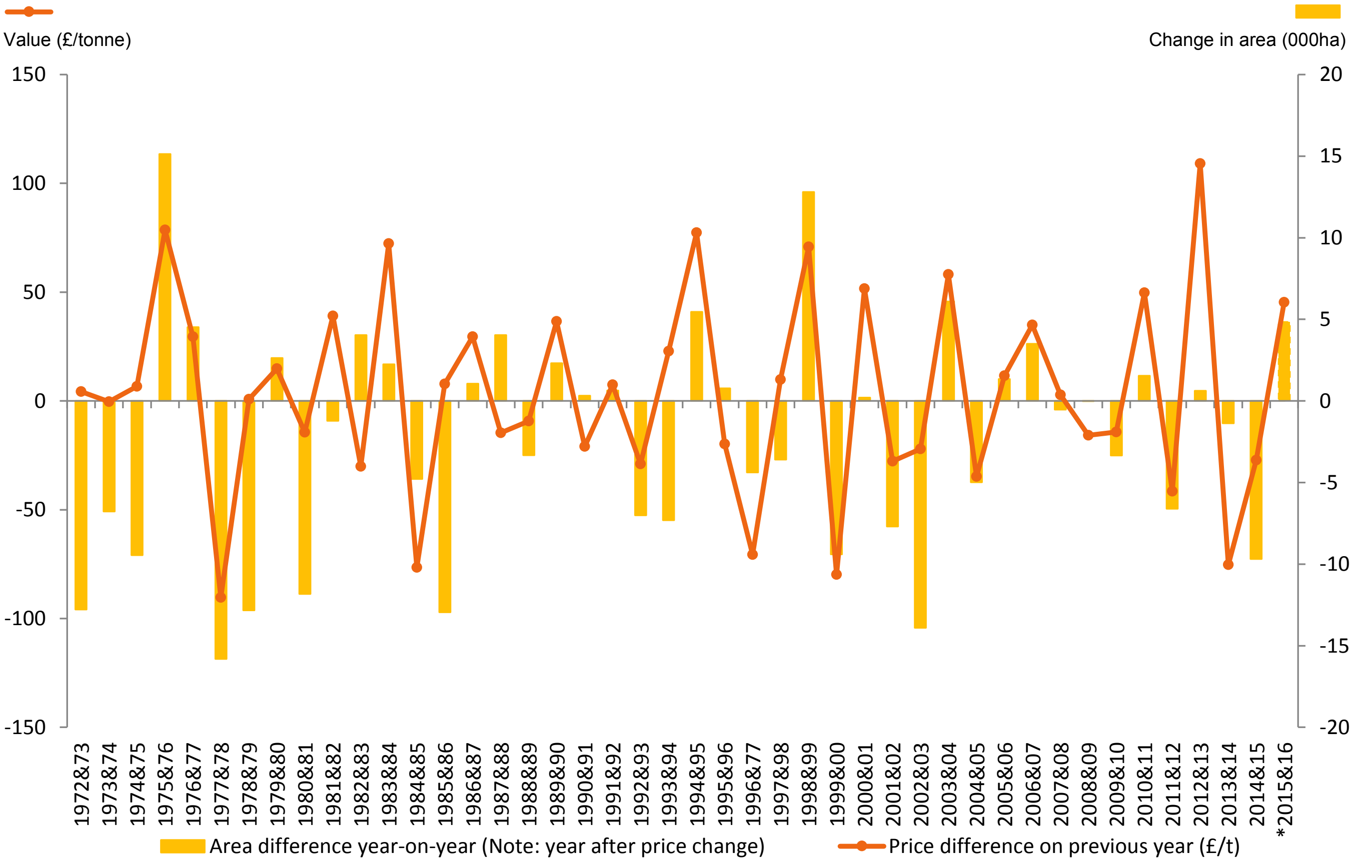
In 2014/15, a large supply put pressure on prices for the second year running, which resulted in average prices falling by around 18% (c. £27/t) on the previous season. The lower value of the crop contributed to a reduction in the 2015/16 planted area of around 9,500 hectares, or 7.8%, compared to 2014/15. The 2015/16 season, however, saw record yields, which meant although production was down on the previous year, it wasn't as low as had been anticipated. This caused prices to rise from Easter onwards, as supplies became tighter. Prices at the end of the season were the second highest on record, only behind the extraordinarily high 2012 season.

2016/17 has subsequently seen an increase in planted area, from 112,000ha in 2015/16 to 116,000ha this year. Although planted area has increased this season, production has decreased once again, due to yields being lower than the five year average. Depending on market conditions, this may add upward pressure to prices which, according to historical trends, could encourage more growers to plant in 2017/18.

Source: Gary Naylor Photography

Figure 9: Price and area relationship (price movements compared to planted area)

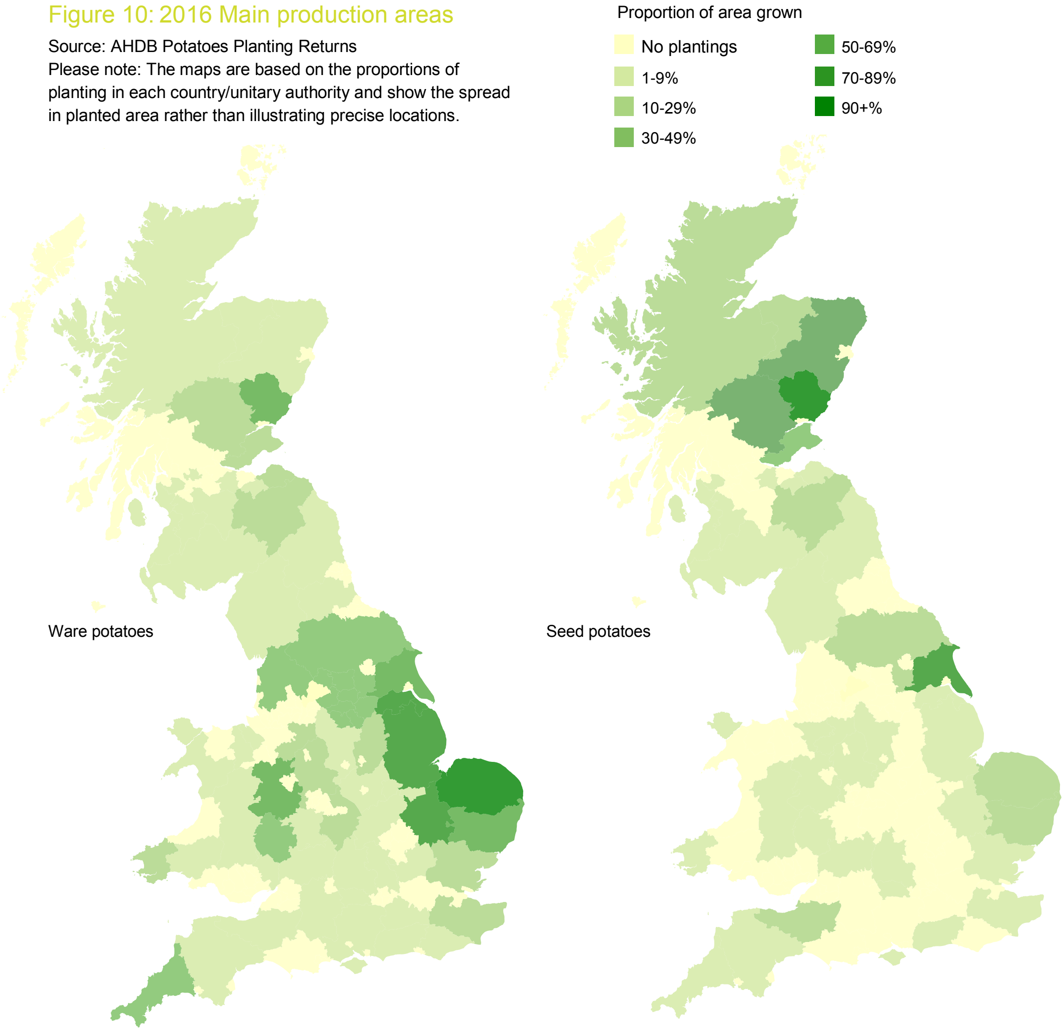
Source: AHDB Potatoes Planting Returns and Weekly Average Price Survey



The first year refers to the **price** difference from the previous year
and the second year refers to the difference in **area** from the previous year

Figure 10: 2016 Main production areas

Source: AHDB Potatoes Planting Returns
Please note: The maps are based on the proportions of planting in each country/unitary authority and show the spread in planted area rather than illustrating precise locations.



23% of the total GB potato planted area is in Scotland, with 47% of this area seed potatoes

11% of plantings are in the West Midlands

29% of plantings are in the Eastern Counties and a further 26% are in the East Midlands and Yorkshire and Humber

11% of plantings are in the remainder of England and Wales

Table 2: Planted area by region in hectares

Source: AHDB Potatoes Planting Returns
† Totals may not tally exactly due to rounding

GB region	2012	2013	2014	2015	2016
North East	970	920	1,020	820	710
North West	5,250	5,830	5,820	5,620	4,370
York and Humber	13,810	13,940	14,360	13,550	14,490
East Midlands	16,570	16,480	16,820	16,180	15,970
West Midlands	14,620	14,720	13,870	12,770	12,830
Eastern Counties	32,790	32,800	32,290	30,300	33,660
South East	3,110	3,190	2,960	2,640	2,100
South West	5,850	6,040	5,830	4,910	4,210
Scotland	27,470	26,910	26,380	23,570	26,330
Wales	1,400	1,600	1,740	1,680	1,570
Total †	**121,820**	**122,440**	**121,070**	**112,040**	**116,230**

