

Annual Review & Outlook for Agriculture, Food and the Marine 2015-2016



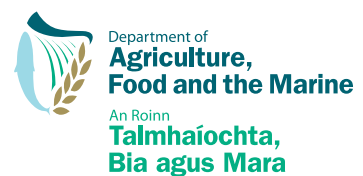
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Department of
**Agriculture,
Food and the Marine**
An Roinn
**Talmhaíochta,
Bia agus Mara**

Annual Review & Outlook for Agriculture, Food and the Marine 2015-2016

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Foreword by Minister Michael Creed



I am pleased to welcome the publication of my Department's Annual Review and Outlook for Agriculture, Food and the Marine 2015/16. This publication brings together information and statistics on a variety of key topics in the agri-food sector, and should be of interest to all those involved in the sector.

Ireland's economic recovery has been mainly export-led, and the agri-food sector has continued to play an important role in that recovery. The sector is Ireland's largest indigenous industry, contributing €26 billion in turnover and generating 10.7% of all merchandise exports. In 2015 the sector accounted for around 8.4% of total employment, making a significant contribution to employment in rural and coastal areas and ensuring the continued viability of these areas.

2015 saw the publication of Food Wise 2025 which sets out a ten year strategy for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and illustrates the potential for this sector to continue to grow. The strategy sets out the key actions required to maximise the contribution of the sector to economic growth, job creation and environmental sustainability over the next decade.

Global demand for safe, healthy and nutritious food is continuing to grow, and Ireland is well positioned to be a world leader in sustainable agri-food production. Although price volatility is a significant concern, particularly in 2016, in the longer term, future growth prospects remain very positive. I look forward to the future development of the sector having benefits for farmers and rural Ireland, processors and manufacturers, agri-business and exporters.

A handwritten signature in dark ink, reading "Michael Creed". The signature is fluid and cursive, with a large initial 'M' and a long, sweeping underline.

Michael Creed T.D.

Minister for Agriculture, Food and the Marine

List of Abbreviations

Abbreviation	Description
ABSEI	Annual Business Survey of Economic Impact
AD	Anaerobic Digestion
AEOS	Agri-Environment Options Scheme
ANC	Areas of Natural Constraint
BES	Bioenergy Scheme
BIM	Bord Iascaigh Mhara
CAP	Common Agricultural Policy
CETA	Comprehensive Economic and Trade Agreement
CFP	Common Fisheries Policy
CHP	Combined Heat and Power
CIP	Census of Industrial Production
CO ₂	Carbon Dioxide
CoFoRD	Council for Forest Research and Development
CPI	Consumer Price Index
CSE	Consumer Support Estimate
CSO	Central Statistics Office
DAFM	Department of Agriculture, Food and the Marine
DCENR	Department of Communications Energy and Natural Resources
DECLG	Department of Environment, Community and Local Government
DoT	Department of Transport
DPs	Direct Payments
EAFRD	European Agricultural Fund for Rural Development
EFSA	European Food Safety Authority
EI	Enterprise Ireland
EIA	Environmental Impact Assessment
EMIDA	Emerging and Major Infectious Diseases of Livestock
ENPADASI	European Nutritional Phenotype Assessment and Data Sharing Initiative
EPA	Environmental Protection Agency
ERA-NETS	European Research Area Networks
ESRI	Economic and Social Research Institute
ETS	Emissions Trading System
EUFORGEN	European Forest Genetic Resources
F&D	Food and Drink
FACCE	Agriculture, Food Security and Climate Change
FAO	Food and Agriculture Organization
FETAC	Further Education and Training Awards Council
FFI	Family Farm Income
FH2020	Food Harvest 2020
FIRM	Food Institutional Research Measure
FLAG	Fisheries Local Action Groups
FORI	Forest Research Ireland
FPI	Food Price Index
FSAI	Food Safety Authority of Ireland
FSPB	Food Safety Promotion Board
FTA	Free Trade Agreement
GACSA	Global Alliance for Climate-Smart Agriculture
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GLAS	Green, Low-Carbon, Agri-Environment Scheme
GMDSS	Global Maritime Distress and Safety System
GNP	Gross National Product

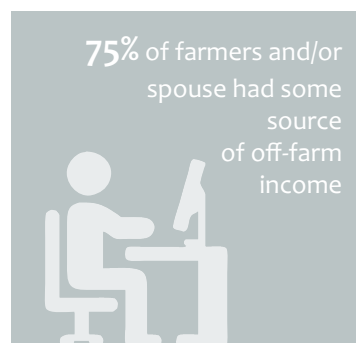
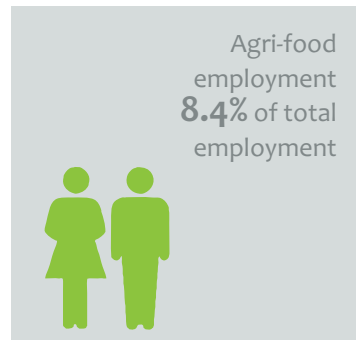
List of Abbreviations

Abbreviation	Description
GT	Gross Tonnage
GVA	Gross Value Added
HACCP	Hazard Analysis and Critical Control Points
HICP	Harmonized Index of Consumer Prices
HPSU	High Potential Start-Ups
HSA	Health and Safety Authority
IACS	Integrated Administration and Control System
ICAC	Irish Codex Advisory Committee
ICT	Information and Communications Technology
IDA	Industrial Development Authority
IEE	Irish Economic Expenditure
IMERC	Irish Maritime and Energy Resource Cluster
IMF	International Monetary Fund
INGO	International Nongovernmental Organisations
ISPM	International Standards For Phytosanitary Measures
IT	Information Technology
JPI	Joint Programming Initiatives
JWEE	Joint Wood Energy Enquiry
KW	Kilowatts
LEAP	Livestock Environmental Assessment and Performance
LULUCF	Land Use, Land-Use Change and Forestry
MDF	Medium Density Fibreboard
MSY	Maximum Sustainable Yield
N	Nitrogen
NAFRI	National Agri-Food Research and Innovation
NBE	Net Budget Effect
NCCAP	National Climate Change Action Plan
NEC	National Emissions Ceiling
NFI	National Forest Inventory
NFS	National Farm Survey
NIFF	National Inshore Fisheries Forum
non-CHP	Non-Combined Heat and Power
NRPE	National Research Prioritisation Exercise
NS	Net Subsidies
NTE	Net Trade Effect
OBF	Official Brucellosis Free
OECD	Organisation for Economic Co-operation and Development
OS	Operating Surplus
OSB	Oriented Strand Board
PAG	Prioritisation Action Group
PCE	Personal Consumption Expenditure
PCRW	Post-Consumer Recovered Wood
PRSI	Pay Related Social Insurance
PSE	Producer Support Estimate
QNHS	Quarterly National Household Survey
R&D	Research and Development
RDP	Rural Development Programme
REFIT	Renewable Energy Feed-in-Tariff
REPS	Rural Environment Protection Scheme
RIF	Regional Inshore Forums
RSS	Rural Social Scheme

List of Abbreviations

Abbreviation	Description
RSW	Refrigerated Sea Water
SAP	Sectoral Adaptation Plan
SCA	Special Committee on Agriculture
SEA	Strategic Environmental Analysis
SFM	Sustainable Forest Management
SFP	Single Farm Payment
SFPA	Sea Fisheries Protection Authority
SHARP	Sustainable Healthy Agri-Food Research Plan
SMP	Skimmed Milk Powder
SO	Standard Output
SPS	Single Payment Scheme
SRC	Short Rotation Coppice
TAC	Total Allowable Catch
TAMS	Targeted Agricultural Modernisation Schemes
TFA	Trade Facilitation Agreement
TPP	Transpacific Partnership
TSE	Total Support Estimate
TTIP	Transatlantic Trade and Investment Partnership
UAA	Utilisable Agricultural Area
UNECE	United Nations Economic Commission for Europe
WBP	Wood Based Panels
WHO	World Health Organisation
WMP	Whole Milk Powder
WTO	World Trade Organisation

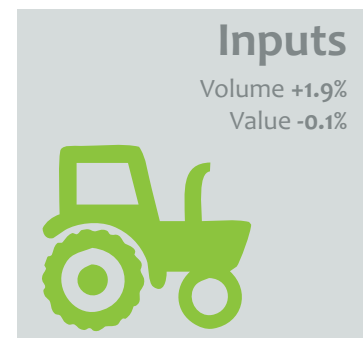
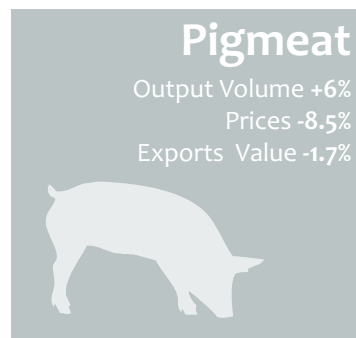
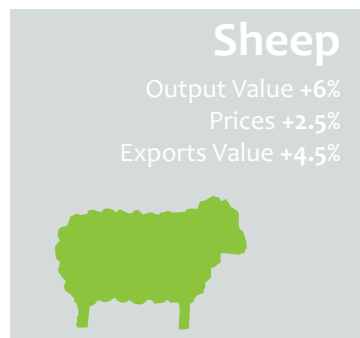
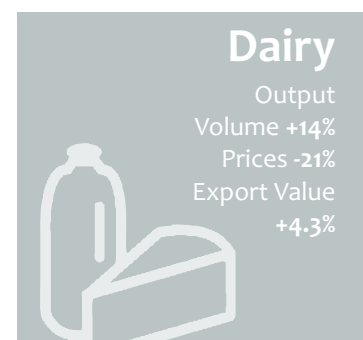
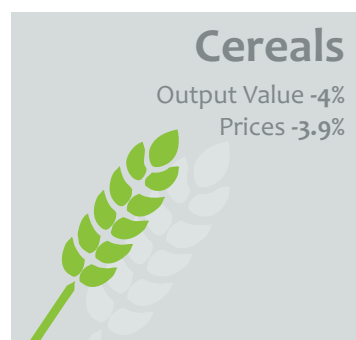
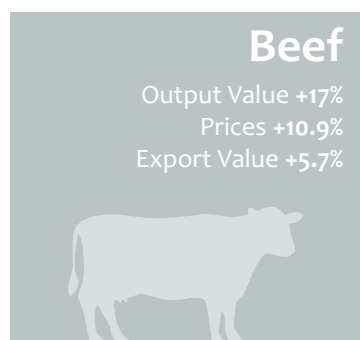
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INCOME

INPUTS AND OUTPUTS

CSO



Farm Structures Data (CSO)

No. of farms **139,600**
Average farm size **32.5 hectares**



< 35 years **6%**
>65 years **26%**



Farming is the
Sole Occupation
for more than half
of farmholders



Food & Beverage Manufacturing

7 out of 10
food & beverage
enterprise are
Irish owned
(2012)



70%
of Raw Materials
used are Irish



Food and Beverages
Turnover **€26bn**



Food Wise 2025 projects
85% increase in
exports value by 2025



Exports of forest products
increased by **12%**
Forest cover **10.5%** of
total land area



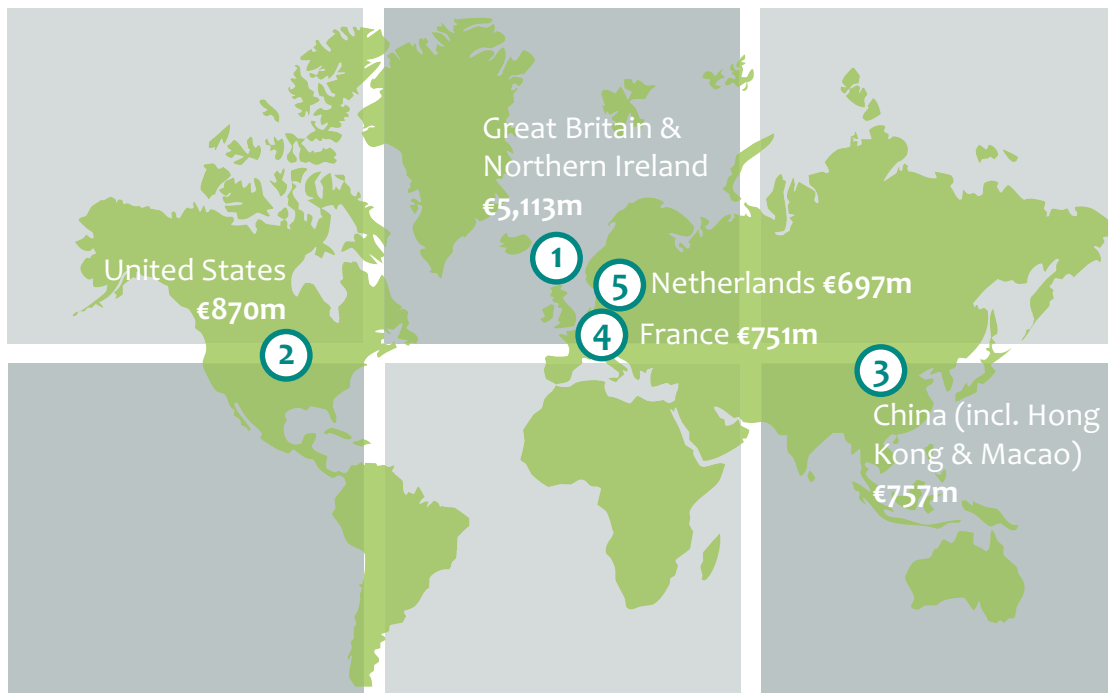
65% of Irish seafood
exports sold to EU markets

Seafood exports
increased by **4%**



Exports

Top 5 Export Markets (CSO)



- 1 Great Britain & Northern Ireland
- 2 United States
- 3 China (incl. Hong Kong & Macao)
- 4 France
- 5 Netherlands

Chapter 1 The National Economy

1.1 Review of the Irish Economy

TABLE 1.1 INDICATORS OF THE NATIONAL ECONOMY 2013-2015

Annual % Changes unless otherwise stated.	2013	2014	2015
GNP	4.6%	6.9%	5.7%
GDP	1.4%	5.2%	7.8%
Exports of Goods and Services	1.6%	6.9%	17.7%
Imports of Goods and Services	-0.2%	15.1%	20.3%
Inflation - HICP (%)	0.5%	0.3%	0.0%
Employment - % Growth	2.4%	1.7%	2.6%
Unemployment Rate ILO basis (%)	13.1%	11.3%	9.5%
Source: CSO economic indicators, Eurostat HICP			

The Irish economy showed continued recovery throughout 2015, as evidenced by a broad range of economic indicators:

- GDP increased by 7.8% in 2015, while GNP grew by 5.7%.
- Value-added for all industry sectors grew during the year, contributing to a 13.7% overall rise.
- Capital investment rose considerably, by 28%, and personal consumption, which accounts for 55% of domestic demand, rose by 3.5%
- The value of goods exported increased by over 20% in 2015, contributing to a record trade surplus of €44bn (up 39% year-on-year).
- Q4 2015 was the fourteenth quarter in succession where unemployment declined on an annual basis and saw the lowest unemployment rate since Q4 2008.
- The Consumer Price Index fell by 0.3% during 2015, its first annual fall since 2010
- Q4 2015 figures showed that household debt had fallen for 29 quarters in a row and dropped 26% from its peak in Q3 2008.
- Consumer sentiment continued to rise throughout 2015 and by the end of the year was at its highest point since the start of 2006, according to the ESRI's index.

TABLE 1.2 COMPARISON OF ECONOMIC FORECASTS FOR IRELAND 2016

Institution	Annual Percentage Change						% Rate
	GNP	GDP	HICP	Exports of Goods & Services	Imports of Goods & Services	Employment	Unemployment
Department of Finance	4.1%	4.9%	0.4%	8.0%	9.0%	2.6%	8.4%
Central Bank	4.7%	5.1%	0.6%	6.8%	7.5%	2.3%	8.2%
ESRI	5.0%	4.8%	1.2%	9.3%	12.5%	1.9%	8.7%

Source: Department of Finance 2016 Stability Programme Update, Central Bank Quarterly Bulletin, Q2 2016, ESRI Spring 2016 Economic Commentary

Table 1.2 summarises 2015 forecasts from the main economic institutions, which suggest a sustained recovery of the Irish economy. All predict strong growth in GDP and GNP as Ireland is predicted to continue to benefit from increased domestic demand, favourable exchange rates and lower oil prices which existed in 2015. All forecasts indicate continued growth in the exports of goods and services in 2016 and this will be aided by expected growth in the economies of Ireland's main trading partners. Nevertheless, despite the positive indicators and the continued resilience forecast for 2016, threats to the Irish economy remain. These include:

- ongoing difficulties in the Irish financial sector
- cost of credit
- the persistent high levels of private sector debt
- the anaemic performance of many European economies since 2010

In addition, a number of the factors which contributed to the strong economic performance are outside of government or policy manipulation. These include the weak euro and strong economic performance amongst key trading partners. As an open economy, Ireland is particularly vulnerable to the vagaries of the global trading system. In particular, although there are still growing export destinations for Irish goods and services, problems in the emerging market economies could affect Irish economic growth indirectly by impacting on key Irish trading partners such as the United States, the United Kingdom and Europe.

Indeed, Britain remains Ireland's single biggest trading partner, accounting for 25% of merchandise imports and 12% of such exports. Therefore, a Brexit, or British exit from the EU, could have a major impact on the Irish economy; the ESRI (2015) estimated this could result in the bilateral trade flows between Ireland and the UK falling by as much as 20%. Further details on the potential implications of a Brexit are available in Chapter 7.

Gross Value Added

It is estimated that the Agri-Food sector¹ accounted for approximately 7.6% of Gross Value Added at Factor Cost² in 2014³. Primary agriculture, fisheries and forestry together accounted for 2.5% of GVA, while the Food and Beverage industry was responsible for 5%. Further details are below.

TABLE 1.3 CONTRIBUTION OF THE AGRI-FOOD SECTOR TO GVA, 2014

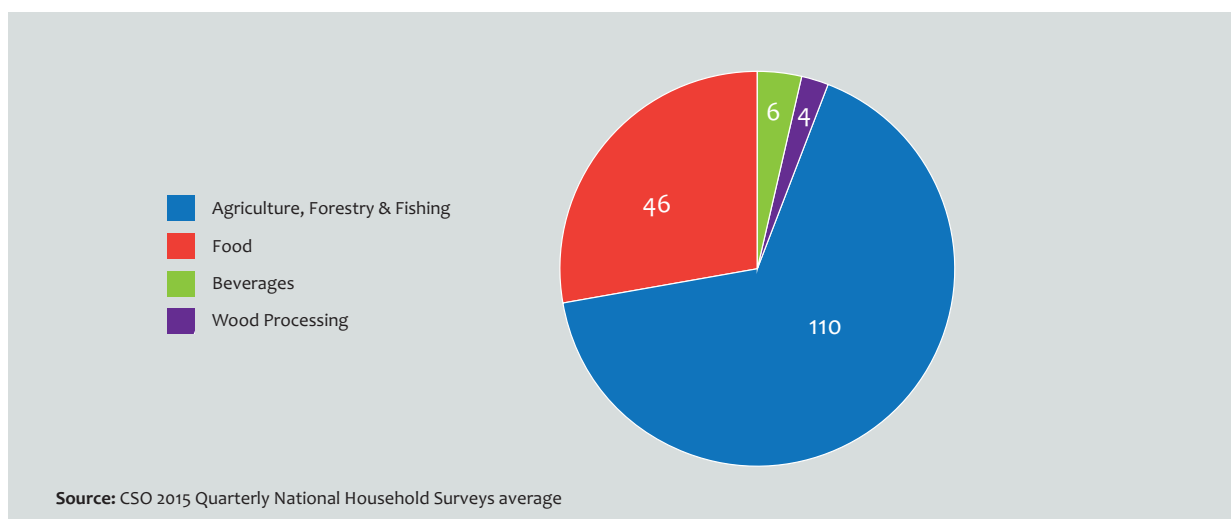
	€m
Gross Domestic Product (GVA) at Factor Cost	€170,602m
GVA in Primary Agriculture, Fisheries and Forestry at Factor Cost	€4,189m
GVA in Food & Beverages Sector	€8,562m
GVA in Wood Processing (estimated)	€178m
Total	€12,929m
GVA in Primary Sector as a % of GVA	2.5%
GVA in overall Agri-Food Sector as % of GVA	7.6%
Source: CSO National Income & Expenditure 2014, special request	

¹ The Agri-Food Sector is taken to include primary production (Agriculture, Fishing and Forestry) along with Food, Beverages & Tobacco (grouped together in the National Income & Expenditure classification) and wood processing sectors.

² Gross value added at factor cost is GVA at market prices less any indirect taxes plus any subsidies.

³ 2015 data not yet available

FIGURE 1.1 COMPOSITION OF EMPLOYMENT (000's) IN THE AGRI-FOOD SECTOR, 2015 ⁴



Exports

Food & Beverage exports have performed strongly in recent years, reaching an estimated €10.8 billion in 2015 (Bord Bia figures) by continuing the annual increases seen since 2009. The value of Food and Beverage exports has risen by more than 50% since then.

TABLE 1.4 FOOD & BEVERAGE EXPORTS 2014-2015

Category	2014	2015	2014/2015	% Share of Total
	€m	€m	% Change	
Dairy Products & Ingredients	3,105	3,240	+4%	30%
Beef	2,280	2,410	+6%	22%
Prepared Foods	1,810	1,800	-1%	17%
Beverages	1,150	1,260	+10%	12%
Pigmeat	580	570	-2%	5%
Seafood	540	560	+4%	5%
Edible Horticulture & Cereals	230	240	+4%	2%
Poultry	310	320	+3%	3%
Sheepmeat	220	230	+5%	2%
Live Animals	245	195	-20%	2%
	10,470	10,825	+3%	100%

Source: Bord Bia Performance & Prospects 2015/16

CSO trade statistics for the broader agri-food classification show exports of almost €12bn for 2015. These capture produce such as forestry, hides & skins, and animal foodstuffs, which are not included under the Bord Bia “Food & Beverage” definition.

⁴ Details on employment figures for the seafood industry are provided in Chapter 11

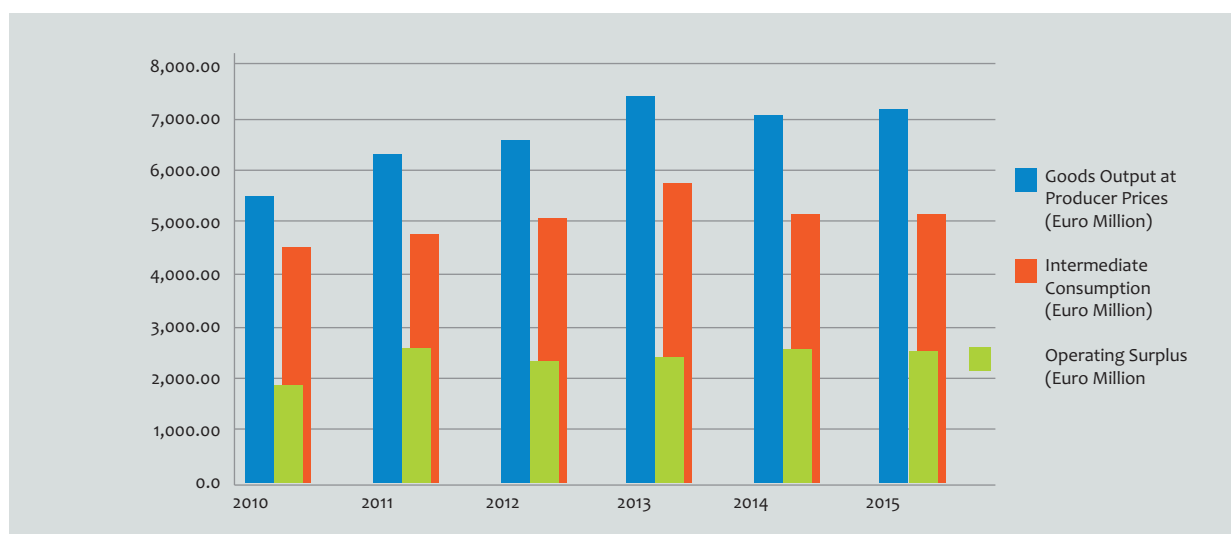
TABLE 1.5 PUBLIC EXPENDITURE ON AGRICULTURE, 2015

Period 1 January to 31 December 2015	€m	
EAGGF Guarantee direct expenditure		1,075.0
Direct Payment Scheme/ Single Farm Payment	1122.0	
Grassland Sheep, Burren Life, Beef Data Programme	11.0	
Export Refunds	0.0	
Intervention/Aid to Private Storage ⁵	13.0	
Other Market Supports	5.0	
Super levy	-71.0	
Other	-5.0	
Voted Expenditure (excluding Administration)		1,044.5
Rural Development ⁶	373.3	
Structural Measures ⁶	40.5	
State Bodies	197.9	
Horse & Greyhound Fund	68.0	
Animal Health	72.3	
Research and Training	24.6	
Market Support Costs ⁷	89.2	
Forestry and Bio-Fuels	104.1	
Fisheries	23.1	
Food Aid/World Food Programme	20.0	
Other	31.5	
Administration		220.1
Total Voted Expenditure		1,264.6
Total Expenditure		2,339.6

Source: DAFM

Analysis of data for aggregate output, input and income in Irish agriculture is outlined in Figure 1.2 and Table 1.6. While there was a 2% increase in the value of goods output, this was offset by a drop in the value of subsidies received. Overall, however, Operating Surplus (profit) remained steady (down just 0.1%) and is up 35% since 2010.

FIGURE 1.2 TRENDS IN OPERATING SURPLUS, GOODS OUTPUT AND INTERMEDIATE CONSUMPTION, 2010-2015



5 This is the amount paid by DAFM on product purchased into Intervention in the year. The cost of Intervention purchases is fully recouped from the EU through depreciation of stock value during the year of purchase and at the time of sale of the product.

6 EAFRD Rural Development measures and certain Structural Development measures are part financed by the EU and the Exchequer. These figures are total expenditure on these measures in the calendar year. The EU contribution to expenditure is subsequently recouped as appropriations in aid, some of which is received in a subsequent calendar year. Expenditure in 2015 comprises REPS, AEOS, Early Retirement, Areas of Natural Constraint, Organic Farming, Beef Data & Genomics Programme (BDGP) and TAMS.

7 Part of this expenditure relates to expenditure on IACS and to Intervention financial (interest) and operational costs. The latter costs are subsequently claimed back from the EU on basis of standard amounts. In 2015 this heading also includes the national top up to the EU Market Volatility payment for milk producers and EU Disallowance/Clearance of Accounts payments.

TABLE 1.6 OUTPUT, INPUT & INCOME IN AGRICULTURE, 2015/16

	2015 Value €m	2016 Value €m	% Change 2015/2016
Goods Output at Producer Prices	7,005.1	7,155.3	+2.1%
Contract Work	361.9	360.0	-0.5%
Subsidies less Taxes on Products	28.8		
Agricultural Output at Basic Prices	7,333.3	7,432.4	+1.4%
Intermediate Consumption	5,133.9	5,128.1	-0.1%
Gross Value Added at Basic Prices	2,199.4	2,304.3	+4.8%
Fixed Capital Consumption	729.2	729.2	+0.0%
Net Value Added at Basic Prices	1,470.2	1,575.1	+7.1%
Other Subsidies Less Taxes on Production	1,524.6	1,413.0	-7.3%
Factor Income	2,994.8	2,988.1	-0.2%
Compensation of Employees	496.0	491.0	-1.0%
Operating Surplus	2,498.8	2,497.0	-0.1%

Source: CSO Output, Input & Income in Agriculture. Preliminary Estimates 2015

1.6 Global Outlook for Agriculture

The OECD-FAO Agricultural Outlook 2015-2024 outlines the prospects for global agricultural commodity markets over the coming decade, and provides comparisons with a base period of 2012-14. Some headline points are covered in this section.

In real terms, prices for all agricultural products are expected to decrease from their base levels, due to production growth, rising productivity and lower input prices (In particular, lower oil prices, via their impact on energy and fertiliser costs). However, commodity prices are expected to remain above their pre-2007 levels.

Population growth, rising per capita incomes and urbanisation in developing countries will increase the demand for food. In particular, rising incomes allow for diversification of diets and the increased intake of animal protein. As such, the prices of meat and dairy products are expected to be high relative to crop prices. In contrast to total intake of calories, which remains largely stagnant in the developed world, protein intake on a per capita basis continues to increase across countries at all income levels.

Meat Outlook

Global meat production rose by almost 20% over the last decade, led by growth in poultry and pigmeat. Prices for most meat products, particularly beef, reached record levels in 2014. It is predicted that, over the next decade:

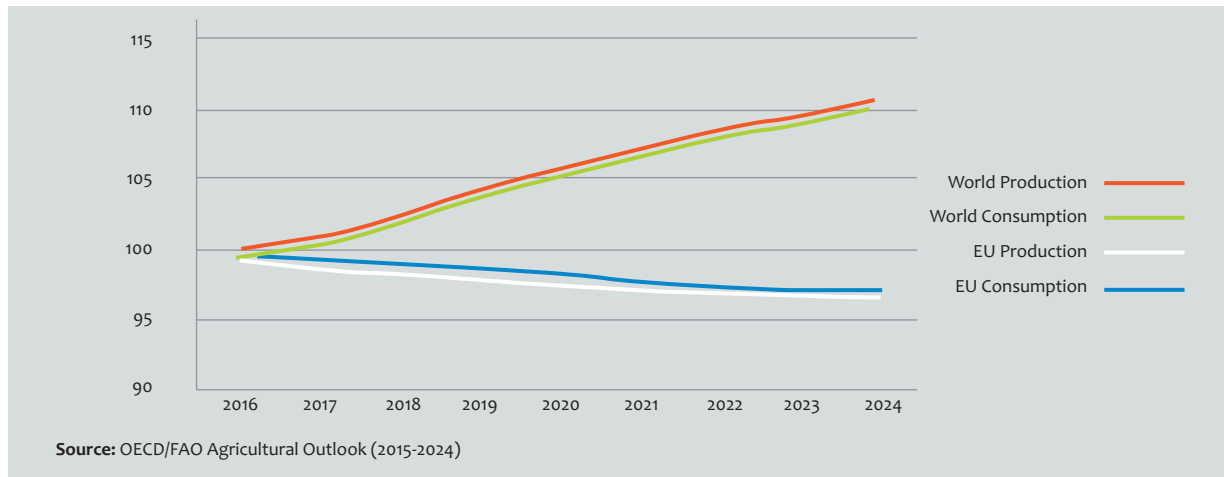
- Production will expand as a result of increased profitability, particularly in the pigmeat and poultry sectors.
- Global meat production will expand by 17% compared to the base period.
- Poultrymeat will represent more than half of the additional meat produced globally by 2024
- Real meat prices are expected to trend down from their latest high levels, although they will remain higher than in the previous decade.
- Growth in meat trade is projected to decelerate compared to the past decade though globally almost 11% of meat output will be traded
- The most significant growth in import demand will originate from Asia and Africa and, although developed countries are still expected to account for slightly more than half of global meat exports by 2024, their share is steadily decreasing.

TABLE 1.7 CHANGES IN GLOBAL VOLUME OF MEAT CONSUMPTION, 2016-2024

Beef and Veal	+11%
Pigmeat	+7%
Poultry Meat	+17%
Sheepmeat	+16%

Source: OECD/FAO Agricultural Outlook (2015-2024)

FIGURE 1.3 GROWTH PROJECTIONS FOR WORLD & EU BEEF PRODUCTION AND CONSUMPTION (BASE 2016=100), 2016-2024



Dairy Outlook

It is predicted that, over the next decade:

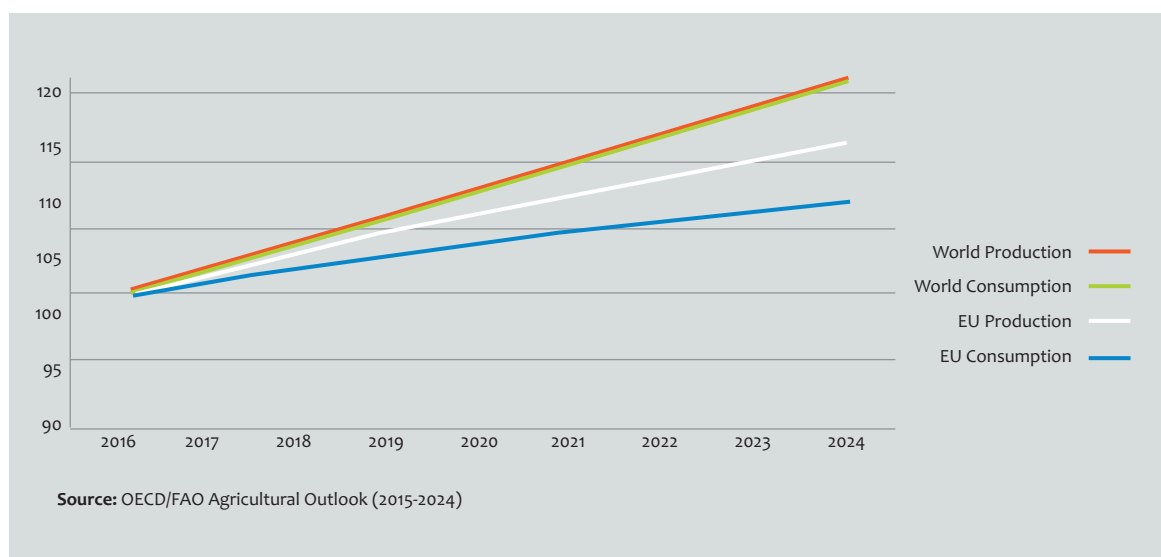
- The demand for dairy products will expand by 23% by 2024, compared with the base period.
- The growth rate in milk production is expected to average 1.8% pa, down from 1.9% over the last decade
- Real prices are projected to decline slightly, albeit remaining considerably above the pre-2007 levels.
- Nominal prices of dairy products are expected to recover from their current low levels.
- Dairy cow numbers are expected to decline in developed countries, and herd expansion in developing countries is projected to slow down
- Exports of dairy products are projected to further concentrate in the four prime origins: New Zealand, the European Union, the United States and Australia, where opportunities for domestic demand growth are limited.
- World demand will remain strong, especially from China, but Chinese self-sufficiency ratios in dairy products will be a major determinant of future price developments on the world market.

TABLE 1.8 CHANGES IN GLOBAL VOLUME OF DAIRY CONSUMPTION, 2016 – 2024

All Dairy	16%
Fresh dairy products	20%
Butter	19%
Cheese	13%
Skim milk powder	16%
Whole milk powder	24%
Casein	7%

Source: OECD/FAO Agricultural Outlook (2015-2024)

FIGURE 1.4 GROWTH PROJECTIONS FOR WORLD & EU DAIRY PRODUCTION AND CONSUMPTION (BASE 2016=100), 2016-2024



Fisheries Outlook

Global per capita fish consumption reached about 20 kg in 2014, with aquaculture overtaking capture fisheries as the main source of fish for human consumption for the first time.

Over the next ten years:

- Global fish consumption is projected to grow by 19%. Per capita fish consumption is expected to increase in all continents, with Asia showing the fastest growth.
- Fisheries production worldwide is also projected to expand by 19%. The main driver of this increase will be aquaculture, which is expected to be 38% higher in 2024 than in 2012-14. Aquaculture will remain one of the fastest growing food sectors and will overtake capture production overall.
- Developing countries, in particular in Asia, will continue to drive major changes and expansion in global fishery production, trade and consumption.

TABLE 1-9 CHANGES IN GLOBAL VOLUME OF FISH CONSUMPTION, 2016 – 2024

All Fish	+13%
Fish from Capture	+5%
Aquaculture	+22%
Source: OECD/FAO Agricultural Outlook (2015-2024)	

Chapter 2

Farm Income

2.1 Introduction

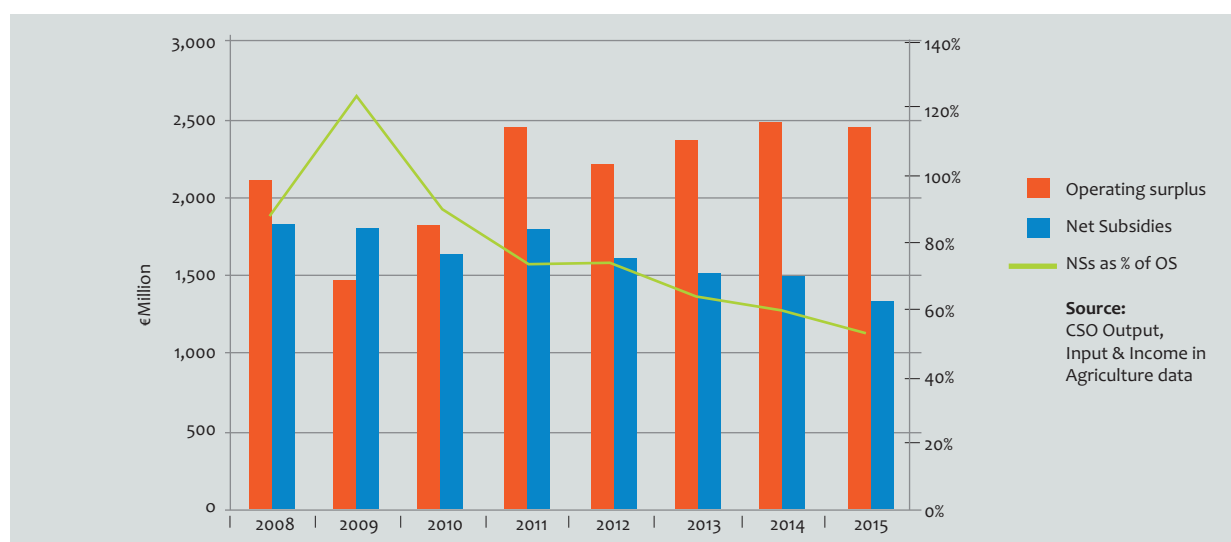
This chapter analyses data from the Central Statistics Office (CSO) and Teagasc's National Farm Survey (NFS) to show developments in farm income in both Ireland and the EU. In addition, the impact of off-farm income and direct payments are also examined. The Chapter also looks at farm viability using NFS results and support schemes for farmers administered by the Department of Social Protection.

2.2 National Farm Income in 2015

The CSO's preliminary estimate of output, input and income in agriculture for 2015¹ showed that operating surplus was virtually unchanged at €2,497m. The overall value of goods output by the sector increased by 2.1%, to €7,155m, while expenditure on intermediate consumption was marginally down, to €5,128 million. Other significant points from the CSO's estimates for 2015 include:

- Cattle output increased by 17.2% or €346.4m, mainly due to improved beef prices and higher stock levels of live animals
- Milk output value decreased by 10.7% or €223.7m, due to a sharp fall in prices although volume increased by 14.1%
- Sheep output increased by 5.6% or €12.9m
- Total intermediate consumption amounted to €5,128.1m, a slight decrease of 0.1%
- Expenditure on commercial feedingstuffs increased by 2.3%, to reach €1,351.9m
- Expenditure on fertilisers remained virtually unchanged at €565.1m
- The value of *subsidies less taxes on production* is estimated to have decreased by 7.3% from €1,524.6m in 2014 to €1,413.0m for 2015
- The estimated net subsidies less taxes figure of €1,330 million equated to 53% of the year's operating surplus.

FIGURE 2.1 CSO OPERATING SURPLUS AND NET SUBSIDIES, 2008-2015

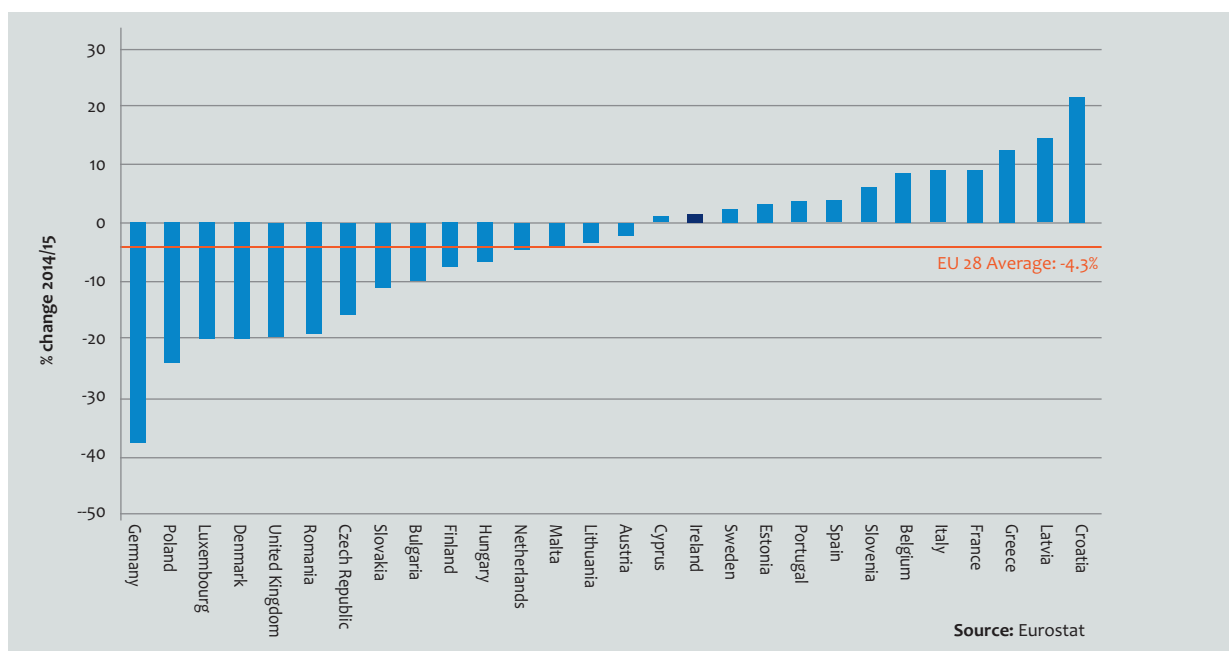


1 <http://www.cso.ie/en/releasesandpublications/er/oiiap/outputinputandincomeinagriculture-preliminaryestimate2015/>

Farm Income across the European Union

According to estimates from Eurostat², real agricultural income in the European Union (EU) fell by 6.0% in 2015 compared with 2014, while agricultural labour input dropped by 1.8%. As a result, real agricultural income per worker in the EU decreased by 4.3%. Across the EU Member States, real agricultural income per worker in 2015 is expected to have risen in thirteen Member States and fallen in fifteen compared with the previous year, albeit in different proportions.

FIGURE 2.2 % CHANGE IN REAL INCOME PER AGRICULTURAL WORKER IN EU-28 MEMBER STATES



2.3 National Farm Survey

The National Farm Survey (NFS) has been conducted by Teagasc on an annual basis since 1972. The survey is operated as part of the Farm Accountancy Data Network (FADN) of the EU and fulfils Ireland's statutory obligation to provide data on farm output, costs and income to the European Commission. A random, nationally representative sample is selected annually in conjunction with the Central Statistics Office (CSO). The sample represents 84,000 farms nationally. Each farm is assigned a weighting factor so that the results of the survey are representative of the national population of farms³.

In the most recent summary survey data for 2015⁴ average family farm income (FFI) increased by 6% to €26,526 however, this conceals differences across the various farm types. Dairy farms account for about 19% of farms represented by the NFS, average dairy farm income fell by 4% to €63,020 mainly due to a fall in milk prices (-20%), production increased by 5%. On cattle rearing farms average family farm income increased by 34% to €12,904. However, average income on cattle finishing farms increased by 29% to €16,215, mainly due to increased finished cattle prices (+13%). Average farm income on sheep farms increased by 8% to €15,791 and on tillage farms increased by 16% to €33,731.

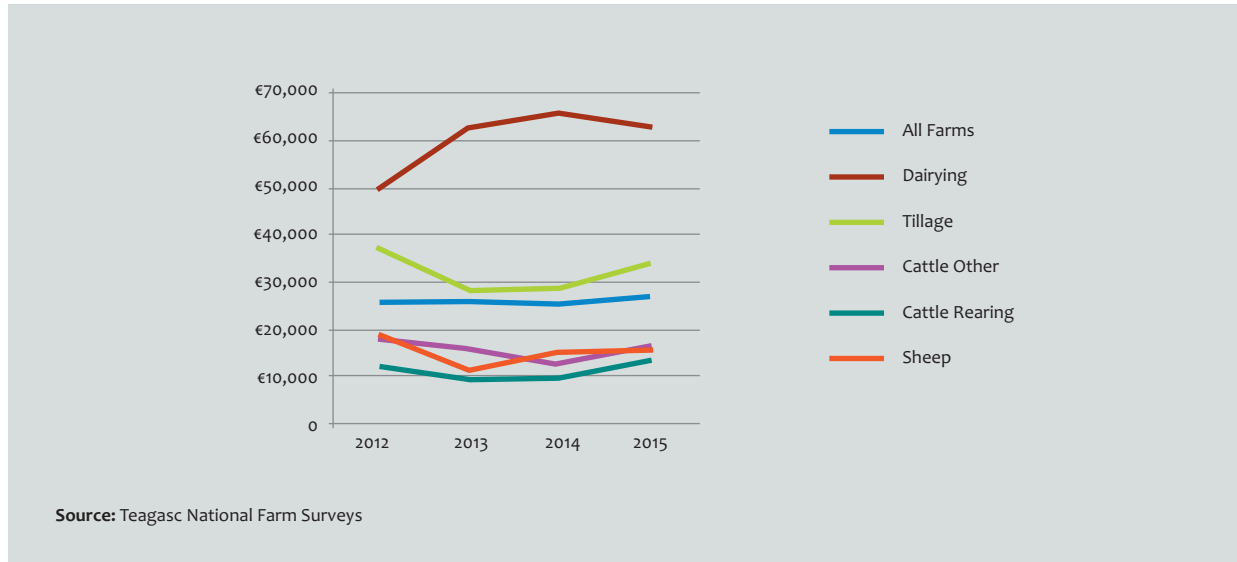
² Eurostat News Release 223/2015

³ Since the 2012 Teagasc National Farm Survey, farms below €8,000 of Standard Output (SO) are no longer included in the sample. Up to this the threshold for inclusion of farms in the survey field had been €4,000 SO. Farms are assigned to six farm systems on the basis of farm gross output, as calculated on as standard output basis. Standard output measures are applied to each animal and crop output on the farm and only farms with a standard output of €8000 or more, the equivalent of 6 dairy cows, 6 hectares or wheat or 14 suckler cows, are included in the sample. Farms are then classified as one of the six farm systems on the basis of the output of the farm.

⁴ NFS, May 2016. The CSO conducts a Census of Agriculture every 10 years to record the population of farms and the structure of farming in Ireland. Farm Structure Surveys (FSS) are conducted in the intervening periods to produce estimates of the farm population. The 2013 FSS estimated the farming population falling within the sampling frame of the NFS to be 84,259. The 2015 estimates reported here are based on this updated population figure. In order to be consistent in the year on year comparisons presented in the preliminary 2015 report, the 2014 results were revised by Teagasc to reflect the new population and therefore the 2014 figures presented by Teagasc do not correspond to the figures published in the National Farm Survey 2014 report.

Family farm income varies considerably by farm system. The large variations are driven by differences in both farm size and profitability. Dairy farms are consistently the most profitable farms, and almost all dairy farms are classified by Teagasc as full-time farms in terms of the labour input required⁵. Most cattle farms and the majority of sheep farms are classified as part-time in terms of labour input requirements, even though in many cases the farmers may not have an off-farm job, often because they are elderly.

FIGURE 2.3 FAMILY FARM INCOME BY SYSTEM, 2012-2015



More detailed data on farm incomes is available up to 2014 table 2.1 shows that direct payments averaged €19,139 per farm in 2014, accounting for 23% of gross output and 72% of family farm income. Again, there are noticeable differences between farm types. Estimates for dairy farms show that direct payments account for only 31% of income, while cattle and sheep farms are more reliant on direct payments and would be operating at a loss without them.

TABLE 2.1 MAIN RESULTS FROM NATIONAL FARM SURVEY, 2014

	Dairying	Cattle Rearing	Cattle Other	Sheep	Tillage	Mixed Livestock	All Systems
% of farms represented	19.9%	19.7%	32.8%	15.5%	8.4%	3.5%	100%
Direct Payments (DPs) €	20,767	15,412	18,250	18,510	26,129	25,165	19,139
Market Output €	169,516	24,482	32,704	30,217	82,432	136,198	65,762
Gross output	190,283	39,894	50,954	48,727	108,561	161,363	84,901
Less							
Direct Costs €	72,521	13,908	19,079	16,361	39,207	61,228	31,454
Overheads €	50,164	15,616	18,555	17,300	40,359	43,951	26,806
Total Costs	122,685	29,524	37,634	33,661	79,566	105,179	58,260
Family Farm Income (FFI)	67,598	10,369	13,321	15,065	28,995	56,183	26,642
DPs as % of FFI	31%	149%	137%	123%	90%	45%	72%

Source: Teagasc National Farm Survey 2014

⁵ In the NFS full-time and part-time farms are based on labour input, with farms requiring 0.75 of a standard labour input being defined as full-time and those requiring less as part-time.

A comparison of financial data for full-time and part-time farms⁶ is shown in Table 2.2. Average farm income for the 41% of farms classified as full-time rose 8% to €51,661 in 2014. Full-time farms are the larger more viable farms, of which, 47% are involved in dairying, 44% in other livestock systems and 9% in tillage.

For the 59% of farms classified as part-time the average family farm income was €9,677. These farms were particularly reliant on direct payments to cover production costs with average payments of €13,868 accounting for 143% of family farm income

Full-time and Part-time Farms

TABLE 2.2 MAIN RESULTS FROM NATIONAL FARM SURVEY FOR FULL-TIME AND PART-TIME FARMS, 2014

	Dairying	Cattle Rearing	Cattle Other	Sheep	Tillage	Mixed Livestock	All Systems
Full-time							
% of pop	19%	2%	7%	5%	4%	3%	41%
UAA (ha)	59.3	70.2	72.3	77.7	104.8	71.9	69.7
Family farm income (FFI) €	69,971	28,206	27,194	25,611	48,155	63,974	51,661
FFI/ha €	1,180	402	376	330	459	890	741
Direct payments (DP) €	21,431	34,017	30,993	27,767	40,354	28,256	26,912
DP as % of FFI	31%	121%	114%	108%	84%	44%	52%
Part-time							
% of pop	1%	17%	25%	10%	5%	1%	59%
UAA (ha)	23.9	36.1	33.1	45.8	35.0	-	31.5
Family farm income (FFI) €	22,371	8,010	9,262	9,811	14,741	-	9,677
FFI/ha €	936	222	280	214	421	-	307
Direct payments (DP) €	8,095	12,951	14,521	13,897	15,546	-	13,868
DP as % of FFI	36%	162%	157%	142%	105%	-	143%
Source: Teagasc National Farm Survey 2014							

2.4 Off Farm Employment Income

The presence of off-farm employment is an important factor in maintaining the sustainability of farms – if it were not for off farm income, two thirds of farms would be vulnerable. In just over half of all farms, either the farmer or their spouse held a job off the farm in 2014, down from a high of 59% in 2006.

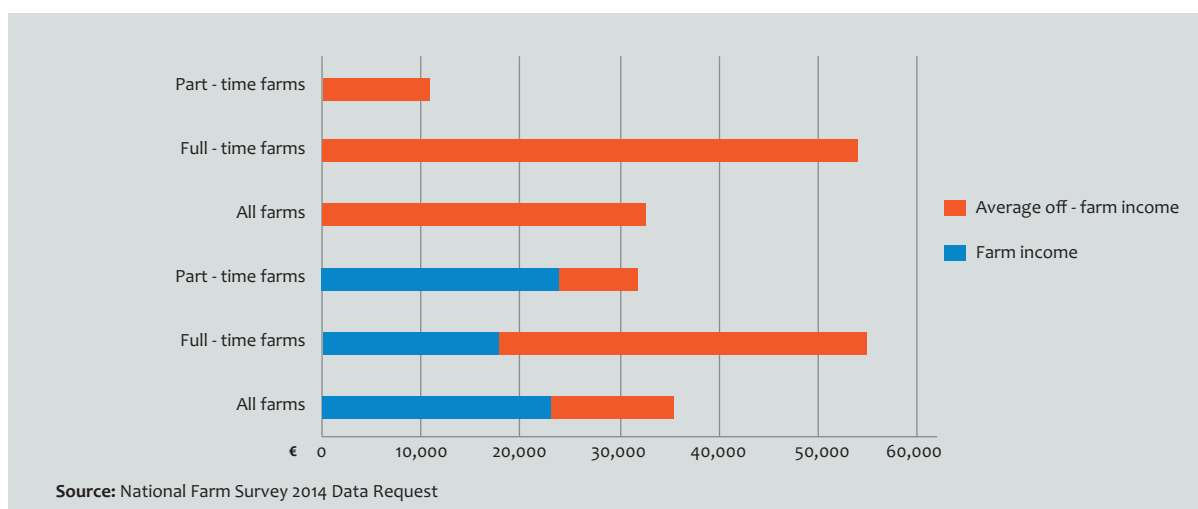
The National Farm Survey 2014 estimates that 30% of farm holders had an off-farm occupation. Most of the farmers with off-farm jobs were classified as part-time (in terms of labour input on farm) and had combined farm and non-farm earnings of €32,092. Those with full-time farms and off-farm employment had an average income of €55,191. Overall average off-farm earnings, for those who had off-farm jobs were estimated to be €23,097, while average family farm income for these farms was €12,440 giving a combined income of €35,537.

70% of farm holders stated that they had no off-farm income, with full-time farms earning an average family farm income of €53,575 and part-time farms earning average family farm income of €10,906.

Overall, it was estimated that on 75% of farms, either the farmer and/or spouse had another source of off-farm income, be it from employment, pensions or social assistance.

⁶ In the NFS full-time and part-time farms are based on labour input, with farms requiring 0.75% of a standard labour input being defined as full-time and those requiring less as part-time.

FIGURE 2.4 ESTIMATE OF OFF - FARM EMPLOYMENT INCOME OF THE FARM HOLDER, 2014



2.5 Farm Viability Analysis

While farm income is a useful measure, it does not account for the economic viability of the farm business nor does it make any allowance for the role of income earned outside of the farm in ensuring the sustainability of farm households. Teagasc undertook a viability analysis of Irish farms to address this issue, surveying the same 871 farms that participated in the 2014 National Farm Survey.

Teagasc divide farms into one of three categories based on their viability:

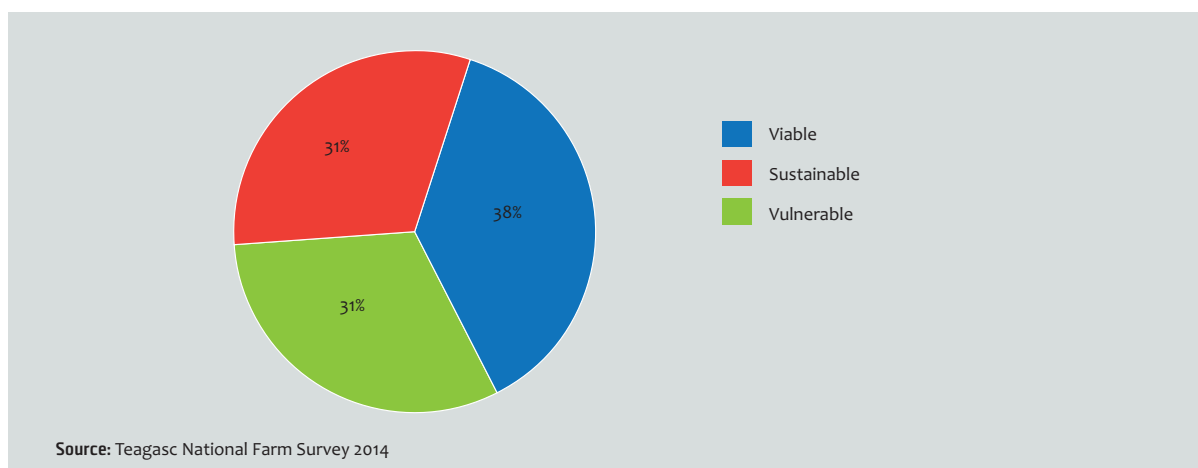
Viable: A farm is defined as economically viable if the farm income can remunerate family labour at the minimum agricultural wage, and provide a 5% return on the capital invested in non-land assets

Sustainable: If the farm business is not viable, the household is still considered sustainable if the farmer or spouse has an off-farm income

Vulnerable: A farm is considered to be economically vulnerable if the farm business is not viable and if neither the farmer nor spouse work off the farm.

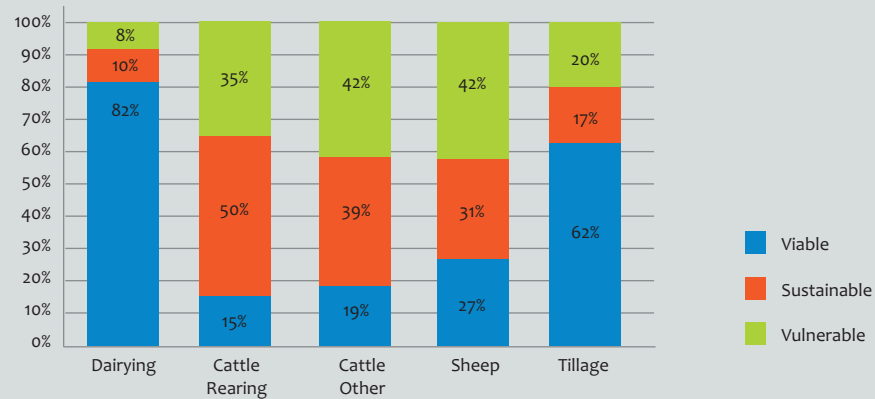
38% of Irish farms were categorised as viable in 2014, with a further 31% as sustainable because of the presence of off-farm income. The viability of farming increased marginally from 2013 when 35% of farms were classified as economically viable.

FIGURE 2.5 VIABILITY OF NATIONAL FARM SURVEY FARMS



The viability of farming varies quite substantially by farm system. In 2014, 92% of dairy farms were economically viable or sustainable and 62% of tillage farms were economically viable.

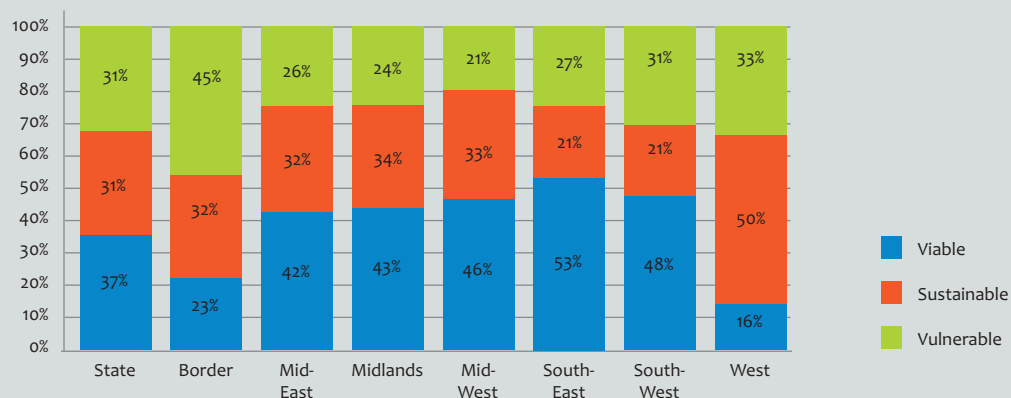
FIGURE 2.6 VIABILITY OF NATIONAL FARM SURVEY FARMS BY FARM TYPE



Source: Teagasc National Farm Survey 2014

The southeast is the most profitable region and contains the highest proportion of viable and sustainable farms. The west (16%) and border (23%) have the highest proportion of vulnerable farms.

FIGURE 2.7 VIABILITY OF NATIONAL FARM SURVEY FARMS BY REGION



Source: Teagasc National Farm Survey 2014

2.6 Payments to Farmers

Total payments to farmers were estimated to be €1,661 million in 2015. This figure includes the subsidies (defined by Eurostat) used by the CSO in the calculation of operating surplus in agriculture (Section 2.2), such as Basic Payments Scheme, REPS, Compensatory Allowances for Disadvantaged Areas and disease compensation payments, but also payments such as Forestry Premia, Targeted Agricultural Modernisation Scheme and the Beef Technology Adoption Programme. Table 2.4 provides a breakdown of total direct payments by province for the 2015 calendar year.

TABLE 2.3

DISTRIBUTION OF ALL PAYMENTS TO FARMERS BY DAFM, BY PROVINCE, 2015

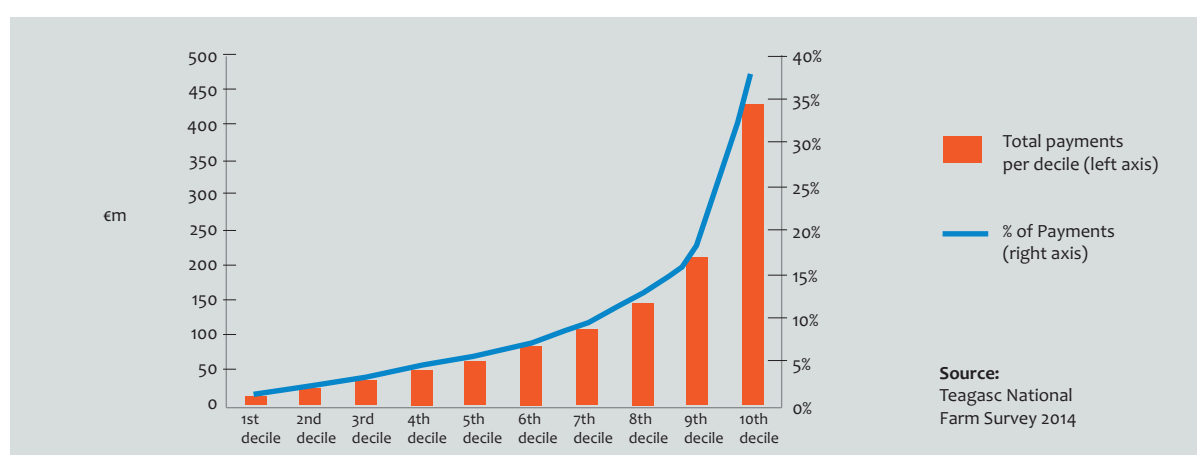
	Overall Payments	Total Number of Recipients	Average Payment
Connacht	€373,743,065	40,073	€9,327
Leinster	€492,284,457	34,096	€14,438
Munster	€615,389,042	46,263	€13,302
Ulster	€179,139,999	18,645	€9,608
State	€1,660,556,563	139,077	€11,940

Source: DAFM

Figure 2.8 below shows the distribution of the Basic Payment Scheme⁷ to farmers. The average payment under the SPS was €9,118 (though over 70% of recipients received payments under this amount). 2.5% of payments went to the lowest 20% of recipients while 38% of payments went to the 10% of farmers with the highest SPS incomes.

FIGURE 2.8

DISTRIBUTION OF SPS PAYMENTS TO FARMERS BY DECILE, 2015

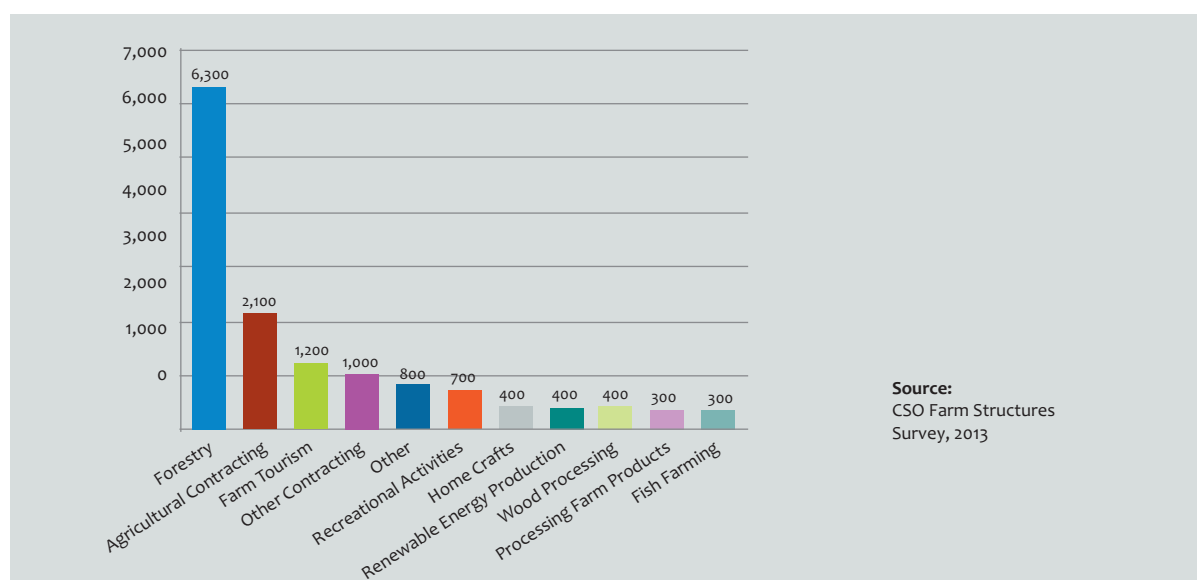


2.7 Non-Agricultural Activities

In 2013, over 12,000 farms reported to the CSO that they undertook gainful non-agricultural activity on the farm as a supplement to traditional farming. Forestry was the principal activity, with almost 6,300 farms engaged in this activity, while over 2,000 farms were engaged in agricultural contracting.

FIGURE 2.9

FARMS ENGAGED IN GAINFUL NON-AGRICULTURAL ACTIVITY



Farm Assist

Farm Assist is a means-tested payment to low income farmers, administered by the Department of Social Protection. In order to qualify for Farm Assist, an applicant must be a farmer, be aged between 18 and 66 and satisfy a means test. Those in receipt of Farm Assist receive a weekly payment, which varies according to the number of dependents.

In 2015, 8,790 farmers, representing 6.3% of the 139,600 farms in the state, were in receipt of Farm Assist. Estimated expenditure on farm assist in 2015 was €88m.

Rural Social Scheme

The Rural Social Scheme (RSS) is an income support administered by the Department of Social Protection. It provides supplementary income to farmers and fishermen/women in receipt of a social welfare payment, including Farm Assist. Under this scheme, participants work for 19.5 hours a week providing services that benefit the local community including maintenance of walking routes, care of older people and administration work relating to not-for-profit cultural and heritage centres.

Chapter 3

Agricultural Commodities & Inputs

3.1 Overview

Table 3.1 sets out the latest details for outputs and inputs in agriculture in 2015. Between 2014 and 2015, gross value added at basic prices increased by 4.8% to €2.3 billion. In 2015, cattle and calves comprised one third of gross output, with milk making up another quarter. In terms of intermediate consumption, the largest category is animal feed which constitutes one quarter of the total.

TABLE 3.1 OUTPUT, INPUT & INCOME IN AGRICULTURE, 2015 – VALUE, VOLUME & PRICE

	Value	% Change 2015 over 2014			As % total Output
	€m	Value	Volume	Price	%
Gross output at producer prices					
Cattle and Calves	2,358.7	17.2%	4.7%	10.9%	33%
Pigs	458.6	-2.7%	6.3%	-8.5%	6%
Sheep and Lambs	244.5	5.6%	2.9%	2.5%	3%
Poultry	141.7	6.3%	2.3%	1.8%	2%
Milk	1,869.4	-10.7%	14.1%	-21.0%	26%
Cereals	269.3	-4.0%	-0.6%	-3.9%	4%
Potatoes	106.0	21.0%	-10.7%	34.0%	1%
Fresh Vegetables and Fruit	280.7	n/a	n/a	n/a	4%
Forage Plants	1,020.3	-1.8%	-1.1%	-0.5%	14%
Other	406.3	n/a	n/a	n/a	6%
Total	7,155.3	2.1%	5.58%	-3.8%	100%
Intermediate Consumption (Inputs)					As % total Output
Animal Feed	1,351.9	2.3%	6.7%	-3.8%	26%
Fertilisers	565.1	-0.1%	0.5%	0.8%	11%
Energy and Lubricants	404.9	-10.1%	1.1%	-11.0%	8%
Maintenance and Repairs	448.4	-0.2%	0.1%	-0.2%	9%
Forage Plants	1,015.6	-1.8%	-1.1%	-0.5%	20%
Contract Work	360.0	-0.5%	1.7%	-2.5%	7%
Others	982.3	n/a	n/a	n/a	19%
Total	5,128.1	-0.1%	1.9%	-1.9%	100%
Gross value added at basic prices	2,304.3	4.8%	12.6%	-7.7%	n/a

Source: Data request from the CSO based on Output, Input & Income Preliminary Estimate 2015

Stock Changes

The latest estimates for stock changes on Irish farms in 2015 are shown in Table 3.2. There was an increase in the number of cattle and a decrease in the number of pigs, while poultry and sheep remained relatively stable.

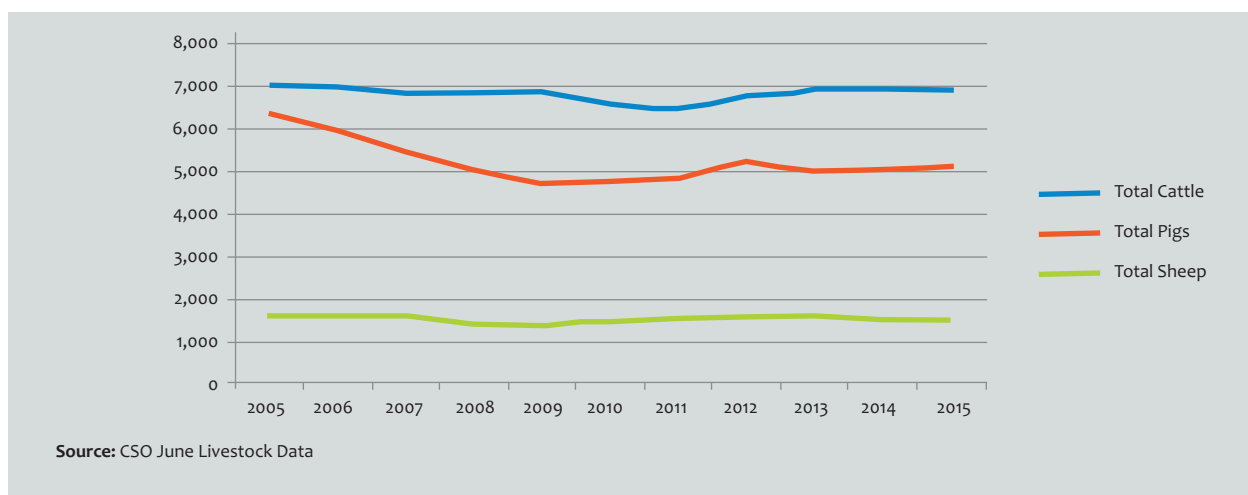
TABLE 3.2 ESTIMATED VALUE (€M) AND VOLUME¹ (000s) OF STOCK CHANGES ON FARMS 2014/2015

	2014		2015 ²	
	Value	Volume	Value	Volume
Cattle	-67.7	-66.0	140.8	179.2
Sheep	0.2	0.8	-0.1	-0.1
Pigs	1.9	36.6	-1.2	-31.1
Poultry	-1.2	-915.0	0.0	0.0
Crops	22.8	94.9	-1.3	10.8
Total	n/a	-848.7	n/a	158.8

1 Volume of Livestock is in heads (000s), volume of crops is in tonnes (000s)
2 Final Estimate
Source: CSO

Longer term trends in stock levels for cattle, sheep and pigs are outlined in Figure 3.1, which gives livestock numbers between 2005 and 2015 from the CSO's June Livestock Surveys.

FIGURE 3.1 LIVESTOCK NUMBERS (000S), 2005-2015



Terms of Trade

Agricultural output prices decreased by 3.9% in 2015 relative to a decrease of 2.3% in input prices. These price developments equated to a negative movement in the terms of trade index for farmers of -1.6% in 2015.

TABLE 3.3 TERMS OF TRADE, 2014-2015

Base 2010 =100	2014	2015 %	change 2014/2015
Output	120.66	116	-3.9%
Input	114.66	111.98	-2.3%
Terms of Trade	105.2%	103.6%	-1.6%

Source: CSO Agricultural Price Indices

General Market Situation 2015

2015 was a year characterised by uncertainty and volatility in the dairy sector. For the EU as a whole, the ending of milk quotas in April led to an increase in production of approximately 2.2% for 2015 overall, which was less than many predictions. Nonetheless, when taken with broader global supply and demand imbalances, a situation where adverse milk and dairy commodity market effects continued to persevere in Ireland, the EU and globally.

Continued weak Chinese demand in the commodity powder sectors (WMP & SMP) in particular, exacerbated by the ongoing effects of the Russian ban, combined with the aforementioned supply factors (including evidence of ongoing surplus stocks in some markets) to frame a highly competitive international marketplace for traded dairy commodities for Irish and EU operators. Nonetheless, Irish exports experienced a record year in the dairy sector, driven primarily by Infant Formula and higher value export categories such as cheese and butter. Commodity powders experienced volume increases which ameliorated the effects of sometimes significant price decreases.

Market effects combined to put sustained pressure on raw milk and primary dairy commodity prices (for powders in particular) throughout the year. The EU average raw milk price was €30.47 per 100kg in December 2015, which was 7.9% down from the same month one year previously and 24% down from highs experienced in January 2014. The EU average masks significant variations in EU Member States, where factors such as production costs and pricing methodologies make inter-state comparisons difficult. The Irish price for raw milk in December 2015 stood at €29.43 per 100kg which was 16.2% back on one year before and a little over 30% down on January 2014.

Global Production

The abolition of quotas in April 2015 led to an EU production increase of 2.2% for the calendar year, with deliveries increasing in 19 of the 28 EU Member States. Ireland experienced the largest rate of growth in the year among EU Member States at 13.3% or 773,000 tonnes. The Netherlands experienced the largest absolute volume increase, with approximately 850,000 tonnes of extra raw milk production in 2015 compared with 2014.

Among other key milk producers and exporters, production in the United States increased by 1.2% to just under 94,600 thousand tonnes (KT). Milk production for the calendar year in New Zealand (which spans 2 milk production “seasons” for NZ and also Australia) was down 1.4%, with herd culling in response to deteriorating market conditions as the year progressed being a key factor. Production in Australia was up by 1% in 2015. Anticipated negative El Nino effects for the southern hemisphere dairy producers have not to date materialised to the extent originally forecast by some commentators whilst its effects elsewhere have been varied, for example bringing a welcome end to numerous years of sub-optimal rainfall for Californian dairy producers. The production position for the EU, United States, New Zealand and Australia is detailed in the table below, with their combined supplies up approximately 1.5% for 2015 versus 2014.

TABLE 3.4 MILK PRODUCTION TRENDS 2014/15

PRODUCTION/DELIVERIES (000's Tonnes)	IRE	REST OF EU	TOTAL EU	USA	NZ	AUS
Deliveries 2015	6,589	145,043	151,632	94,571	21,533	9,605
Deliveries 2014	5,816	142,602	148,418	93,460	21,843	9,513
Volume Change	773	2,441	3,214	1,111	-310	92
% change	13.3%	1.7%	2.2%	1.2%	-1.4%	1.0%

Source: DAFM

Output in Ireland

In 2015 Ireland experienced the highest rate of growth in milk output volume among EU Member States, at 13.3%, including 16.6% for the April to December period.

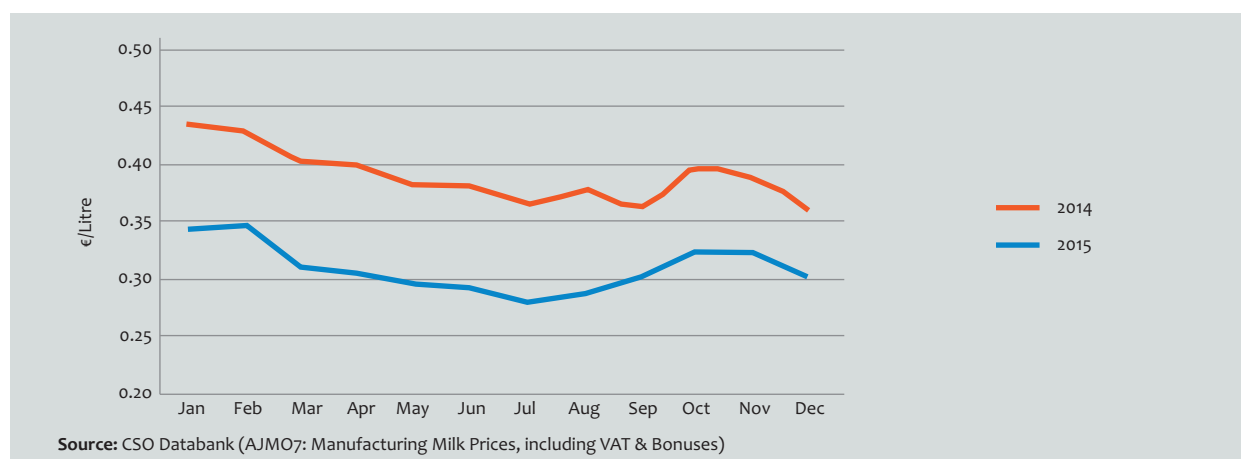
TABLE 3.5 MILK OUTPUT (WHOLE MILK ONLY) 2011 – 2015

million litres	2011	2012	2013	2014	2015	% change 2014/15
Manner of Disposal						
Milk sold off farms	5,377	5,232	5,423	5,649	6,399	+13.3%
Milk used in farm households	18	18	18	18	18	
Imported Milk Intake	356	406	411	511	584	+14.3%
Total Milk Output	5,751	5,655	5,852	6,178	7,001	+13.3%
Source: CSO Databank and Industry Estimates						

Prices

In Ireland, prices remained at moderate levels throughout the year, including the peak delivery period. This reflected various aforementioned global factors including global supply changes and the ongoing effects of the Russian import ban on EU agri-food produce. This situation continued to be reflected in the domestic market price and the farmgate price as the year progressed. Figure 3.2 shows that the average milk price (including VAT and bonuses) paid to producers was 30.1 cent per litre in 2015 (weighted average) compared to 38.5 cent per litre in 2014, a fall of 22%.

FIGURE 3.2 MILK PRICES, 2014-2015

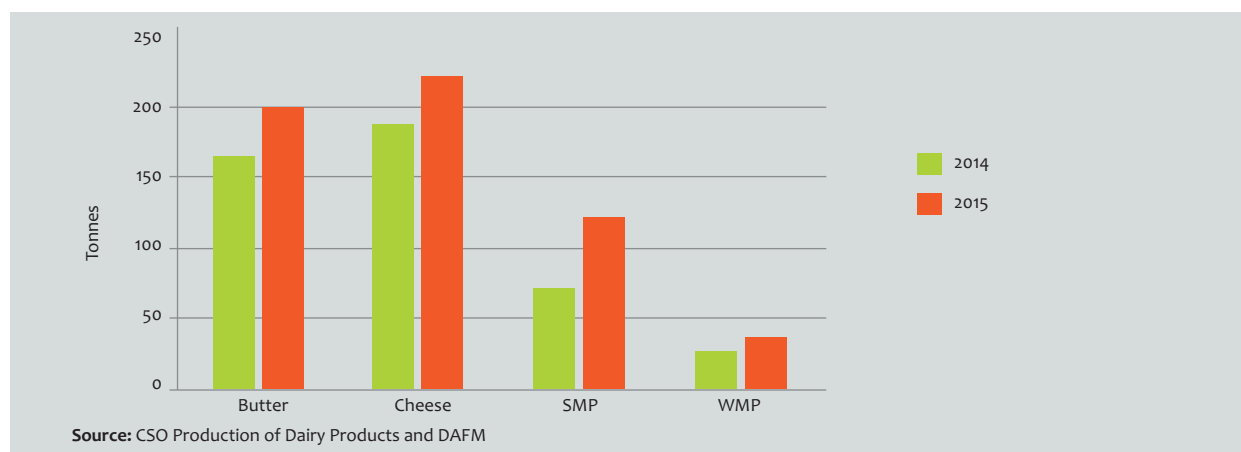


Production and Prices of Dairy Products

As a result of quota abolition, production of Irish butter, cheese and skimmed milk powder (SMP) increased significantly in 2015.