Figure 11: Proportion of planted area by region 2016

Source: AHDB Potatoes Planting Returns
Totals may not equal 100% due to rounding

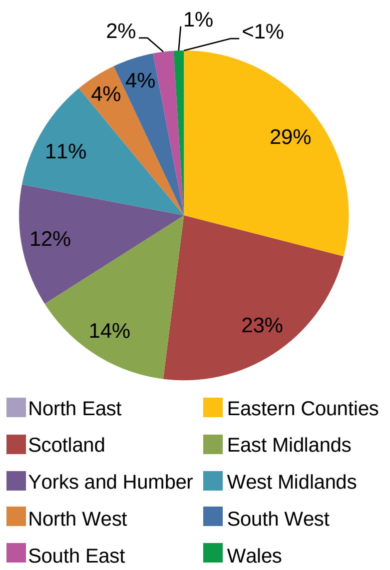
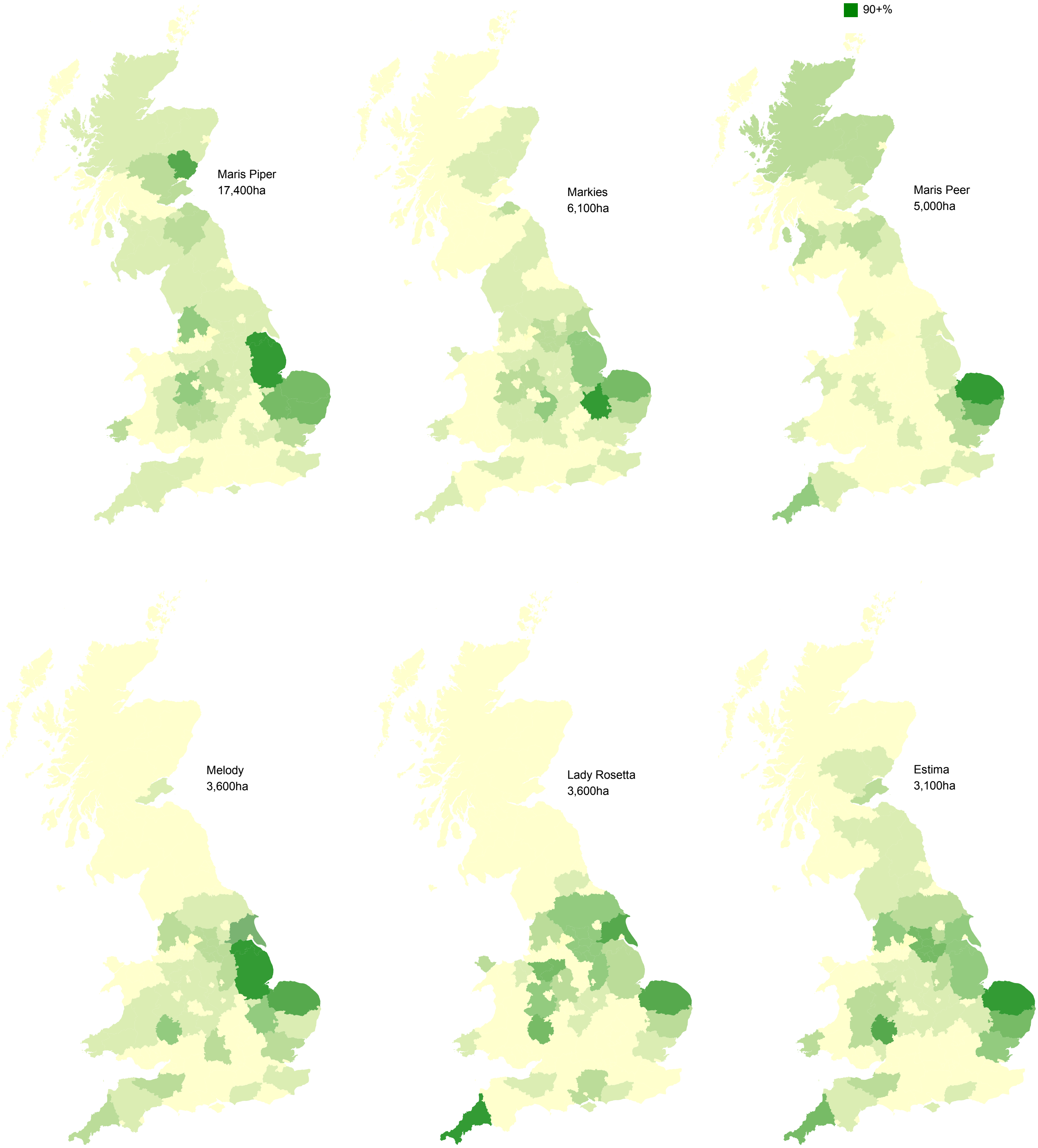


Figure 12: 2016 Planted area of most popular varieties (ware potatoes)

Source: AHDB Potatoes Planting Returns

Please note: These maps are based on the proportion of plantings in each country/unitary authority and show the spread in planted area rather than illustrating precise locations.



Most popular varieties by planted area

A combination of factors influence the choice of varieties grown. These could include disease resistance, potential yields, soil type, irrigation availability, storage or farm set-up or end-market requirements.

Maris Piper remains the most popular variety in terms of planted area, accounting for around 15% in 2016, shown in Table 3.

New entrants to the top ten in 2016, are Taurus (crisping, +31%) and Royal (processing, +38%), both having increased planted areas by more than 500ha compared to 2015. Similar strong gains were made by Brooke (crisping, +113%) and Nectar (packing, +48%), though these remain outside the top ten. These are all newer varieties which seem to be proving popular with both purchasers and growers.

As shown in Figure 13, Lady Rosetta has had the largest area decrease this year, down by close to 1,000ha, followed by Hermes, Harmony, Estima and Markies. All of these varieties have been on a declining trend for the past few years.

42%

of the planted area comes from top ten varieties

15%

of the planted area is Maris Piper

Table 3: Top ten varieties by planted area in 2016

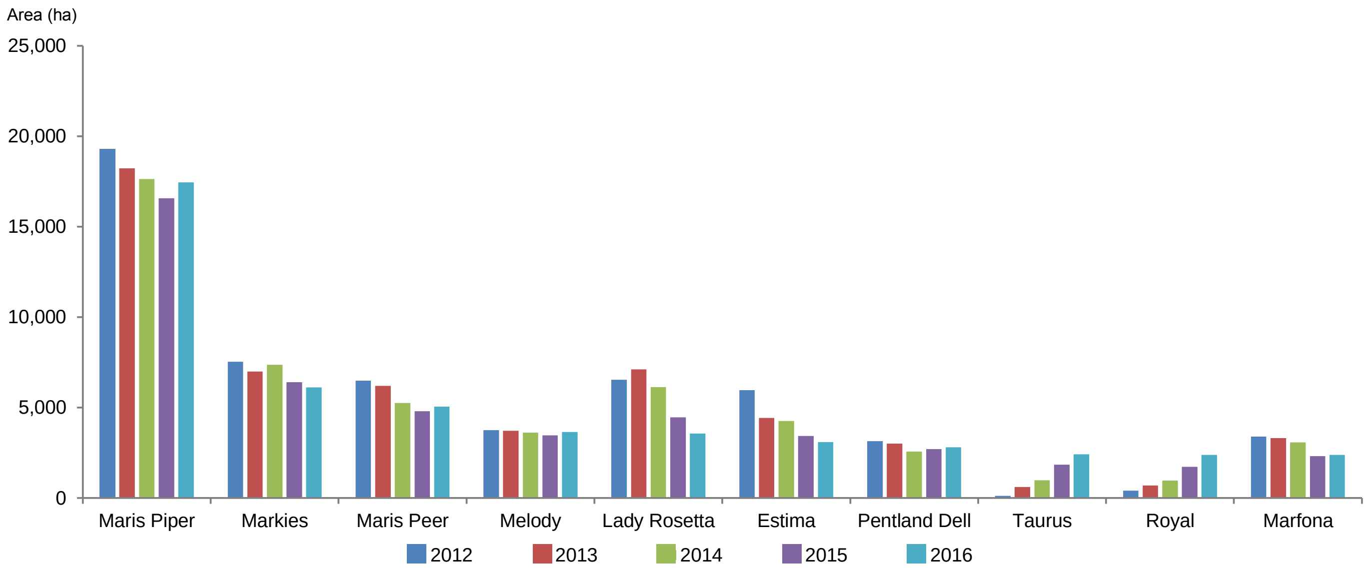
Source: AHDB Potatoes Planting Returns

Rank	Variety	2016 ha	Final 2015 v provisional 2016 change in rank		Proportion of GB area (%)	Principal use
1	Maris Piper	17,400	0	▶	15	Maincrop multipurpose (mainly chipping but also popular packing and bags)
2	Markies	6,100	0	▶	5	Maincrop chipping
3	Maris Peer	5,000	0	▶	4	Second early pre-pack (mainly salad or new potato)
4	Melody	3,600	+1	▲	3	Maincrop pre-pack
5	Lady Rosetta	3,600	-1	▼	3	Maincrop crisping
6	Estima	3,100	0	▶	3	Second early pre-pack
7	Pentland Dell	2,800	+1	▲	2	Maincrop chipping
8	Taurus	2,400	+6	▲	2	Maincrop crisping
9	Royal	2,400	+6	▲	2	Maincrop chipping
10	Marfona	2,400	0	▶	2	Second early pre-pack

Further details of the top 50 varieties can be found here
potatoes.ahdb.org.uk/publications/update-potato-plantings-variety-great-britain-2016

Figure 13: Planted area of top ten varieties - five year trend

Source: AHDB Potatoes Planting Returns



Farmgate potato prices

2015 was a season of two halves. A dramatically reduced planted area served as a good indicator of a smaller overall crop. However, the season produced some of the highest yields on record and most crops did very well. This narrowed the difference in production from the bumper 2014 crop and reduced the impact of the record low planted area.

2015 tracked both the 2013 and 2007 seasons closely, up until March 2016, when the market tightened and prices began to climb. From March 2016 onwards to the end of the season, there were very few weeks where the average prices fell and the free-buy price eventually reached a peak of £298.78/t in the penultimate week of the season. The gap between overall average prices (contract and free-buy) and free-buy widened as prices rose, with average free-buy prices up to £35/t higher at the end of the season.

2016 crop ex-farm prices, started to follow a typical seasonal trend of decline, albeit at a much elevated position. However, the decline seems to have been short lived in the free-buy market, see Figure 15, as prices have been firming with reports of growers unwilling to accept lower prices, in light of the low production.

Figure 14: GB weekly average price trends

Source: AHDB Potatoes Weekly Average Price Survey (WAPS)

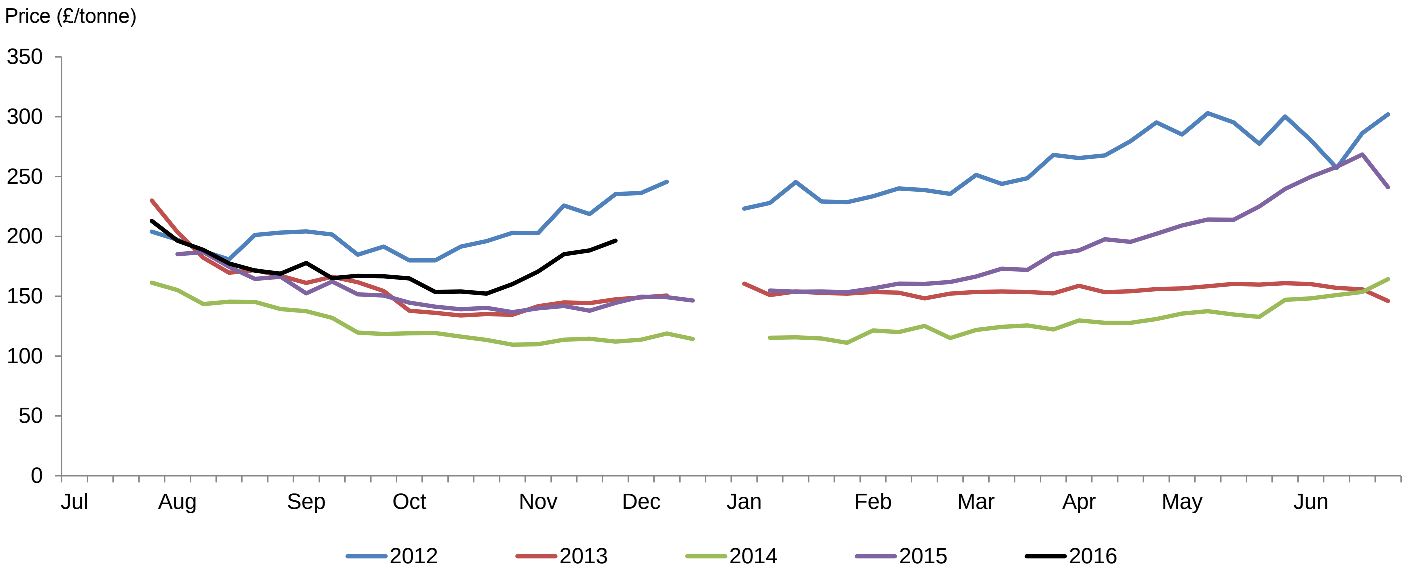


Figure 15: GB weekly average and free-buy price trends

Source: AHDB Potatoes Weekly Average Price Survey (WAPS)

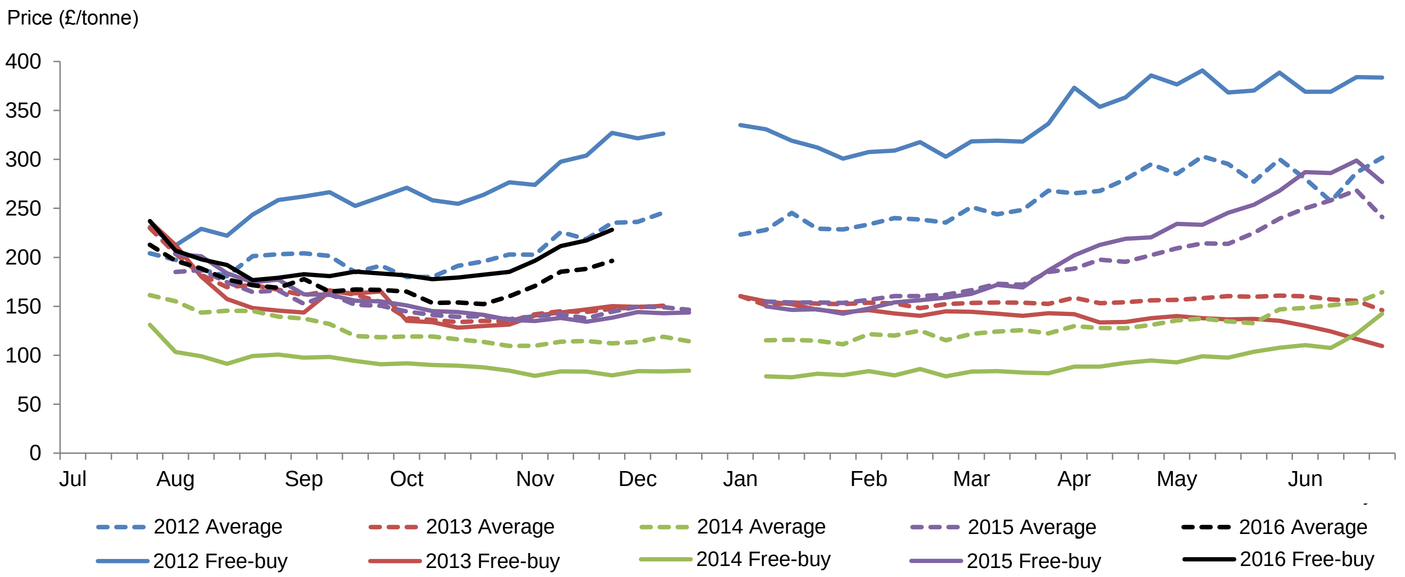
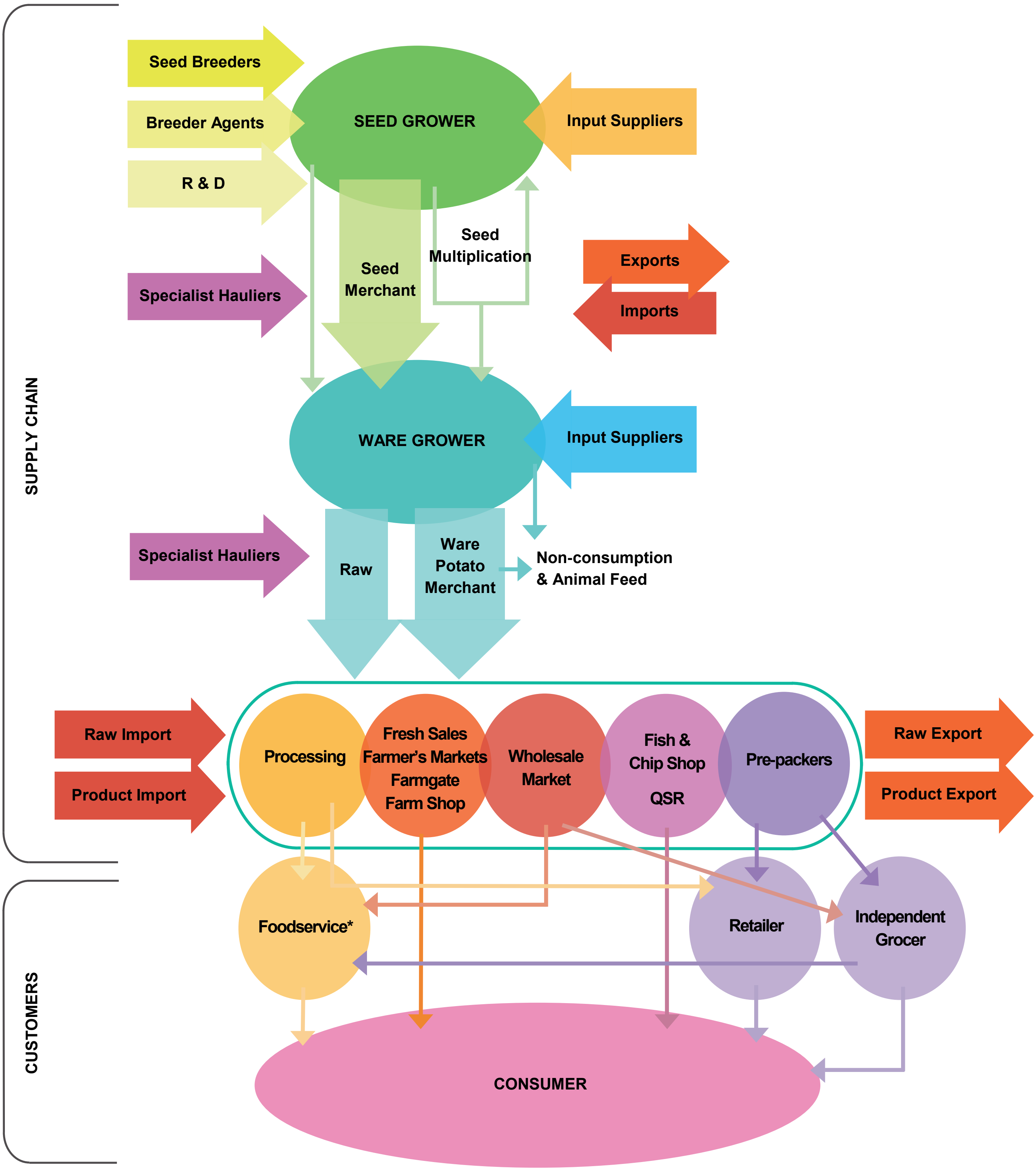


Figure 16: Potato supply flowchart

Source: AHDB Potatoes



*Pubs, Restaurants, Leisure, Government, Quick Service Restaurants (QSR), Contract Catering/Public Sector (Schools, Hospitals, Workplace, etc)

GB potato imports and exports

According to HM Revenue & Customs (HMRC) data, during the 2015/16 season, total imports and total exports both increased slightly.

Imports of seed, fresh and processed potatoes were all higher in 2015/16 than 2014/15, due to greater import requirements, given the reduced domestic supply. The majority of processed potato products and seed imports were sourced from the Netherlands, with fresh imports from France.

Fresh exports increased by 26% year on year in 2015/16, with an increased amount going to Ireland, Spain and Belgium when compared to the previous season. The main export destinations for fresh potatoes remain Ireland and Spain. This increase in exports was due to lower production elsewhere in Europe last season, not just GB. Seed exports saw a 24% drop during the 2015/16 season. This was in part due to a late season change in size specification by one of GB's largest seed purchasers, Egypt. Processed potato exports increased by 3%.

Figure 17: UK exports and imports of potatoes by sector

Source: HMRC (October 2016)

Seasons from 1 July of year shown to 30 June of following year

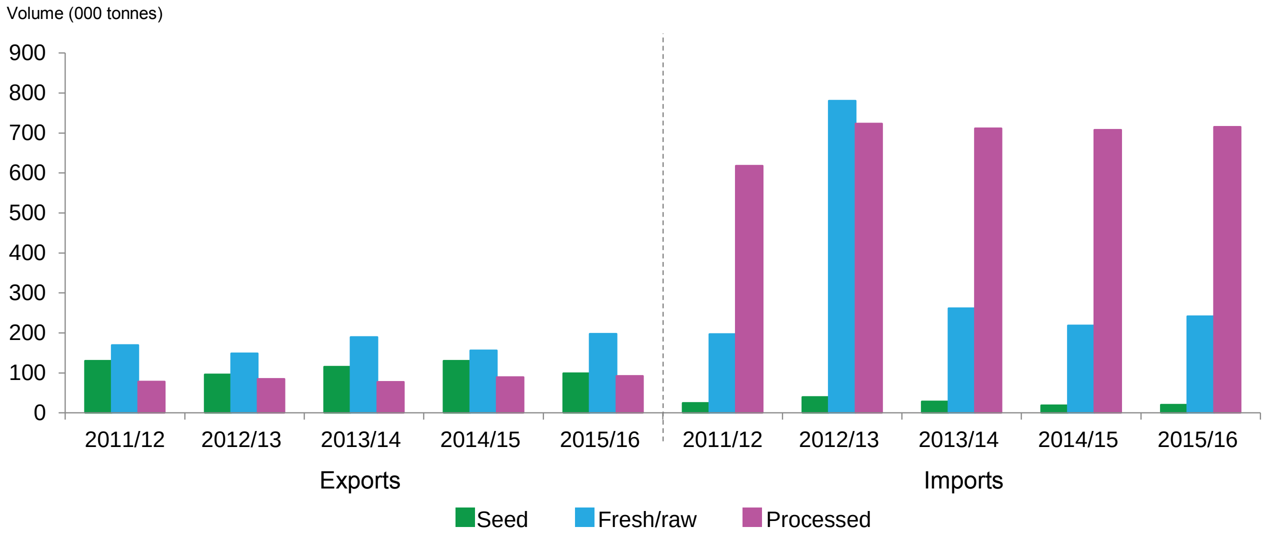
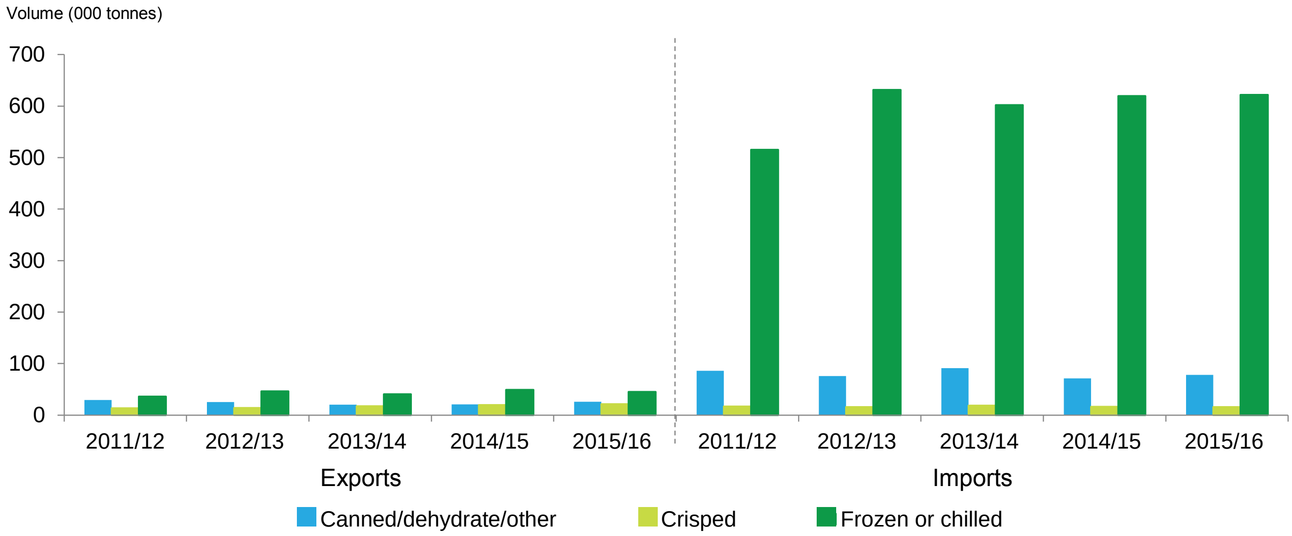