SMP production grew by 50,000 tonnes approx which represents a 72.5% increase. Butter and cheese also had significant increases of 20% and 18% respectively. Similarly, Whole Milk Powder (WMP) production rose by 37%, though from a lower comparative production base than the others.

FIGURE 3.3 PRODUCTION OF DAIRY PRODUCTS, 2014-2015



The key dairy commodity prices for SMP, butter and other commodities during 2015 followed the unstable pattern evident across the EU. SMP prices, in particular, were well below levels evidenced in 2014 and both EU and Irish prices fell below intervention level on a number of occasions. Butter prices were more stable and remained between 25% and 30% above EU intervention trigger prices throughout 2015, both in Ireland and the EU overall.

Exports

Exports of Irish dairy products and ingredients remained strong in 2015 and were valued at approximately €3.25¹ billion for 2015, which represented a 4% increase on 2014, which was also a record year. Irish dairy products continue to be exported to almost 130 countries worldwide. The proportion of exports to non EU markets in destinations in Asia, the Middle East and Africa also continues to increase and now stands at approximately 42%, up from 40% in 2014. Infant formula, cheese and butter remain key sectors both in terms of values and volumes exported.

EU Market Management Measures

Under the Common Market Organisation, market measures such as Private Storage and Export Refunds are only activated in situations where they are warranted and required. In response to a ban on EU agri-food exports to Russia in August 2014, and to mitigate possible detrimental effects on milk and dairy markets, measures were introduced for Cheese, Butter and SMP in September 2014.

In light of the continuation of the ban in 2015, as well as the perseverance and escalation of more general market turbulence in the dairy sector, these measures were continued and in some cases modified with a view to mitigating the worst effects of the market situation and providing a safety net for the sector.

Although the commencement date under which intervention could be utilised in 2015 was brought forward to January 1st, recourse to intervention was not triggered until mid-2015 and used in a number of Member States from August onwards.

In 2015, Ireland utilised intervention provisions, with 1,843 tonnes of product being offered in during the second half of the year. This represented 4.6% of the EU total of 40,218 tonnes for the year.

In terms of other EU market measure modifications, an “enhanced” SMP Private Storage scheme, running in tandem with the existing scheme, was introduced in October. Under this scheme, product could be placed in storage and receive higher rates than the existing scheme if remaining there for a period of 365 days. Uptake at EU level to the end of 2015 amounted to over 9,000 tonnes but did not include any utilisation in Ireland.

Furthermore, a revised Private Storage Cheese scheme was also introduced in October 2015. The original Cheese Private Storage Aid (PSA) scheme had been discontinued one year earlier as the uptake had in the main been from countries unaffected by the Russian ban. Under the new scheme and recognising the overall EU market effects of the dairy market slowdown and ongoing Russian ban, 100,000 tonnes was allocated amongst all 28 EU Member States. Allocations were made based on the proportion of EU cheese production in each MS and Ireland utilised its full allocation of 1,835 tonnes immediately upon opening of the scheme. Approximately 30% of the tonnage allocated was utilised by the end of phase 1 of the scheme, which ended mid-January 2016. The surplus has been reallocated to 8 Member States, including Ireland, who received an additional amount of 4,127 tonnes for utilisation by end September 2016.

Existing Private Storage schemes for SMP and Butter, introduced in September 2014, remained available to EU and Irish producers throughout all of 2015. Ireland made use of PSA for both of these products, utilising circa 6,000T (or 14.3% of the EU total of 43,000T) for SMP and 19,400T (or 13.7% of an EU total of 141,366T) for butter.

EU Targeted Aid for the Dairy Sector

In September 2015, on foot of pressure from several Member States including Ireland, the EU Commission announced a €500m package for the EU Agriculture Sector, aimed primarily at the dairy and pigmeat sectors i.e., those most acutely affected by the ongoing agri-commodity market turmoil. A key component of the EU provisions was a €420m, EU-wide, aid package and Ireland’s allocation under this element was some €13.7 million. The capacity to top up this aid with national funding was availed of in Ireland, facilitating an envelope of approximately €26m in targeted payments for the dairy sector, and the bulk of this was distributed in late 2015.

¹ Bord Bia: 2015/2016 Export Performance & Prospects, Irish Food, Drink & Horticulture.

Milk production management

With the ending of the 31 year old Milk Quota regime on 31 March 2015, the Department was no longer involved in milk supply management controls. Such issues are now a matter for the milk producer and the milk purchaser. Nevertheless, the Department will continue to have a central role in milk quality and hygiene and is also obliged to report monthly production volumes to Brussels.

Due to excellent weather conditions throughout 2014 and the early part of 2015, Ireland ended the final milk quota year at 7.1% over quota attracting a super levy bill of €71m. The facility to phase the final superlevy payment over three years was introduced by the EU Commission in 2015, at Ireland's request. Farmers availing of the facility were required to pay at least one third of the bill in each of the first two years (2015 and 2016) with the balance to be paid in 2017 and over 60% of the farmers concerned chose this option.

In order to continue support for milk production at farm level, the Department supported a Milking Skills Process Course, collaboratively organised by the Farm Relief Service, Teagasc and Animal Health Ireland. Almost 600 milkers have participated in the course, which leads to a FETAC Level 6 qualification, over the last two years (2014 and 2015).

Farm Partnerships

The ending of the milk quota regime saw the ending of the legal basis for the Teagasc operated Milk Production Partnerships. Given the high priority the Minister attached to the concept of partnership in Irish agriculture for enhancing efficiency, providing better work/life balance; addressing land mobility and smoothing intergenerational succession, the Department established a new Register of Farm Partnerships to take over from the Milk Production Partnership Register. Participation on the new register was broadened to include enterprises other than dairying. Entry on the new register is a precondition for access to the support schemes which are aimed at encouraging the development of farm partnerships in Irish agriculture, such as the Support for Collaborative Farming Grant Scheme and the preferential stock relief for registered farm partnerships. The Department also ensures that the members of such registered farm partnerships are fully catered for in the implementation of the CAP Reform Schemes such as TAMS, GLAS, ANC, and BPS. At the end of 2015 some 1,100 farm partnerships had been entered on the new Register, 550 of which were former Milk Production Partnerships.

Outlook for 2016

The increased output in a number of key dairy producers was a feature during 2015 and whilst the post quota context was evident in the EU, other major producers such as the USA also contributed to a position of increased global supply. This extra supply, characterised by ongoing elevated stocks in many countries, and coupled with less or curtailed demand in key markets, led to commentators such as Rabobank to summarise the situation as *"more milk than market"*.

Forecasts suggest a slowdown in supply for New Zealand but it is clear that this will not be of the magnitude necessary to address global imbalances in the short term. Fonterra's most recent farmgate milk price forecast remained under downward pressure following on from downward trends in the GDT. Trends in the auction for the early part of 2016 could weigh heavily on the opening milk price forecast for 2016/17, with the possibility for pursuant supply responses.

Demand factors also play a significant role in the equation on international markets in particular. In this respect the medium term outlook for dairy markets continues to be very bright, with growing global demand among a burgeoning middle class in fast growing developing countries with increasingly westernised, more protein based diets expected to support prices in the years ahead. However, it is clear that there will be continuing volatility around this positive trend. In the shorter term, declining international oil prices have weakened the spending power of countries reliant on oil revenues, while the buffer provided by favourable exchange rate movements cannot be taken for granted in 2016. There is no doubt that a softening of global dairy markets has had effects on dairy farmers in Ireland and throughout the EU and the possibility is that this will continue into late 2016.

General Market Situation 2015

2015 was a year of substantial fluctuations, with deadweight prices rising from January to July and then reducing through to the end of the year.

As Ireland exports 90% of the beef produced here, export markets remain essential to the industry and this will continue into the future. 2015 saw Ireland begin the first exports of beef to the American market, with an estimated value of €11 million, along with substantial progress being made on access to the Chinese market. The combined value of Irish meat and livestock exports in 2015 is estimated at €3.7 billion. Beef exports, including offals, accounted for just under €2.41 billion of that, up 6% on 2014. It is important to note that this increase in value was achieved even though in output terms Irish beef exports were 503,000 tonnes, down 4% on 2014. The UK remains the single largest export market, making up 54% of volume trade for Irish producers, (270,000 tonnes), a figure similar to 2014. Year-on-year trade to the rest of the EU was down 2%, due to a preference for the high value UK market as well as the overall decline in output.

Output

Nearly 1.6m cattle were slaughtered in 2015 in Irish export approved meat plants, a decrease of 63,000 head or 5% on 2014 figures. This can be broken down by steers (41%), cows (20%), heifers (27%), young bulls (10%) and mature bulls (2%).

FIGURE 3.4 CATTLE SLAUGHTERINGS AT MEAT EXPORT PREMISES 2014-2015

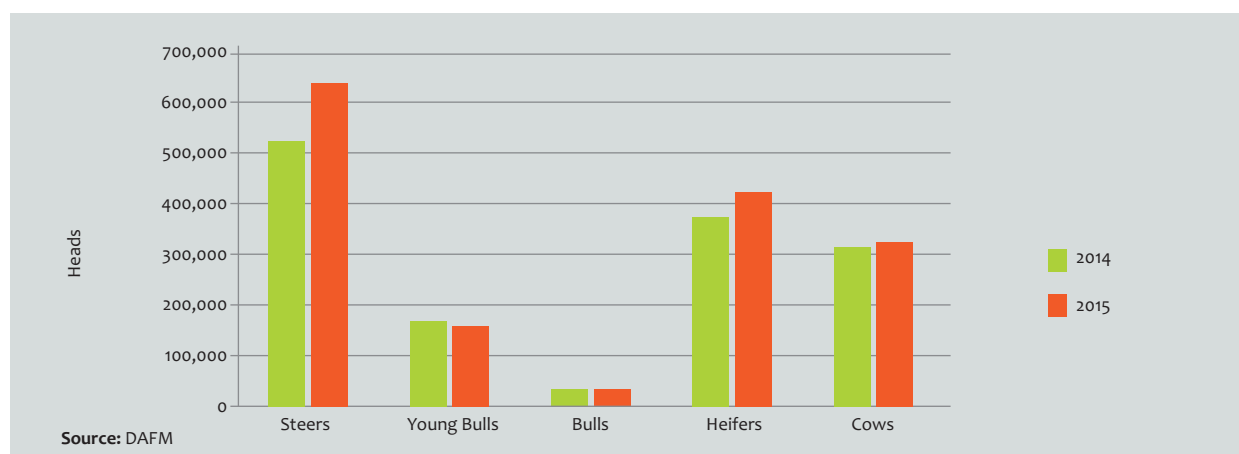


TABLE 3.6 OUTPUT VALUE (€m) AND NUMBERS (000's) OF CATTLE AND CALVES, 2014/2015

	2014		2015 ¹	
	Value	Number	Value	Number
Live Exports	120.49	241	113.84	181
Export Slaughterings ²	1,953.73	1,745	2106.65	1,663
Levies	16.12		14.94	
Total Disposals	2,090.34	1,986	2235.43	1,843
Imports	10.35	11	17.54	17
Changes in Stocks	-67.74	-66	140.82	179
Total	2,012.26	1,909	2358.71	2,006

1 Values shown are after deductions for transport costs
2 Final Estimate
Source: CSO Output, Input & Income Preliminary Estimate 2015

² DAFM provides the CSO with data on the number of slaughterings in meat establishments approved by the Department every month, which covers approximately 95% of the total number of livestock slaughterings. The remaining 5% are carried out in slaughterhouses and meat plants approved by Local Authorities under S.I.432 of 2009 and each local authority collects data on these premises in their area and provide same to the CSO. Figure 3.4 and the associated text are based on DAFM data, Table 3.6 on CSO, hence the differences.

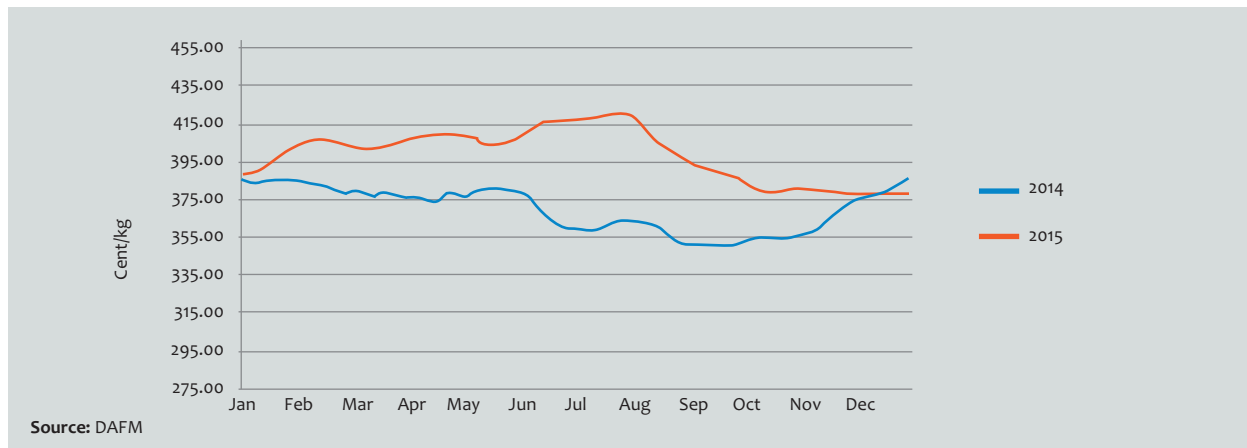
Cattle Prices

The EU male cattle market in 2015 was relatively stable compared to the fluctuations seen in the Irish and the UK markets. Consumption of beef rose marginally EU wide and as such there was a corresponding increase in the price paid for young bull beef, which is the predominant production system on the continent. For 2015 the average price paid for R3 young bulls in the EU 15 was €3.83 per kg.

European Commission forecasts indicate that supply will rise marginally in 2016, although developments in other areas, especially around market access, will determine if prices will improve in the short term.

Domestically, 2015 was a better year for producers than 2014. Prices for the year were 7.5% higher last year, with the best prices being achieved in July.

FIGURE 3.5 STEER (R3) PRICES 2014 - 2015



Beef Exports

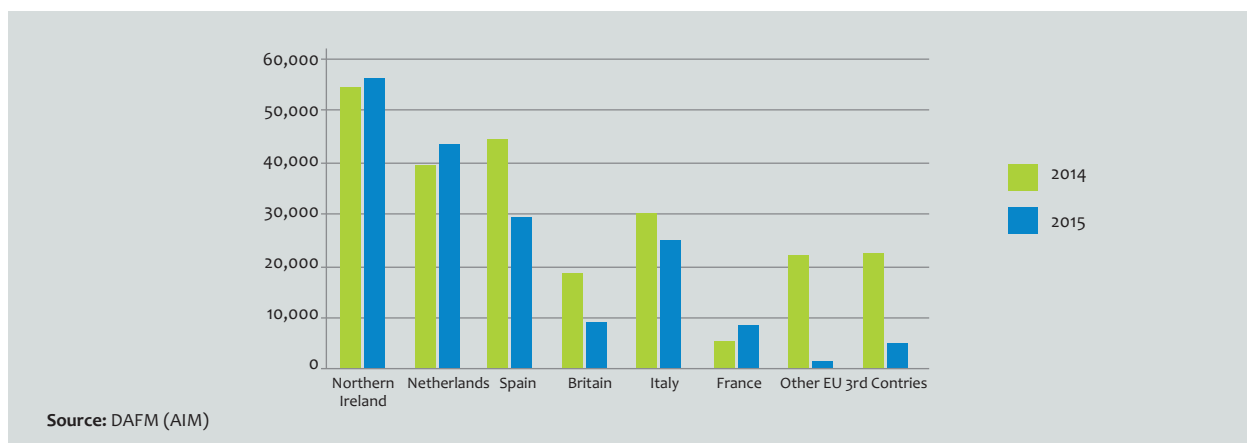
In terms of Irish beef exports, the UK market was worth €1.1 billion and the EU market €1 billion, with the non-EU market valued at about €60m. Beef remains at a relatively high price point when compared to pork or poultry in Europe. Overall beef exports to EU markets (excluding the UK) were down about 8% in volume terms but still recorded a roughly €20 million increase in value terms.

Live Exports

Live exports remain a valuable market outlet for all categories of stock though number of cattle exported reduced by roughly a quarter compared to 2014, to just over 180,000.

Increased domestic prices were a factor in this decline, along with geopolitical instability in North. Exports to Northern Ireland, the Netherlands and France rose, while exports to Belgium, Italy, Spain and Britain declined. The political situation in North Africa made exports to that region very difficult.

FIGURE 3.6 LIVE EXPORTS OF CATTLE, 2014-2015



Ireland Outlook, 2016

Falling demand in some continental markets, the ongoing economic uncertainty throughout the EU and an increased supply of cattle as a result of the expansion of the dairy herd due to the ending of the Milk Quota regime are concerns for the Irish beef sector in 2016. However, access to new international markets will potentially be a major benefit for Irish beef and the overall market access outlook is a positive one.

Irish cattle supplies are expected to rise by 60,000 to 80,000 head in 2016, leading to an export availability of around 525,000 tonnes. Prices are expected to show some modest rises in the first half of 2016 due to tight supplies, with the second half of the year being a more difficult period for producer prices. Demand for beef in the UK is expected to show a modest rise and the Euro-Sterling exchange rate will influence returns for Irish exports to that market.

Teagasc has forecast that fertiliser costs should remain similar to 2015 while feed prices may undergo a slight rise of 2%. This rise, however, may be offset by a predicted reduction in fuel costs of 3%.

Bord Bia has predicted that 2016 should be a positive year for live exports as traditional markets for Ireland in weanlings and stores, namely Spain and Italy, recover from economic downturns. Live exports to North Africa will depend on the political situations in countries in the region, along with our price competitiveness.

EU Outlook, 2016

EU wide beef production volumes in 2016 are forecast by Bord Bia to be generally similar to 2015. Coupling this with forecast stability in consumption would seem to suggest that EU beef prices should remain relatively comparable to 2015.

As always, consumer spending levels will be the major driver of demand across the European Union. Some tentative growth can be expected across the continent, with a favourable economic situation in the UK likely to boost to consumption there.

3.4 Sheep and Lambs

Market Situation, 2015

According to Bord Bia, sheepmeat production in the EU is estimated to have increased by 1% in 2015 to reach approximately 753,000 tonnes. The rise in 2015 was largely driven by higher output in the UK and Ireland whilst there was drop in French output. It is expected that overall EU exports of sheepmeat fell by around 25% in 2015 and that imports increased by a modest 1%. Consumption of sheepmeat in the EU of around an average 1.8 kg per capita is expected to stay constant during 2015 and 2016. The European Commission has noted that a combination of favourable prices and relatively good forage conditions, in those Member States not affected by drought, helped to incentivise production in 2015.

Output in Ireland

Table 3.7 shows a 6% increase in the value of sheep sector output in 2015. This increase was driven entirely by a rise in the price of sheepmeat, as disposals were virtually unchanged year-on-year.

TABLE 3.7 OUTPUT VALUE (€m) AND NUMBERS (000's) OF SHEEP AND LAMBS, 2014/2015

	2014		2015 ²	
	Value	Number	Value	Number
Live Exports	4.53	47	3.15	32
Export Slaughterings + Other from 2013	261.88	2,835	273.92	2,834
Other Slaughterings	-	-	-	-
Total Disposals	266.41	2,881	277.07	2,866
Imports	35.02	364	32.43	332
Changes in Stocks	0.22	1	-0.15	0
Total	231.61	2,518	244.49	2,534

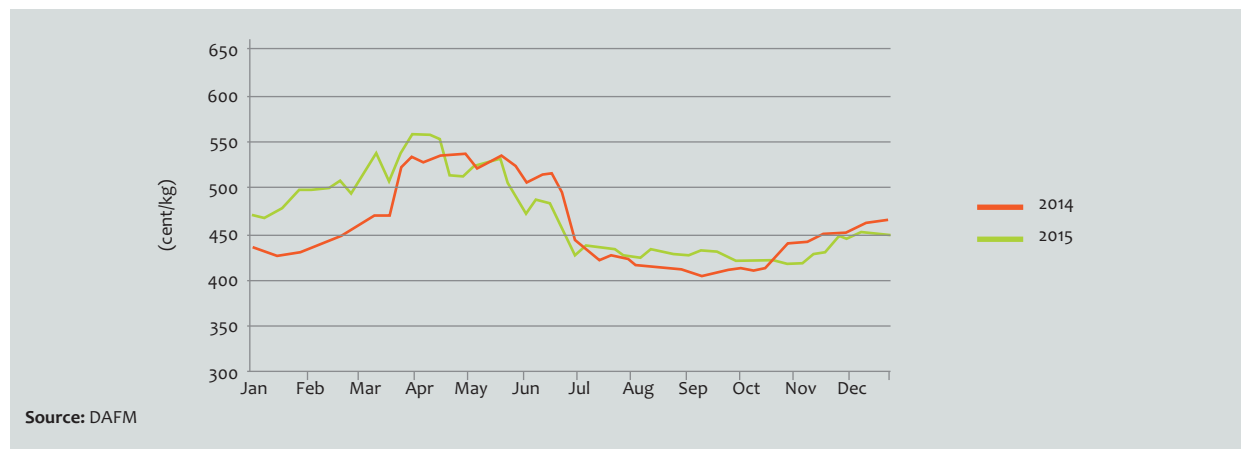
Values shown are after deductions for transport costs
² Final Estimate

Source: CSO Output, Input & Income Preliminary Estimate 2015

Prices

The average factory price for 2015 was 482.93 c/kg (exclusive of VAT). This represents an increase of 1.5% on the 2014 level.

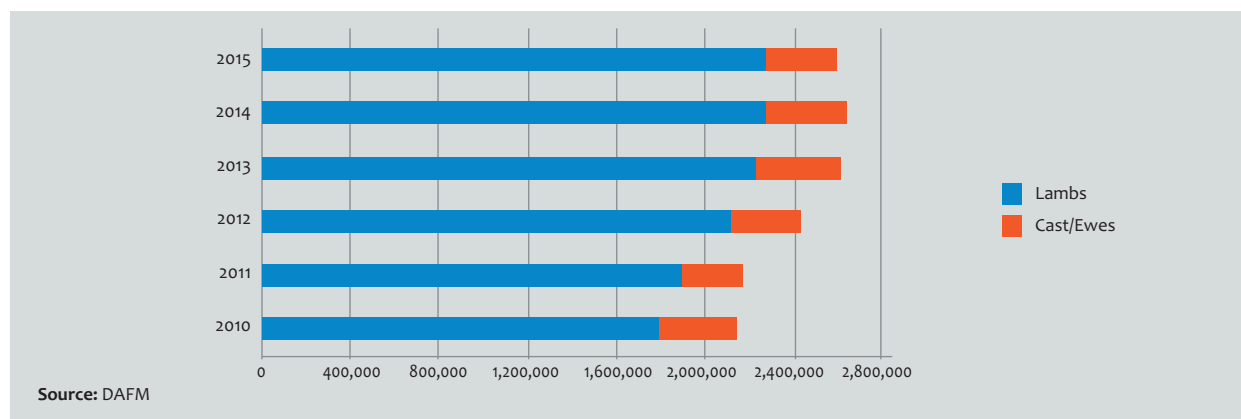
FIGURE 3.7 SHEEP PRICES AT MEAT EXPORT PREMISES, 2014 - 2015



Slaughtering

The number of sheep slaughtered at DAFM-approved premises in 2015 was 2,599,697 head. This compares with a figure of 2,605,758 head for 2014, a reduction of 0.2%. These figures include animals imported directly for slaughter from Northern Ireland. The number of animals imported directly for slaughter in 2015 was 337,381 head (adjusted calendar year figures). This compares with a figure of 372,519 head in 2014, a reduction of 9.4%.

FIGURE 3.8 SHEEP SLAUGHTERING AT MEAT EXPORT PREMISES, 2010-2015



Sheepmeat Exports in 2015

According to Bord Bia, sheepmeat exports continued to perform well in 2015 as a more positive environment helped export values. The weakening of the euro versus sterling in particular also boosted the relative competitiveness of Irish lamb in key markets. Exports of sheepmeat in 2015 are estimated at over 46,000 tonnes with a value of €230 million. The UK and France continue to be the two main sheepmeat export markets, together accounting for around 60% of the tonnage exported, with Germany, Belgium and Sweden being other Irish sheepmeat export destinations in the EU.

Outlook for 2016

According to Bord Bia, following a rise in 2015, EU output is likely to remain steady in 2016. With EU sheepmeat supply and demand expected to remain stable and lower New Zealand and Australian supplies expected, it is forecast that this will help to increase global prices. Teagasc forecasts a rise in prices of the order of 3% for the Irish sheepmeat sector, assuming a stable euro exchange rate. With continued stability in the costs of production further growth in output value is expected in 2016.

The June 2015 CSO Livestock Survey showed an increase of 0.8% in the total number of sheep. However, this comprised an increase of 2.8% in the population of non-breeding sheep and a reduction of 1% in the number of breeding ewes on farms, compared to the June 2014 figures. This indicates a small reduction in the lamb crop available in 2016, which will likely be reflected in higher prices.

General Market Situation 2015

Continued high feed costs, albeit at a lower level than 2014, together with ongoing challenges in respect of non-feed costs, combined to keep margins for pig producers under pressure in 2015. The CSO Pig Survey in June 2015 indicates that the number of breeding pigs was down 1.6%, while non-breeding pig numbers were down by 1.1% in the same period. Domestic output increased by approximately 8%, in part due to increases in carcase weight, however this was offset by a drop in prices of circa 10%. Consequently Irish pigmeat exports are estimated to have dropped by 2% in value to €570m. There was a shift in exports to the UK helped by favourable exchange rates. Exports to international markets performed strongly despite the absence of the Russian market. Product originally destined for the Russian market was redirected to fulfil growing demand in South East Asia, with slower demand from Japan offset by increased activity to Australia.

Pigmeat prices continued to decline from 2014 into the first two months of 2015, after which they began to recover until the end of July. Prices then fell until year end, resulting in the lowest year end figure in a number of years (€135.67/100kg).

Despite a reduction in feed costs, the impact of cereal price increases since 2009 on the pig sector remained significant, particularly given that cereals account for up to 75% of pig feed. While the downward trend in feed ingredient prices continues to reduce pig feed costs, the impact on the sector is still considerable in light of poor pig prices, though they continue to remain significantly above long-term averages, at 17 cent per kg deadweight above the 2010 average (93 cent/kg or €15 per pig (at 81kg dead weight at sale).

Output in Ireland

In 2015 the output value attributable to pig production is estimated to have decreased by 2.7% to €459 million.

TABLE 3.8 - OUTPUT VALUE (€m) AND NUMBERS (000s) OF PIGS 2014/2015

	2014		2015 ²		
	Value	Nos.	Value	Nos.	
Live Exports	80.87	636	74.36	640	
Export Slaughterings	390.27	3,043	387.05	3,225	
Total disposals	471.14	3,679	461.42	3,865	
Imports	1.72	14	1.67	15	
Changes in stock	1.86	37	-1.15	-31	
Total	471.28	3,701	458.60	3,819	

Values shown are after deductions for transport costs
² Final Estimate

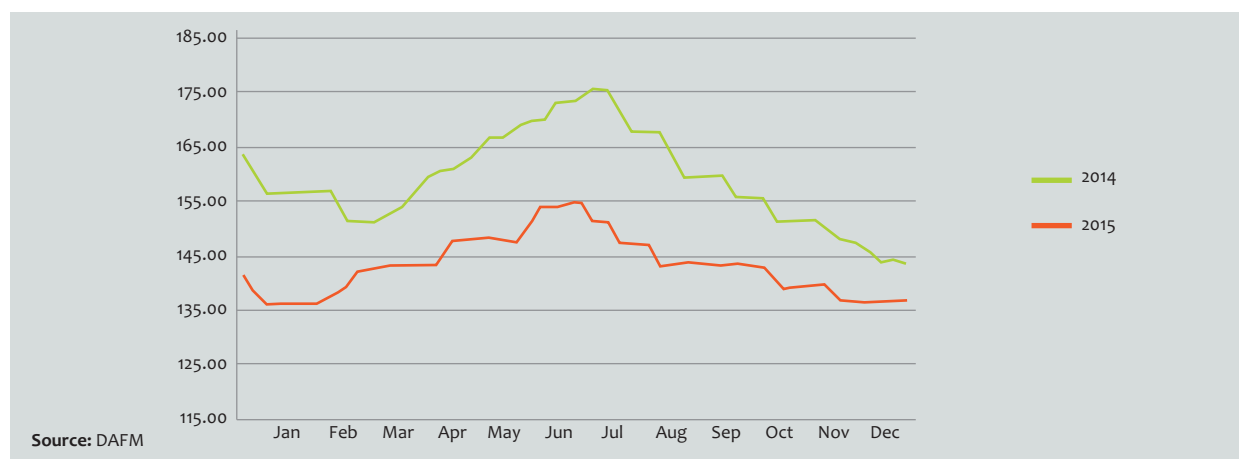
Source: CSO Output, Input & Income Preliminary Estimate 2015

Prices

The average price during 2015 was €142.97/100kgs, €15.84c/kg lower than the average for 2014. Prices in week 52 were €6.60/100kgs below 2014 levels, a fall of 4.6%. December 2015 prices were 17.6% behind 2013 and 20.2% below levels achieved in December 2012.

The EU average price increased in the first half of the year with levels increasing by approximately 12% between January and end June, however this increase was completely eroded in the second half of the year. During the year Irish prices remained broadly in line with the EU average, rising above this rate at the end of October and remaining above the EU rate until year end. Although prices in both the EU and Ireland weakened in the second half of the year, the rate of decline was greater in the EU. The result of this was that Irish prices ended 2015 at 7.6% above the EU average.

FIGURE 3.9 PIG PRICES (€/100kg) AT MEAT EXPORT PREMISES, 2014-2015



Slaughtering

During 2015, approximately 3.2 million pigs were slaughtered in DAFM export-approved plants. This represents an increase of approximately 6% on 2014 figures.

Production continued to accelerate on the previous year, with up to 8% gains in certain weeks during April and May, and ended up on average 7.5% ahead. Approximately 104,000 sows are included in this 2015 figure, an 8.6% increase from 2014. Pork accounted for almost 97% of the total in 2015 as was the case the previous year. The decline in export of live pigs to Northern Ireland continued albeit at a slower pace, and fell by approximately 21,000 head, or 4%.

Exports

Irish pigmeat exports were 8% higher in volume in 2015 compared to the previous year, building on significant increases seen since 2009. However lower prices saw pigmeat export values fall marginally, by 2%, during 2015, amounting to €570 million.

The UK continues to be the largest single market for Irish export product and pigmeat shipments there performed well, with volumes 6% higher at 90,000 tonnes. The value of this trade is estimated at €350 million, up 2% on the previous year. The volume of trade to Continental European markets showed a further rise in 2015, driven mainly by a strong increase in shipments to Germany, Sweden, Italy and France. For the year, exports to the Continent are estimated to have reached 60,000 tonnes, with the value of trade falling by 6% to over €90 million, reflecting lower prices.

International markets performed strongly despite the absence of the Russian market - Export volumes are estimated to have grown by 3% and reached some 80,000 tonnes with the value of this product estimated at €130 million. As a result of the Russian market being effectively closed to Irish exporters from the end of January 2014, much of the increase was redirected towards different locations in South East Asia. China remains the second most important market for Irish pigmeat, with exports increasing to over 40,000 tonnes last year. Slower demand in Japan was offset by increased export activity to Australia.

It is important to note that, while exports performed strongly during 2015, the domestic market remains the single main volume output for Irish pigmeat. Consumption in this marketplace was largely unchanged and amounted to approximately 146,000 tonnes.

Outlook for 2016

Following rebuilding and recovery efforts in recent years the future for the Irish pig sector remains challenging. While feed prices are now below record highs, projections are for a 3% increase in feed prices this year. Pig producers are especially affected by changes in cereal prices, given that cereals account for 75% of feed. In addition, difficulties in the non-feed elements of production, such as credit availability and energy costs, will present a significant challenge to producers. EU pigmeat output is forecast to slow down during the first half of 2016 reflecting a marginal decline in the breeding. Indications for the second half of the year suggest that there will be some reduction in supplies, as the effect of volatility and weak producer prices may lead to further culling in the EU breeding herd.

All of these factors will strongly influence the production decisions of Irish producers and on the back of a 2% decline in the breeding, Irish production is expected to fall marginally in 2016.

The opening of emerging markets in Asia, such as Vietnam and the Philippines, continues to complement levels of growth in already established markets like China and Japan, and given the volume of exports to third countries the decline in value of the euro has made our exports more competitive.

From a disease perspective, two came to the fore in Europe recently, namely African Swine Fever (ASF) and Porcine Epidemic Diarrhoea (PEDv). Although neither disease has ever been recorded in Ireland, it is difficult to predict what impact they may have in the future. However, pigmeat remains the most consumed meat worldwide and this will continue to present opportunities for Irish producers, given our degree of self-sufficiency. In addition, the progress made in the last few years in establishing and consolidating a presence in important international markets has better positioned Irish producers to take advantage of growing demand.

3.6 Poultry & Eggs

General Market Situation 2015

Retail sales of fresh and chilled poultry increased by approximately 5% on the Irish market in 2015. While the outlook for the poultry sector is positive, the sector continues to face challenges. Prices of compound feed and cereals are expected to remain at current levels, but these still compose a significant cost for producers. These, combined with energy costs and significant pressure from imports (particularly for the service sector) continue to present difficulties for producers.

Output in Ireland

In 2015 the output value of the poultry sector was €141.7 million, up 6.3% on 2014.

TABLE 3.9 OUTPUT VALUE (€m) AND VOLUME OF POULTRY (000's) 2014/2015

	2014		2015 ¹	
	Value	Number	Value	Number
Poultry	133.3	83,167	141.7	78,487
1 Final Estimate				
Source: CSO Output, Input & Income Preliminary 2015 Prices				

While input prices reduced somewhat, producer and wholesale prices in the sector also eased slightly throughout 2015. Poultry is normally reared under contract to processors, for a pre-agreed price, and therefore poultry producers are not subject to the same price fluctuations as other farmers. EU broiler prices eased slightly during 2015, falling by around 1%.

Slaughterings

Slaughtering of poultry amounted to 80.3 million birds during 2015 – an increase of 5.4% on 2014 levels, with most of the increase evident in broiler and turkey output.

Exports

The value of Irish poultrymeat exports in 2015 is estimated to have grown by around 3%, helped by stronger processed, fresh poultry and offal exports. The value of exports increased to an estimated €320 million, underpinned by strong growth in the export of processed products. Exports to the UK increased by 4% to approximately €267 million, with a high proportion of these exports being redirected to international markets from the UK. Exports to other EU markets were valued at €33 million and slowed somewhat during the year due to reduced exports to France and the Netherlands. Conversely, direct shipments to international markets increased twofold to €20 million in 2015.

Outlook for 2016

Irish production is forecast to remain stable during 2016, with poultry exports forecast to rise due to stronger processed, offal and fresh poultry exports. EU and international production is estimated to increase marginally, however, as with pigmeat the impact of cereal price changes will influence output decisions by producers as the year progresses.

General Market Situation 2015

Total area sown to cereals within the EU-28 Member States decreased by slightly over 1%, to 57.4 million hectares, in 2015 with the main decrease in sowings attributed to maize. In Ireland, autumn sowings remained on a par with 2014, however, there was a big shift from winter wheat to winter barley. The overall EU cereal usable production is currently forecast at 308 million tonnes, down 6.5% on last year. Common wheat accounts for 149.2 million tonnes (48% of all cereals), Barley 61 million tonnes and Maize falling from 78 million tonnes in 2014 to 56 million tonnes in 2015.

Main cereal prices in the EU continued to decline in 2015, mainly due to the excellent harvest and stiff competition in the market. It is projected that cereal stocks will be in the region of 45 million tonnes at the end of June 2016.

On the world market, the International Grains Council (IGC) forecasts 2015/16 global grain production in the region of 1,996 million tonnes, 3 million tonnes or 2% below the 2014/15 record figure. This includes 726 million tonnes of wheat and 967 million tonnes of maize. Despite an increase in consumption, mainly due to the sustained rise in food demand, cereal stocks are expected to increase to 454 million tonnes, the highest figure in nearly 30 years and equivalent to 23% of global demand.

Output in Ireland

Table 3.10 shows the CSO's estimate of the output value of cereals in 2015 is €269.3 million, a 4% drop on 2014 figures. Volume was effectively unchanged from 2014.

TABLE 3.10 OUTPUT VALUE (€m) AND VOLUME OF CEREALS (000 TONNES) 2014/2015

	2014		2015 ¹		
	Value	Volume	Value	Volume	
Barley	196.3	1,263.0	183.5	1,233.1	
Wheat	69.4	464.8	65.9	447.1	
Oats	14.8	96.2	19.8	136.5	
Total Cereals	280.5	1,824.0	269.3	1,816.8	
1 Final Estimate					
Source: CSO					

Area, Yield and Production in Ireland

According to Teagasc, the national production of Cereals for 2015 is estimated to be close to 2.6 million tonnes a 1% increase on the 2014 harvest and the highest recorded since 1985, due to the excellent yields. This, despite the national cereal area falling by 5%. There was a continuation of the recent trend of an increasing proportion of winter cereals being grown in Ireland, with winter barley up 27% (150,000 tonnes) on 2015 and winter oats showing a 19% increase over the 2014 figure however winter wheat production fell 9% (58,000 tonnes) while spring wheat production increased 59% year on year from 54,000 tonnes up to 86,000 tonnes.

Total production of wheat was 691,000 tonnes, a 3.7% decrease on 2014 while overall barley production was 1,728 million tonnes almost equal to the 2014 figure. Nationally, cereal yields were higher for Winter Wheat, Spring Barley and for both Winter & Spring oats exceeding previous records due to the excellent growing season coupled with very favourable harvesting conditions – Again, this was despite a 15,600 hectare reduction in the area harvested.

A favourable grain fill period and fine weather during the harvest all contributed to the high yields and ensured that grain quality was of a high standard.

TABLE 3.11

AREA, YIELD & PRODUCTION OF CEREALS, 2015*

	Production	Area	Yield	
	000 tonnes	000 hectares	t/ha	
Winter Wheat	605	55	11	
Spring Wheat	86	10	8.6	
Total Wheat	691	65	9.8 average	
Winter Barley	709	70	10.2	
Spring Barley	1019	132	7.7	
Total Barley	1728	202	8.95 average	
Winter Oats	105	11	9.2	
Spring Oats	92	12	7.7	
Total Oats	197	23	8.45 average	
Total Cereals	2,616	290	9.07 average	

Source – Teagasc Estimate

*refers to all production, which is subsequently sold or used alternatively typically for feed. CSO figures refer to sold production only.

Prices

Ireland is a deficit market for cereals and, as such, is greatly affected by world prices and supplies.

Outlook for 2016

Forecasts from the EU Commission's DG Agri medium-term outlook publication for the 2016/2017 harvest year and beyond predict a slight increase in production over the period, providing growing conditions are favourable. On the world market, the International Grains Council predicts a small decrease in cereal production, mainly due to a retreat in the wheat harvest from the previous record, though consumption is expected to continue to increase due to higher food and animal feed use. In Ireland the total area sown to winter crops for harvest in 2016 is estimated at 146,000 hectares a 10,000 hectare increase on the 2015 area.

3.8 Horticulture & Potatoes

General Market Situation 2015

For most sectors within the horticultural industry, the cost of production and the value of output are significantly influenced by prevailing weather conditions. Favourable overall weather conditions during 2015 meant it was a reasonably good year for most sectors within the horticultural industry.

During 2015 many Irish growers continued to make significant capital investments to improve production efficiency as well as the quality of their produce. While energy costs have fallen, they still represent a significant input cost for the industry, especially those operating under heated glass. This is leading many growers to continue to invest in alternative energy sources and energy saving measures.

Competition within the retail trade for the dominant share of fresh fruit and vegetables sales remained intense during 2015, however the effect of this was somewhat offset by the strength of sterling making UK imports less attractive. Downward price pressure and the issue of short term supply contracts continue to represent the greatest issues facing an industry which otherwise has very good prospects for further growth.

Horticulture Output in Ireland

The horticulture sector (excluding potatoes) contributed approximately €348m to farm output in 2015, an increase of 3.7% on 2014.