Figure 18: UK exports and imports of potato products by segment

Source: HMRC (October 2016)

Seasons from 1 July of year shown to 30 June of following year



GB potato purchases

According to Defra's Family Food Survey, UK household purchases of potatoes continued their long term downward trend, with a 10.1% reduction since 2011. Purchases are 18% lower than ten years ago. The reduction in recent years is driven by a decline in purchases of fresh potatoes.

The price of potatoes has increased by 44.4% since 2007. This is higher than the total food category which rose by only 34.2% over the same period. As a result Defra indicates that UK households have bought noticeably less potatoes since 2007.

Figure 19: UK household purchases of potatoes

Source: Defra Family Food Survey

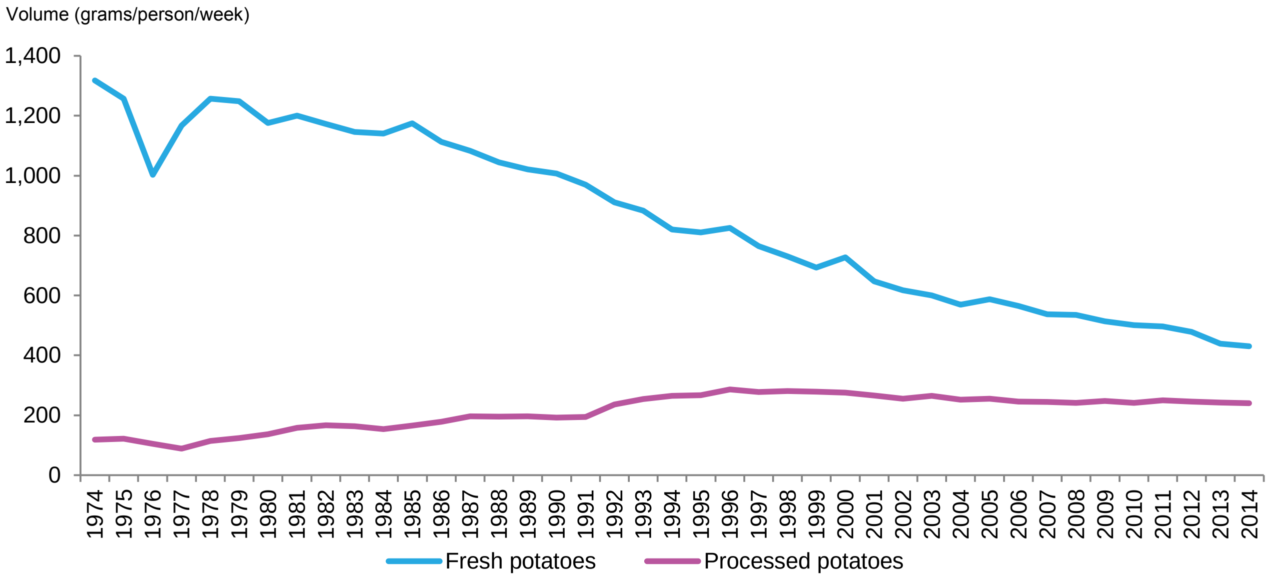
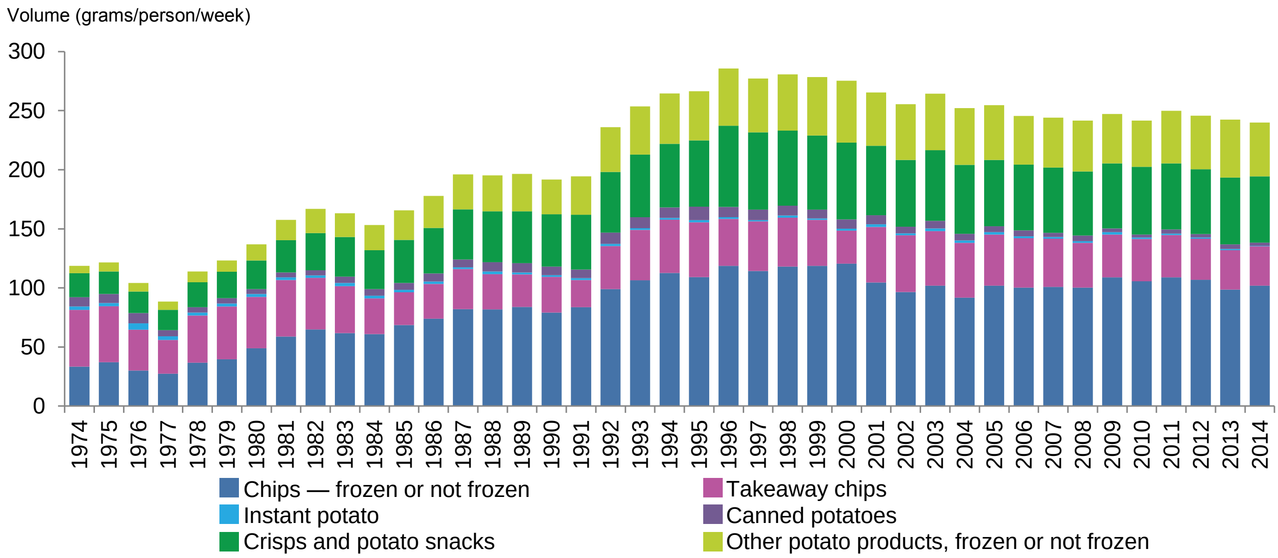


Figure 20: UK household purchases of potato products

Source: Defra Family Food Survey



GB potato retail market

Fresh potatoes sold in GB retail were worth £1.1bn in the year ending August 2016. This was 1.3% lower than the year earlier and is due to lower average retail prices, as volumes have stabilised over the past year.

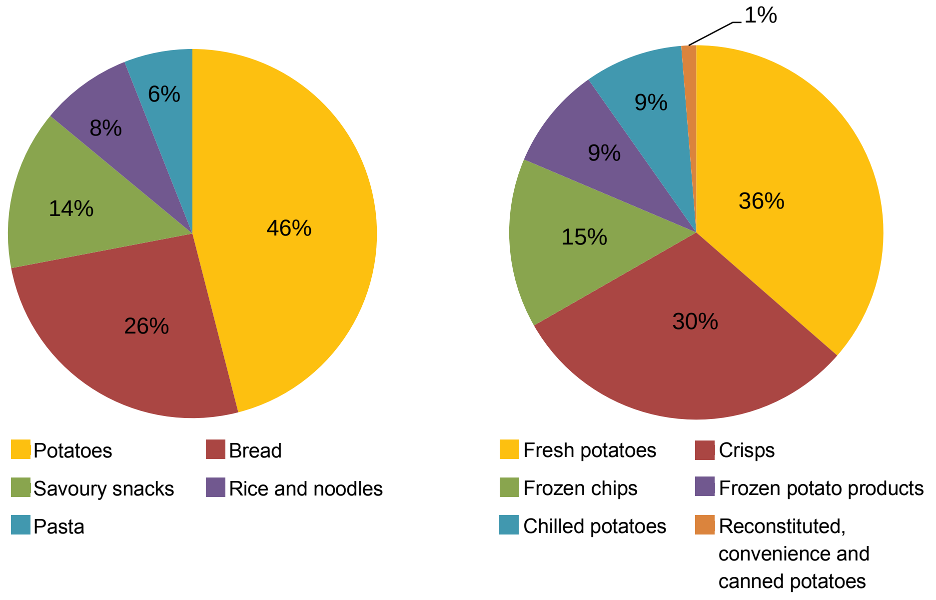
The hard discounter stores have had strong year-on-year growth in volume sales across the fresh, chilled and frozen potato categories, albeit from a smaller base. Major multiples, however, have had a more mixed performance.

The proportion of fresh potatoes sold on promotion has fallen, from 40% of total volume in 2014/15 to 30% in 2015/16.

Although a small part of the market by volume, the chilled potato market is an important added value segment. Spend on these products was up 7.6% between 2015 and 2016, as an increasing number of households bought into the category.

Figure 21: Size and share of the carbohydrates market by value of sales

Source: Kantar WorldPanel (52 weeks to August 2016)



£6.63

average retail price of crisps per kg

£0.83

average retail price of fresh potatoes per kg

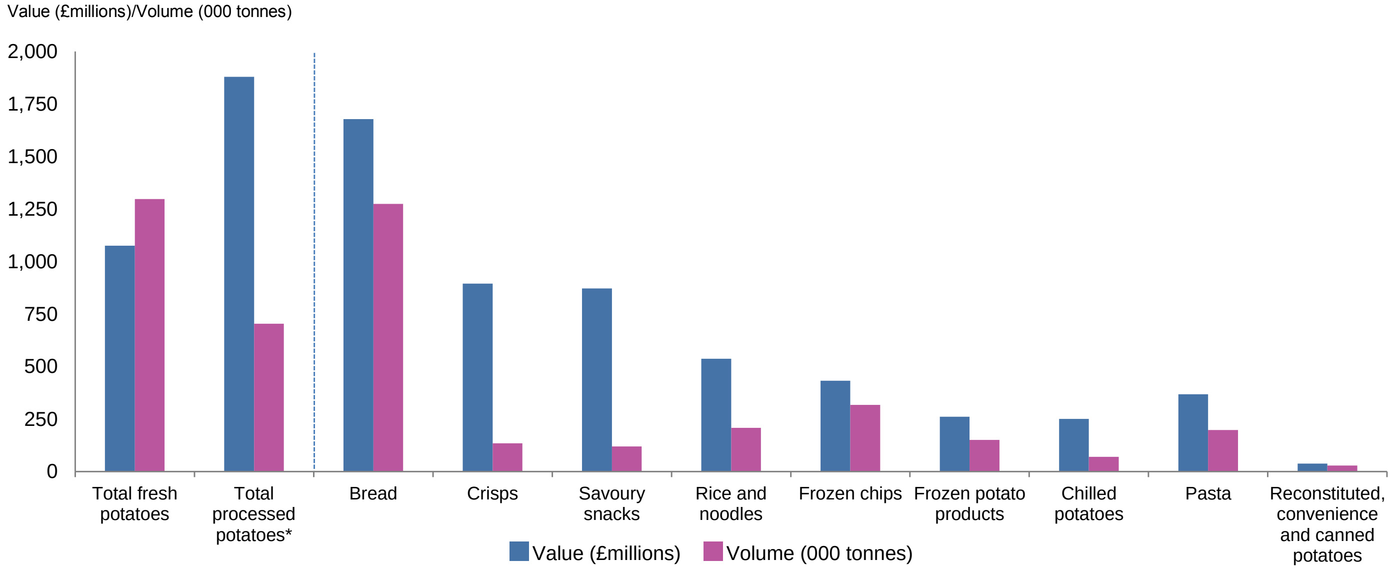
£1.36

average retail price of frozen chips per kg

Figure 22: Volume versus value relationship

Source: Kantar WorldPanel (52 weeks to August 2016)

*Includes crisps, chips, frozen, chilled and reconstituted, convenience and canned



GB potato retail sales

Maincrop accounts for 58% of fresh potato volumes sold through GB retailers. This proportion has reduced this year, as volumes declined, while baking and new potatoes achieved good volume growth of 10.2% and 4.5% respectively. The main boost to volumes has been through shoppers purchasing more frequently.

Volumes of frozen potato products were unchanged from last year, although higher average prices meant that spend on the category was up 1.8%. In the case of frozen chips, purchase frequency was up 2% but the amount bought on each trip was down, mirroring a trend seen in a number of categories, as promotional activity moves away from multibuy deals to temporary price reductions or non-promoted sales.

Chilled potato products had a strong performance this year, with the category growing by almost £18m, turning it into a category worth over a quarter of a million pounds. The drivers of growth for this category are again increased purchase frequency and, importantly, more shoppers buying into it — 51% of shoppers bought a chilled potato product over the year.

Figure 23: Value sales of carbohydrates market

Source: Kantar WorldPanel (52 weeks to August 2016)

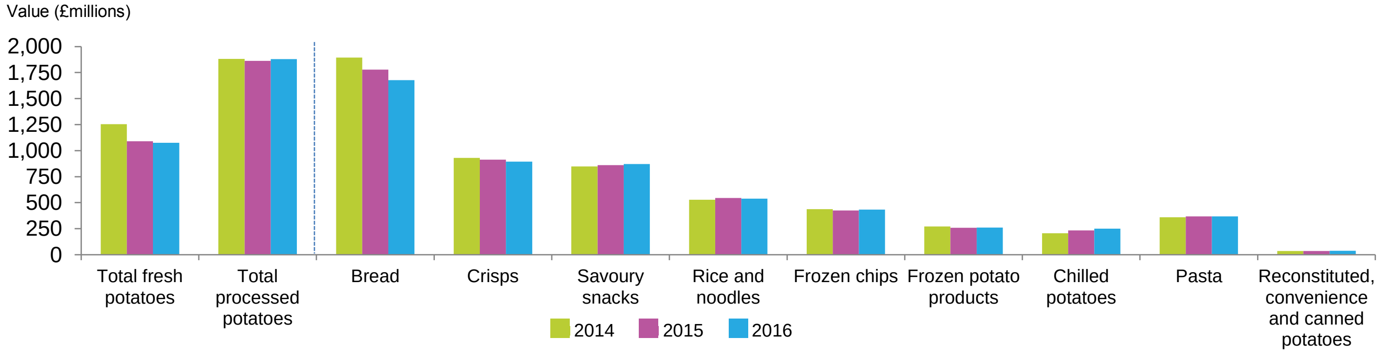


Figure 24: Volume sales of carbohydrates market

Source: Kantar WorldPanel (52 weeks to August 2016)

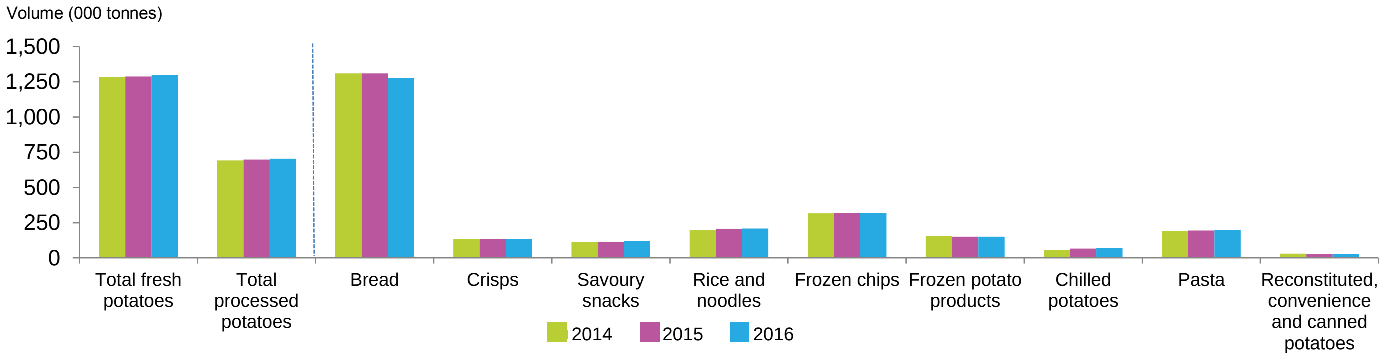
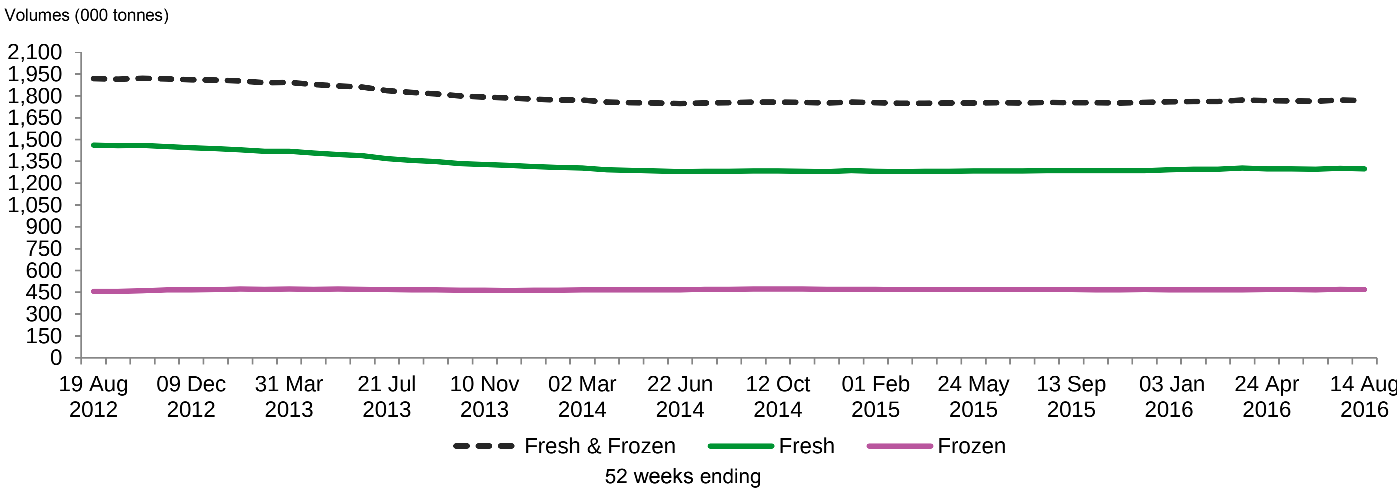


Figure 25: Fresh potatoes and frozen products sales trends

Source: Kantar WorldPanel (Retail Sales)



GB potato consumers

In the year ending May 2016, there were 5.5 billion meal occasions featuring fresh potatoes eaten in home and a further 2.8 billion featuring frozen potato products.

Combined, fresh and frozen potatoes accounted for 35% of all in-home meals containing carbohydrates.

For every in-home meal occasion that contained pasta in the year ending Aug 2016, there were four occasions featuring fresh or frozen potatoes.

However, fresh and frozen potatoes featured in 3% fewer meal occasions than in the previous year.

Fresh potatoes have an older consumer profile than frozen potato products. Consumers consider these processed products to be more convenient due to reduced involvement in cooking and preparing. They tend to appeal more to families.

The British foodservice market continued to experience growth in the year ending June 2016, with total food servings up 2.8%. Out-of-home potato servings were down marginally, due to the performance of crisps and roast potatoes. Chips continue to register growth and now account for two thirds of all potato servings out of home.

Crisps have been most affected by a decline in servings through quick service restaurants and travel and leisure outlets (such as hotels and service stations). Snacking as a whole, while consumers are out of home, is in decline and this is likely to have affected the performance of crisps.

Consumer confidence has been shown to affect the fortunes of the British foodservice market, this may be affected by Brexit over the coming months and years.