TABLE 3.12

OUTPUT VALUE OF HORTICULTURE, 2014/2015

Product	Value €m	Value €m	% Change
	2014	2015	Y on Y
Mushrooms	133.2	137	2.8%
Field Vegetables	61.1	67.1	9.9%
Protected Crops	85.3	86.1	0.9%
Outdoor Fruit Crops	9.8	9.5	-2.3%
Bulbs, outdoor flowers, foliage	5.9	8.1	38.1%
Hardy nursery crops, Christmas trees and honey	40.8	40.6	-0.5%
Total	336.1	348.4	3.7%
Source: DAFM			

Mushrooms

Irish grower numbers contracted slightly during 2015, as smaller growers continued to exit the industry. Grower numbers at the end of 2015 stood at around 70, however, during 2015 output volume for the sector increased marginally building on the trend of increased production from the mushroom sector over recent years.

Growers' production of this highly perishable product was well aligned with demand for the year overall, however, the downward price pressure which was evident since mid-2014 intensified during 2015 as retailers sought to reduce prices to offset currency changes and reduce costs. The UK market which is the main destination for Irish mushrooms, became increasingly competitive over this period due to a combination of increased domestic UK production and a stronger presence of Polish mushrooms on the UK's food service market.

The mushroom sector continues to invest heavily in new technology to optimise production costs but it is facing a number of challenges. In addition to on-going retailer pressure the sector is faced with more limited availability of labour due to the improving Irish economy.

Fruit and Vegetables

Most field vegetable growers had a good year up to November 2015. In general, yields were good and prices were steady. This arose through a combination of reasonably favourable weather, steady demand and reduced UK imports due to the strength of Sterling. The exceptionally mild weather from November onwards, coupled with the wettest December on record, made these two months very challenging for some field vegetable growers. Crop growth in November was accelerated due to unseasonably mild weather, which resulted in over-maturity problems for certain crops, especially where the crop was programmed for Christmas demand but was ready for harvest in November. The mild wet weather at the end of the year combined to give rise to significant disease and quality issues for certain crops. While harvesting has been disrupted by the exceptionally wet conditions the impact has not been as severe as it would have been in the past as many field vegetable growers have over recent years invested in harvesting machinery which is designed to cope with wet soil conditions. Looking to the future there is a need for growers to consider further measures to reduce soil compaction, especially at harvest, if they going to compete successfully at a reasonable price for conacre land.

Soft fruit growers enjoyed another good year as they benefited from a steady supply of product combined with very strong consumer demand for soft fruit throughout the year. Given the increasing demand for soft fruit and the recovering economic situation Ireland's soft fruit sector has very good prospects for the future.

Salad crop growers had a reasonable year in 2015 however it was not as profitable as the previous two years. This arose due to a combination of poorer weather at certain times, and especially in the Summer period, reducing consumer demand for salads plus the retail multiples offering cheaper imported produce on promotion adjacent to higher priced Irish product.

Dessert and Culinary Apple yields were back marginally due to poorer crop pollination arising from less favourable weather at pollination time. Apple prices were stable overall in 2015. Output from the apple sector is expected to increase significantly over the coming years as a number of new orchards come into production. Many of these have been planted to facilitate mechanical harvesting for the processing sector.

Nursery Stock

After a number of difficult trading conditions the nursery sector began to see some improvement in 2014. This trend continued through 2015 and there is now a cautious optimism in the sector. It will still take some time for certain nurseries to fully recover from the difficulties of the past, however, there is currently more cause for optimism in the sector than at any stage over the past 8-9 years.

Potato Sector

In 2015 growers reduced plantings in response to the poor prices achieved over previous years. The potato area reduced by 10% however good yields, combined with reasonably good harvesting conditions for most growers, resulted in a more marginal reduction in overall production volume. The lower production volumes led to a significant firming of prices compared to previous years and while many retail prices increased significantly this didn't significantly affect demand for potatoes.

TABLE 3.13 AREA, YIELD & PRODUCTION OF POTATOES, 2011-15

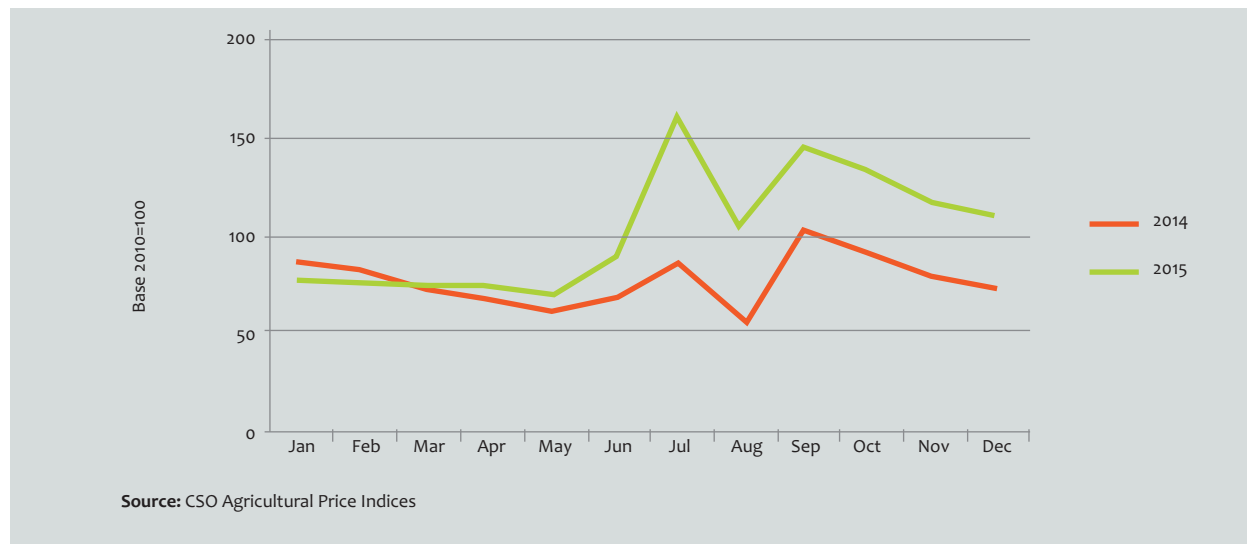
Year	Area (000 Ha.)	Estimated Average Yield (tonnes per Ha.)	Production (000 tonnes)
2011	9.61	40	384.4
2012	8.86	29.7	263.1
2013	10.09	36	362.9
2014	9.16	38.7	354.3
2015	8.2	42.4	347.7

Source: DAFM Estimates

The variety "Rooster" maintained its position of being by far the most dominant variety planted by Irish growers in 2015. An early estimate of the 2016 planting area is that it will be similar to 2015.

The long awaited three year Industry / EU co-funded potato promotion campaign got underway on the British and Irish markets in Autumn 2015.

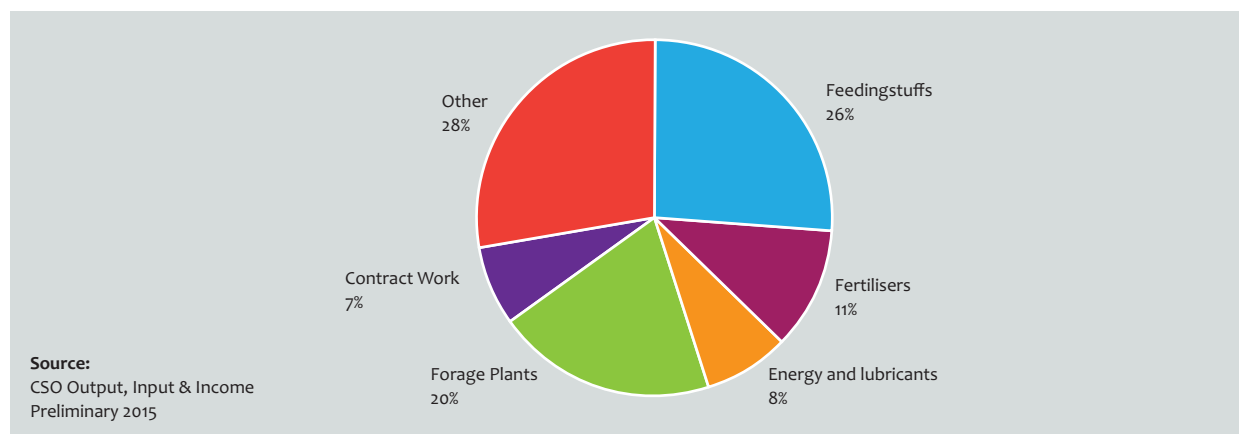
FIGURE 3.10 POTATO PRICE INDICES 2014-2015



Expenditure on Intermediate Consumption

2015's intermediate consumption expenditure in agriculture was very slightly down (-0.1%) year-on-year to €5,128.1m. Energy Costs fell by 10.1%, though feedingstuffs, which account for over one-quarter of total intermediate consumption in the sector, (see Figure 3.11), rose by 2.3% to €1,351.9m.

FIGURE 3.11 INTERMEDIATE CONSUMPTION 2015 - % SHARE OF SELECTED ITEMS



Price Indices for Agricultural Inputs

In 2015, the price level of agricultural inputs fell by 2.3% following on from a 4.2% drop in 2014. The most significant contributor to 2015's decrease was the price of energy, which fell by 11%, primarily due to a 14.7% fall in motor fuels.

TABLE 3.14 AGRICULTURAL INPUT PRICE INDEX, 2014-2015

	2014	2015
Input Prices	-4.2%	-2.3%
Feedingstuffs, including	-9.7%	-3.8%
Straight	-17.5%	-6.2%
Cattle	-9.6%	-5.3%
Pig	-8.4%	-1.2%
Poultry	-6.6%	-1.5%
Fertilisers, including	-3.6%	0.5%
Straight	-3.9%	0.4%
NPK	-7.8%	-0.7%
PK	-3.6%	0.5%
All Energy, including	-2.7%	-11.0%
Motor Fuels	-4.5%	-14.7%
Electricity	3.6%	-0.2%
Seeds	-6.4%	-2.9%
Veterinary Expenses (incl A.I)	2.1%	1.2%

Source: CSO Agricultural Price Indices

Animal Feedingstuffs

The volume of compound feedingstuffs produced in 2015 increased by almost 7% to 4.351 million tonnes, compared with 2014 production levels of 4.072 million tonnes. The overall cost of feedingstuffs increased by 2.3% from €1.32 billion in 2014 to €1.35 billion in 2015.

The CSO Agricultural Price Index indicates an overall reduction 3.8% in the price of feedingstuffs in 2015.

FIGURE 3.12 PRICE INDEX FOR ALL FEEDINGSTUFFS, 2014-2015

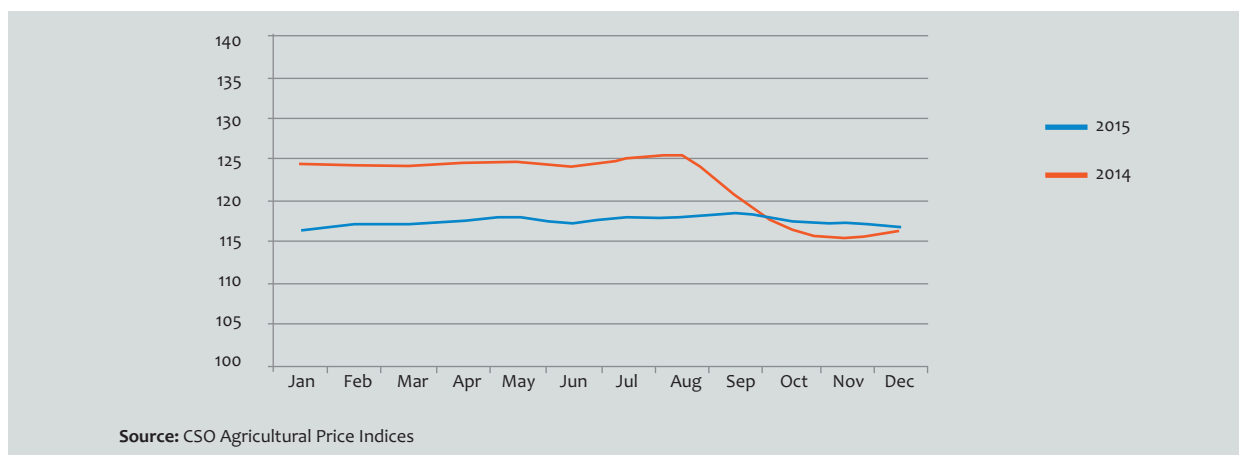
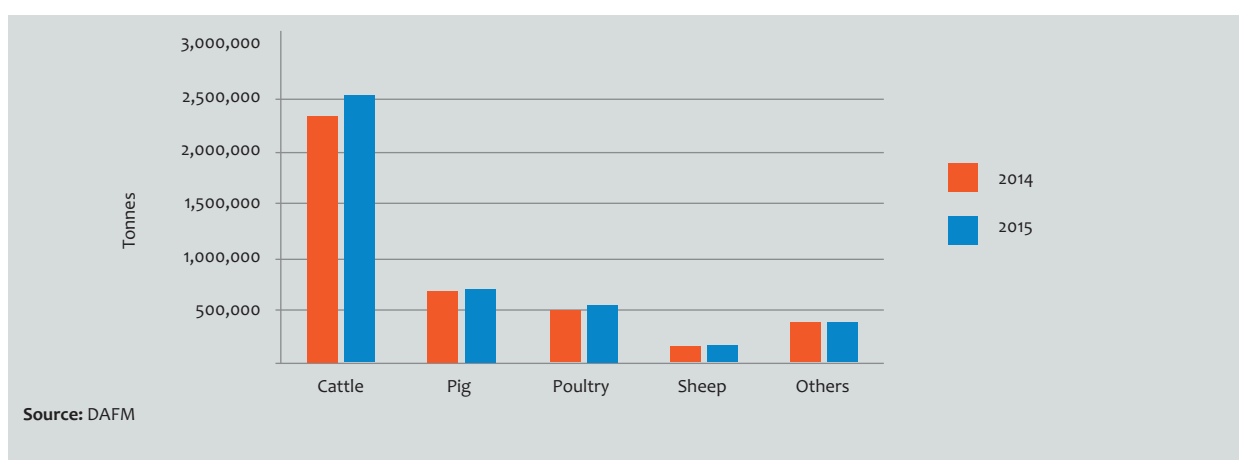


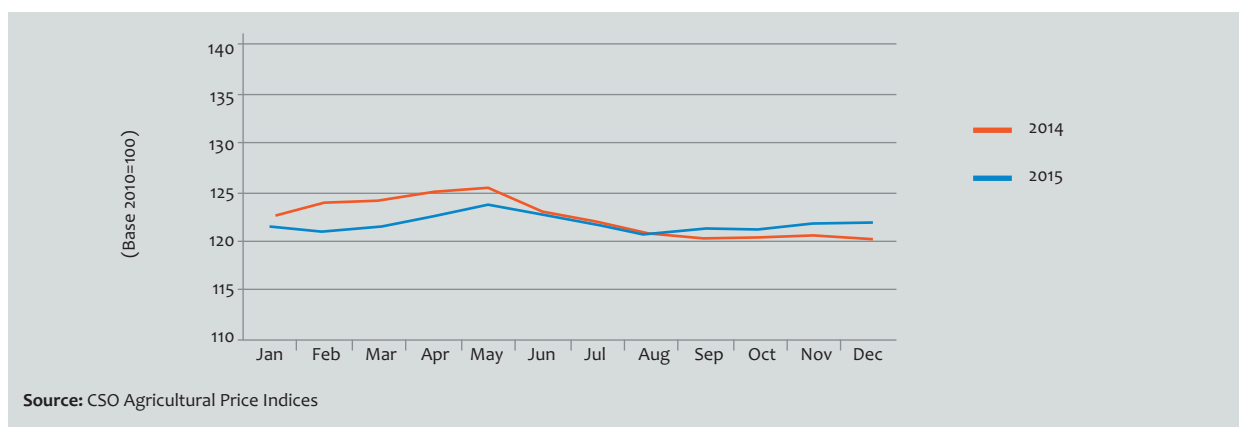
FIGURE 3.13 PRODUCTION OF COMPOUND FEEDINGSTUFFS, 2014-2015



Fertiliser & Ground Limestone

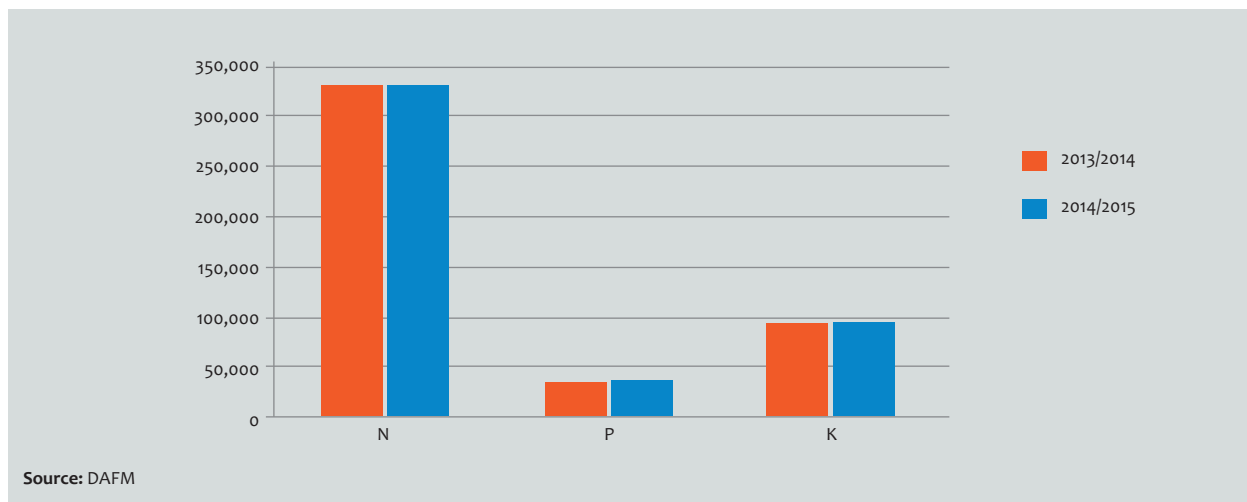
CSO estimates for 2015 indicate that the fertiliser (including ground limestone) price decreased by 0.5% while the volume consumed remained almost unchanged at €565.1 million.

FIGURE 3.14 PRICE INDEX FOR ALL FERTILISERS, 2014-2015



Data collected by DAFM shows that for the sale year October 2014 to September 2015, total sales by volume of NPK fertiliser decreased by 0.47% from 1.402 to 1.395 million tonnes. Ground Limestone sales in 2015 (calendar year) amounted to 892,066 tonnes compared to 868,905 tonnes in 2014, an increase of 2.7%.

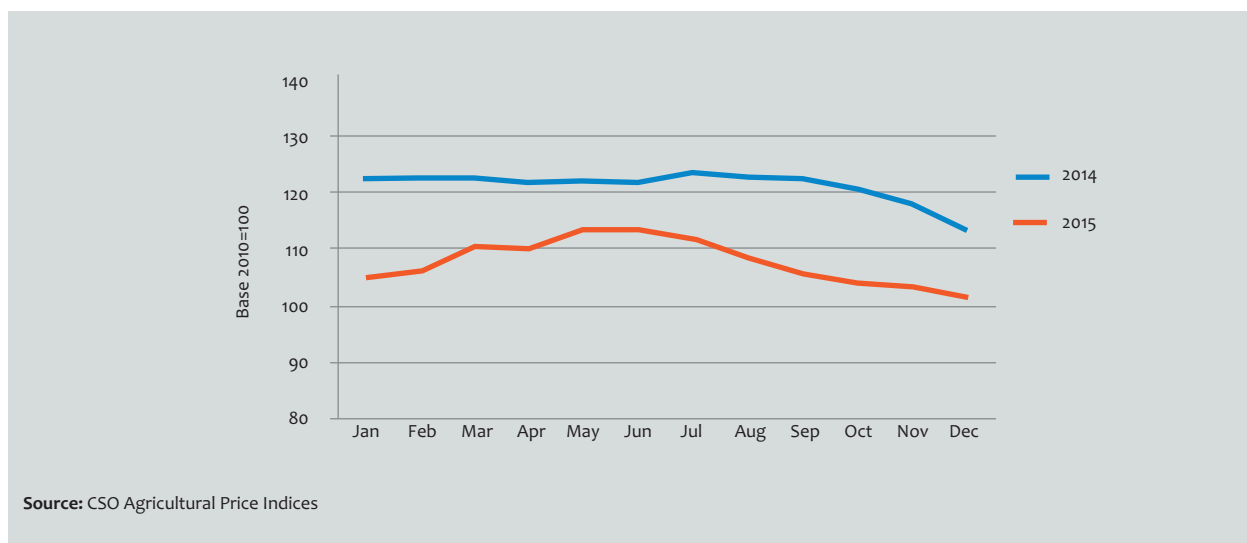
FIGURE 3.15 SALES OF FERTILISERS BY NUTRIENT CONTENT, 2013/2014 AND 2014/2015



Energy Costs

In 2015, within the sector, the price of all energy products fell by 11%, with Motor Fuels decreasing by 14.7% and the cost of electricity relatively static (-0.2%).

FIGURE 3.16 PRICE INDEX FOR ALL ENERGY 2014/2015



Outlook for Inputs

Teagasc's Outlook for 2016 predicts that input prices will be relatively unchanged in 2016. Though there could be some upward pressure for inputs such as pig feed, oil prices are expected to remain low with positive consequences for fertiliser and electricity prices.

Chapter 4

Farm Structures

4.1 Overview

This chapter examines farm structure in Ireland using data from the CSO's Farm Structures Survey 2013 and the Teagasc National Farm Survey 2014, amongst other sources. Investment and borrowings in the agri-sector are also covered, as are analyses on the age profile of farmers and the presence of women in agriculture.

4.2 Farm Numbers and Farm Size

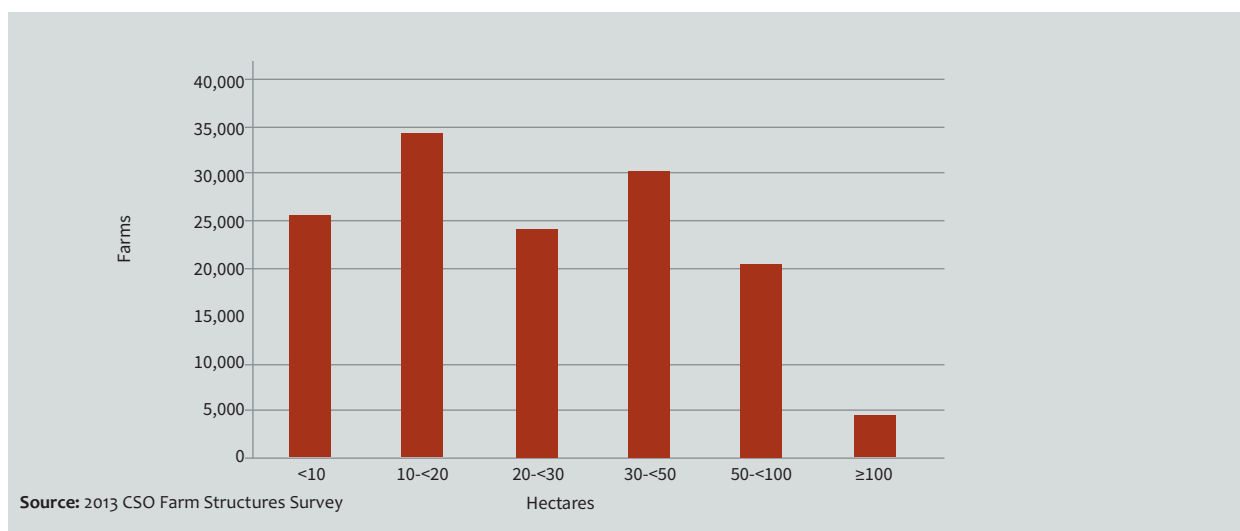
This Farm Structures Survey (FSS) 2013 is the first since 2007, with the 2010 Census of Agriculture being published in between. The FSS and Census are of particular interest for their farm number and farm demographic data, unavailable in other sources. Though the FSS also covers animal numbers and crop areas, this data is updated in Annual CSO surveys. Table 4.1 below shows the total number and average farm size.

TABLE 4.1 NUMBER AND SIZE OF FARMS, 2013

Number of Farms	139,600
Utilised Agriculture Area excluding commonage (ha)	4,536,400
Average Farm Size (ha)	32.5

Source: CSO Farm Structures Survey 2013

FIGURE 4.1 NUMBER OF FARMS BY SIZE OF FARM, 2013



4.3 Age Profile of Farmers

We can also draw on the Farm Structures Survey 2013 for an age profile of farm holders. Table 4.2 shows that half of farm holders (49.9%) were aged between 45 and 65. At opposite ends of the spectrum, the data shows that 6.2% were aged <35 while over a quarter of farm holders were over 65.

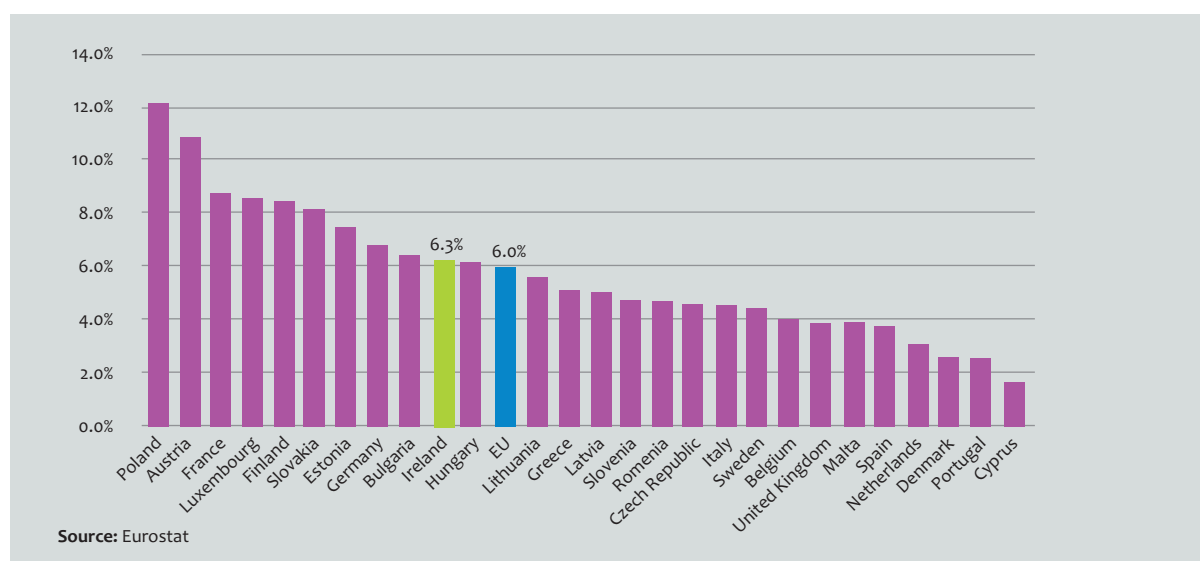
TABLE 4.2 NUMBER OF FARMS BY AGE OF FARM HOLDER, 2013

	Number 000s	%
< 35	8,200	6.2%
35-44	22,800	17.6%
45-54	34,800	24.8%
55-64	35,600	25.1%
>65	37,700	26.3%
Total	139,100	100%

Source: CSO Farm Structures Survey, 2013

Eurostat data on the age profile of farm holders in the EU 28 countries show that 31.1% of all EU farm holders are over 65 and 6.3% aged under 35. The corresponding figures for Ireland are 27.5% of holders over 65 and 6.0% under 35. Both graphs below illustrate the large differences between farmers' age profiles across the EU.

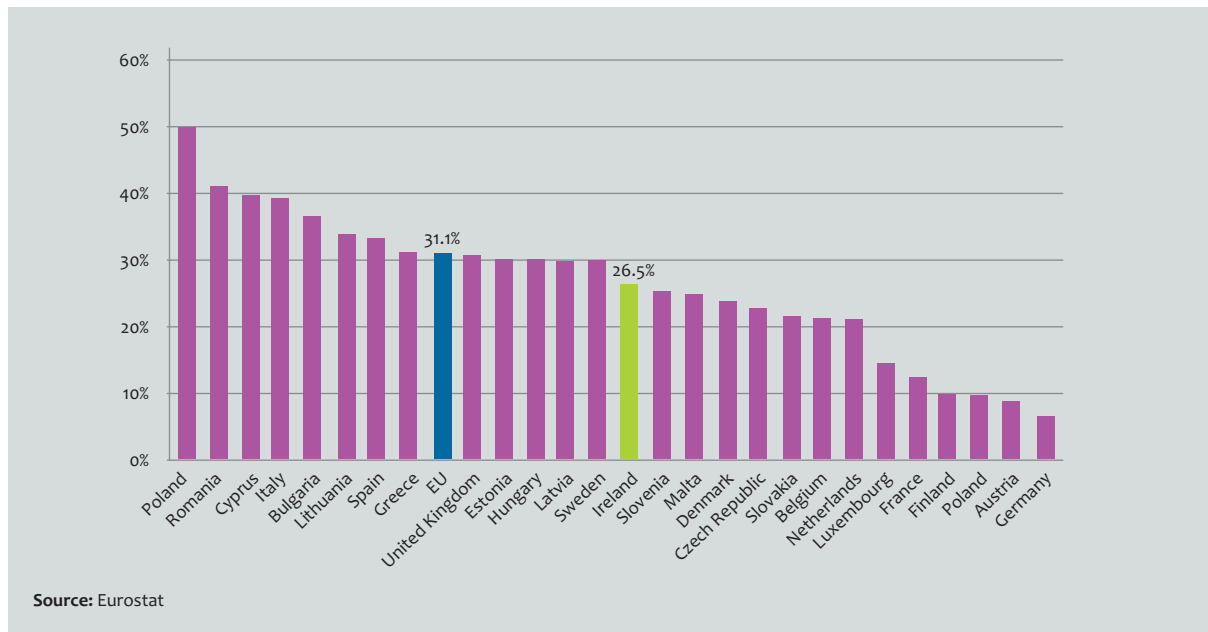
FIGURE 4.2 PERCENTAGE OF FARM HOLDERS UNDER 35, 2013



1 Family Farms only hence slightly lower total figures. Family Farms account for 99.8% of all farms

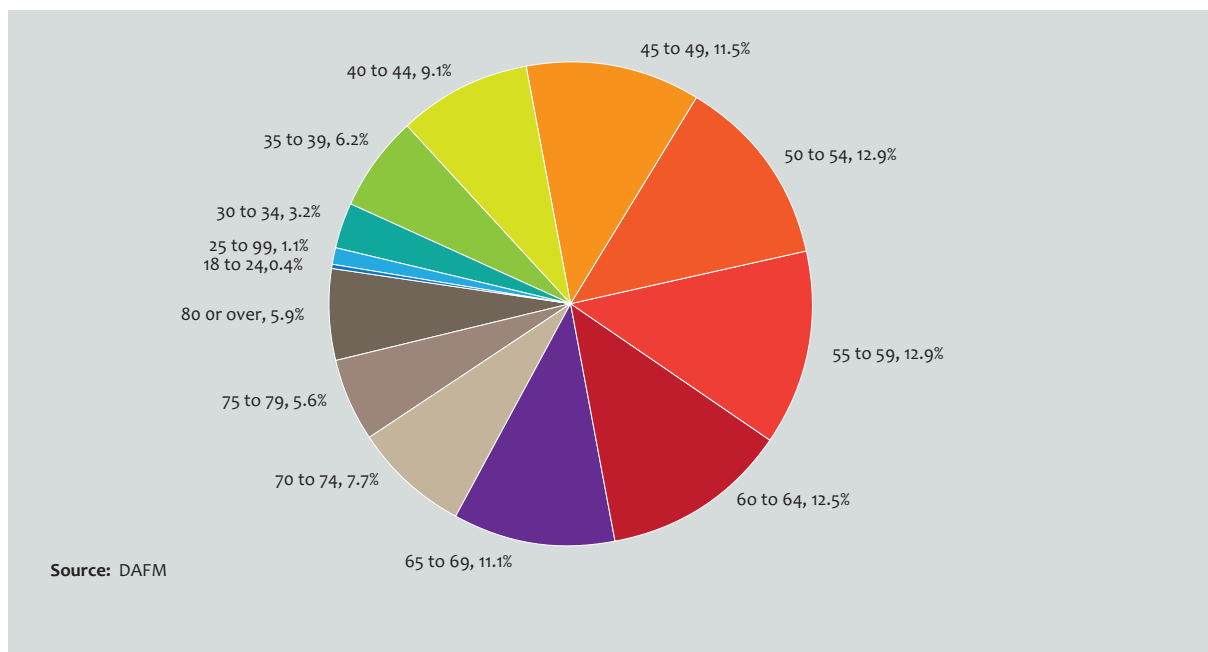
2 Croatian 2013 data unavailable at time of writing so figures and percentages based on EU-27

FIGURE 4.3 **PERCENTAGE OF FARM HOLDERS OVER 65, 2013**



The age profile of farmers can be further assessed using data from an exercise undertaken on the Department’s Customer Client System, for 2014. In total, 111,134 farmers were captured in this analysis and results show that the average age of a farmer was 56. The proportion of farmers under 35 had decreased slightly since 2012 figures, to 4.7% (5,174) and remained lower than those over 80 (6,535 or 5.9% of the total). The majority of farmers (59%) were in the 40 to 64 age group and the second largest category was the over 65 group with 33,562 or 30.2% of the total.

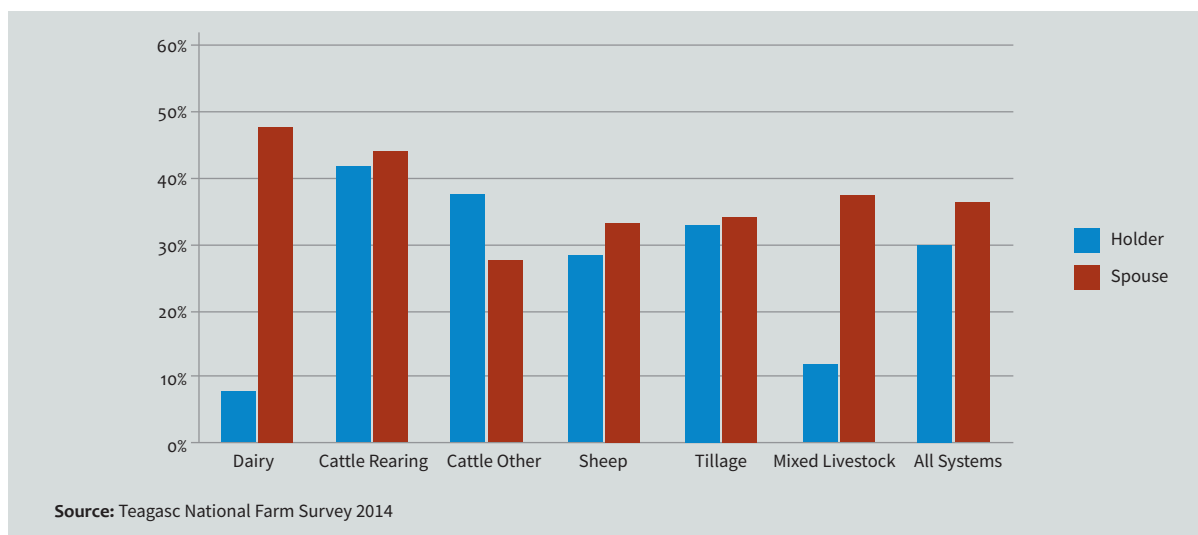
FIGURE 4.4 **AGE PROFILE OF DAFM CLIENTS 2014, BASED ON CCS DATA**



4.4 Off-farm Employment

The **Teagasc National Farm Survey 2014**, which represented almost 80,000 farms³ nationally, indicated that 29.8% of holders and 36.2% of spouses had an off-farm occupation. In 51% of cases, either the holder and/or spouse had off-farm employment⁴. The highest incidence of farm-holders with off-farm employment was reported on 'cattle rearing' and 'cattle other' farms, while spouses were more likely to have off-farm employment on dairy farms. Overall it was estimated that on 75% of farms either the farmer and/or spouse had another source of off-farm income, be it from employment, pension or social protection.

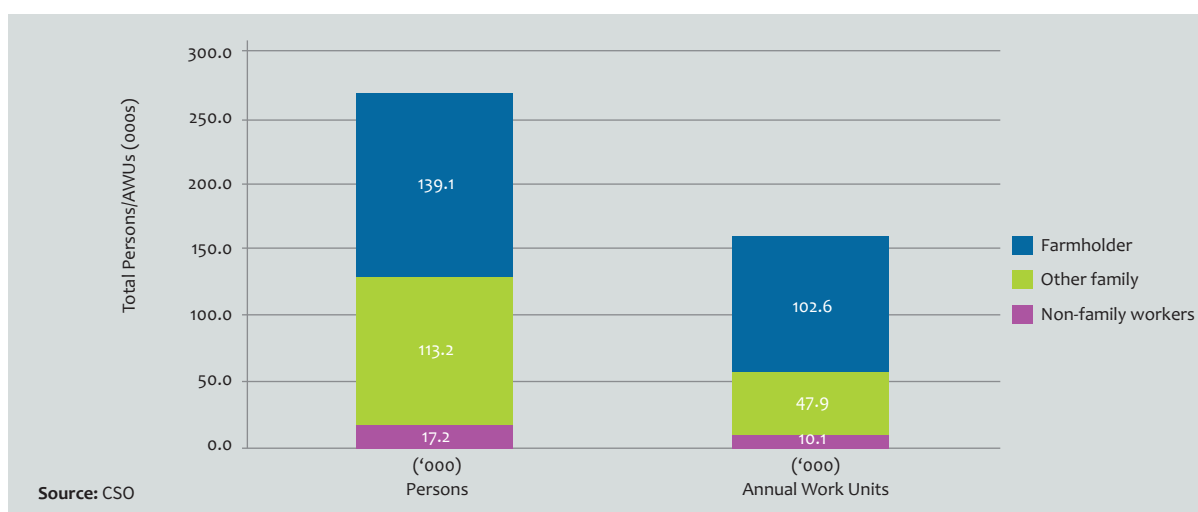
FIGURE 4.5 PERCENTAGE OF FARMERS AND/OR SPOUSES WITH OFF-FARM EMPLOYMENT BY SYSTEM OF FARMING, 2014



4.5 Labour Input

The most recent data available on farm labour inputs is from the CSO's Farm Structures Survey 2013. Total labour input was calculated as 161,000 annual work units, of which 52% was provided by the farm holders, 42% by other family members and 6% by non-family. This split is virtually unchanged from the Census of Agriculture data in 2010.

FIGURE 4.6 LABOUR INPUT IN AGRICULTURE, 2013



³ From 2012 The National Farm Survey excludes farms with less than €8,000 of Standard Output (SO). Up to this the threshold for inclusion of farms in the survey field had been €4,000 SO. As a result a straightforward comparison between the 2012-14 results and those of preceding years could easily lead to an incorrect interpretation of intervening changes. It must be borne in mind that the population of farms represented in the 2012-14 NFS sample is now smaller than previous years.

⁴ The figures are lower than those reported by the CSO which would in part be due to the fact that farms with less than €8,000 of Standard Output are excluded

Meanwhile, data from the National Farm Survey 2014 can be used to examine the extent to which there is excess labour supply on farms. On average, labour input on Irish farms is estimated to exceed labour requirements by over 50%. Under-employment is particularly evident on cattle and sheep farms, whilst dairy farms and mixed-livestock farms could be described as over-employed as they have less labour available than required.

TABLE 4.3 **COMPARISON OF ACTUAL LABOUR⁵ VERSUS ESTIMATED LABOUR REQUIREMENT (STANDARD MAN DAYS)⁶**

	Dairy	Cattle Rearing	Cattle Other	Sheep	Tillage	Mixed Livestock	All Systems
Full-time farms							
Total actual labour units	1.63	1.41	1.5	1.39	1.49	1.68	1.4
SMD labour units	2.18	1.12	1.24	1.21	1.67	2.12	1.6
Total actual labour as % SMD	75%	126%	121%	115%	89%	80%	88%
Part-time farms							
Total actual labour units	0.96	0.98	0.97	1.06	0.86	0.92	0.91
SMD labour units	0.65	0.42	0.36	0.46	0.41	0.61	0.38
Total actual labour as % SMD	147%	230%	269%	229%	208%	151%	239%
All farms							
Total actual labour units	1.59	1.03	1.09	1.17	1.13	1.57	1.21
SMD labour units	2.1	0.51	0.56	0.71	0.95	1.89	0.79
Total actual labour as % SMD	76%	203%	195%	165%	119%	83%	153%

Source: Teagasc analysis using National Farm Survey 2014 data.