Figure 26: Consumer profile — fresh potatoes and frozen potato products

Source: Kantar Worldpanel Usage
52 w/e 24 May 2016

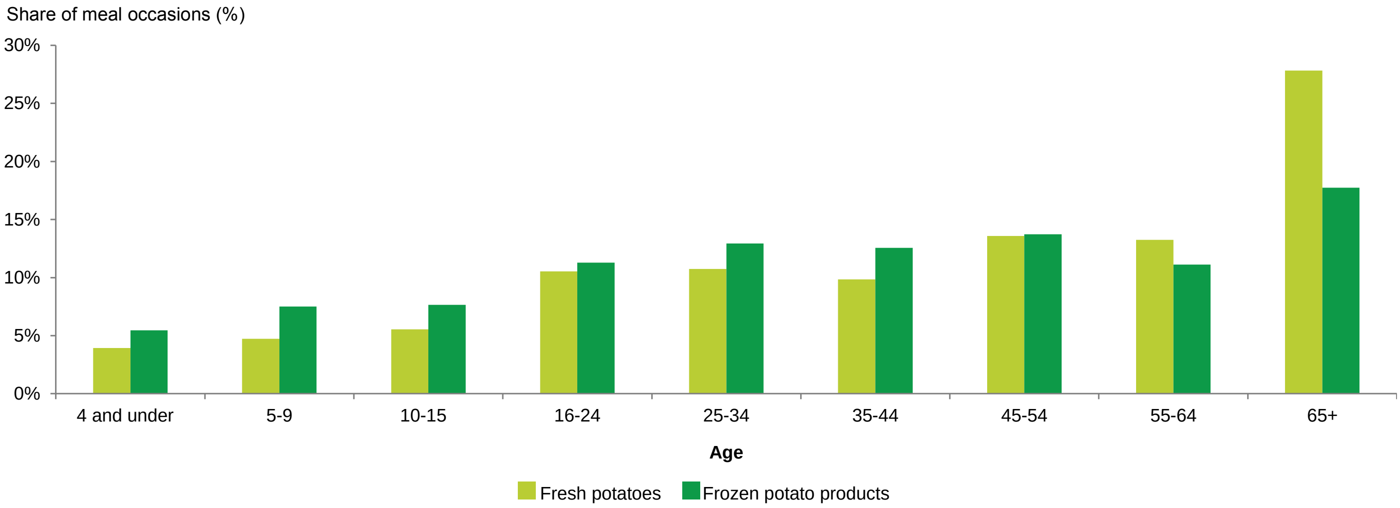


Figure 27: In-home meal occasions — carbohydrates

Source: Kantar Worldpanel Usage
52 w/e 24 May 2016

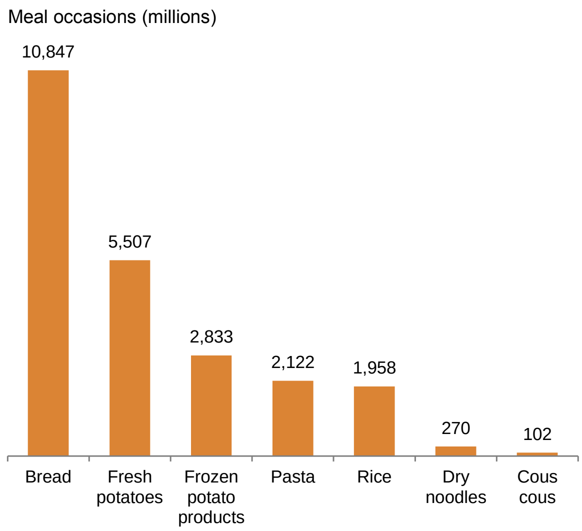
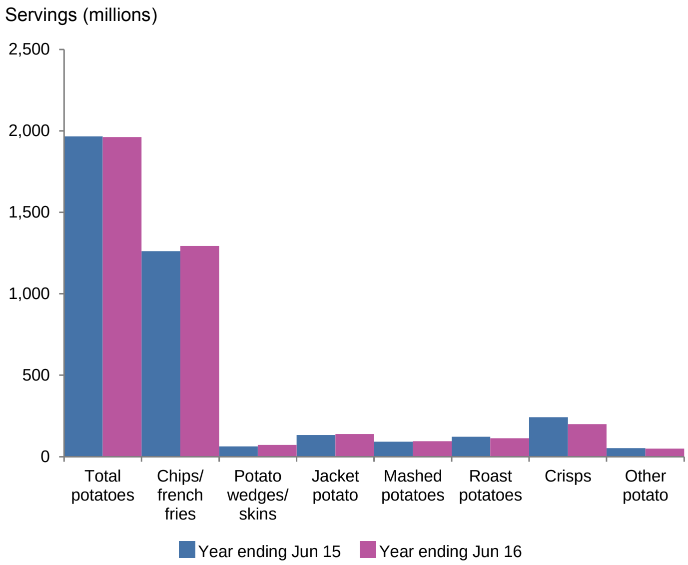


Figure 28: Total out-of-home servings of potatoes

Source: NPD Crest



Section 2

The European market

The GB market is increasingly influenced by the European potato market. Volatility in potato supply and prices, due to issues such as weather, means that imported European product plays a part in the GB market. Price, quality and variety of homegrown supply, as well as currency fluctuations, influence the level of imports in a particular season.

The North-western European Potato Growers

(NEPG)

Established in 1997 and representing Belgium, Netherlands, Great Britain, Germany and France, the NEPG aims to facilitate the communication of up to date and accurate business information for the benefit of the industry.

The network also aims to improve the stability of the EU processing supply chain through information provision and exchange.

AHDB Potatoes is a member of NEPG and, as such, gains insight into the dynamics of the north-west European potato market.

Privileged access is also given to information on production, as well as technical and marketing aspects of NEPG countries.

More information is available at www.nepg.info

The Belgian potato market

(Source: Fiwap)

The processing industry has expanded tremendously during the last 20 years, from 800,000 tonnes in 1994 to nearly 4Mt in 2015.

To fulfil industry requirements, the potato area has increased from 52,000ha in 1994 to 90,700ha in 2016. New growers are being attracted to the potato business, and a few farmers are highly specialising. However, since 2006/07 around 0.8-1.0Mt is imported each year from neighbouring countries (mainly the Netherlands and France but, increasingly, also Germany) to fulfil their strong processing demand.

Two varieties, Bintje and Fontane now represent around 56% of the planted potato area in Belgium, with about 28% each. Bintje has seen a decline in area in recent years, with processors encouraging growers towards higher yielding varieties such as Fontane, Innovator and Challenger. Bintje used to be sold for the fresh potato market, chip shops and export, as well as for the processing industry. However, sales of Bintje for the fresh market and for export are now generally in decline, although still popular with growers as seed prices are much lower than some of the newer varieties.

The fresh market plays a much smaller part of the overall Belgian potato market. The sector is heavily dependent on imports from France as well as the Netherlands. For the last decade, the Belgian potato sector has used new varieties, irrigation, packaging and marketing to increase the amount of fresh consumption potatoes sold in supermarkets.

The French potato market

(Source: UNPT)

The total French planted area of 160,000ha (consumption, seed and starch) is grown by about 16,000 potato growers (8,000 growers with one ha or more potatoes). 22% of potato growers (about 3,600) plant 80% of the French potato area and the industry still continues to consolidate and specialise.

About 1.2Mt of potatoes, or a quarter of French potatoes, are processed in factories every year. 75% of these are contracted, about 10% are free-buy purchased and around 15% imported.

Unlike Belgium and the Netherlands, the processing industry development is steady with little new capacity introduced over the past few years.

About 1Mt of fresh potatoes for the French market are produced each year. Similar to GB, consumption of fresh potatoes has seen decline in recent years.

There has been major development of fresh exports over the past 15-20 years, but trade is steady now at about 2.4Mt. The main importers are Belgium, Spain, Italy and Portugal. Half of the potatoes exported from France are for the fresh market (mainly to South of Europe) and the other half to Belgium and the Netherlands, to be processed and are then re-imported back to France as french fries, flakes or crisps.

The European market

The German potato market

(Source: REKA)

Germany remains the largest north-western European potato producer, producing on average 7.6Mt of potatoes each year, excluding seed and starch.

The total planted area is 240,000ha this season. Of this, about 142,000ha are processing potatoes, including starch. The area for starch and fresh consumption potatoes is decreasing as fresh consumption decreases, while french fry raw material is increasing slightly.

Similar to the whole of NEPG, the German industry is consolidating, with the number of potato producing farms decreasing every year. Farms are getting more specialised and increasing in size. Over 30% of German potato producing farms now grow more than 20ha of potatoes annually.

Germany usually exports between 1.3-1.4Mt of potatoes per year.

The Netherlands potato market

(Source: VTA/Phaff Export Marketing)

The Netherlands grows about 7Mt of potatoes from a planted area of around 160,000ha. These include around 1.85Mt of starch potatoes and 5Mt of seed, fresh for retail and the processing industry. Bintje, once the most popular variety grown, has been overtaken by newer processing varieties such as Fontane, Markies and Agria.

There is a trend towards larger farms to achieve economies of scale, however, compared with GB and northern France the growers are still relatively small.

Land for growing potatoes is more expensive than in other north-western potato growing countries so high yields, economies of scale and a good strategy are key for Dutch growers.

The majority of Dutch potatoes are used for processing, with around 3.75Mt of potatoes processed last year. The Dutch processing industry has grown enormously over the last 15 years. The current Dutch harvest is not enough to fulfil processing demand and so supplies are imported from Belgium, northern France and Germany to fulfil requirements.

The fresh retail potato market is estimated at a maximum of 283,000t a year. A quarter of all Dutch consumers never buy fresh, raw potatoes, while consumption of fresh, chilled potato convenience products shows an upwards trend. Unlike GB, the food service market, such as restaurants, rarely use fresh potatoes, only finished products.

The Netherlands is by far the largest seed potato exporter in the world, with 811,000t exported last season. The main seed variety grown is the early Spunta.

Thank you to our colleagues at Fiwap, UNPT, REKA, VTA and Phaff Export Marketing for providing information for this section.

Figure 29: North-western European potato production (excludes seed and starch)

Source: NEPG (Belgium, France, Germany, GB and the Netherlands)
Please note that 2016 production figures are provisional as at November 2016

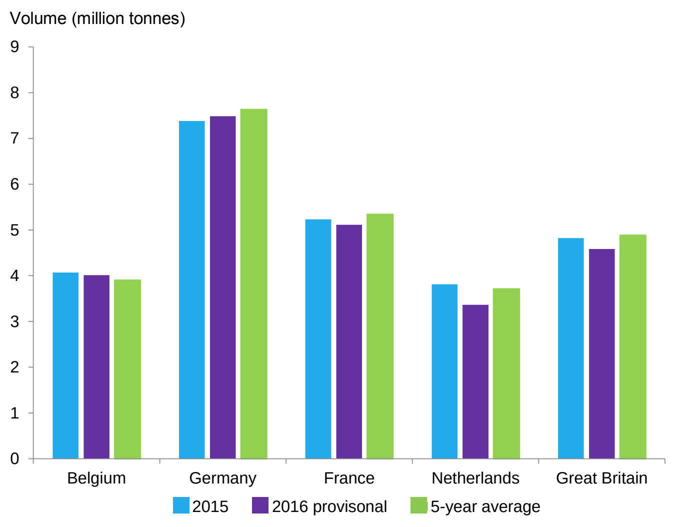
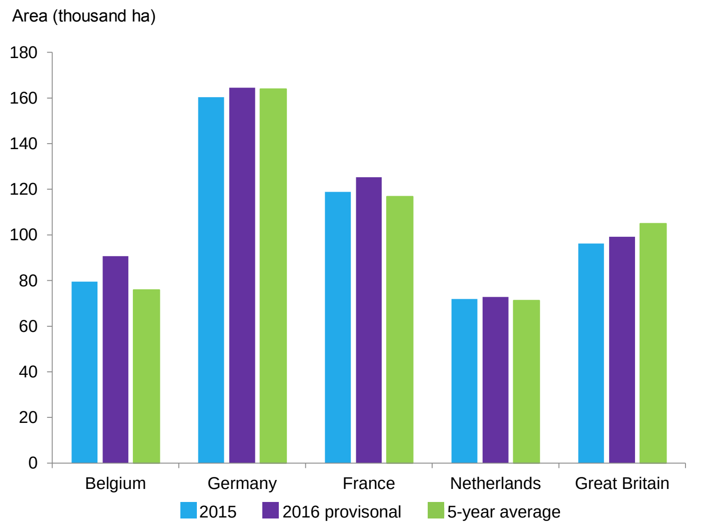


Figure 30: North-western European potato area (excludes seed and starch)