4.6 Employment

The CSO's Quarterly National Household Survey for Quarter 4 2015 showed a headline increase in total employment in the economy of 44,100 over the same quarter in 2014. Total employment in Ireland averaged 1,964,000 across the four 2015 QNHS quarters. Employment in the agri-food sector⁷ in 2015 averaged 166,000 or 8.4% of primary employment for all those employed.

TABLE 4.4 **QUARTERLY NATIONAL HOUSEHOLD SURVEY DATA 2015 – AGRICULTURE EMPLOYMENT**

'000s	2015	% of Total
All persons in employment	1,963.6	100.0%
of which		
Agri-food Sector	165.7	8.4%
Agriculture, forestry & fishing	109.9	5.6%

Source: CSO QNHS 2015

The QNHS data for the agri-sector has been difficult to interpret since a new sample was gradually introduced in Q4 2012 and the Q4 2013 CSO release flagged that *'for agriculture, forestry and fishing, it can be noted that estimates of employment in this sector have shown to be sensitive to sample changes over time' and that 'particular caution is warranted in the interpretation of the trend in this sector over time'.*

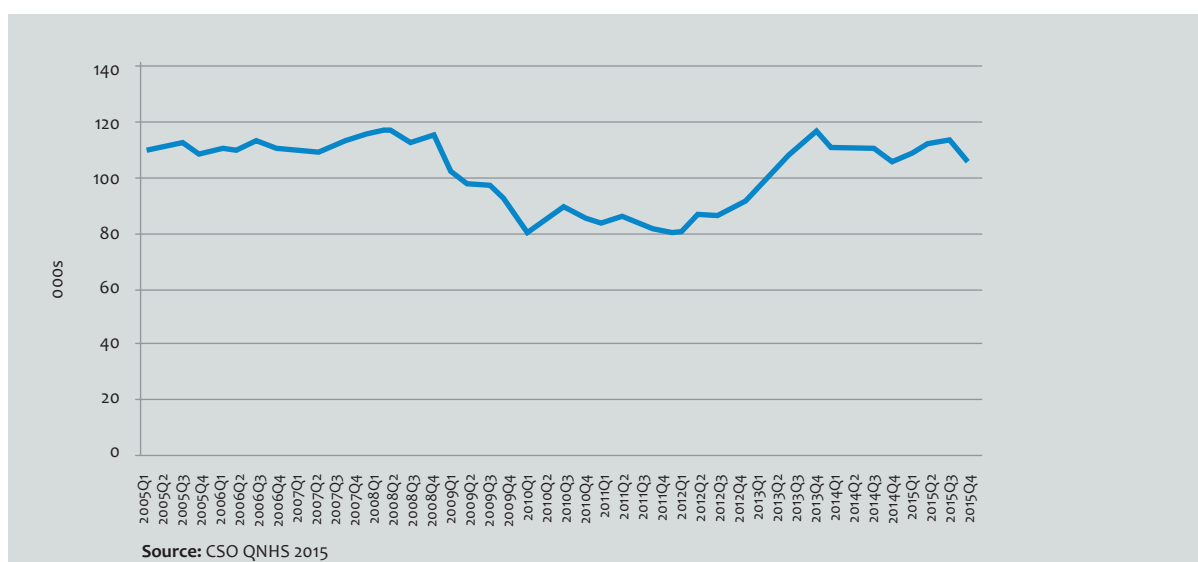
⁵ Actual labour unit is defined as 1,800 hours or more worked on a farm by a person over 18 years.

⁶ Standard Man Days (SMD) Labour Unit eight hours of work supplied by a person over 18 years of age. The number of SMD required per hectare for the different crops and per head for various categories of livestock is used to calculate the total number of SMDs required to operate the farm

⁷ As well as farm holders, the QNHS figures include family and non-family members working on farms. Figures would also include around 6,000 fishermen and primary forestry workers.

Figure 4.7 below shows QNHS figures for agriculture, forestry and fishing since 2005. The considerable dip from 2008 to 2011 seems counter-intuitive (when one might have expected people losing off-farm jobs in the recession to re-classify their primary occupation as agriculture). Employment for Q3 2013 suggested that employment in primary production had grown by 30% since Q4 2012 and stood at its highest level since Q4 2003. It is likely, therefore that this was an over-estimate and comparisons with this quarter will be unreliable. Figures since 2014 seem more in line with those over the years before 2008 and suggest that the data has levelled off and is now more dependable. DAFM continues to liaise with the CSO on the best ways to interpret and present the sector's employment data.

FIGURE 4.7 QNHS AGRICULTURE, FORESTRY AND FISHING EMPLOYMENT, 2005-2015



4.7 Land Prices and Land Mobility

Irish Farmers Journal (IFJ) Land Price Report 2015

The latest Irish Farmers Journal Land Price Report⁸ shows that the average price for land in the Republic of Ireland decreased by 9.9% to €8,914 an acre in 2015. This made 2015 the sixth year in a row that the national average was below €10,000 an acre. The amount of land for sale also decreased, by 13.6%, to 74,629 acres⁹.

Kildare was the most expensive county to buy land last year at €13,886/acre, followed by Dublin at €13,736/acre, Meath at €11,861/acre, Wexford at €11,214/acre and Kilkenny at €10,883/acre. In contrast, Leitrim was the least expensive at €4,869/acre followed by Clare at €5,391/acre, Mayo at €5,699/acre, Roscommon at €5,801/acre and Sligo at €6,089/acre.

At a provincial level, Leinster had the highest average price at €10,271/acre, followed by Munster at €9,190/acre, Ulster at €8,093/acre and Connacht at €6,183/acre.

In terms of volume, a total of 74,629 acres were offered for sale in 2015 – down from 86,408 acres in 2014. The IFJ report suggests that the increase in the number of long-term lease arrangements partly contributed to a decrease in supply and that the exceptional demand from farmers to enter a long-term lease, coupled with the favourable tax relief for landowners, has made these arrangements very attractive.

Land supply fell in 22 counties, with the biggest drop experienced in Louth, Donegal, Dublin and Kilkenny. Cork had the most land offered for sale at 7,458 acres followed by Tipperary at 5,869 acres and Wicklow at 5,510 acres. However, despite the fall in price and supply, the success rate at auction saw a marked improvement. Of the 502 farms that went to auction, 48% sold this is up from 38% in 2014. The report, however, confirms that private treaty is still the preferred route in terms of method of sale. Over two-thirds of the 1,654 farms that were brought to the market in 2015 were offered for sale by private treaty.

⁸ Agricultural Land Price Report 2015 supplement in the Farmers Journal, 10th of March 2016
⁹ 1 acre = 0.404685642 hectares

Society of Chartered Surveyors Ireland / Teagasc Land Market Review & Outlook 2015

The Society of Chartered Surveyors Ireland/Teagasc Land Market Review and Outlook 2015, aimed to bring together the respective expertise of both organisations to increase the range and quality of the data that is available on the agricultural land market in Ireland. It contended that *“Our ability to understand the challenges and opportunities farmers face depends on our capacity to produce and interpret a wide range of factors relating to the agriculture sector, including the operation of the land market.”*

Figures from the survey also indicate that there are significant geographical differences in average land prices in Ireland and that prices per acre of land have changed between 2010 and 2014, increasing for transactions up to 50 acres, decreasing for transactions of between 50 and 100 acres and differing by province above 100 acres. The three figures below illustrate these findings.

FIGURE 4.8 AVERAGE PRICE PER HECTARE OF AGRICULTURAL LAND WITH ENTITLEMENTS BUT WITHOUT A RESIDENCE, 2010 AND 2014. AREAS UP TO 50 ACRES.

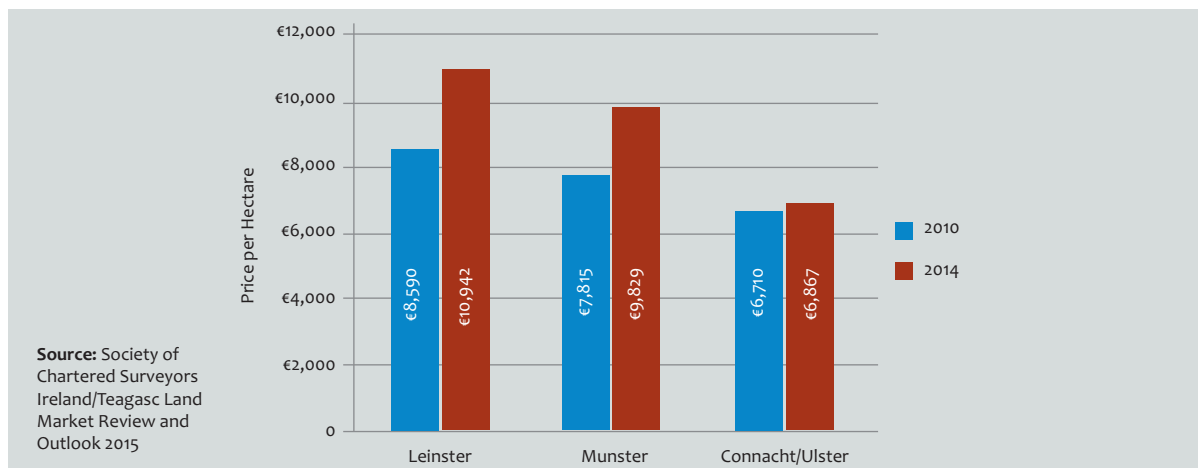


FIGURE 4.9 AVERAGE PRICE PER HECTARE OF AGRICULTURAL LAND WITH ENTITLEMENTS BUT WITHOUT A RESIDENCE, 2010 AND 2014. AREAS BETWEEN 50 AND 100 ACRES.

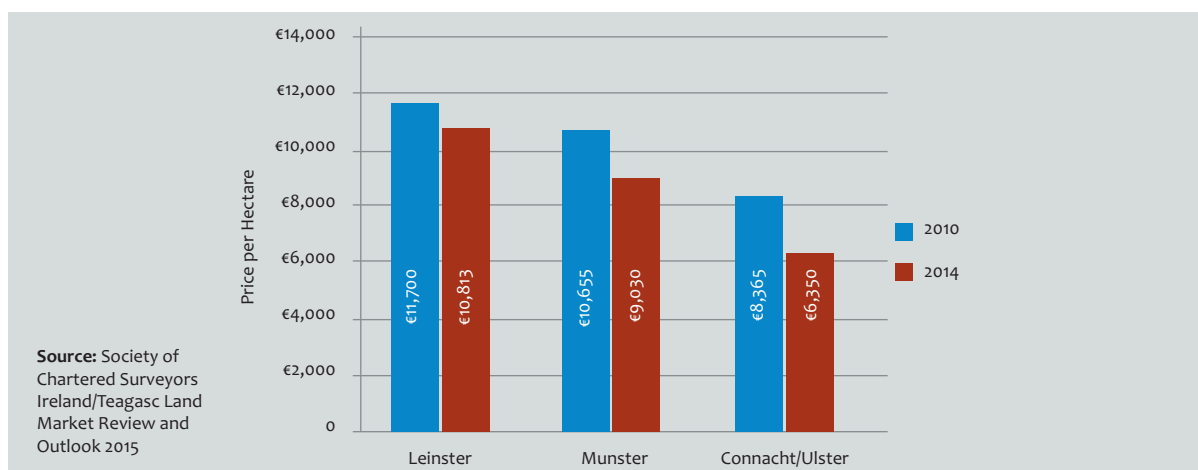
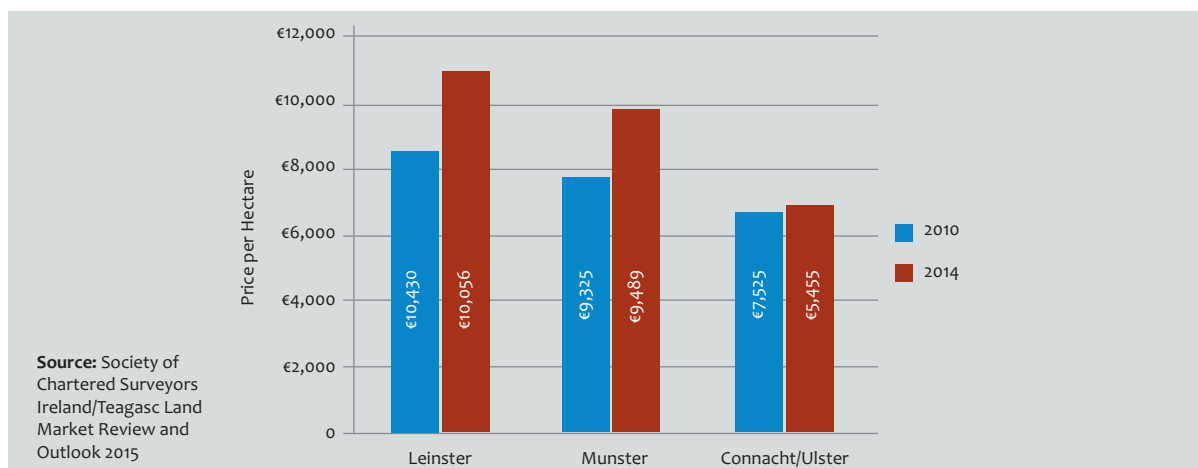


FIGURE 4.10 AVERAGE PRICE PER HECTARE OF AGRICULTURAL LAND WITH ENTITLEMENTS BUT WITHOUT A RESIDENCE, 2010 AND 2014. AREAS OVER 100 ACRES.



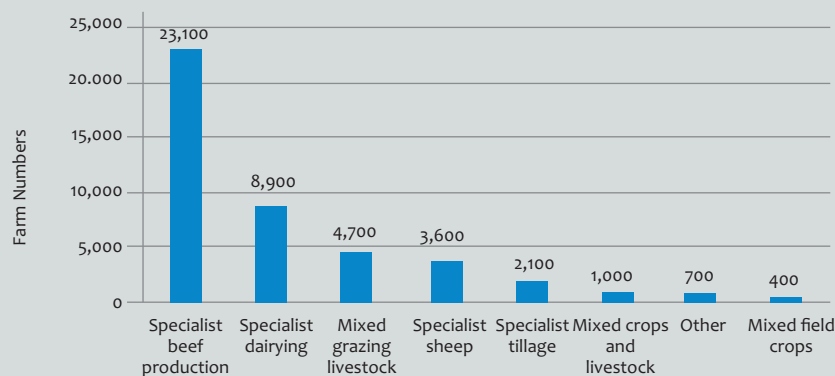
Land Rental

The SCSi/Teagasc report shows that, in Ireland, the area of agricultural land sold annually represents only a fraction of 1% of the total stock of land that is farmed, with the sale of agricultural land in Ireland being very much the exception rather than the rule.

One of the consequences of the low volume of land sales is that farmers have to make use of the land rental market if they wish to change the area of land they farm. Renting out land is a means by which the title to the land can be retained but an income can be derived from the land by the owner if he or she is not in a position to farm the land. From the perspective of those renting land, it is often the only means to increase their farm's land base. The land rental market can also be used to address problems which arise because of farm fragmentation, such as where an out-farm is remote from the home farm.

The CSO Farm Structures Survey 2013 provides data on this topic and shows that almost 44,500 farms included rented land, with 4,900 farms being 100% rented. Of those farms that rented in land, over half were involved in specialist beef production and 20% were specialist dairying.

FIGURE 4.11 NUMBER OF FARMS WITH LAND RENTED-IN, 2013



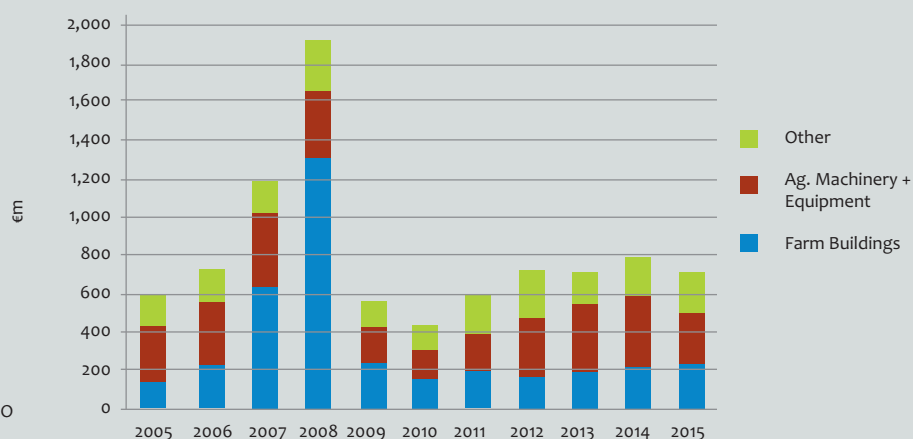
Source: CSO Farm Structures Survey 2013

4.8 Investment, Borrowings and Interest in Agriculture

Gross fixed capital formation, or capital investment, in agriculture has grown considerably since its dramatic collapse back in 2009. Most of the decrease in 2009 was attributable to the end of the Farm Waste Management Scheme, which required that all building work be completed by the end of 2008. Investment has since returned to levels similar to 2007/8.

Total Investment (including breeding stock) in 2015 was valued at €713 million, a €141 million, or 9% decrease on 2014 figures.

FIGURE 4.12 CAPITAL INVESTMENT IN AGRICULTURE, 2005-2015



Source: CSO

Borrowings

Latest data from the Central Bank¹⁰ shows that the primary agriculture sector was the largest component of new lending to SMEs, accounting for €734m or 28% of all new loans (ex financial & property) in 2015. During the same period, new lending to Food and Beverage companies was €97m, or 4% of the total.

TABLE 4.5 NEW BORROWINGS BY AGRICULTURE, FORESTRY & FISHERIES SMEs, 2010-2015 (€m)

	2010	2011	2012	2013	2014	2015
Agriculture	573	568	566	585	600	649
Forestry, Logging, Mining & Quarrying	46	25	19	15	10	14
Fishing & Aquaculture	37	48	24	36	40	69
Primary Production Total	655	639	610	635	652	734

Source: Central Bank Table A.14.1

However, total outstanding borrowings held by the primary sector continued to decline as loan repayments increased. Table 4.6 shows that there was a 6.6% drop on 2014 figures and a 36% fall in total outstanding borrowings since 2008.

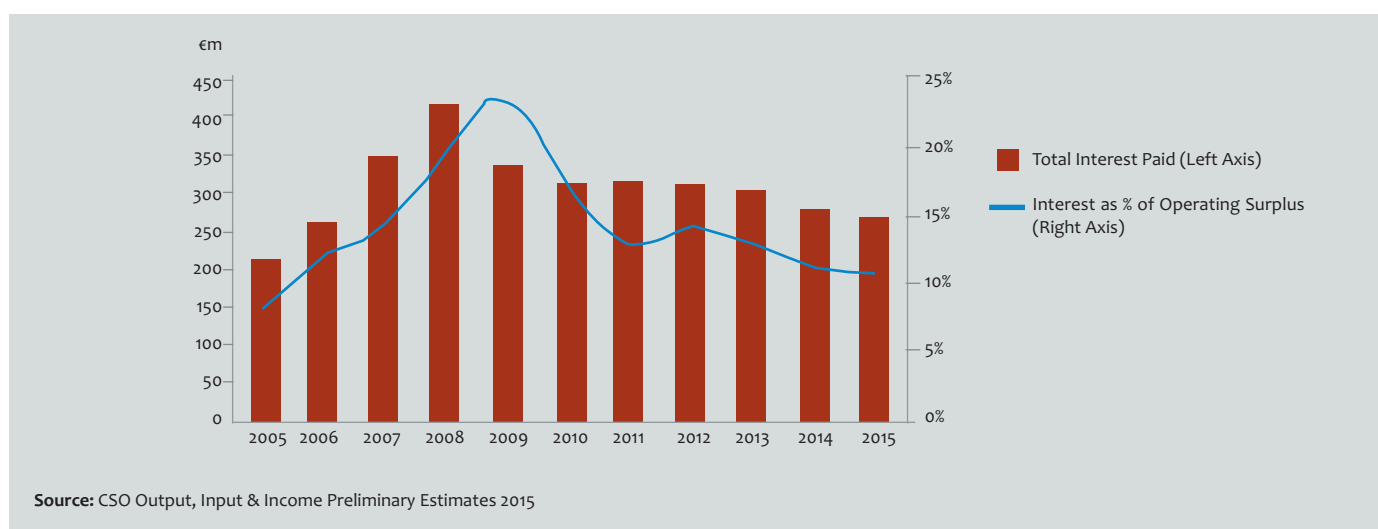
TABLE 4.6 OUTSTANDING BORROWINGS BY AGRICULTURE, FORESTRY & FISHERIES SECTORS, 2008-2015 (€m)

	2008	2009	2010	2011	2012	2013	2014	2015
Agriculture	5,173	4,960	4,595	4,435	4,277	4,184	3,633	3,397
Forestry, Logging, Mining & Quarrying	828	704	575	566	538	531	508	445
Fishing & Aquaculture	412	374	316	322	295	261	233	247
Primary Production Total	6,412	6,038	5,486	5,323	5,110	4,975	4,375	4,088

Source: Central Bank Table A.14, September data for each year

Figure 4.13, shows interest paid by the agriculture sector declined by 4.6% to €267.1 million between 2014 and 2015.

FIGURE 4.13 AMOUNT OF INTEREST PAID & THE PERCENTAGE OF OPERATING SURPLUS IT REPRESENTED, 2005-2015



¹⁰Latest Central bank New Lending and Total Borrowing figures are found at:
<http://www.centralbank.ie/publications/Documents/Quarterly%20Bulletin%20No.%201%202015.pdf>
<http://www.centralbank.ie/polstats/stats/cmab/Pages/BusinessCredit.aspx>

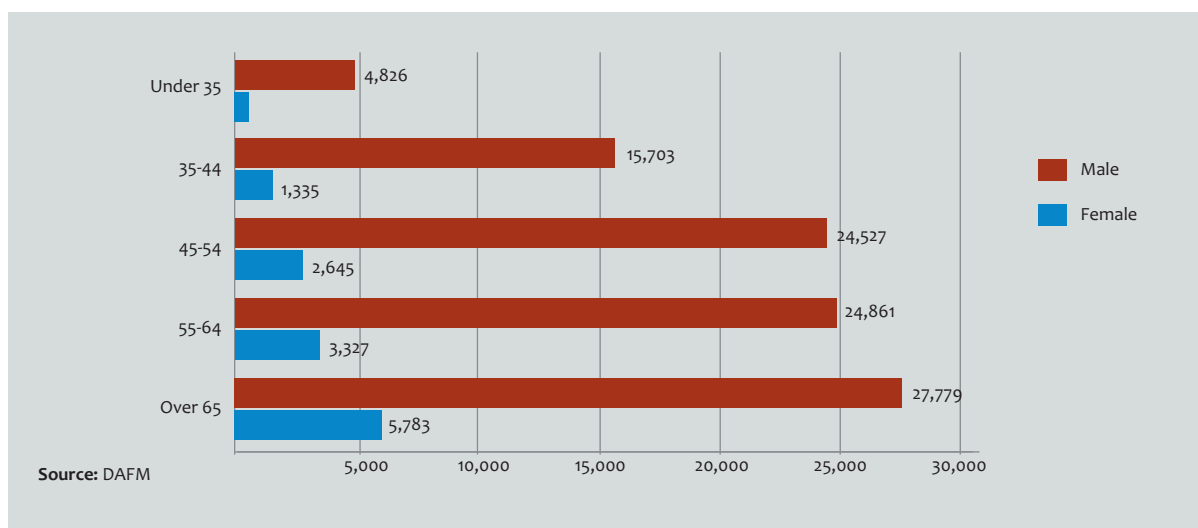
4.9 Women in Agriculture

Ireland

Data obtained from the DAFM's client database for 2014 was used to analyse the role that women play in Irish agriculture. This was combined with data on farmers who received a Single Farm Payment in 2014 and the amount of eligible hectares attributed to each herd number receiving a Single Farm Payment. The analysis excluded payments made to more than one named farmer, meaning that farms jointly owned by a husband and wife were omitted, as were farm partnerships. A total of 111,134 farms which received €1.1 billion in Single Farm Payments and owned 3.9 million hectares were accounted for.

Figure 4.14 shows the age profile of Irish male and female farmers in 2014. Only 13% of the 111,134 farmers were women and they were slightly older than their male counterparts, with an average age of 62 compared to 56 for men. Similar to the findings in Figure 4.2, the majority of both male and female farm owners are in the 45 to 64 age group, however, 43% (5,783) of female sole owners of farms were over 65, with 30% of these over 80 years of age, which would suggest that they received the farm when they were widowed. In comparison only 28% of total male farmers were over 65.

FIGURE 4.14 FARM OWNERSHIP BY GENDER 2014



If we break down the amount of eligible hectares by gender, women are the sole owners of just 10% (376,335 ha) of the total land eligible for Single Farm Payment with 40% (151,167 ha) of this land owned by women over 65.

FIG 4.15 LAND ELIGIBLE FOR SFP, BY GENDER, 2014

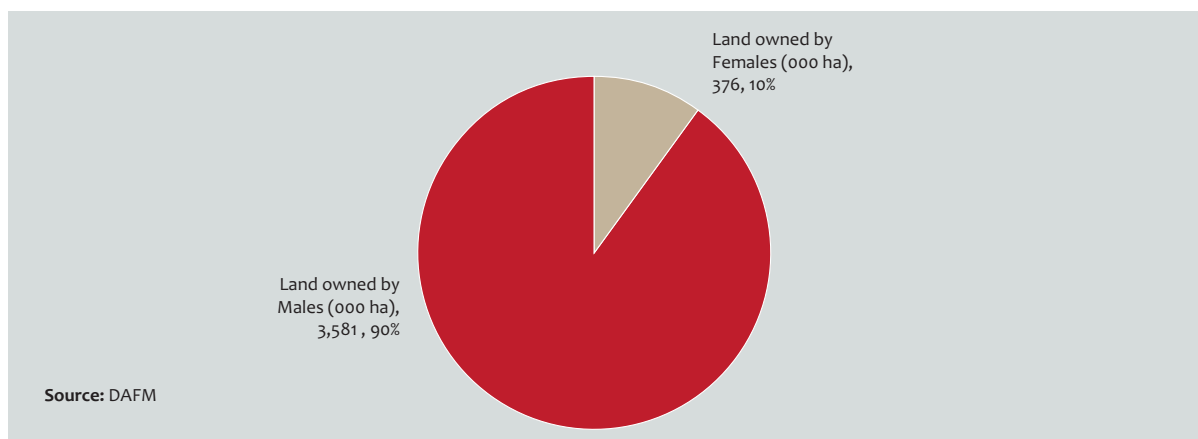
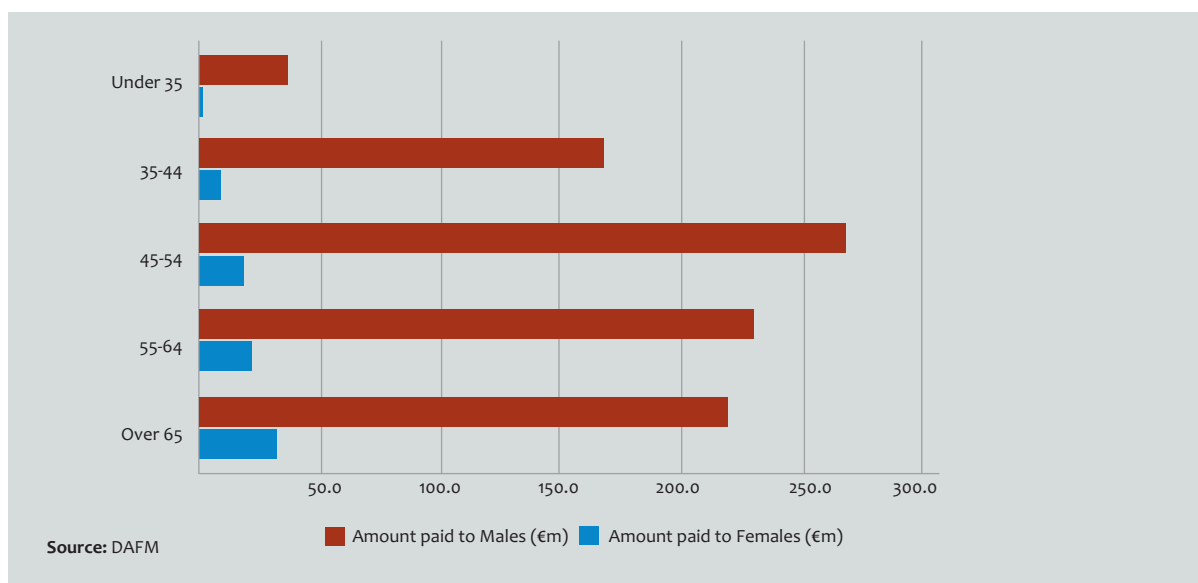


FIG 4.16

SINGLE FARM PAYMENT (€m) BY GENDER 2014

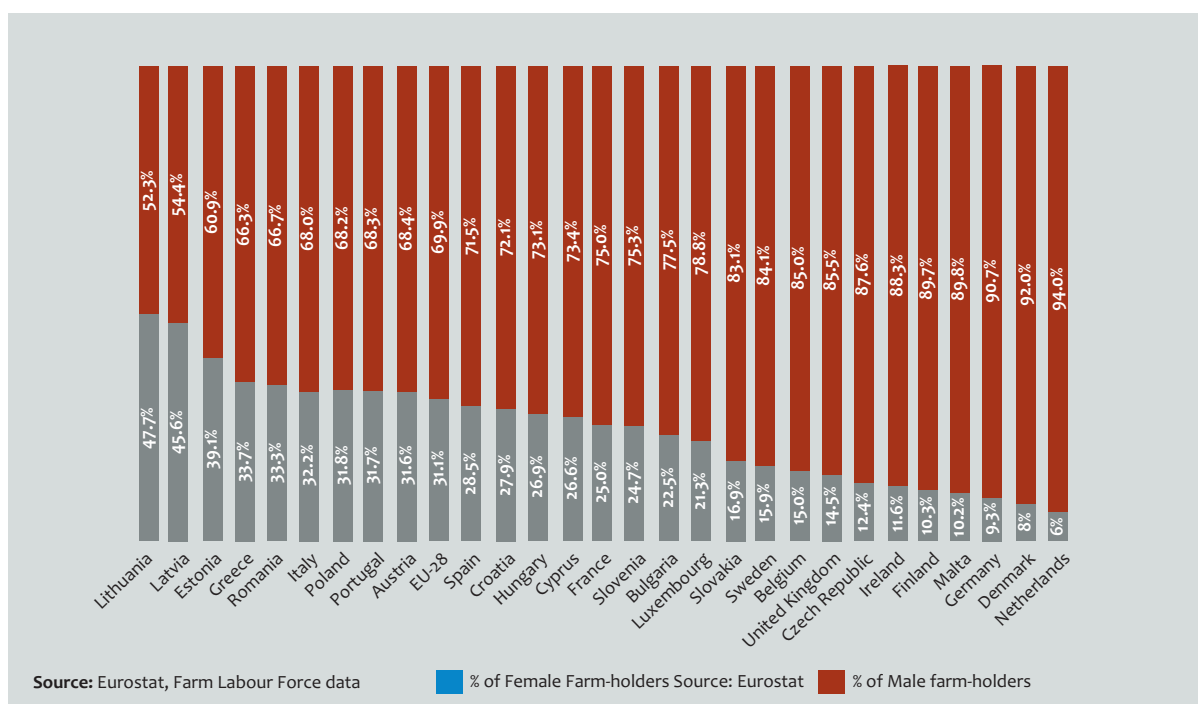


Europe:

Figure 4.16 shows that women received just 8% of the €1.1 billion available in Single Farm Payments in Ireland in 2014. Data from a publication on direct payments, broken down by age and gender, from the Ministry for Agriculture in Spain¹¹ show that 36% of Spanish farmers were women and that they received 27% of total Single Farm Payments. This publication also shows results for the different regions in Spain and in the Galicia region, which has very similar agriculture characteristics to Ireland in that it is made up of mainly beef suckler and dairy farms, 58% of the farmers are women and they receive 44% of total payments.

2013 data from Eurostat, on the holders of farms across the European Union shows that the total proportion of female farmers in the EU is 30%, though this masks wide variations across the continent. The countries with the highest proportion of female farm holders are based in the Baltic region e.g. 48% of Lithuania's 170,000 farmers are female; At the other end of the scale, just 6% of sole farmholders in the Netherlands are female. According to the data, the corresponding figures for Ireland is 11.7%.

FIGURE 4.17: FARM HOLDERS BY GENDER IN EU-28, 2013



¹¹ http://www.fega.es/PwfgCcp/imagenes/es/Fega_Ayudas_Directas_GraficosPiramide_13_tcm5-39579.pdf

Chapter 5

The Food Industry

5.1

Overview

2015 was another positive year for the Irish agri-food industry, as the sector continues to build on its position as one of Ireland's most important indigenous industries. The food and beverages sector provides a primary outlet for the produce and output of the country's 140,000 family farms and generated over €26 billion in turnover in 2012 (latest year available). The sector is an important source of employment in rural areas and employs over 50,000 people directly.

Recent Bord Bia export statistics demonstrate the vitality of the sector, with Irish food and drink exports reaching a record high of almost €10.83bn in 2015, continuing the strong and resilient growth pattern evident over several years in otherwise difficult economic circumstances. The consecutive annual increases seen since 2009 mean the value of Food and Beverage exports has risen by more than 50% in the meantime. Table 5.1 outlines the sector's contribution across some key macro economic variables¹.

TABLE 5.1 THE FOOD & DRINKS INDUSTRY IN THE NATIONAL ECONOMY, LATEST DATA

	Estimated Values	% of Total
Food & Drinks GVA (2014)	€8,562m	5.0%
Employment (2015)	52,000	2.7%
Food & Beverage Exports (2015)	€10,825m	-

Source: CSO National Accounts, CSO Trade, CSO QNHS 2015 Average

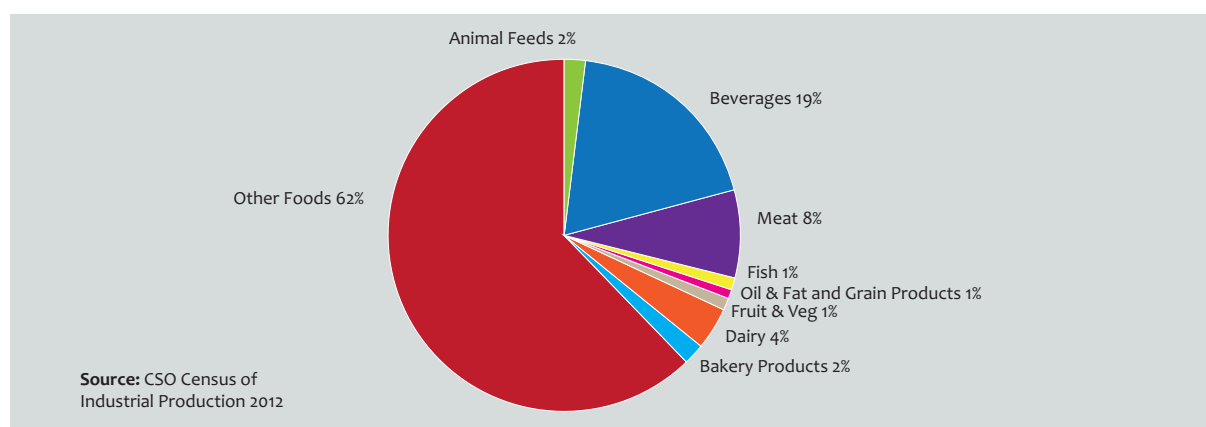
5.2

Size and Structure of the Food and Drinks Sector

Output-Turnover and Gross Value Added

The most recent data available from the CSO Census of Industrial Production 2012 show the Gross Value Added (GVA) attributable to the food and drink sector was €7.5 billion in 2012 with the meat and dairy sectors accounting for 12% of the sector's total, while beverages accounted for some 19%. "Other Foods" which would include processed food products, unsurprisingly accounted for a high proportion of total GVA for the sector at 61% or some €4.6 billion. The composition of output as measured by both turnover and gross value added by broad sector for 2012 is outlined in Figures 5.1 and 5.2.

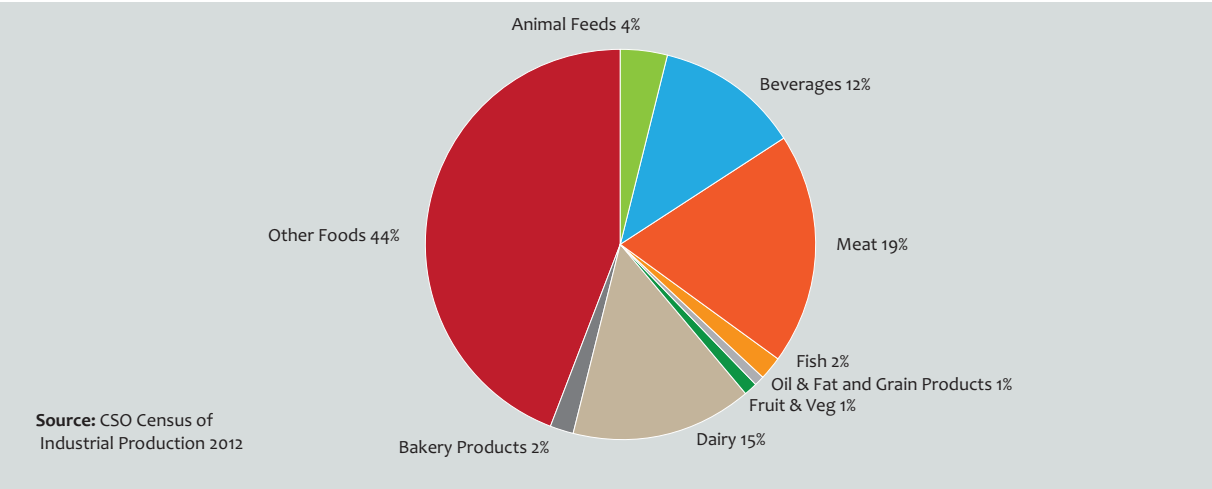
FIGURE 5.1 COMPOSITION OF F&D INDUSTRY GROSS VALUE ADDED BY BROAD SECTOR 2012



¹ Figures for GVA and Employment relate exclusively to the food and drink sector whilst figures for exports relate to both processed and unprocessed agri-food produce.

The Food and Beverages sector accounted for over €26 billion in turnover or one-quarter of total turnover for all manufacturing industries. The food sector (excluding beverages) accounts for about 88% of turnover in the Food & Beverages sector with meat and dairy production accounting for just over one third of turnover. The meat sector, along with dairy, continues to play a highly important role in the overall food sector, with the Other Foods category providing a vital source of demand for all indigenous primary production.

FIGURE 5.2 COMPOSITION OF F&D INDUSTRY TURNOVER BY BROAD SECTOR 2012



Figures 5.3 and 5.4 show breakdowns for overall turnover and GVA for the meat sector by its sub-components. The Beef Sector represented almost 52% of the total Turnover and 44% of total GVA.

FIGURE 5.3 TURNOVER IN THE MEAT SECTOR 2012

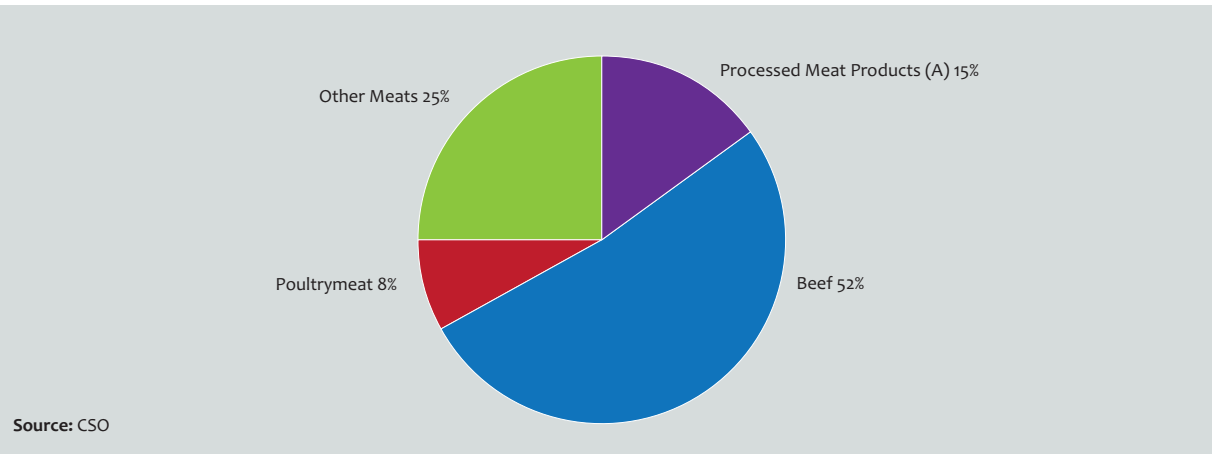
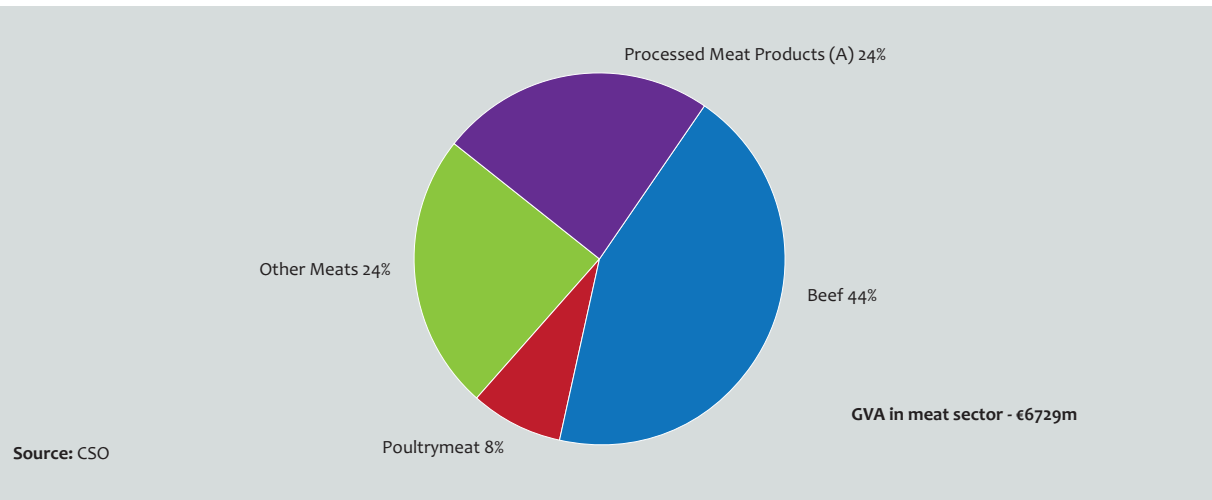


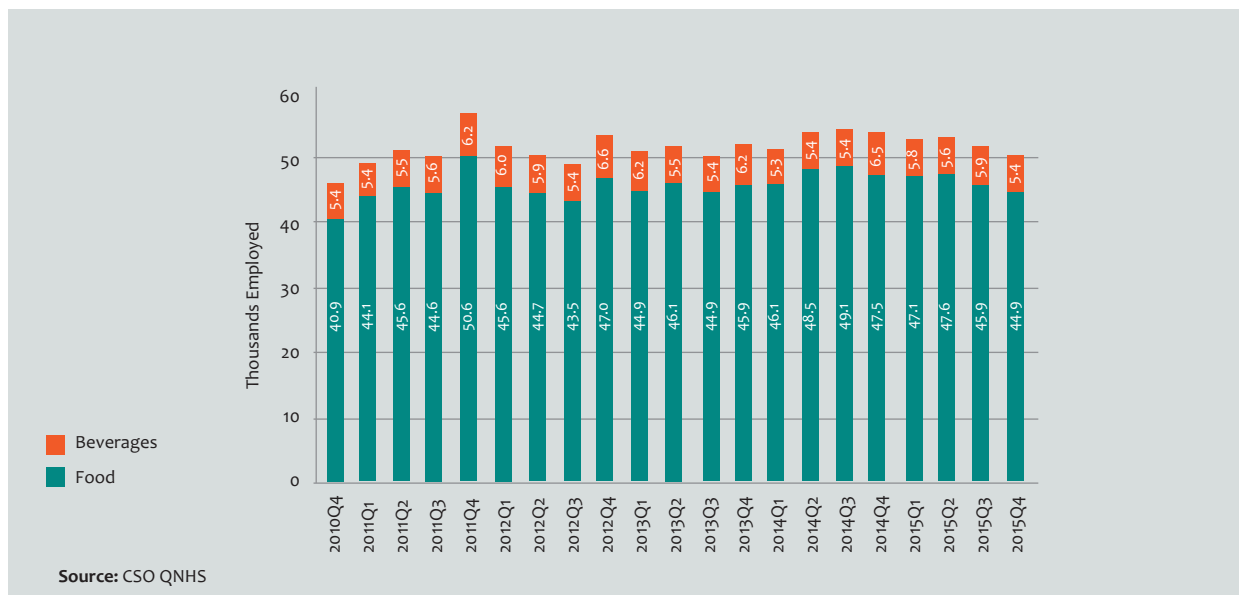
FIGURE 5.4 GVA IN THE MEAT SECTOR 2012



Employment

According to the most recent data from the CSO, employment in the Food and Beverage sector averaged at 52,000 in 2015, representing 2.7% of all those in employment. Figure 5.5 illustrates the employment trends for the food and beverages sectors over recent years (2010-2015).

FIGURE 5.5 EMPLOYMENT IN THE F&D SECTOR, 2010 - 2015

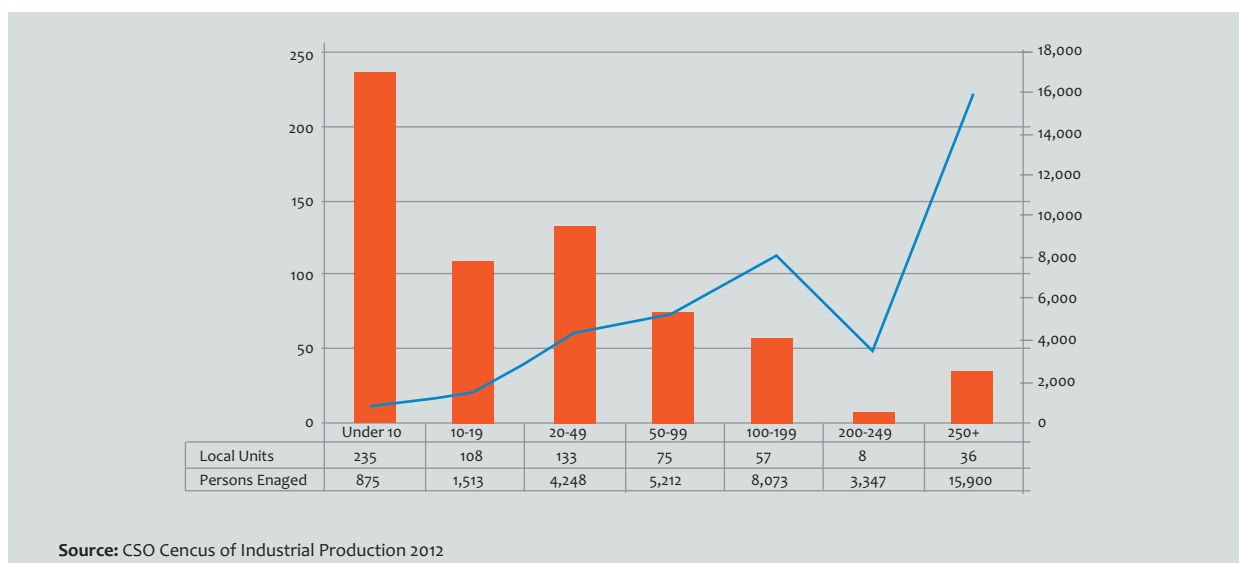


Size and Structure

According to the CSO's latest Business Demography data (2012), the food and beverage sector encompasses over 1,200 enterprises, of all sizes, across a wide spectrum of types, from small independent farmhouse producers to the large, often multinational, food processors and marketers.

The CSO's more narrowly based Census of Industrial Production focuses on business with three or more people engaged². The latest (2012) data shows that the sector, whilst accounting for 15% of manufacturing units in Ireland, provided some 25% of manufacturing employment. Figure 5.6, below, illustrates the structure of the sector in terms of company sizes and in employment levels³. Some 5.4% of units in the sector, typically larger companies and cooperative concerns, account for 41% of persons engaged. Companies employing 50 persons or less account for 72% of local manufacturing units in the sector and provide 16.5% of total people engaged. Employment in the sector exhibits a wide regional spread, providing jobs in rural areas (see section on regional spread).

FIGURE 5.6 FOOD & BEVERAGES INDUSTRY STRUCTURE, 2012



² The CIP is, therefore, non-comparable with the QNHS.

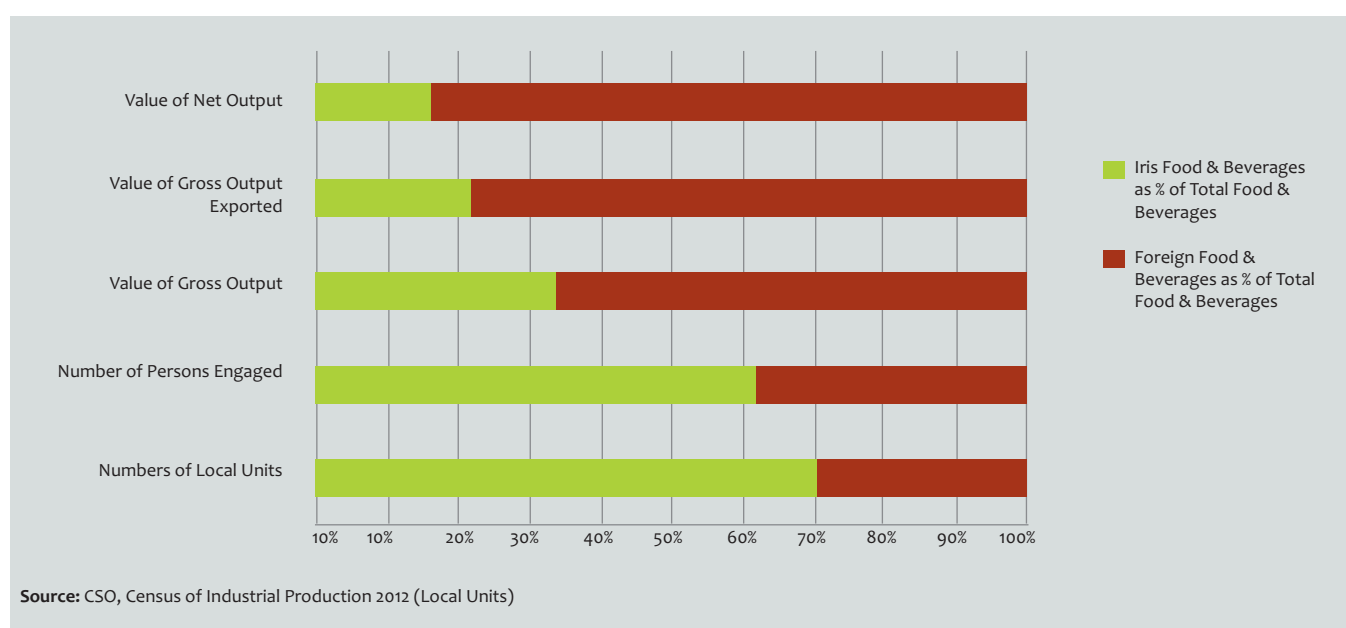
³ The CSO is currently undertaking a review of its Structural Business Statistics, which includes the CIP and Business Demography, and data up to 2014 is due for release in H2 2016. It should be noted that the CIP data to date includes only enterprises with 3 or more employees, though the new releases will cover all sizes.

Contribution to the Irish Economy by Ownership

The importance of the sector to the indigenous economy is analysed in Figure 5.7 which looks at the breakdown between resident and non-resident factors across key variables in the Food & Beverage sector. Over 60% of employment in the sector is in Irish owned units, which account for more than seven out of every ten.

However, Irish owned Food & Beverage exports still accounted for more than 53% of gross value exported by all Irish owned manufacturing units. Lastly, the comparatively high percentage of net Food & Beverage output by non-Irish owned enterprises, 75%, is largely explained by a small number of very large establishments operating in Ireland.

FIGURE 5.7 DISTRIBUTION OF KEY VARIABLES BETWEEN IRISH AND FOREIGN OWNERSHIP WITHIN THE FOOD & BEVERAGE SECTOR , 2012



The Annual Business Survey of Economic Impact (ABSEI)⁴ for 2013, conducted by Forfás, provides aggregated estimates for all Irish-owned and foreign-owned firms across a range of variables. As part of this survey, Forfás collates data on Irish Economic Expenditure (IEE), taken to consist of wages, Irish raw materials and Irish services. An analysis of expenditures by companies operating in Ireland highlights the close ties the FD sector retains with the national economy in terms of IEE. Table 5.2 illustrates absolute comparisons between the FD Sector and the overall manufacturing sector in terms of this breakdown in expenditures whilst Figure 5.7 demonstrates proportional comparisons. Irish Economic Expenditure accounts for 74% of total expenditure in the FD sector. This compares favourably to the manufacturing sector when taken as a whole, where the equivalent rate of IEE is 43%. Also striking is the fact that the FD sector accounts for 73% of total manufacturing consumption of Irish Raw Materials.

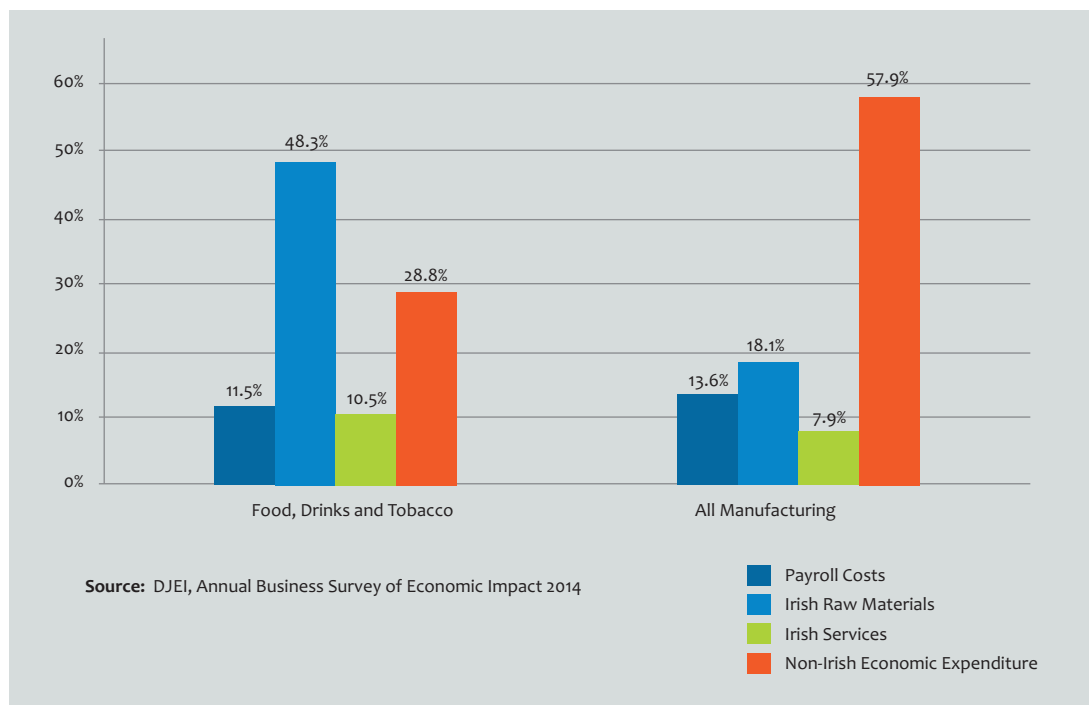
⁴ The ABSEI survey covers the client base of Enterprise Ireland, IDA Ireland, Shannon Development and Údarás na Gaeltachta, and the population comprises all manufacturing and internationally traded services firms in Ireland with 10 or more employees – approximately 3,600 client companies.

TABLE 5.2 BREAKDOWN OF EXPENDITURE IN FOOD & DRINK MANUFACTURING COMPARED TO OVERALL MANUFACTURING, 2014.

	F&D	All	F&D % of Total
	€m	€m	
Payroll Costs	1,932	8,576	23%
Irish Raw Materials	8,101	11,415	71%
Irish Services	1,753	5,006	35%
Corporation Tax	151	1,620	9%
Total Irish Economy Expenditure (IEE)	11,937	26,617	45%
Non-Irish Economic Expenditure	4,824	36,555	13%
Total Expenditure	16,761	63,172	
IEE as % of Total Expenditure	71%	42%	
Sales	21,003	86,079	24%
IEE as % of Sales	57%	31%	

Source: CSO National Accounts, CSO Trade, CSO QNHS 2015 Average

FIGURE 5.8 BREAKDOWN OF EXPENDITURE IN F&D SECTOR COMPARED WITH OVERALL MANUFACTURING SECTOR, 2014



Regional Spread

The F&D Sector exhibits a wide geographic spread throughout the country. Figure 5.9 compares the dispersion of units in the F&D sector with other manufacturing industries.

FIGURE 5.9 REGIONAL DISPERSION OF F&D COMPARED TO OTHER MANUFACTURING INDUSTRIES, 2012

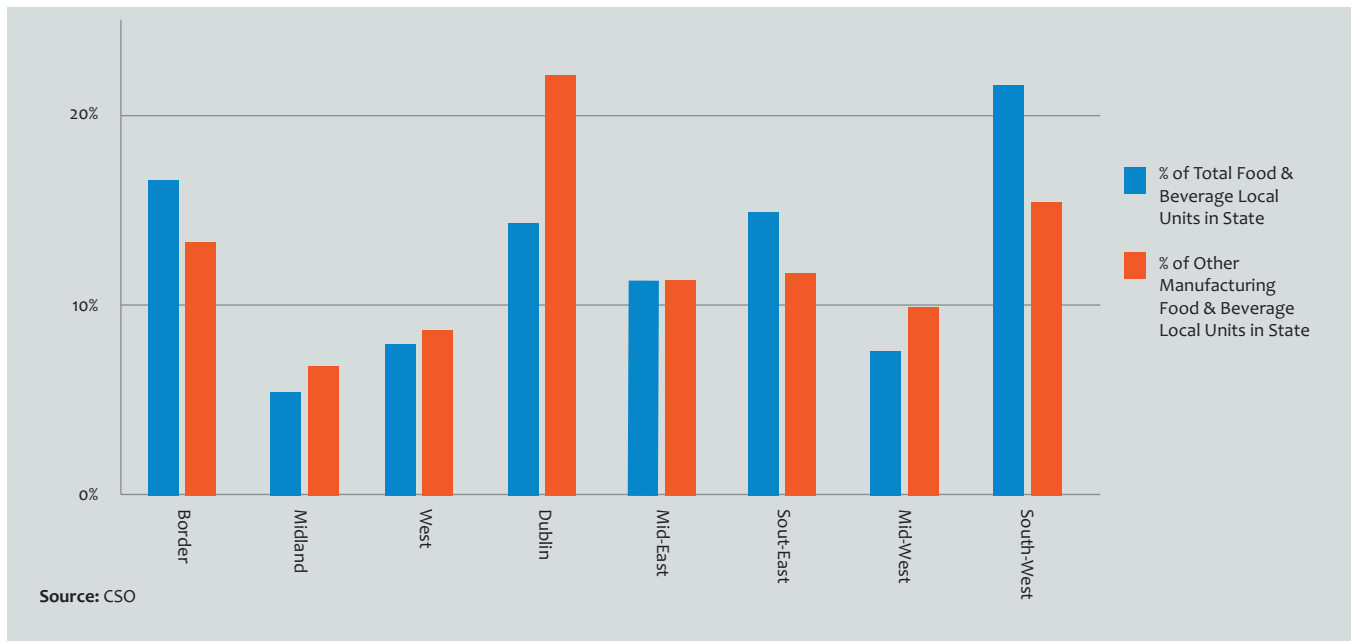


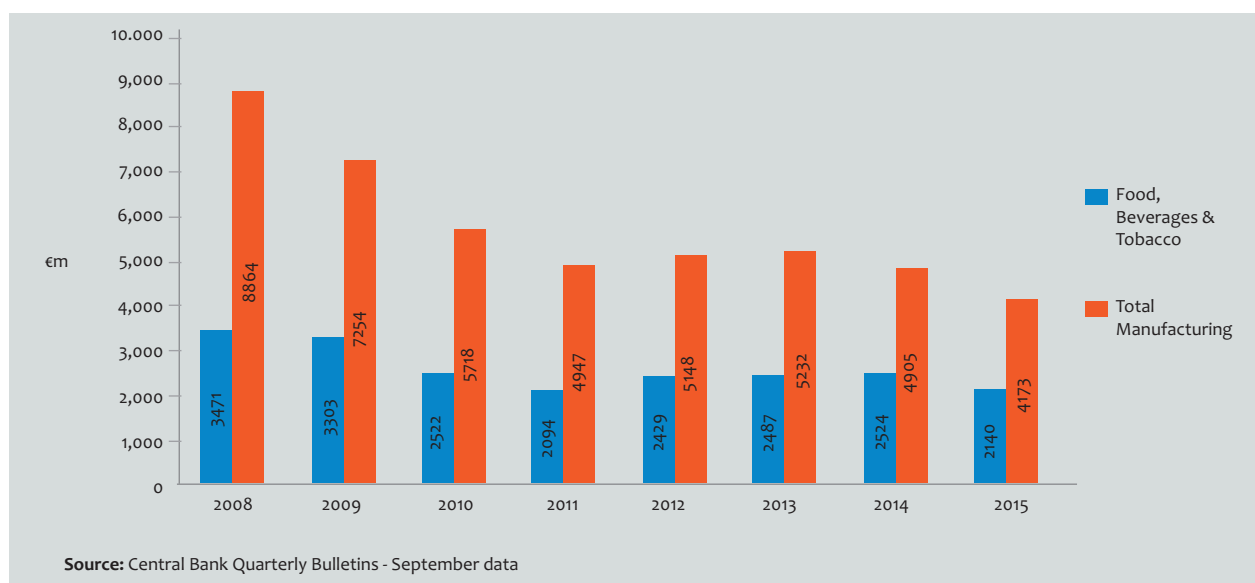
Table 5.3 elaborates on further regional details for the sector. This illustrates that the proportion of total F&D units located in all regions outside Dublin exceeds the proportion of overall manufacturing industries located therein. Regional concentrations can be delineated across sectoral lines with the meat sector more concentrated in the Mid-East, South-East and Border regions whilst ‘Other Food’ concerns are more densely represented in the Dublin, South West and Border regions.

TABLE 5.3 REGIONAL DISPERSION OF FOOD & BEVERAGES AND ALL MANUFACTURING SECTORS, 2012

No of Local Units	Border	Midland	West	Dublin	Mid-East	South-East	Mid-West	South-West	Total
Food & Beverage Sector	109	35	54	96	76	99	51	142	662
Other Manufacturing	470	236	313	788	405	409	353	546	3520
Total Manufacturing	579	271	367	884	481	508	404	688	4182
Food & Beverages as % of Regional Total	19%	13%	15%	11%	16%	19%	13%	21%	16%
Regional % of Total Food & Beverages	16%	5%	8%	15%	11%	15%	8%	21%	100%
No of Local Units									
Meat	22	15	13	13	25	20	7	16	131
Dairy	12		3			16	7	23	66
Other Foods	71		38	77*		54	33	98	433
Drinks	4	20*	0	6	51*	9	4	5	32
*Breakdowns unavailable due to confidentiality.									
Source: CSO, Census of Industrial Production 2012. Local Units, NACE 2.									

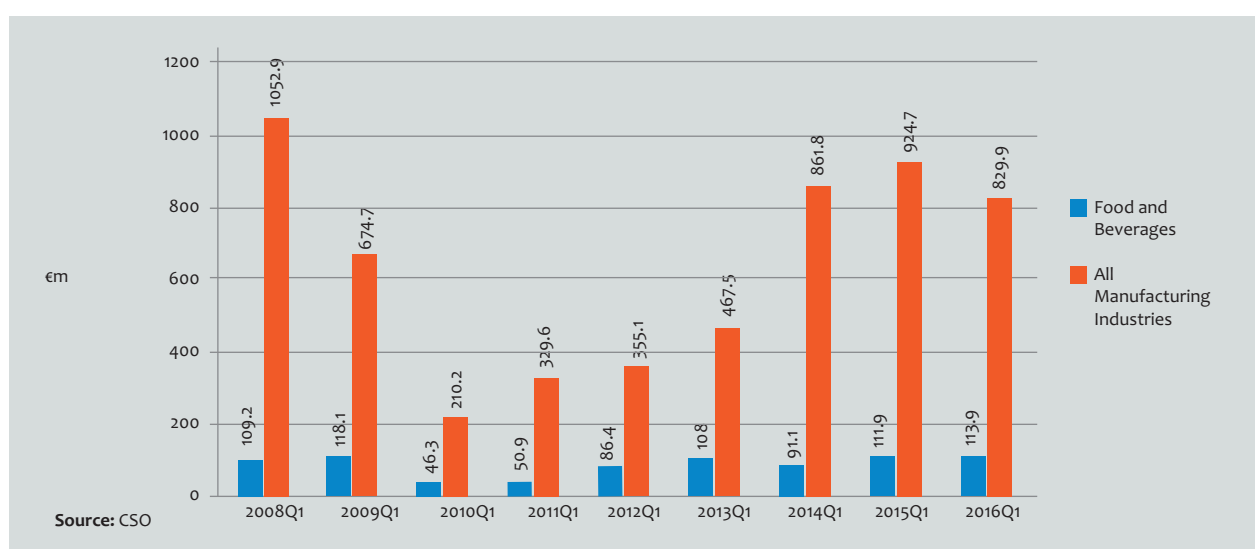
Borrowings and Capital Acquisitions.

FIGURE 5.10 OUTSTANDING CREDIT ADVANCES TO FOOD & DRINKS SECTOR, 2008-2015



The F&D sector has significant capital requirements for both capital assets and working capital. Figure 5.10 gives a breakdown of the amount of outstanding borrowings to F&D companies as at September 2015, compared to the same period every year since 2008. The level of borrowings extended to Food & Beverage companies fell by 15% year-on-year and by over 40% since their peak in 2008. The annual change is the same as that for overall manufacturing, however, outstanding borrowings for manufacturing have declined by more than 50% since 2008.

FIGURE 5.11 CAPITAL ACQUISITIONS IN THE FOOD & DRINKS SECTOR VERSUS OVERALL MANUFACTURING 2008 - 2016



The Food & Beverage sector accounted for approximately 14% of total capital acquisitions by manufacturing industries in quarter 1 2016. The levels of Capital Acquisitions within the Food & Beverages sector for the past eight years are outlined in Figure 5.11. Comparing the same periods for each year (Q1), Capital Acquisitions in the *All Manufacturing* category had risen by 294% in 2015 (to €830m) compared to a low of just €210m in 2010. The Food and Beverages sector contributed to this rise in acquisitions with a 146% increase across the same timespan, to €114m in 2016 from €46.3m in 2010.

Export Performance 2015⁵

Bord Bia produces detailed annual estimates for the export performance of the Irish food and beverages sector. The Irish food and drink sector recorded its sixth consecutive year of export growth in 2015 as increased output in key sectors, favourable exchange rate developments and better returns for beef, seafood and beverages helped to offset a considerable weakening in dairy prices.

It is estimated that the value of Irish food and drink exports increased by 3% to exceed €10.8 billion in 2015. This represents a new high for exports and marks growth of over 51% or €3.6 billion since 2009.

The dairy and beef sectors were the strongest performing categories in 2015, representing €3.2bn (30%) and €2.4bn (22%) of total food and drinks exports respectively. Prepared Foods accounted for €1.8bn (17%), while Beverages contributed €1.3bn (12%). Together, these four sectors contribute more than 80% of Irish Food & Beverage exports. The categories with the biggest growth since 2014 were Beverages (+10%), Beef (+6%) and Sheepmeat (+5%).

FIGURE 5.12 TRENDS IN EXPORTS OF FOOD & BEVERAGES BY CATEGORY, 2014-2015

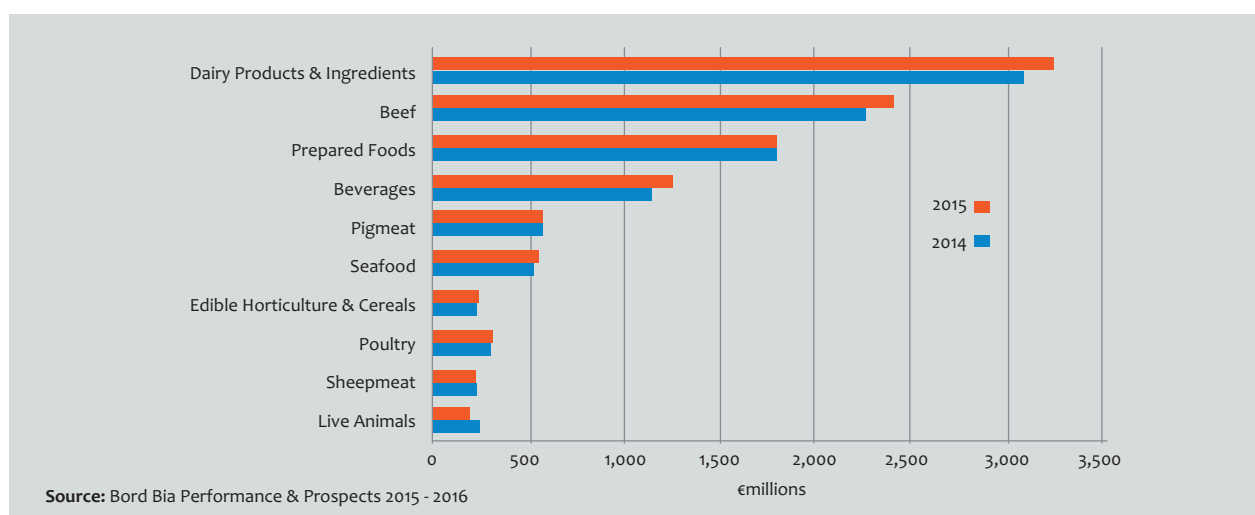
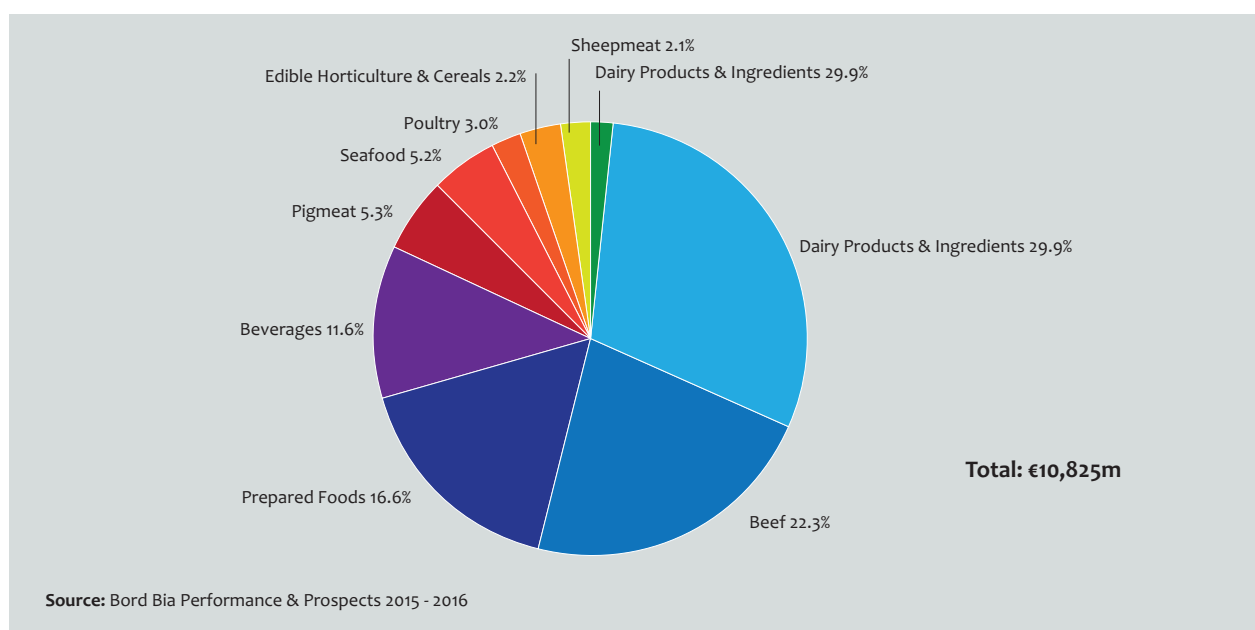


FIGURE 5.13 COMPOSITION OF FOOD & BEVERAGE EXPORTS, 2015



Agri-Food Exports by Destination

The UK and Northern Ireland remained the principal export market, with sales of €4.4bn or 41% of Ireland's total Food & Drink exports. Elsewhere, exports to other European markets remained relatively stable in 2015 at €3.4 billion or 31% of the total. Food and drink exports to international markets also stayed fairly static but still exceeded €3 billion or 28% of total exports.

The CSO (Figure 5.14 & Table 5.4) provides details of the major destinations for Ireland's Agri-Food exports, which include Food and Drink plus non-processed agricultural products and forestry; bringing the total value of agri-exports in 2015 to €12 billion.

FIGURE 5.14 SHARE OF AGRI-FOOD EXPORTS BY DESTINATION, 2015

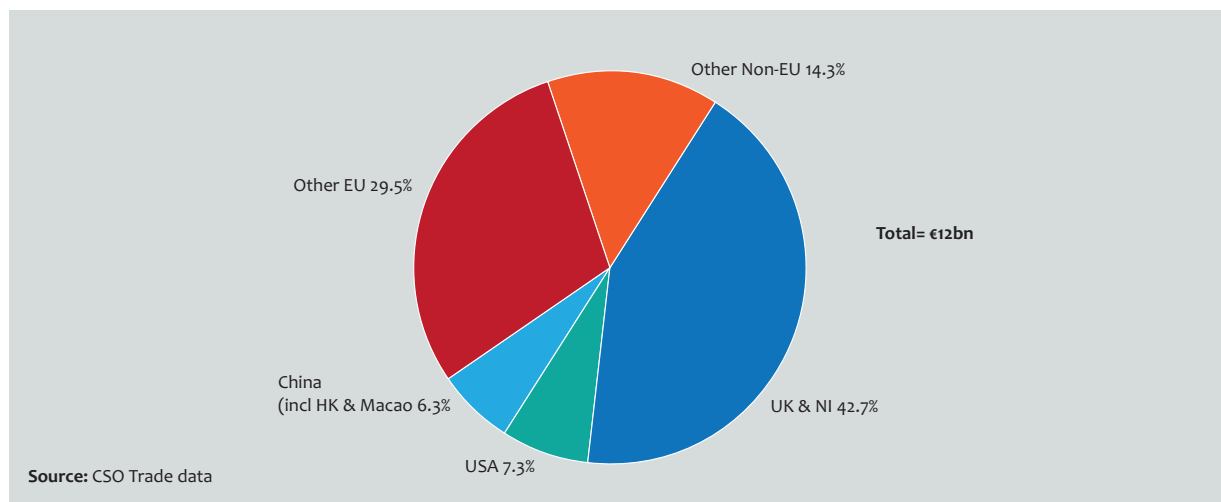


TABLE 5.4 VALUE OF IRISH AGRI-FOOD EXPORTS, 2015 AND TOP 10 DESTINATIONS

	€m
Grand Total	11,986
1 Great Britain & Northern Ireland	5,113
2 United States	870
3 China (incl. Hong Kong & Macao)	757
4 France	751
5 Netherlands	697
6 Germany	614
7 Italy	349
8 Spain	227
9 Belgium	224
10 Saudi Arabia	171

Source: CCSO/DAFM

Key Food & Drink export markets⁶

Much of the export growth in 2015 was recorded in trade to the UK where further weakening in the euro relative to sterling helped improve the competitive position of Irish exports. On an international level favourable exchange rate movement boosted trade to North America in particular while the Middle East and China also recorded strong increases. Good market demand in these regions helped to offset the ongoing challenges evident across other EU markets where consumer sentiment remained fragile.

Strong milk production growth in some of the main export regions, combined with a slowdown in Chinese import demand and Russian restrictions, resulted in the global dairy market experiencing downward pressure for much of the year. Favourable weather conditions led to a strong increase in production in many of the world's largest dairying regions, while quota removal led to significant increases in the EU, particularly North West Europe. This higher output, political instability in key exporting regions and reduced import demand from China coupled with lower oil prices caused further downward pressure on prices.

Tighter finished cattle supplies in Ireland, a rise in cattle prices and some stability in beef consumption across most export markets helped exports in 2015. With domestic consumption levels unchanged, the volume of beef available for export stood at just over 500,000 tonnes, some 4% below 2014 levels. This decline in volumes was offset by a rise of more than 11% in average cattle prices. This led to the value of Irish beef exports showing a 6% rise, standing at €2.41 billion when offals are included. Trade for fresh, frozen and processed beef products was 7% higher at €2.19 billion.

A rise in domestic output, an increase in EU output and a more difficult global market as a result of the Russian trade situation led to a challenging market environment for Irish pigmeat in 2015, exports of which were down 2% to €570m. Difficult international market conditions, increased EU production and slow consumer demand across the continent all led to falls in prices at home and EU-wide. Nevertheless, exports of Irish pigmeat to international markets performed strongly despite the absence of the Russian market, with China remaining the second most important market for Irish pigmeat. Furthermore, as a result of the Russian market being effectively closed to Irish exporters, products that would usually be destined for that market has been redirected to different locations around South East Asia.

Irish sheepmeat exports continued to perform well in 2015, being valued at €230m, as a more positive price environment helped export values. The weakening of the euro against sterling also boosted the relative competitiveness of Irish lamb in key markets. Higher output, some increase in imports and reduced domestic consumption led to volumes available for export increasing in 2015. The UK and France continued to be the core markets for Irish sheepmeat, accounting for almost two-thirds of Irish export volumes between them.

Strong consumer demand for poultry throughout 2015 outweighed some of the increase in supplies evident during the second half of the year. Poultry production across the EU is estimated to have increased by 3% in 2015 with most of this increase evident in broiler and turkey output. For the year it is estimated that the value of Irish poultry exports also increased by 3% to reach €320 million, helped by stronger processed, fresh poultry and offal exports.

The global beverages market showed further growth in 2015 as the market benefited from a continued rise in demand for premium alcoholic beverages. This strong performance in 2015 was driven by ongoing growth in whiskey combined with a further rise in 'craft' exports while favourable exchange rates also boosted exports, which were valued at a total of €1.26bn in 2015. Beer and cream liqueurs also recorded some growth while cider exports eased. Exports of non-alcoholic beverages were boosted by strong sales of juices, which offset reduced exports of mineral waters.

A new product category included in the Food Wise 2025 report is that of Prepared Consumer Foods (PCF). This category encompasses a range of value added food and beverage products including the following:

Prepared foods such as bakery, pizza, chocolate, confectionery, biscuits, snacks, extracts, sauces and soups with the exception of dairy based enriched powders; Value added meats; Value added seafood; Value added horticulture & Non-alcoholic beverages.

Exports under this category put in a strong performance in 2015 to stand at an estimated €2.5 billion. This equates to an increase of 7% (€170m) on 2014 levels. Growth in the category was led by bakery, chocolate confectionery, value added pigmeat, beef and seafood. This offset lower exports of sauces, soups and dairy products.