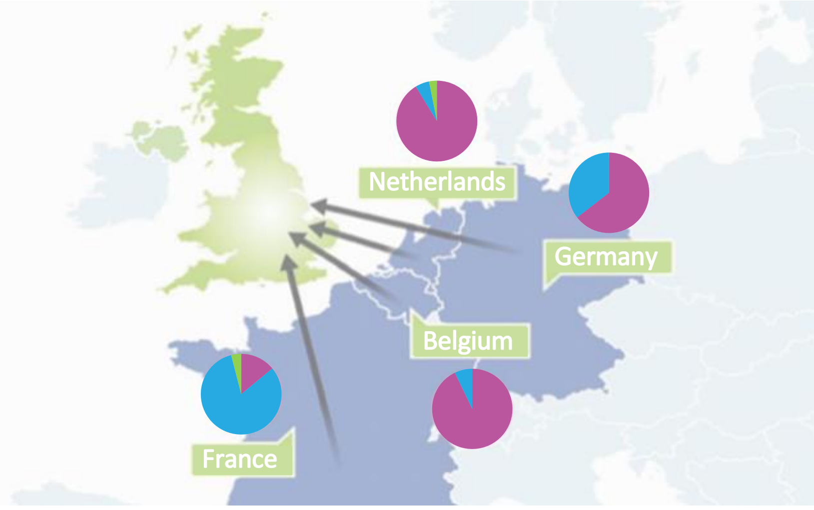
Source: NEPG (Belgium, France, Germany, GB and the Netherlands)



The European market

Figure 31: North-western European imports to the UK

Source: HMRC 2015/16 (October 2016)



Imports (Kt)

Belgium
- 247 Processed*
- 19 Fresh
- <0.5 Seed

Germany
- 20 Processed*
- 11 Fresh
- <0.5 Seed

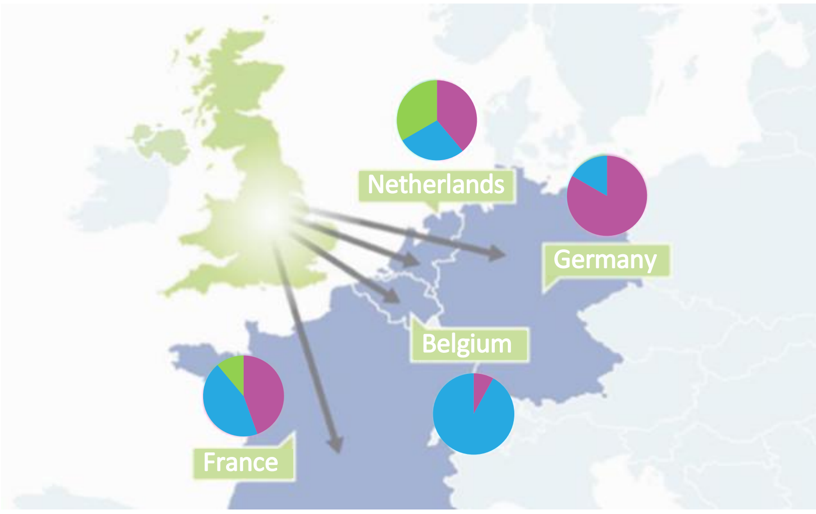
France
- 7 Processed*
- 41 Fresh
- 2 Seed

Netherlands
- 408 Processed*
- 25 Fresh
- 14 Seed

*Processed refers to product weight, not raw equivalent

Figure 32: North-western European exports from the UK

Source: HMRC 2015/16 (October 2016)



Exports (Kt)

Belgium
- 2 Processed*
- 23 Fresh
- <0.5 Seed

Germany
- 5 Processed*
- 1 Fresh
- <0.5 Seed

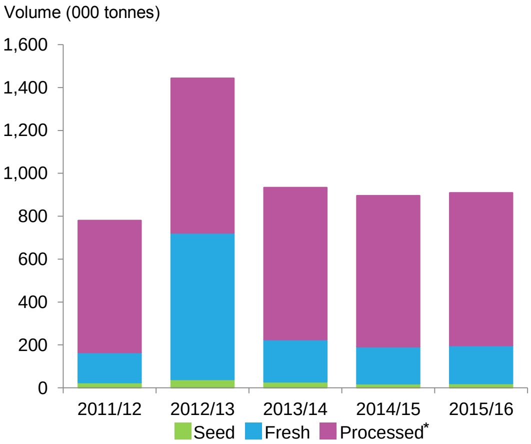
France
- 4 Processed*
- 4 Fresh
- 1 Seed

Netherlands
- 7 Processed*
- 5 Fresh
- 6 Seed

*Processed refers to product weight, not raw equivalent

Figure 33: EU-28 imports to the UK

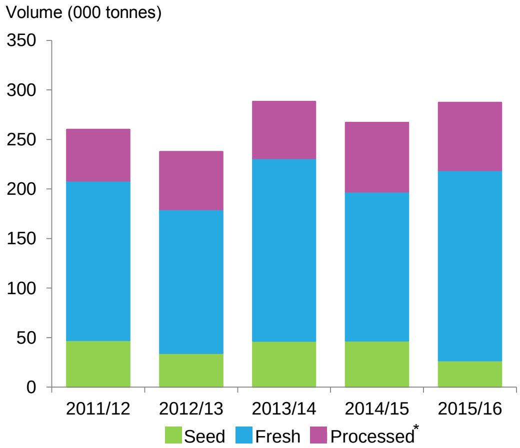
Source: HMRC (October 2016)
Please note difference in scale to exports
Seasons from 1 July of year shown to 30 June of following year



*Processed refers to product weight, not raw equivalent

Figure 34: EU-28 exports from the UK

Source: HMRC (October 2016)
Please note difference in scale to imports
Seasons from 1 July of year shown to 30 June of following year



*Processed refers to product weight, not raw equivalent

Section 3

World overview

According to HMRC in 2015/16, of non-EU countries, the UK continued to import the majority of fresh potatoes from Israel and processed potato products from the USA.

For non-EU exports, the UK continued to export the largest amount of seed potatoes to Egypt, fresh potatoes to Norway and processed potatoes to Nigeria in the 2015/16 season (July-June).

Table 4: World top 20 potato consumers (kg/capita/year)

Source: FAOSTAT* (kg/capita/year, raw equivalent)

	Country	2001	2011**	% difference
1	Belarus	172.7	185.2	+7 ↑
2	Ukraine	139.7	139.8	+0 ↑
3	Poland	131.1	114.7	-13 ↓
4	Kazakhstan	131.8	114.0	-14 ↓
5	Russian Federation	109.4	111.5	+2 ↑
6	Ireland	80.1	108.2	+35 ↑
7	Malawi	113.2	106.8	-6 ↓
8	Estonia	112.9	105.9	-6 ↓
9	Kyrgyzstan	130.8	102.0	-22 ↓
10	**United Kingdom**	**122.9**	**100.8**	**-18** ↓
11	Latvia	121.7	100.8	-17 ↓
12	Rwanda	99.6	99.9	+0 ↑
13	Lebanon	88.9	99.3	+12 ↑
14	Lithuania	90.9	93.9	+3 ↑
15	Romania	94.6	92.6	-2 ↓
16	Netherlands	119.1	90.1	-24 ↓
17	Azerbaijan	60.8	82.4	+36 ↑
18	Peru	79.5	78.4	-1 ↓
19	Bosnia and Herzegovina	42.2	75.1	+78 ↑
20	Belgium	91.9	75.0	-18 ↓

*FAOSTAT data includes the whole of the UK so will be different from AHDB Potatoes GB data

** Latest consumption data available

World overview

Table 5: World top 20 potato producers (million tonnes)

Source: FAOSTAT*

	Country	2004	2014	% difference
1	China, mainland	72.2	96.1	+33
2	India	27.9	46.4	+66
3	Russian Federation	35.9	31.5	-12
4	Ukraine	20.8	23.7	+14
5	United States of America	20.7	20.1	-3
6	Germany	13.0	11.6	-11
7	Bangladesh	3.9	9.4	+141
8	France	7.3	8.1	+11
9	Poland	14.0	7.7	-45
10	Netherlands	7.5	7.1	-5
11	Belarus	9.9	6.3	-37
12	Egypt	2.5	4.8	+88
13	Iran (Islamic Republic of)	4.5	4.7	+6
14	Peru	3.0	4.7	+56
15	Algeria	1.9	4.7	+146
16	Malawi	2.2	4.7	+114
17	Canada	5.2	4.6	-12
18	Belgium	3.2	4.4	+36
19	**United Kingdom**	**6.3**	**4.2**	**-33**
20	Turkey	4.8	4.2	-13

*FAOSTAT data includes the whole of the UK so will be different from AHDB Potatoes GB data

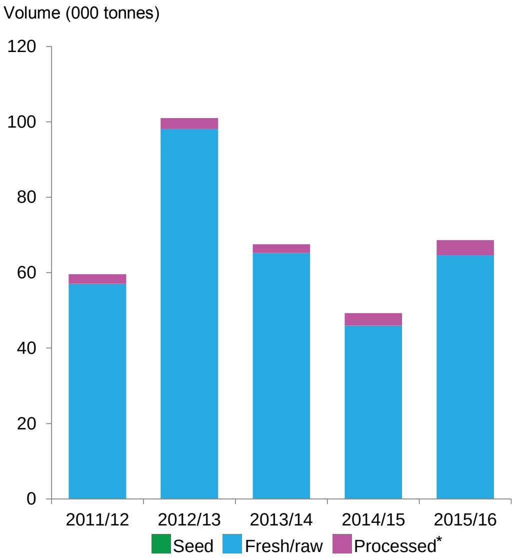
Table 6: World production by commodity (million tonnes)

Source: FAOSTAT

	Commodity	2004	2014	% difference
1	Sugar cane	1,342.1	1,900.0	+42
2	Maize	729.0	1,038.3	+42
3	Rice, paddy	607.6	741.0	+22
4	Wheat	632.1	729.0	+15
5	**Potatoes**	**336.2**	**385.1**	**+15**
6	Soybeans	205.5	308.4	+50
7	Oil, palm fruit	163.3	274.1	+68
8	Cassava	204.1	270.3	+32
9	Sugar beet	251.6	266.8	+6
10	Barley	153.9	144.3	-6
11	Sweet potatoes	130.9	104.5	-20
12	Seed cotton	70.7	76.9	+9
13	Rapeseed	46.5	71.0	+52
14	Yams	47.0	68.1	+45
15	Sorghum	58.1	67.9	+17
16	Coconuts	55.0	61.4	+12
17	Oil, palm	30.1	52.2	+74
18	Cottonseed	44.4	46.6	+5
19	Groundnuts, with shell	36.5	42.4	+16
20	Sunflower seed	26.2	41.3	+58

Figure 35: Non-EU imports to the UK

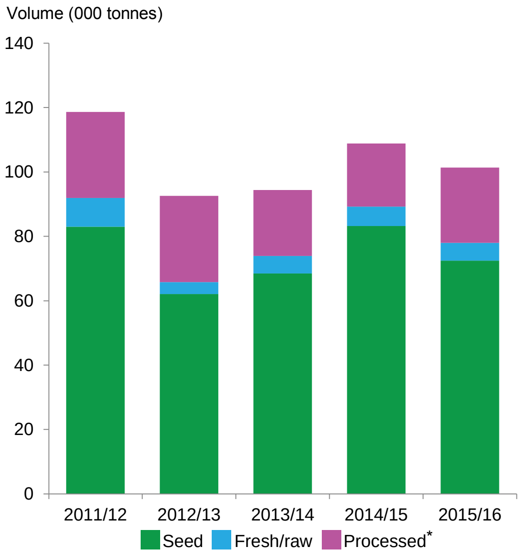
Source: HMRC (October 2016)
Seasons from 1 July of year shown to 30 June of following year



*Processed refers to product weight, not raw equivalent

Figure 36: Non-EU exports from the UK

Source: HMRC (October 2016)
Seasons from 1 July of year shown to 30 June of following year



*Processed refers to product weight, not raw equivalent

Appendices

Appendix 1: Data sources

Levy collection data (Planting and Merchant Return)

The Agriculture and Horticulture Development Board Order 2008 requires AHDB to raise levies relating to each sector. Details can be found at the following web address: ahdb.org.uk/about/LevyRates.aspx

The information provided in the Planting Return for grower levy collection and the Merchant Return for potato buyer purchases for human consumption is not only used to calculate area levies, but is also a very important source of market intelligence. Using the return data avoids the need for separate forms and helps save levy funds. The market sector information gives us useful knowledge about the GB potato market; it helps us develop our communication strategy and enables us to provide information and feedback to growers in a more targeted and cost-efficient manner.