Outlook for the Exports of Irish Food and Drink in 2016

There are a number of factors that point to 2016 being a mixed year in terms of further growth in the value of food and drink exports:

- The pressure on global dairy markets is expected to negatively affect global milk prices in 2016 though some further growth is anticipated in Irish milk supplies.
- The prospects for the EU beef market in 2016 remain mixed. Following a stabilisation of consumption in 2015, little change is expected in 2016. Much will depend on consumer spending levels with many key countries reporting lower retail sales recently. It is hoped to build on exports to third country markets outside of the EU, such as Turkey.
- The market environment for the pigmeat sector looks set to remain challenging in 2016. The ongoing absence of the Russian market may have some negative impact.
- The global sheepmeat market continues to become more polarised between the traditional markets of Europe and emerging markets where domestic supplies struggle to match demand.
- The global poultry outlook for 2016 is positive, with feed prices expected to remain at around current level while prices for competing proteins such as beef will be relatively high.
- Overall the outlook for all prepared food exports is broadly positive for 2016.
- Beverages are likely to face ongoing competitive pressures although the demand for premium products will present further opportunities in key markets. Further strong growth potential exists for whiskey in particular.

Chapter 6 The Consumer

6.1 Overview

This chapter examines key areas of concern to consumers including information relating to food price inflation, changing consumer tastes and food chain integrity. It also looks at consumer attitudes and consumption patterns over the last number of years.

6.2 Food Prices

Food Prices in Ireland

For 2015 as a whole, the price of Food & Non-Alcoholic Beverages in Ireland was 2.1% down on 2014. This is a considerably larger drop than the aggregated CPI basket, which was down 0.3%.

FIGURE 6.1 MONTHLY CPI AND FPI - % CHANGE OVER PREVIOUS YEAR, 2014-2015

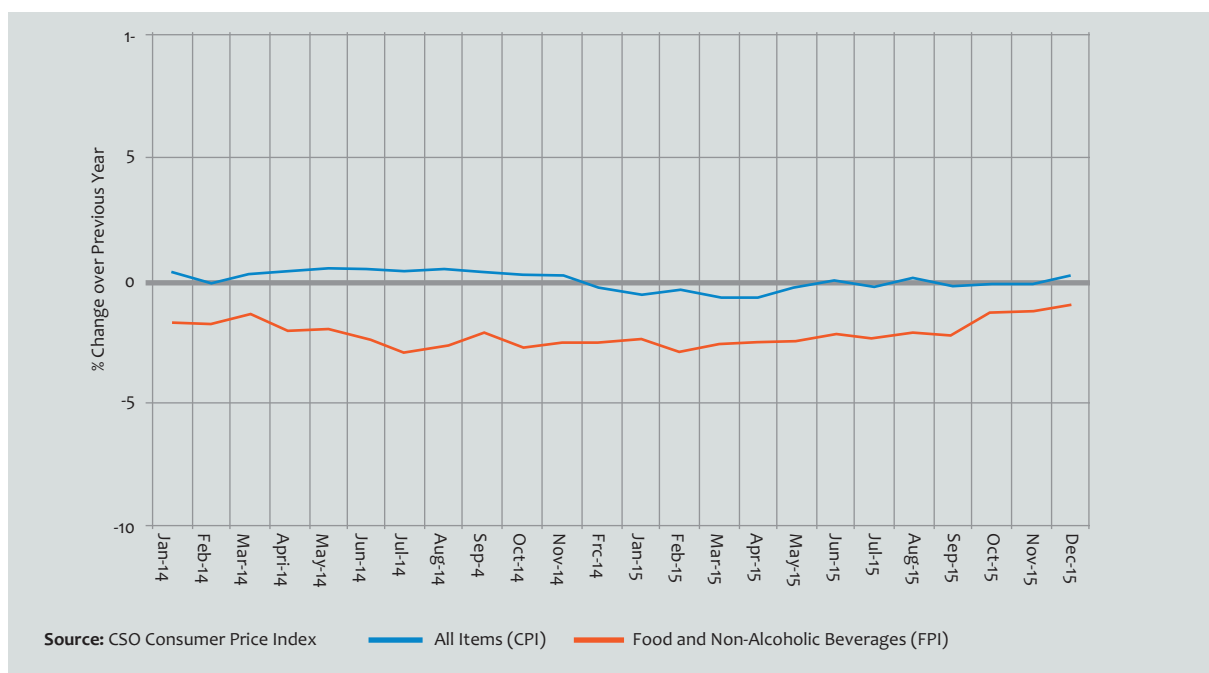
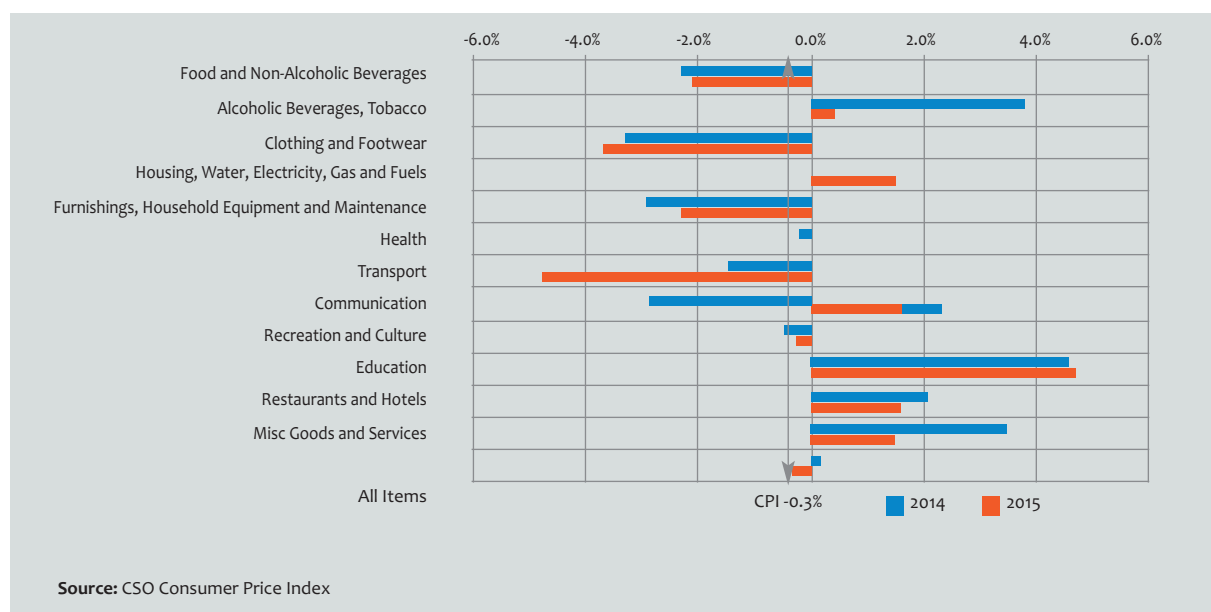


Figure 6.2 compares the overall level of inflation with its 12 constituent categories (including food and non-alcoholic beverages) for 2014 and 2015. Price movements may vary over any given period, and sector to sector. These variances may occur due to a number of factors e.g. volatility in commodity prices, or other input costs, supply chain shocks or a global economic downturn. In 2015 the overall CPI index was relatively static despite Ireland experiencing a period of growth.

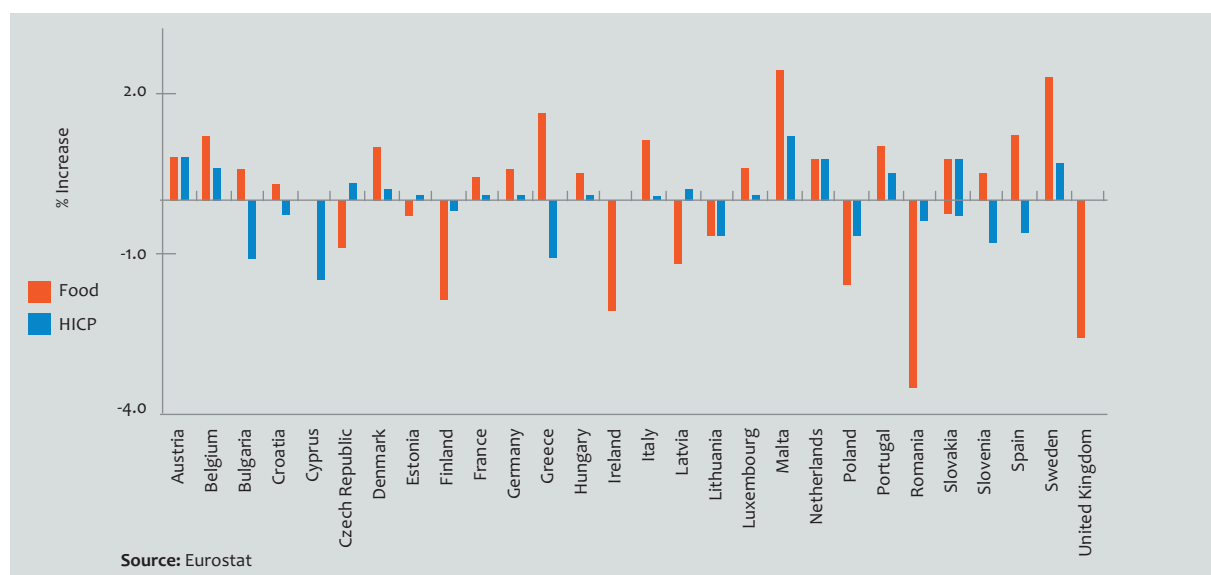
FIGURE 6.2 FOOD SUB INDEX COMPARED TO OVERALL CPI AND OTHER SECTORS, 2014-2015



EU Trends

When comparing the price performance of different EU Member States, the Harmonised Index of Consumer Prices, or HICP, provides the most reliable estimate of inflation amongst the EU member states. HICP differs from Ireland's own CPI output as it excludes interest on mortgage repayments and specific forms of tax and insurance. Ireland's annual HICP inflation rate was 0% in 2015, despite the annual European Central Bank (ECB) 2% inflation target. Inflation for the EU as a whole for this period was also 0%, as was the EU-28 HICP for Food & Beverages. Figure 6.3, below shows the position for each individual Member State in 2015 compared to 2014.

FIGURE 6.3 HICP AND FOOD HICP, EU COMPARISONS, CHANGES IN THE YEAR TO DECEMBER 2015



6.3 Consumer and Retail Trends

According to the Bord Bia study entitled 'The Irish Consumer 2015' Irish consumers are driven by values. Three specific values have emerged as part of the new Irish consumer agenda – self-reliance, balance, and post-materiality.

Reduced levels of trust towards institutions, brands and businesses is creating a desire for self-reliance, leading consumers to make more considered purchase choices. Consumers are now looking for the human face behind everything with increasing expectations around transparency and responsibility. Ultimately, consumers are becoming as self-reliant as possible (63%), instead of seeking help and guidance from experts or professionals (37%).

People are living increasingly time pressured, complex lives. They are beginning to realise the importance of disconnecting and the growing consideration of balance is being driven by a desire to manage their lives. Now over 40% of consumers agree that it is hard to find space in their lives to think, reflect and switch off from everyday stresses. Surprisingly, the younger age groups are finding it the most difficult to switch off from everyday pressures with 55% of 16 to 24 year olds agreeing with this.

Consumers seek balance as a way of muting the modern lifestyle as opposed to changing it. People in Ireland are starting to recognise that they have the tools to find time for everyday reflection. They also placing greater value on those 'pause, stop, reflect' moments.

Consumer Lifestyle Trends Programme

In 2015, the new edition of the Consumer Lifestyle Trends was launched. The programme identifies the biggest trends shaping people's lives over the next three to five years. By keeping up with trends and understanding what's coming next, the programme helps companies within the food and drink industry in Ireland to better prepare for the future needs and wants of their consumers both in Ireland and abroad. The six Trends are Busy lives, Shared experiences, Personal value seekers, Responsible living, Health and Wellbeing and Keeping it real.

PERIscope 2015

The eighth edition of PERIscope research undertaken was released in October 2015. Between June and July, over 8,000 interviews took place across eight markets (Ireland, Great Britain, Spain, France, Germany, Netherlands, US and for the first time China). This large scale study allows Irish food and drink brands track how consumer attitudes towards food, shopping and cooking are changing across eight markets since 2001. It covers topics such as: eating at home, attitudes towards cooking, local food, sustainability, the environment, grocery shopping and health & wellbeing.

This year, new themes are explored:

The Power of Food: All about consumer understanding of the health benefits of eating well. Ireland perceives itself as the healthiest of all the countries in this study. In contrast, Great Britain is one of the lowest. 92% of Irish consumers agree that to be healthy it is necessary to eat properly. Only 79% of British consumers agree with this.

Back to Work: This theme is all about the changing economic environment and how it is impacting shopping and working habits. Both Great Britain and Ireland are amongst the most successful economies in Europe and both countries lead the rankings for the back to work theme. More employees are buying lunch at work and their total spend seems to be increasing.

Love Local: This theme is all about the ongoing love for local food. Ireland's love affair with local produce is increasing but the growth in people who believe it is important has levelled off. Currently 30% of Irish shoppers believe buying local is important compared to only 19% in Britain.

Easier Living: This is all about how technology and convenience continues to make consumers lives easier. People in Great Britain are finding it harder to fit in a proper breakfast and to cook as often as they would like. They are more likely to eat convenience meals and use readily prepared ingredients. Irish people have yet to experience this time pressure. 31% of Irish people agree to eating less ready meals than 12 months previous.

Better Business: This theme is all about 'better' business and how it affects the consumer decision making process. Within Great Britain and Ireland, people are a little less concerned than shoppers from the other eight markets, 54% of Irish shoppers stated that they prefer to buy from companies that are aware of the impact of environmental issues compared to only 43% in Britain.

Sustainability is the challenge for this decade - presenting in agri-food, environmental and social aspects – and a resilient and efficiently functioning food supply chain is essential to deliver on this.

Quality Assurance and Origin Green

Bord Bia Quality Assurance Schemes for beef, lamb, pigmeat, poultry and horticultural produce provide on-farm assurance to consumers that produce meets independently accredited quality standards. This includes carbon footprint measurement on over 40,000 beef farms. A nationally representative survey by Red C in October 2015 indicated that 93% of shoppers are aware of the Quality Mark - up from 60% in 2004. 66% say that they would also be more likely to buy a food product having seen the Quality Mark on it – up from 54% in 2006.

The sustainability of Ireland's agri-food and drink sectors, as exemplified by Quality Assurance and the Origin Green initiative, was the main theme of Ireland's participation at Expo Milan 2015. Some 2.4 million visitors were received in Ireland's Pavilion between May and October 2015.

As of April 2016 the number of food and drink manufacturers who had signed up to Origin Green exceeded 500. 132 companies representing over 85% of the value of Irish food and drink exports had had their sustainability plans independently scrutinised and were fully verified members with plans for a range of environmental measures in the areas of reducing energy, water footprint, level of waste, sustainable manufacturing and social responsibility.

Grocery Goods Regulations

Regulations aimed at ensuring fair and reasonable dealings in the grocery goods sector enter into force on 30 April, 2016. The regulations, signed by the Minister for Jobs, Enterprise and Innovation, require that contracts for food and drink products must be in writing and cannot be varied except by express mutual consent. Suppliers cannot be obliged to obtain goods/services from a third party from whom a retailer/wholesaler receives payment for this arrangement. Suppliers may require a retailer/wholesaler to forecast the goods needed.

The regulations do not set or guarantee prices but do provide that goods must be paid for within 30 days. Suppliers cannot be required to pay for stocking/listing goods; for promotion; for marketing costs; for better positioning on shelves; for advertising; for wastage; for shrinkage except in strict, contractual circumstances. Records must be retained for inspection and compliance statements made. Strong enforcement powers are available to the Competition and Consumer Protection Commission.

EU Developments

The European Commission is also examining the issues of relationships in the food chain and in January 2016 published a statement on unfair trading practices and established an Agricultural Markets Task Force to provide the Commission with advice and expertise in the area of the food supply chain and to see what improvements could be made for farmers. The Task Force is to report later in 2016. The first meeting of the new High Level Forum on better functioning of the food supply chains, which includes Member States, producers, food companies and retail bodies, is planned to take place in mid-2016 with an initial report in 2017 and a final report by end 2019.

Reducing Food Waste

Reducing food waste contributes to the sustainability of the food supply chain. The STOP Food Waste programme funded by the EPA provides advice on reducing food waste. Voluntary bodies such as Bia Food Initiative and FoodCloud work effectively with large retail outlets to offer edible food to charities in a safe, efficient and responsive way. BiaFoodInitiative's regional food hubs accept and re-distribute surplus food with software technology tracking product from point of entry to the end user. It is a member of Bord Bia's online Origin Green Platform, providing access to a network of over 500 companies, who can include this in their Origin Green action plans. FoodCloud connects businesses that have too much food with charities in communities that have too little. Using their app, or through their website, participating businesses can upload details of their surplus food and when the food can be collected. The first charity to accept collects the food directly from the business. This reduces costs to business and creates long lasting local benefits.

The Department of Agriculture, Food and the Marine continues to place huge emphasis on safety and quality. Over many years the Department has driven up standards and has contributed to the international recognition of Ireland as a centre of excellence for food production.

Food Safety Governmental Bodies

There is continued collaboration between Departments and relevant agencies on the development of food safety policy and legislation. The following are the main bodies involved with Food Safety issues in Ireland:

1. The **Food Safety Authority of Ireland (FSAI)** is a statutory, independent, science based agency dedicated to protecting public health and consumer interests in food safety and hygiene.
2. **Sea Fisheries Protection Authority** was established in 2007. It has functions in relation to the enforcement of food safety legislation in respect of fish and fish products.
3. **The Food Safety Promotion Board**, now known as **Saferfood**¹ was established in 1999 to foster and maintain confidence in the food supply on the island of Ireland by working in partnership with others to protect and improve the public's health.
4. At EU level, **The European Food Safety Authority (EFSA)** is an independent European agency dedicated to improving consumer confidence by providing independent scientific advice and clear communication on all matters related to food safety.

Animal Health

Ireland is free of Brucellosis in sheep, pigs and cattle. There has been no outbreak of Brucellosis in cattle in Ireland since April 2006 and Ireland obtained Official Brucellosis Free (OBF) status in July 2009, following which a reduced level of testing was implemented for a period of 5 years, as required. The expiry in 2014 of this 5-year mandatory transition period enabled a further significant scaling back in testing and the requirement for a Brucellosis Round test ended from the beginning of 2015. Following the achievement of Official Brucellosis Free (OBF) status by Northern Ireland in September 2015, pre-movement Brucellosis testing ended on both sides of the Border with effect from 28 September 2015. Accordingly, all routine compulsory on-farm testing in the South has been abolished. Reporting and sampling obligations for all abortions in cattle remain in place, as well as risk based testing in particular for animals imported from non-OBF countries.

With regard to bovine TB, significant progress has been achieved in recent years in bringing down disease incidence. This trend of reducing herd incidence was maintained in 2015 (herd incidence 3.37% compared with 3.64% in 2014). Reactor numbers also fell in 2015 to the lowest ever figure on record (15,317 reactors compared with 16,145 in 2014). Almost 100 fewer herds remained restricted at the end of 2015 when compared with 2014.

Expenditure on the TB and Brucellosis programmes in 2015 was €30.3m, a reduction of 14% on 2014 spending. Due to the long-term success of the programme, 2015 expenditure was some 50% less than that in 2008.

¹ Saferfood (formerly known as FSPB). Its purpose is to foster and maintain confidence in the food supply in the island of Ireland by working in partnership with others to protect and improve the public's health.

FIGURE 6.4 BOVINE TUBERCULOSIS STATISTICS, 2002-2015



Veterinary Medicines

Veterinary Medicines Veterinary medicines and vaccines play a crucial role in ensuring that Ireland's animal population, particularly those animal species which are a source of food, remains healthy. An effective and up to date legislative code is in place to ensure that only authorised medicines are used and that the specifications governing their distribution and use are observed. A further important safeguard for consumers is provided by the National Residue Plan under which extensive monitoring of animals and animal products takes place.

Tests are carried out for a wide range of substances, including banned products, volatile residues of authorised products and environmental contaminants.

In a typical year, in the region of 20,000 samples are tested. The overall safety of Irish food is demonstrated by the fact that levels of positives have consistently been at very low levels over a number of years (less than 1%). In the case of each residue breach identified, a consumer risk assessment is carried out by the Food Safety Authority of Ireland to evaluate any threat to human health and to assess if food should be withdrawn from the market. In addition, all positive results are followed up to the farm of origin to determine the cause and enforcement action, including a penalty on the farmer's Basic Payment or legal action, is taken as appropriate.

Chapter 7 EU and International Agriculture Policy

7.1 Overview

This chapter estimates the net budget and trade effects of Ireland's participation in the EU. International comparisons of agriculture support are analysed using OECD data and there is also information about recent EU and international agriculture policy developments.

7.2 Benefits of CAP to Ireland

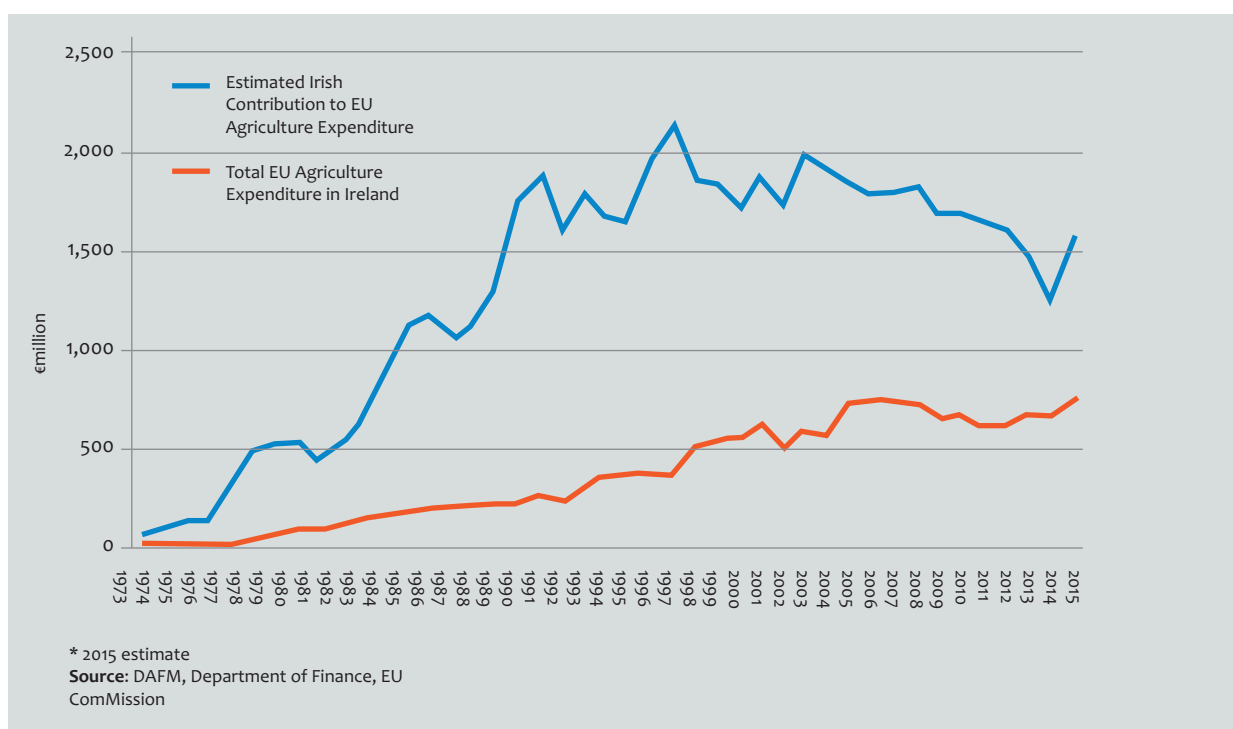
Agricultural Support in the EU Budget

The EU Budget for 2015 made total commitments for payments of about €143 billion. Approximately 40% of this expenditure was in respect of agriculture and rural development related activities. This overall level of agriculture and rural development related expenditure is expected to remain broadly consistent in 2016 and the future outlook for agriculture supports in the EU budget is dealt with in section 7.4.

Budget and Trade Effects

A high proportion of EU payments to Ireland since accession in 1973 have been in the agriculture sector. These direct payments, now typically exemplified by the Basic Payment Scheme (previously the Single Farm Payment), constitute the most obvious and visible benefit derived by Ireland from the Common Agricultural Policy (CAP). The evolution of trends in total agriculture-related payments to Ireland and the estimated Irish contribution to these payments is outlined in Figure 7.1. The graph illustrates how Ireland has experienced significant net disbursements in terms of EU CAP related payments.

FIGURE 7.1 TOTAL EU AGRICULTURE PAYMENTS TO IRELAND AND ESTIMATED IRISH CONTRIBUTION, 1973-2015*



Net Budget Effect

This net transfer of resources is derived by calculating the proportion of Irish payments into the EU Budget that can be attributed to Agriculture related payments (taken to equal the proportion of the EU budget spent on Agriculture). This is then subtracted from EU Agriculture receipts to Ireland to give the Net Budget Effect (NBE). Table 7.1 shows the estimated net transfer to Irish agriculture through the EU budget was €843million in 2015.

TABLE 7.1 **NET BUDGET EFFECT, 2014-2015**

	EU Agriculture -related Expenditure	Estimated Irish Contribution	Net Budget Effect
	€m	€m	€m
2014	1,220.0	657.7	562.3
2015 *	1,580.0	737.0	843.0

The lower total EU agriculture related expenditure in 2014 was because the RDP 2014-2020 was not formally adopted by the EU until May 2015, so no claim could be made in 2014. When the Programme was approved in 2015, DAFM could claim retrospectively for eligible expenditure in 2014, and these receipts were lodged in 2015.

* Provisional estimates
Source: DAFM, Department of Finance, EU Commission

Net Trade Effect (NTE)

Another benefit derived from Ireland's EU membership and participation in the CAP is that agricultural commodity prices have been generally higher on EU markets than on world markets. However, in recent years this trend has not always been the case for all agricultural commodities due to the evolving changes in both the CAP and international trading conditions arising from agreements at WTO level. Under the decoupled CAP model, payments are now made directly to farmers instead of through market based price supports in the form of export refunds. These changes, allied with on-going reductions in EU import tariffs and quota restrictions on agricultural commodities from competing non-EU countries, have brought Irish/EU prices more in line with world prices.

The Net Trade Effect (NTE) provides a measure of benefit accruing to Ireland by quantifying the price gap which exists between Irish and world prices for the main agricultural commodities. The data is sourced from OECD/FAO (world prices) and from DAFM (domestic prices). The relevant price gap for each commodity is then applied to the balance of import/export trade between Ireland and the rest of the world for those commodities, providing an estimate of the NTE.

A positive NTE means Ireland benefits from trading agricultural commodities at the higher prices arising from its EU membership. Negative NTE occurs when world prices for a commodity exceed the Irish price, which for reasons outlined earlier is not uncommon anymore.

This table was not available at the time of publication.

7.3 International Comparisons of Agriculture Support

The Organisation for Economic Co-operation and Development (OECD) is responsible for recording indicators for its member countries in order to monitor and evaluate developments in agricultural policy. These indicators provide economic data to assess the effectiveness and efficiency of policies, and also provide a common base for policy dialogue between countries

There are three selected key indicators recorded by the OECD: (1) Producer Support Estimate (PSE) (2) Consumer Support Estimate (CSE) and (3) Total Support Estimate (TSE). Support is expressed in both monetary terms for all three parameters and as a percentage of gross farm receipts for PSE, percentage of consumer expenditure on domestically for CSE and a percentage of Gross Domestic Product for TSE.

Producer Support Estimates (PSE)

The PSE is an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at farm gate level, arising from policy measures which support agriculture.

The PSE data shows that the EU is the largest supporter of agriculture in terms of total expenditure, providing over €80 billion in 2014 which equates to 18.4% of gross farm receipts. Switzerland, Korea and Japan had lower absolute PSEs than the EU in 2014, however, their PSE as a percentage of gross farm receipts is significantly higher. New Zealand and Australia have very low PSEs, in both monetary and percentage terms, reflecting the low levels of supports transfers to agriculture producers from taxpayers and consumers in these countries.

TABLE: 7.2: PRODUCER SUPPORT ESTIMATE FOR SELECTED OECD COUNTRIES, 2012-2014 AND 2014

Producer Support Estimates	Average 2012-2014*		2014*	
	€million	% of Gross Farm Receipts	€million	% of Gross Farm Receipts
Australia	800.8	2.1	800.5	2.3
Canada	4,469.7	11.2	3,456.0	9.0
EU(28)	85,072.2	19.3	80,003.0	18.4
Japan	40,804.0	52.3	33,120.5	49.2
Korea	16,197.9	50.8	16,477.6	51.1
New Zealand	119.7	0.8	142.7	1.0
Switzerland	4,663.7	54.9	5,041.9	56.6
Turkey	11,786.4	21.1	11,637.0	22.6
US	26,244.9	8.2	31,028.8	9.8
OECD	190,736.7	17.9	178,862.1	17.3
* 2014 figures are provisional estimates				
Source: OECD, Producer and Consumer Support Estimates Database				

Consumer Support Estimate (CSE)

The CSE indicates the value of gross monetary transfers from/to consumers of agricultural commodities, measured at farm gate level, arising from policy measures that support agriculture. It is expressed in both monetary terms and as a percentage of consumer expenditure on domestically produced output. It measures how much the domestic price is inflated by agriculture policy. The CSE is almost always negative because transfers from consumers due to market price support policies outweigh any consumption subsidies from taxpayers which might be provided to consumers. The negative amounts are reflective of an implicit tax on consumers.

Japan has the highest levels of CSE expenditure amongst the OECD regions, with estimated transfers of over €35 billion in 2014. When the CSE is presented in percentage of consumer expenditure terms, Korea, Japan and Switzerland have the highest for the regions listed, while EU has the lowest negative value. It is worth noting that the US figure has become positive in recent years representing the fact that the monetary transfers are to and not from consumers in that country.

TABLE 7.3 CONSUMER SUPPORT ESTIMATE FOR SELECTED OECD COUNTRIES, 2012-2014 AND 2014

Consumer Support Estimate	Average 2012-2014*		2014*		
	€ million	CSE % of Consumer Expenditure on Domestic Farm Receipts	€ million	CSE % of Consumer Expenditure on Domestic Farm Receipts	
Canada	-3004.8	-12.7	-1898.1	-8.8	
EU(28)	-16879.0	-4.6	-12860.0	-3.6	
Japan	-43673.0	-44.3	-355334.0	-42.0	
Korea	-17909.6	-47.7	-17359.3	-47.2	
New Zealand	-94.0	-3.9	-116.0	-4.7	
Switzerland	-1960.2	-29.4	-2170.1	-31.6	
Turkey	-6103.1	-14.7	-5974.7	-15.2	
US	31076.9	15.6	28079.5	14.5	
OECD	-60871.9	N/A	-50548.0	N/A	
No recent data available for Australia * 2014 figures are provisional estimates Source: OECD, Producer and Consumer Support Estimates Database					

Total Support Estimates (TSE)

The TSE calculates the annual monetary value of all gross transfers from taxpayers and consumers arising from policy measures that support agriculture, net of the associated budgetary receipts. The percentage TSE quantifies the overall transfers as a result of agricultural policy measures as a percentage of GDP.

In 2014 it is estimated that the EU had the highest TSE expenditure at €94 billion. In percentage terms of GDP, Korea and Turkey at 1.8% and 2.3% respectively, had significantly higher TSEs than the other regions.

TABLE 7.4 TOTAL SUPPORT ESTIMATE FOR SELECTED OECD COUNTRIES, 2012-2014 AND 2014*

Consumer Support Estimates	Average 2012-2014*		2014*		
	€million	% of GDP	€million	% of GDP	
Total Support Estimate					
Australia	1,617.7	0.1	1,505.7	0.1	
Canada	6,162.8	0.5	4,944.9	0.4	
EU(28)	99,786.1	0.8	94,235.4	0.7	
Japan	48,262.9	1.2	39,050.4	1.1	
Korea	18,606.9	1.9	19,127.1	1.8	
New Zealand	440.6	0.3	466.7	0.3	
Switzerland	5,260.1	1.0	5,639.3	1.1	
Turkey	13,887.0	2.3	13,819.2	2.3	
US	68,436.6	0.5	71,832.1	0.6	
OECD	264,005.5	0.8	249,012.4	0.7	
* 2014 figures are provisional estimates Source: OECD, Producer and Consumer Support Estimates Database					

EU DEVELOPMENTS

2015 saw Latvia and Luxembourg share the role of President of the Council of the European Union - Latvia from January to June and Luxembourg from July to December. The main items discussed during 2015 included Simplification of the CAP, market developments in the dairy and pigmeat sectors in particular, and the ongoing effects of the Russian ban. Legislative proposals discussed during 2015 included the so-called four-part package, organics and the school milk/school fruit & vegetable schemes.

CAP Simplification

Simplification of the CAP featured strongly during 2015. Following the adoption of Council conclusions in May, Commissioner Hogan announced a range of measures at the end of the year, including:

- changes to the direct payment guidelines, in particular with regard to EFAs
- more flexibility on eligibility conditions for voluntary coupled support for animals
- greater flexibility on legal persons' eligibility for the Young Farmers' Scheme
- changes to the IACS system, including preliminary cross checks at application stage
- reducing the level of on-the-spot checks for 2016
- increasing efficiency of sample selection
- introduction of management rules for a system of collective claims under Pillar 2
- further scope to modify declarations on the use of agricultural parcels for greening.

There were calls from some Member States for the simplification initiative to be extended to a review of the Basic Acts. The Commission focus remains on Implementing and Delegated Acts, although Commissioner Hogan has not ruled out reviewing Basic Acts in the future.

Outlook: The Commission is planning further simplification measures for 2016, including a package in the area of administrative penalties and greening. The administrative measures being introduced include preliminary checks of aid applications, a simplified system of penalties for direct payments, and a “yellow card” system for first time offenders. The ‘greening’ package is expected in the summer of 2016, and will come into effect for claim year 2017. The Dutch Presidency also indicated its intention to examine the future of CAP post 2020.

Market Developments

Market developments across the EU, particularly in the dairy and pigmeat sectors, continued to be monitored throughout 2015, taking account of factors such as the effects of the Russian ban on the importation of EU agricultural products, the continued softness of Chinese demand and the increased global production of milk. In the early part of the year, Commission Implementing Regulation (EU) No 2015/517 was introduced to allow Member States to arrange the payment of the super levy due in respect of the 2014/2015 milk year in three annual instalments, without interest. On pigmeat, the Commission introduced a new private storage scheme on 9 March - this was closed on 8 May amid early signs of recovery.

In September, at a specially convened extraordinary Council meeting, agreement was reached on a further €500m package of measures. The bulk of this aid - some €420 million - was ring-fenced for direct, targeted, aid for the dairy and pigmeat sectors. Ireland's allocation amounted to €13.7m, which was augmented with a further €13.7million in national funding. Following consultation with stakeholders, this was subsequently distributed in three ways - a flat-rate payment of €1,395 to all dairy farmers, a top-up of €800 to approx. 2,000 young dairy farmers, and a €1million fund for pig producers. Other key aspects of the support package included funding for promotional measures on third country markets, enhanced rates and longer time periods for PSA schemes for SMP and butter, and the reintroduction of a PSA scheme for cheese. In addition, advance payments of 70% under the direct payments scheme and 85% under rural development schemes were provided for. The package also recommended the establishment of an Agricultural Markets Task Force to examine issues such as market transparency, access for farmers to financial instruments and futures markets to hedge price risks, and options for strengthening farmers' collective actions.

Rural Development

Ireland's Rural Development Programme 2014-2020 was formally adopted by the Commission in May 2015. A number of schemes were launched in 2015, including GLAS, TAMS II, the Organic Farming Scheme, the Beef Data & Genomics Programme, the ANC Scheme and the Collaborative Farming Scheme. An amendment to the RDP covering, inter alia, a new tillage investment support measure, a new Burren scheme and changes to GLAS specifications, was formally submitted to the European Commission on 31 December 2015

Outlook for 2016: Formal approval from the European Commission for Ireland's first amendment to its RDP 2014-2020 is expected. Schemes covering Knowledge Transfer groups and training for advisors will be launched. Local Action Groups, under LEADER, will be selected. A stakeholder conference on European Innovation Partnerships under the RDP is planned and Ireland will consider the use of Financial Instruments.

7.5 BREXIT

The Department is contributing to the overall analysis being carried out by the Department of an Taoiseach on the potential impact Brexit will have on the Irish economy. A scoping report carried out by the ESRI in November 2015 estimated that the potential reduction in bilateral trade flows could be as high as 20%, with a higher impact on agriculture, food and beverages as these are sectors relatively more dependent on exports to the UK. The UK is by far our largest trading partner - in 2015 we exported almost €5.1bn worth of agri-food products, including €970m dairy products and €1.1bn beef products. Our imports from the UK were worth €3.8bn, of which €470m were dairy products and €100m were beef products.

The ESRI scoping report was based on a worst case scenario - The actual impact will depend on the post-exit relationship negotiated between the EU and the UK, if the UK decides to leave. The EU Treaty provides two years for these negotiations and extensions where agreement is not reached within the initial period. In advance of this it is difficult to predict with any certainty what the impact might be.

The Department will continue its analysis in 2016 with a view to identifying the key issues requiring immediate attention in the exit negotiations in the event of a vote by UK citizens to leave the EU.

7.6 EU & International Agriculture Policy Developments

INTERNATIONAL TRADE NEGOTIATIONS

WTO Negotiations

WTO members concluded their 10th Ministerial Conference on 19 December 2015 in Nairobi, Kenya. The "Nairobi Package" saw a sizable portion of the Doha Development Agenda (DDA) fulfilled, in the form of a set of six Ministerial Decisions on agriculture, cotton and on issues related to least-developed countries. The overall outcome is seen as a positive and a balanced one, with a number of commitments, for example on rules of origin and services, which will benefit developing countries in particular. The Package also outlines the future work of the WTO, and acknowledges that many issues may have to be dealt with outside of the established DDA framework. The outcome on agriculture is also considered a balanced one from an EU perspective, with definitive end-dates for the elimination of export subsidies by all WTO members, and enhanced and binding disciplines on the use of export credits, food aid and on the activities of state trading enterprises.

Outlook: Following a review of the Nairobi outcome at the meeting of the World Economic Forum in Davos (20-23 January 2016) and the first meeting of the new G20 Working Group on Trade and Investment (Beijing, 28-29 January 2016), attention turned to implementation, and to the future of the DDA/WTO. It is widely acknowledged that the 'single undertaking' principle ('nothing is agreed until everything is agreed') is in difficulty. The challenge will be to establish a framework which will allow 'older' DDA issues to be addressed as well as newer issues that have come onto the agenda since the DDA was commenced in 2001, with a view to developing a meaningful package for agreement at MC11 in 2017.

EU-US (TTIP)

Ireland has offensive and defensive interests in these negotiations, with opportunities in the dairy sector in particular, and both opportunities and threats in relation to beef. Thirteen rounds of negotiations have taken place and further rounds are scheduled. With both parties having reaffirmed their commitment to making progress, and agreeing to step up efforts to accelerate negotiations. In between formal rounds there will also be a number of technical discussions. Much of the focus from an EU perspective will be on the elimination of non-tariff barriers to trade (such as regulation) in order to secure a balanced overall deal.

EU-Canada (CETA)

The Comprehensive Economic and Trade Agreement with Canada, which will remove over 99% of tariffs, was concluded in September 2014. The text of the agreement underwent a process of legal review during 2015.

EU-Mercosur

These talks had been in suspension for a number of years but political developments in late 2015, particularly in Argentina, generated a new momentum from the Mercosur side to make progress. A number of EU Member States, including Ireland, have raised concerns with the European Commission about the negative impact that an agreement with Mercosur is likely to have on the EU's agricultural sector, and particularly the beef sector. 2016 sees Argentina take over the Presidency of Mercosur. It is expected that the bloc will continue to push for a meaningful resumption of the trade talks with the EU. Ireland will continue to monitor developments closely, including in relation to any potential engagement or development of proposals by the Commission, given the potential impact on the agriculture sector.

EU-Singapore

The negotiations were completed on 17 October 2014, following which a process of legal review commenced. This has now been put on hold pending the outcome of proceedings in the European Court of Justice in relation to whether the Commission has exclusive competence to negotiate the agreement, or shares such competence with the Council/Member States. Ireland submitted comments supporting the Council position in January 2016.