Weekly Average Price Survey (WAPS)

The Weekly Average Price Survey provides top-line economic indicators of the GB potato industry. The survey consists of WAPS forms (purchaser data) and a field telephone survey of growers and merchants. The WAPS survey is open to all purchasers buying potatoes direct from growers. A sample of purchasers complete a form each week summarising total tonnage and value of purchases, categorised by bags/bulk and contract/free-buy. For the field telephone survey, the AHDB Market Intelligence price collection contractor team collects weekly data of actual, confirmed, free-buy sales from growers and merchants not participating in the completion of WAPS purchaser forms. Similar to the WAPS forms, details of total volume and value, ex-farm, are collected. Both the WAPS forms and the field survey are combined by the Market Intelligence team to calculate the WAPS and free-buy average price. This ensures that the WAPS index is as fair, robust and representative as possible. This data is subject to regular auditing to ensure accuracy.

Further information on joining the WAPS survey, is available from the AHDB Market Intelligence department on 024 7647 8953.

The AHDB Potatoes Pricing Panel

The Panel is open to growers who wish to contribute price information, to ensure wide and accurate coverage of the pricing situation from week to week. A total of 200 regular contacts – a combination of growers and purchasers – are called on a weekly basis. These contacts represent the key supply areas for the different markets of the potato supply chain and varieties grown across different regions of GB.

AHDB Potatoes Grower Panel Survey

What is Grower Panel?

The AHDB Potatoes Grower Panel is a group of growers who give information on seed use, yields and sale pathways from selected fields under their management. The data is used to provide national crop statistics on potato production.

What does the Grower Panel survey involve?

The survey involves completing a single form for each sample crop. It covers seed and planting details, yields sold and stored, sold price if known, wastage and intended markets and sale dates. The form is sent out in the autumn for completion and returned once the crop has been harvested. There is also a storage stocks survey, involving completion of a single form three times a year.

These forms can either be completed on paper or online via the Grower Panel website.

Survey members also participate in telephone surveys relative to their potato crop and storage.

What are the benefits?

The information collected is used to provide key market information about the potato industry and in doing so, supports our levy payers in making informed business decisions.

How to get involved?

Contact a member of the AHDB Market Intelligence Market Specialists team on 024 7647 8953.

Figure 37: Grower Panel crop

Source: AHDB Potatoes Grower Panel

Appendix 2: Glossary

Earlies

Refers to all potatoes harvested on or before 31 July each year.

Fresh

Raw consumption potatoes.

Maincrop

Potatoes are considered as maincrop if harvested after the end of July each year.

Meal occasions

Numbers of times that a particular food is eaten as part of a meal.

Plantings

All references to plantings refer to the measurement of planted area. Refers either to Registered Area from registered producers or Total Area, which includes an allowance for undeclared/unregistered area.

Pre-pack

Washed potatoes in bags.

Prices

All prices are ex-farm.

Processed

Processed products are reported in finished product weight tonnage, unless otherwise stated.

Trend

In this context, the word trend is used to highlight the line or curve of best fit.

Years

All crop years are July/June, unless otherwise stated.

Yields

All potato yields quoted in this publication relate to harvested tonnage and are expressed in terms of tonnes per hectare.

Appendix 3: GB areas, production and prices 1960-2016

Source: AHDB Potatoes (Planting Returns, Grower Panel, Weekly Average Price Survey)

Year	Registered growers >=3ha	Registered Area* (000ha)	Total area** (000ha)	Area per grower (ha)	Average net yield (tonnes/ha)	Total production (000 tonnes)	Average price ware (£/tonnes)	Retail Price Index	Average £/tonnes 2015	Gross turnover (£ per grower)
1960	76,830	280.2	287.2	3.6	22.8	**6,560**	-	-	-	18,620
1961	74,930	239.6	245.6	3.2	23.3	**5,730**	-	-	-	20,550
1962	70,060	253.0	259.4	3.6	23.6	**6,110**	-	-	-	22,480
1963	66,380	264.4	271.0	4.0	22.2	**6,020**	-	-	-	24,400
1964	60,940	270.0	276.7	4.4	23.5	**6,510**	-	-	-	26,330
1965	57,730	262.7	269.2	4.6	26.2	**7,070**	-	-	-	28,260
1966	54,700	237.1	243.0	4.3	25.1	**6,100**	-	-	-	30,190
1967	50,310	248.1	254.3	4.9	26.2	**6,670**	-	-	-	32,120
1968	48,240	246.2	252.4	5.1	25.4	**6,400**	-	-	-	34,040
1969	45,130	217.2	222.6	4.8	26.1	**5,820**	-	-	-	35,970
1970	43,350	238.6	244.6	5.5	28.9	**7,080**	14	19	199	30,510
1971	42,760	225.7	231.4	5.3	30.3	**7,020**	15	20	189	29,130
1972	40,760	208.5	213.7	5.1	29.1	**6,210**	19	22	228	32,520
1973	38,750	196.0	200.9	5.1	32.4	**6,520**	19	24	205	32,290
1974	36,870	189.4	194.1	5.1	33.3	**6,470**	25	28	239	39,320
1975	35,480	180.2	184.7	5.1	23.2	**4,290**	104	34	788	89,240
1976	34,940	194.9	199.8	5.6	22.2	**4,430**	133	40	869	103,170
1977	35,290	199.4	204.3	5.6	29.9	**6,110**	43	46	243	39,370
1978	33,390	183.9	188.5	5.5	36.7	**6,920**	44	50	228	44,320
1979	32,150	171.4	175.7	5.3	34.6	**6,080**	59	57	269	47,660
1980	30,230	174.0	178.3	5.8	37.2	**6,630**	44	67	172	35,420
1981	28,760	162.4	166.5	5.6	34.8	**5,790**	84	75	289	54,640
1982	27,500	161.3	165.3	5.9	39.6	**6,540**	53	81	170	37,970
1983	26,500	165.2	169.3	6.2	32.6	**5,520**	126	85	384	74,850
1984	25,480	167.4	171.6	6.6	40.6	**6,970**	49	89	143	36,660
1985	24,950	162.7	166.8	6.5	39.4	**6,570**	57	95	156	38,520
1986	22,570	150.1	153.8	6.7	39.6	**6,090**	87	98	229	57,920
1987	21,440	151.1	154.9	7.0	41.0	**6,360**	72	102	183	50,750
1988	20,160	155.1	158.9	7.7	41.5	**6,590**	63	107	152	47,850
1989	19,270	151.8	155.6	7.9	38.4	**5,970**	99	115	223	66,690
1990	18,330	154.1	157.9	8.4	39.3	**6,200**	78	126	161	52,440
1991	17,230	154.4	158.2	9.0	38.1	**6,030**	86	134	166	56,190
1992	16,510	155.0	158.9	9.4	47.1	**7,480**	57	139	106	46,380
1993	16,310	148.2	151.9	9.1	44.8	**6,810**	80	141	146	59,010
1994	14,900	141.0	144.5	9.5	43.3	**6,260**	157	144	282	114,430
1995	14,020	146.3	150.0	10.4	40.8	**6,120**	137	149	238	100,380
1996	13,400	147.1	150.8	11.0	46.0	**6,940**	66	153	113	56,400
1997	9,770	137.1	146.4	14.0	46.8	**6,850**	76	158	125	84,960
1998	7,530	134.6	142.8	17.9	43.2	**6,170**	147	163	234	185,160
1999	5,000	145.5	155.6	28.5	44.0	**6,840**	67	165	105	136,430
2000	4,550	133.9	146.2	29.4	41.0	**5,990**	119	170	181	230,200
2001	4,220	131.6	146.4	31.2	43.8	**6,410**	91	173	137	200,510
2002	3,910	128.4	138.7	32.9	48.2	**6,680**	69	176	102	168,130
2003	3,380	115.2	124.8	34.0	46.6	**5,810**	127	181	182	301,650
2004	3,180	119.3	130.9	37.5	45.9	**6,010**	93	187	128	234,470
2005	3,070	116.9	125.9	38.0	46.1	**5,800**	104	192	141	256,390
2006	2,920	119.7	127.2	40.9	43.4	**5,530**	139	198	182	332,160
2007	2,840	124.4	130.8	43.8	41.4	**5,410**	142	207	178	327,120
2008	2,730	124.1	130.2	45.5	45.7	**5,950**	126	215	152	320,190
2009	2,610	123.6	130.2	47.3	47.5	**6,190**	112	214	136	310,400
2010	2,470	119.8	126.9	48.6	46.1	**5,850**	162	224	187	428,900
2011	2,370	121.7	128.4	51.3	47.4	**6,090**	120	235	132	328,240
2012	2,290	115.3	121.8	50.4	36.9	**4,490**	229	243	245	463,470
2013	2,190	116.3	122.4	53.2	45.6	**5,580**	154	250	159	392,710
2014	2,140	114.6	121.1	53.6	47.4	**5,736**	127	256	128	298,836
2015	2,000	106.2	112.0	53.1	49.0	**5,486**	172	259	172	471,796
2016	1,900	105.4	116.2	55.5	44.9	**5,216**	-	-	-	-

*Registered areas include estimates for non-returns

**Total planted area includes an allowance for unregistered areas based on results from aerial survey and Planting Return audits

Contacts

We are always keen for feedback on the outputs and information that we provide, in order to ensure that we continue to meet industry needs. To give us your feedback on the report or for further information about our Market Intelligence services, please contact:

Sara Maslowski
Senior Analyst, Market Specialists
T: 024 7647 8953
E: sara.maslowski@ahdb.org.uk

Arthur Marshall
Analyst, Market Specialists
T: 024 7647 8956
E: arthur.marshall@ahdb.org.uk

Rebecca Gladman
Analyst, Consumer Insight
T: 024 7647 8700
E: rebecca.gladman@ahdb.org.uk

Amber Cottingham
Analyst, Market Specialists
T: 024 7647 8698
E: amber.cottingham@ahdb.org.uk

ahdb.org.uk
potatoes.ahdb.org.uk

AHDB Potatoes, Agriculture and
Horticulture Development Board
Stoneleigh Park, Kenilworth
Warwickshire CV8 2TL

Tel: 024 7669 2051
Web: potatoes.ahdb.org.uk
Twitter: @AHDBPotatoes

AHDB Potatoes is part of the
Agriculture and Horticulture
Development Board.

Compiled by the AHDB Potato Market Intelligence team. The aim of this annual potato publication is to provide trusted, key information about the GB potato market, in order to inform decision-making and provide answers for common questions about the industry.

POTATOES