EU-Vietnam

In July 2015 the Commission announced a provisional agreement with Vietnam, comprising full dismantling of 99%-plus of tariffs over 7 years for EU and 10 years for Vietnam. Outstanding issues are now being finalised. The legal review will start in early 2016 followed by translation into all EU and Vietnamese languages. In 2017, the Commission will submit a proposal to the Council and the Parliament for approval. It is expected that the agreement can enter into force at the beginning of 2018.

EU-Japan

The 14th round of the EU-Japan FTA negotiations took place in December 2015. Good progress was made in a number of areas. Outstanding issues remain in relation to sanitary and phytosanitary issues, sustainability, procurement and some other technical barriers to trade. Further rounds of negotiations will take place in 2016. Although a number of issues remain to be resolved, and progress will also be affected by the timing of the ratification of the Trans Pacific Partnership (to which Japan is a party), it is hoped that the Agreement will be concluded by the end of 2016.

EU-Mexico FTA

The European Commission is currently preparing a request for a mandate from the Council to launch negotiations on a modernised Global Agreement with Mexico this year. Among other things, this will facilitate a comprehensive and ambitious modernisation of the trade pillar of the Global Agreement, which was originally entered into in 1997. The EU is Mexico's second biggest export market after the US, and Mexico's third largest source of imports after the USA and China

Russia Ban on EU Agri-food products

The Russian ban on EU food imports remained in place throughout 2015, as did the separate ban on the importation of pigs and pigmeat products, imposed following the discovery of African Swine Fever (ASF) in wild boar in Lithuania in early 2014. These restrictions have had a significant impact on the EU pigmeat market in particular, with Irish pigmeat prices falling to their lowest levels in four years in 2015. Efforts to resolve the impasse are ongoing, with particular attention from an agriculture perspective focused in the latter part of 2015 on potential progress with the Russian authorities on the ASF-related ban.

Outlook: EU sanctions adopted against Russia in the context of the situation in Ukraine are due to be reviewed in 2016 - it is too early to say whether any developments in this area would have an impact on the Russian food ban in 2016. In the meantime, efforts to make progress on the lifting of the ASF-related ban will continue, and all Member States have urged the European Commission to intensify its contacts with the Russian authorities in this regard.

7.7 World Food Programme – Milan EXPO

In September 2015, Minister Coveney co-hosted an event in EXPO Milan with Italian Minister for Agriculture, Maurizio Martina, to promote the work of the World Food Programme (WFP).

The aim was to use the public event to highlight the importance of continued support to the WFP and to encourage Governments around the world to take steps towards giving them the reliable funding they require.

The Ministers, together with Italian Prime Minister, Matteo Renzi, the executive director of the World Food Programme Ertharin Cousin, Bono and Amira Gornass, candidate for the Chair of the FAO Committee on Food Security, participated in a public discussion highlighting the sterling work of the WFP and the UN's global campaign for zero hunger.

The Minister announced an increased contribution to the WFP at the event to a minimum of €20m per annum for the years 2016, 2017 & 2018. He asked that this money be used specifically to fund support for refugees.

7.8 OECD Ministerial meeting of Agriculture Ministers

The OECD Ministerial meeting took place in April 2016 in Paris. The meeting, co-chaired by Secretary Vilsack USA and French Minister Le Foll, was a very positive exchange of views, focused on “better policies to achieve a productive, sustainable and resilient global food system”.

The Ministerial reflected on the progress made in recent international agreements on the Sustainable Development Goals, the Nairobi WTO agreement, and the Paris COP21 agreement on climate change.

There was agreement on the following shared goals:

- To provide all consumers with reliable access to safe, healthy and nutritious food
- To enable producers everywhere, big and small, male and female, to operate in an open and transparent global trading system and to seize available market opportunities to improve their standards of living.
- To contribute to sustainable productivity and resource use, solutions to climate change, resilience in the face of risk, and the provision of public goods and ecosystem services.
- To contribute to inclusive growth, and development, within and across countries.

Chapter 8 National Developments

8.1 Overview

This chapter gives the reader an overview of the strategic commitments and policy developments relating to the agriculture sector under Food Wise 2025 Agri-Food Strategy, the estimates/budgetary process and current schemes.

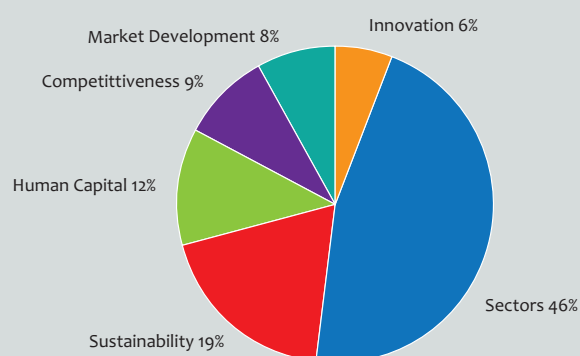
8.2 Food Wise 2025 Agri-food Strategy

Food Wise 2025 published in July 2015 sets out a ten year plan for the agri-food sector and is the successor to the ambitious Food Harvest 2020 strategy. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further. Getting our future priorities right will be fundamental to growing our most valuable indigenous industry. Food Wise 2025 captures the considerable complexity of this sector. Food Wise 2025 has harnessed the collective wisdom, experience and knowledge of leading industry stakeholders and sets a course for the industry of smarter, greener more sustainable growth over the next decade. Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including:

- **85% increase in exports to €19bn; and**
- **The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development.**

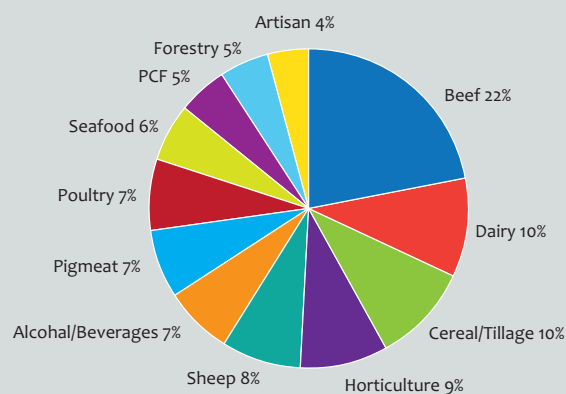
Food Wise 2025 includes more than 400 separate recommendations for action, spread across five cross-cutting themes of sustainability, competitiveness, human capital, market development, and innovation; as well as recommendations for individual sectors.

FIGURE 8.1 FOOD WISE 2025 ACTIONS
414 ACTIONS



Source: DAFM

FIGURE 8.2 FOOD WISE 2025 SECTORAL ACTIONS
189 ACTIONS



It identifies the significant growth which has occurred in the sector over the last few years, and the future global growth opportunities which Ireland is well placed to benefit from including: the ending of milk quotas; our reputation for food safety and controls; our natural competitive advantage in sustainable grass-based production; and a world class agri-food industry, backed by strong State support services.

The theme of Food Wise 2025 is “*Local Roots, Global Reach*”, reflecting the importance of gaining a deep understanding of what consumers, often in distant markets, really want, and communicating those messages back to Irish farmers and food companies. Equally important is to communicate key messages about what makes Irish food unique to the international market.

DAFM is committed to designing a robust implementation process to monitor progress and deliver on the ambitious projections in Food Wise 2025. Implementation of Food Wise will be driven by the High Level Implementation Committee (HLIC), chaired by the Minister of Agriculture, Food and the Marine and with participation from MAC members, other Government Departments and relevant State agencies.

Food Wise states environmental protection and economic competitiveness are equal and complementary: one cannot be achieved at the expense of the other. An Environmental Analysis was carried out in parallel with the development of the Food Wise strategy, and fed into the process. In response to the final Environmental Report, the Food Wise Implementation Plan (published in December 2015) has added several new sustainability actions to the implementation process. The Implementation Plan includes a supplementary list of Food Wise 2025 sustainability actions and recommendations, in response to the final Environmental Analysis Report. An Environmental Sustainability Sub Committee of the HLIC has been established to monitor and drive the implementation of the sustainability actions.

8.3 Research and Innovation

DAFM is supporting a range of research initiatives, at national and international level, aimed at improving the competitiveness and sustainability of the agri-food and forest sectors. At national level DAFM operates three competitive ‘public good’ research funding programmes covering agriculture, food & forestry: the Research Stimulus Fund (Stimulus), the Food Institutional Research Measure (FIRM), the Programme of Competitive Forest Research for Development (CoFoRD). These contribute to the competitiveness, sustainability, resilience, innovation and safety of the sector/industry by building and maintaining capacity and expertise in public organisations with a research performing capability. The programmes support excellent research that can be leveraged and commercialised directly by industry or in conjunction with industry facing programmes such as Enterprise Ireland’s Technology Centres or Commercialisation Fund. They also play a key role in training, providing a pipeline of skilled personnel to the agri-food industry and academia thereby enhancing Ireland’s capacity to compete successfully for European research funding.

2015 Calls for Research Proposals

A Competitive Call for Research proposals was launched in 2015 and aligned with research priorities outlined in FoodWise 2025 under DAFM’s three competitive ‘public good’ research funding programmes. The outcome of this Call will result in the award of research grants to various Irish-based institutions for collaborative research projects in mid 2016.

The content of DAFM’s 2015 Call was informed by strategic priorities including those highlighted in the SHARP strategic research and innovation agenda drawn up in 2014 by all research funders and the DAFM-led National Agri-Food Research and Innovation (NAFRI) Group and based on the two main agriculture and food priority areas identified under the National Research Prioritisation Exercise (NRPE). Accordingly, the Call invited proposals in a broad range of research activities incorporating the following areas:

- Animal and plant production, health and breeding
- Sustainable management of natural resources and climate change
- Food processing, technology and engineering
- Food formulation and ingredients for health and nutrition
- Food chain integrity and safety
- Agroforestry; forest productivity; resource utilisation; adding value; forest resource protection and forest ecosystem services

The Strategic Research Agenda for the Forest sector, titled ‘Forest Research Ireland’ which was developed by a Working Group of the COFORD Council, and published in 2014 provided the forestry themes for inclusion in the 2015 Call.

Platform Call

In a new initiative DAFM launched an innovative industry co-funded 'Platform' funding instrument in late 2015. The Platform Call aims to strengthen the linkages between the research community and industry to help achieve maximum value added to the national bioeconomy sector and deliver economic growth. Under the Platform Call proposals were invited in two areas: Data, ICT and Sensors; and Biorefining.

Employment Based Postgraduate Programme

In 2015 DAFM continued to partner with the Irish Research Council on their Employment Based Postgraduate Programme resulting in DAFM part funding further projects in the agri-food area.

International Developments

Throughout 2015 DAFM continued to collaborate with other research funding bodies on a range of agri-food and forestry research policy and operational matters and was also proactively engaged in discussions on the UK-Ireland Food Business Innovation initiative and the US-Ireland R&D Partnership. In the case of US-Ireland R&D partnership these discussions culminated in the extension of the scope of the Partnership in November 2015 to include agriculture research on a pilot basis, focused on four priority areas in plant and animal agricultural research. In 2016 scientists from the US, Ireland, and Northern Ireland will be able to develop collaborative tri-jurisdictional applications in the selected agricultural pilot areas for submission under the USDA's National Institute of Food and Agriculture (NIFA) Research Call for Proposals.

In 2015 DAFM continued to extend the use of competitive funding allocations to facilitate Irish researcher participation in a number of European Research Area Networks (ERA-NETS) and Joint Actions including EMIDA (animal health), RURAGRI (rural development), ICT-Agri (linking ICT with agriculture), Wood Wisdom (wood products and forest resource management) ENPADASI (European Nutrition Phenotype Assessment and Data Sharing Initiative) and ANIHOWA (Animal Health and Welfare). DAFM took the lead in delivering a Food Processing for Health Call in 2015 as part of the EU Joint Programming Initiative 'A Healthy Diet for a Healthy Life' which has led to the funding of two transnational research projects both with Irish participation. In 2015 DAFM was also active in creating future opportunities for Irish researchers to collaborate with European partners in new transnational Calls including Malnutrition in the Elderly, Sustainable Animal Production, GHG Mitigation, and Sustainable Forest Management.

Furthermore, DAFM leads Irish representation and provides strategic input into the ongoing development of two agri-food relevant Joint Programming Initiatives (JPIs) with other EU Member States, namely 'A Healthy Diet for a Healthy Life' and 'Agriculture, Food Security and Climate Change' (FACCE), as well as the broader Global Research Alliance on Agricultural Greenhouse Gases.

Horizon 2020

Horizon 2020 (2014-20) is the EU Framework Programme for Research and Innovation. DAFM and the Marine Institute (MI) are responsible for Societal Challenge 2 (SC-2) which has a fund of €3.8 billion - including €850m allocated to the Bio-based Industries (BBI) Joint Undertaking. DAFM and MI provide National Delegates (ND) and National Contact Points (NCP) for SC-2 which covers Agri-food, Forestry and Marine activities, Rural Development and the Bioeconomy also provides a representative to the BBI States Representative Group. Overall, the ND and NCP work actively within the Irish research community (academia, industry and other rural actors) to ensure maximum drawdown of funding. The Government has set a national drawdown target of €1.25 billion for Horizon 2020 including the drawdown target of €77m (2%) from the SC2 budget. To date, Irish researchers have drawn down 3.5% of the budget in both the 2014 and 2015 calls totalling €15.6 million. There are also opportunities for North-South collaboration which has seen a total of €3.2 million drawn down collaboratively in the 2014/15 period.

8.4 Estimates 2015

Substantial provisions were made for the agriculture sector for 2015. Of particular note were the following:

- The actual expenditure under the 2015 Areas of Natural Constraint Scheme was €205.9 million.
- Total expenditure on Agri-Environment Schemes in 2015 was €131 million which provided for payments to REPS as well as AEOS, GLAS and Organic Farming Scheme participants.
- Expenditure on forestry and bio-energy in 2015 was €104 million which included capital expenditure of €102 million.
- Total vote expenditure of €1.26 billion taken together with EU funding brought total expenditure by DAFM to over €2.33 billion in 2015 (See Table 1.5).

Government support to the primary agriculture sector through the taxation system has been estimated at some €350 million per annum, demonstrating the Government's strong commitment to agriculture, fishing and forestry.

The Agri-Taxation Review was a joint initiative between the DAFM and the Department of Finance and was published (October 2014) as part of Budget 2015. While taxation policy is primarily the responsibility of the Minister for Finance, the two Departments continuously liaise on agri-taxation matters. The Review provides a solid evidence base for continued assistance to the primary agriculture sector through taxation measures, and is a clear strategy with specific policy objectives for the future to:

1. Increase the mobility and the productive use of land.
2. Assist succession.
3. Complement wider agriculture policies and schemes, such as supporting:
 - a) Investment to enhance competitiveness, including assisting new entrant, young trained farmers.
 - b) Environmental sustainability, including the improvement of farm efficiency.
 - c) Alternative farming models such as farm partnerships.
 - d) Responses to increasing income volatility.

Budget 2015 gave effect to many of the Review recommendations and introduced what was described at the time by the Minister for Agriculture, Food and the Marine as the most substantial package of measures ever introduced in one budget. However it was not possible to implement all of the recommendations in just one budget.

Budget 2016

Important additional measures were announced in Budget 2016, including:

- A major new initiative on 'Family Transfer Partnerships' to assist succession,
- The removal of forestry income from the 'High Earners Restriction' for active foresters and farmers.

Family Transfer Partnership

The examination of this measure to incentivise earlier intergenerational transfers of farms was included in the Agri-taxation Review recommendations. There are a number of barriers identified to increasing the number of life-time transfers of family farms:

- The requirement for two generations to derive an income stream from the farm.
- Financial security concerns for the older generation.
- The full transfer of the family farm is sometimes considered too abrupt a change.

'Family Transfer Partnership' is a structure in which family members enter into a partnership, and appropriate profit-sharing agreement, with the provision for the transfer of the family farm to the younger farmer at the end of a specified period (not exceeding ten years). To support this transfer, a tax credit of up to a maximum of €5,000 per annum for five years, can be allocated to the partnership, thereby incentivising the transfer and mitigating some of the financial concerns. The partnership model enables a gradual transfer of control and also facilitates knowledge transfer from one generation to another. This measure is expected to cost €10 million per annum, and is subject to EU State Aid approval.

Removal of Forestry Income from the 'High Earners Restriction' for active Foresters

Income from woodlands managed on a commercial basis and with a view to the realisation of profits is tax exempt. However, since 2006 this income has been subject to the 'High Earners Restriction' limits. It has been stated that this had a disproportionate effect on forest owners as the majority of income comes at a single point in time, i.e. clear-felling, and that it impacted long-term decision making and afforestation planting targets. The removal of forestry income from the 'High Earners Restriction' for active foresters is a significant measure in support of national forestry policy. Forestry is of major economic importance in rural Ireland, as well as providing social and recreation benefits. Forestry also plays a huge role environmentally in terms of carbon sequestration, the potential of biomass energy and the preservation of biodiversity and natural habitats.

The introduction of these measures completes the implementation of this comprehensive agri-taxation strategy.

Renewals

Budget 2016 also announced that four existing tax measures on stock relief and stamp duty relief, vitally important to the agriculture sector, have been renewed for three years:

- 25% General Stock Relief on Income Tax
- 100% Stock Relief on Income Tax for Certain Young Trained Farmers
- 50% Stock Relief on Income Tax for Registered Farm Partnerships
- Stamp Duty Exemption on Transfers of Land to Young Trained Farmers.

Agricultural Relief from Capital Acquisitions Tax is also retained.

Changes in the taxation of the self-employed

Most farmers, foresters, fishermen and food entrepreneurs are self-employed and will see their tax liability fall with the introduction of the new Earned Income Credit of €550 and reduced USC rates. These changes will mean over €800 in additional net income, or 3.5%, based on the average Family Farm Income¹.

Support for Young Farmers

Over the last two budgets there have been new tax measures introduced, with existing measures retained and enhanced, to assist succession planning, support investment and improve land mobility. The new and enhanced measures are especially important for young farmers, particularly the enhancements made to long-term leasing relief.

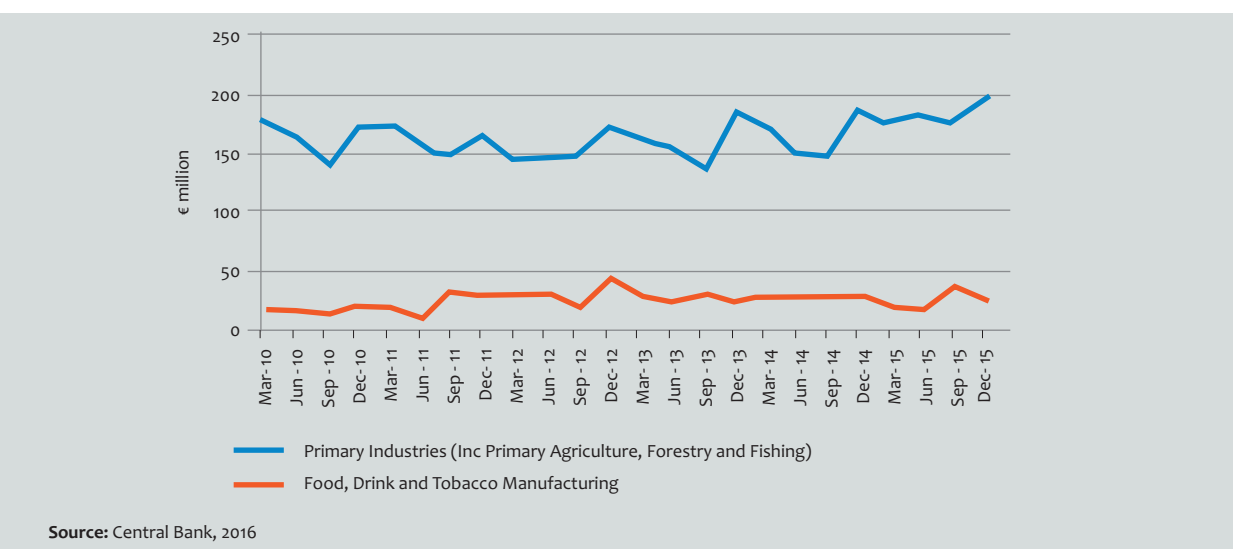
There has been anecdotal evidence of an increase in long-term leasing but there is no official data as there is a significant time-lag for Revenue information in this regard. In order to gauge the effectiveness of the recent changes, the Department carried out its own survey in 2015. This indicated that a significant behavioural shift from renting on a conacre basis to longer-term leasing has occurred.

- 27% of respondents commenced a new long-term lease in 2015 and
- Almost two-thirds of these indicating that it was the first time they had entered a long-term lease.

8.6 Access to Finance for the Agri-Food Sector

The main Irish banks consider the agri-food sector to be a priority and have a range of specialised funds, from which there continues to be a significant take-up. Data from the Central Bank shows that the 'primary industries' sector (consisting of primary agriculture, forestry and fishing) continues to be a key component of new SME lending, accounting for €734m or 21% of all new loans in 2015 (see Figure 8.3). Agriculture accounted for €649m or 19% of total new lending. During the same period, new lending for the Food and Beverage companies was €97m, or just under 3% of the total new lending.

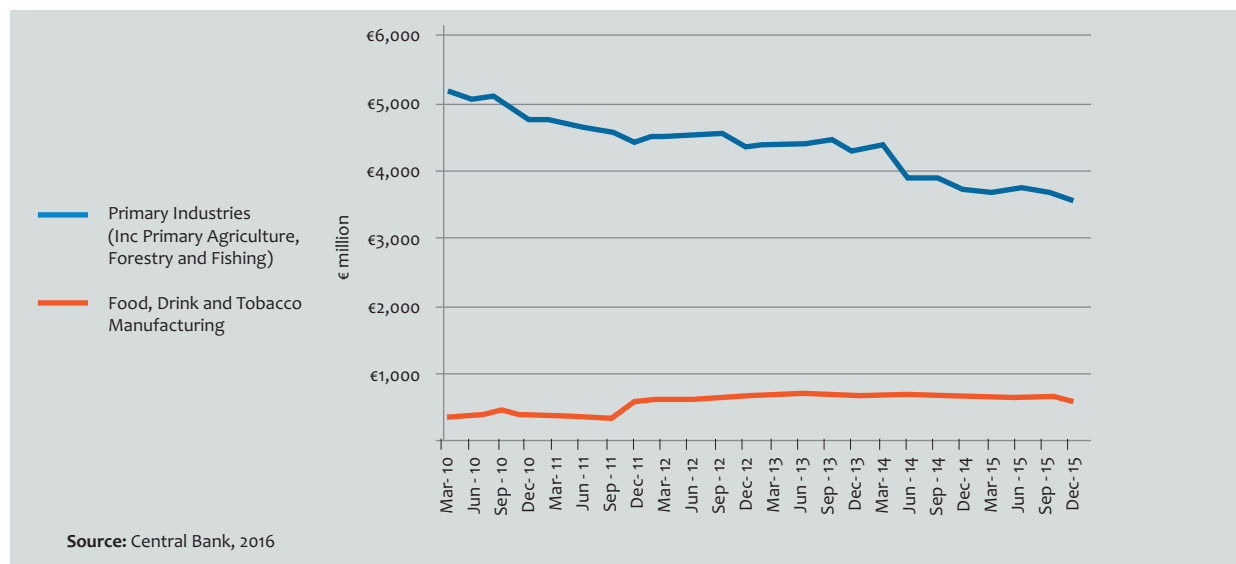
FIGURE 8.3 Gross New Lending to Irish Resident Small and Medium Sized Enterprises, March 2010 to December 2015



1 Average Across Sectors - €26,974, Teagasc National Farm Survey, 2014

Over the previous six years lending to the primary sector has remained stable, ranging from €134 million to €197 million per quarter. Over these six years new lending averaged €164 million per quarter to the primary industry sector (see Figure 8.3). While new lending has remained relatively consistent it is clear from Figure 8.4 that the overall indebtedness of the industry has declined. In the six years leading up to December 2015 the total outstanding debt of the primary industry had declined by 30% from €5.1bill to €3.6bill. Meanwhile, the average rate of interest that the primary industry pays on debt is 4.3% for existing debt, and 4.94% on new lending. Although the cost of new lending is currently higher than that of existing debt, it has dropped significantly in the past year from the average rate of 5.52% in December 2014.

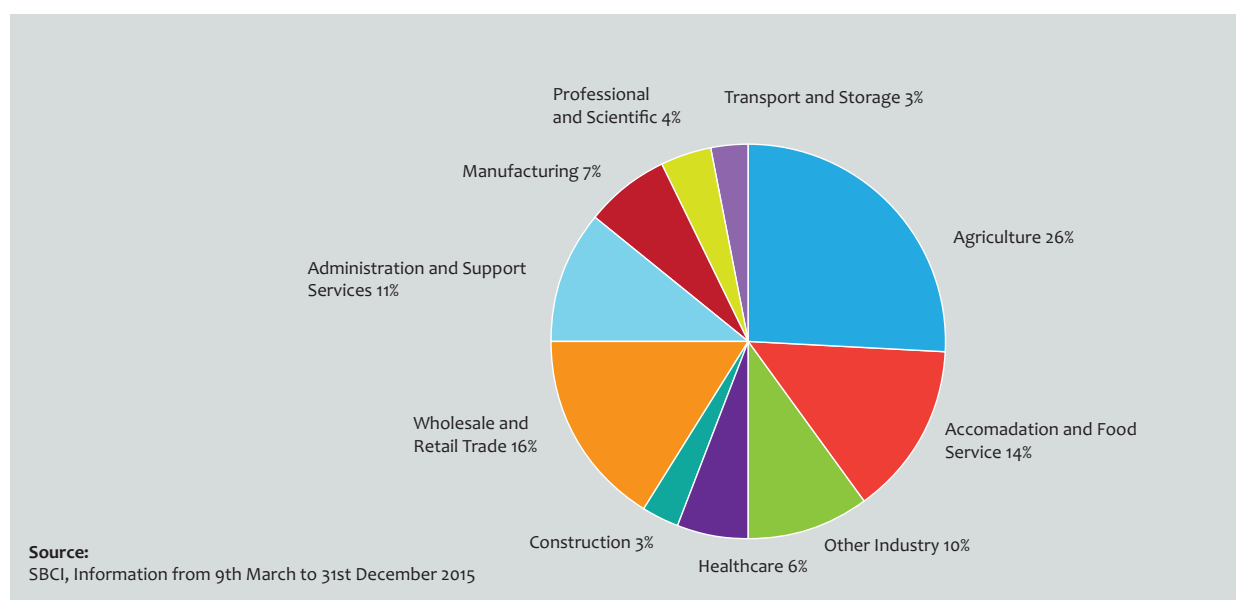
FIGURE 8.4 PRIMARY INDUSTRIES OUTSTANDING LOAN AMOUNTS, MARCH 2010 TO DECEMBER 2015



Strategic Banking Corporation of Ireland (SBCI)

The SBCI was established by the Government as a strategic Small and Medium Enterprises (SMEs) funding company. The SBCI aims to deliver lower cost, long-term, innovative and accessible funding to Irish SMEs, by offering tailored flexible products, through its 'on-lending partners'. In February 2015, the SBCI announced their initial products including 'Agriculture Investment Loans', available for investment by agricultural SMEs, including farmers, involved in primary agricultural production, the processing of agricultural products or the marketing of agricultural products. The features of these products compared with products currently on the market are lower interest rates, minimum loan maturity of 2 years, loan amounts up to €5m and increased repayment flexibility. Since its launch the SBCI has made €750 million of lower-cost loans available for SMEs, including farmers. In its last report at the end of January, the SBCI stated that of the 4,619 loans amounting to €172 million drawn down by SMEs, 26% had been accessed by the agriculture sector. This is by far the largest sector and accounts in part for a wide geographical spread in SBCI loans.

FIGURE 8.5 SBCI LOAN VALUES, BY SECTOR, 9TH MARCH TO 31ST DECEMBER 2015



Ireland Strategic Investment Fund (ISIF)

The National Pensions Reserve Fund has been transformed into the '*Ireland Strategic Investment Fund*' (ISIF) and provides a portfolio valued at some €7.6 billion for investment in Ireland. These investments must show a commercial return, but must also support economic activity and employment. ISIF has been exploring opportunities for providing funding to the agri-food sector. In March 2016, Glanbia, ISIF, Rabobank and Finance Ireland announced the planned creation of a new €100 million 'Glanbia MilkFlex Fund', which will offer flexible, competitively priced loans to Glanbia milk suppliers with loan repayments which can vary according to movements in milk price.

Financial Instruments

DAFM, in cooperation with other State bodies, continues to explore new and more competitive sources of funding for the agri-food sector, including the possible use of 'Financial Instruments'. The European Commission and the European Investment Bank (EIB) have outlined a model guarantee instrument for agriculture developed within the framework of their Memorandum of Understanding on co-operation in agriculture and rural development within the EU. The model instrument aims to help ease access to finance for farmers and other rural businesses. Member States and regions can adapt and use this model to set up financial instruments funded by their rural development programmes (RDPs) under the European Agricultural Fund for Rural Development (EAFRD). No funding has been allocated by the EIB or under Ireland's RDP to date but it is being actively considered. Financial instruments can take the form of loans, guarantee funds or equity investments, and the funding for any such FIs would have to draw on Ireland's existing RDP allocation, as well as national exchequer funding. It is also possible to incorporate funding from other sources for such instruments.

8.7 CEDRA Initiatives

A series of pilot measures using the Rural Development and Innovation fund (linked to CEDRA - Commission for the Economic Development of Rural Areas) were rolled out over 2015. This fund of €1m was utilised to:

- support Rural Female Entrepreneurs through the 'Acorns' programme
- support Social Farming initiatives around the country
- support the development of local food markets, and
- support Agri-Tourism projects through the Local Authorities.

The funding has been increased to €1.5m for 2016, and it is hoped that this increased allocation will ensure that it is possible to build on the momentum started by the 2015 pilot projects. 2016 support will be rolled out in tranches. It is envisaged that new supports for Rural Female Entrepreneurs and for Social Farming initiatives will commence as part of the first tranche.

Chapter 9 The Environment and Rural Development

9.1 Overview

Ireland has huge natural advantages when it comes to farming in an environmentally friendly way; a moderate climate, with plentiful rainfall, leading to excellent grass growth. Research has shown that Ireland is one of the world's most efficient food producers in terms of carbon footprint per unit of output. However, because of the importance of the sector to the economy, and our historic lack of heavy industry, agricultural emissions make up over 30% of Ireland's emissions profile. Therefore it is essential that we explore and implement sustainable solutions to agri-food emissions wherever possible; as well as protecting water quality and bio-diversity, which are equally essential to a sustainable environment.

Some of the innovative measures already being implemented are:

- Bord Bia's Origin Green initiative
- The Carbon Navigator tool, which enables farmers to focus on improving both their economic and their environmental efficiency.
- Various measures under the €4 billion Rural Development Programme, including GLAS the agri-environmental scheme, the Beef Data and Genomics Programme, and Knowledge Transfer programmes.
- Ireland is also deeply committed to improved collaborative research both nationally and internationally, to ensure we stay on the right long-term path.

This chapter provides an overview of the most significant environmental protection measures impacting agriculture and the measures being taken to reduce the impact on the environment.

9.2 Greenhouse Gases

Greenhouse Gas (GHG) emissions from agriculture accounted for 33.3% of the State's total emissions in 2014 (EPA, 2015). Agriculture is the single largest contributor to emissions in Ireland due to both the importance of the sector and to our traditional lack of heavy industry.

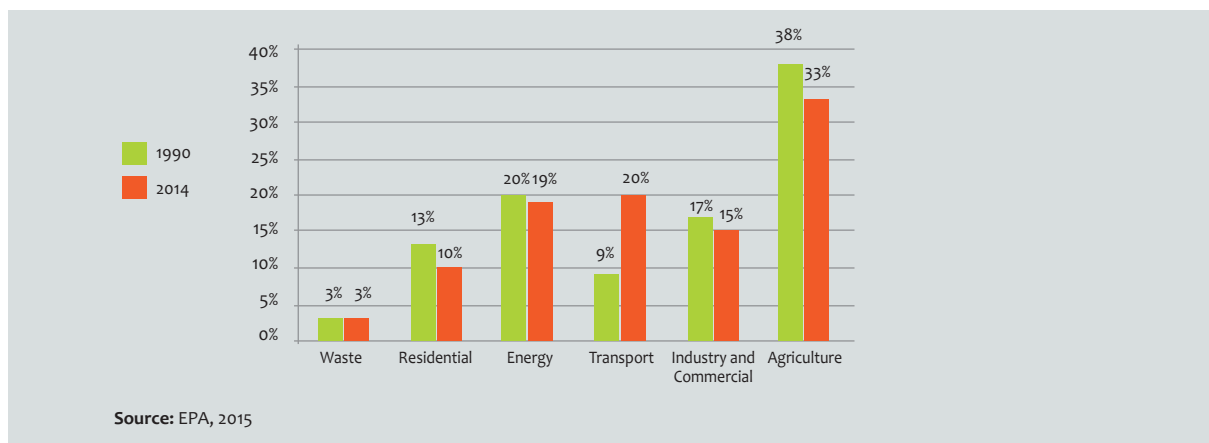
Emissions from agricultural activities reached a peak in 1998 and have decreased to below their 1990 level since 2002, reflecting long-term decline in livestock populations and in fertiliser use. Emissions from agriculture in 2014 were 9.7% below their 1990 levels.

Enteric fermentation, soils and indirect emissions, and manure management account for on average 55%, 30% and 9%, respectively of total emissions from agriculture. Emissions from the combustion of fossil fuels account for on average 4% of total emissions from agriculture. Carbon dioxide emissions from lime and urea application to agricultural soils account for the remaining 2%.

GHG emissions in Ireland by sector in both 1990 and 2014 can be seen in Figure 9.1. Although still the largest source of GHG, the share from the agriculture sector fell from 37.8% to 33.3% over this period.

FIGURE 9.1

GREENHOUSE GAS EMISSIONS IN 1990 AND 2014 PERCENTAGE CONTRIBUTION BY SECTOR

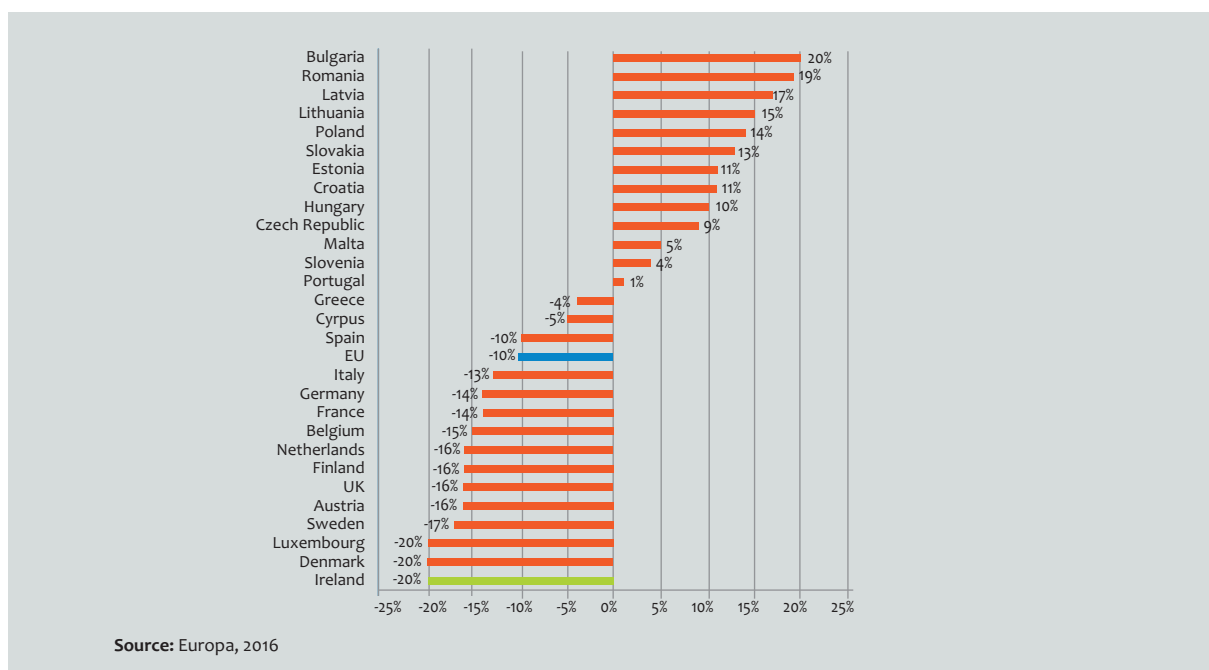


9.3 The EU Effort Sharing Decision

The EU's Effort Sharing Decision (ESD) established binding annual GHG emission targets for member states for the period 2013-2020. These targets address emissions from sectors which did not fall under the Emissions Trading Scheme (ETS) and include the agriculture, transport, building and waste sectors.

The national emission targets for 2020 were set on the basis of the availability of cost effective abatement options and wealth. Individual Member State emission reduction targets range from a 20% increase to a 20% reduction relative to 2005 emission levels by 2020 (Fig 9.2) These national targets will collectively deliver a reduction of around 10% in total EU emissions below 2005 levels by 2020 from the sectors covered by the Effort Sharing Decision.

FIGURE 9.2: GHG TARGETS FOR 2020 PER MEMBER STATE (COMPARED TO 2005 LEVELS)



The ESD assigned Ireland an emission reduction target of 20% below 2005 levels by 2020. This represents a significant challenge for Ireland due to our growing population and growing emissions. This challenge is further compounded by the high proportion of agricultural emissions arising from livestock activities and the limited availability of cost effective mitigation options and opportunities to expand milk production following the abolition of milk quotas in the EU.

9.4 Paris Agreement (COP 21)

The United Nations Climate Change (Conference of the Parties (COP 21) in December 2015 which resulted in the Paris Agreement recognised that global action is required to hold the increase in global temperatures to well below 2°C above pre-industrial levels. It was agreed to pursue efforts to limit the temperature increase to 1.5°C, whilst not threatening food production.

The Agreement provides a clear link with Sustainable Development Goal 2 to “End hunger, achieve food security and improved nutrition and promote sustainable agriculture.” It also includes a strong recognition of the role of forests in mitigating climate change and the need to account for both emissions and removals. The UNFCCC’s own data identifies that Irish forests removed 3.7Mt of CO₂ after allowing for harvesting and ancillary emissions. Further information on the forestry sector is available in Chapter 10.

The concept of carbon neutrality is recognised in Article 4.1 of the convention, which is in-line with Ireland’s national policy objectives. This agreement is of tangible benefit to Ireland as an island with specific vulnerabilities to climate change, including higher sea levels, increased storm frequency and changing precipitation patterns.

9.5 The Gothenburg Protocols and NEC Directive

Ireland is a party to the Convention on Long-Range Trans-boundary Air Pollution (CLRTAP). It is through CLRTAP that the Gothenburg Protocol establishes targets for the control of air pollution. Amendments in 2012 repealed and replaced emissions ceilings set out under the previous iterations of the protocol and set out reduction commitments for 2020 onward. For Ireland, a reduction commitment for ammonia of 0.5% below 2005 levels (108.6Kt) will apply once the protocol is ratified.

From the perspective of Irish agriculture, ammonia (NH₃) is of particular concern as almost all of Ireland’s ammonia emissions arise from agricultural activities. Atmospheric ammonia, when deposited, can have a negative impact on human health and sensitive natural ecosystems, and its deposition can contribute to acidification and eutrophication of surface waters. Ammonia is also known to be a contributor to the formation of secondary particulate matter (PM_{2.5}). The main sources of agricultural ammonia are animal housing, land spreading of animal manures and chemical fertiliser application (EPA, 2015).

The National Emissions Ceiling (NEC) Directive is currently being reviewed under the EU Clean Air Package. It is envisaged that once this process is completed the NEC Directive will oversee compliance with reduction commitments established under the Gothenburg Protocol. Proposed amendments also exist that will enable the NEC Directive to set out further reduction targets for the 2030 period and beyond. In light of the food production increases anticipated over the next decade, and limited capacity for cost effective emission reduction in the agriculture sector, DAFM and DCENR are engaging to ensure that the interests of Irish agriculture are represented and understood in target negotiation.

9.6 Nitrates National Action Programme

The EU Nitrates Directive requires every Member State to review their National Action Programme at least every four years. Ireland is currently operating under its 3rd Nitrates Action Programme. Current Regulations, commonly referred to as the Nitrates or Good Agriculture Practices (GAP) Regulations (Statutory Instrument No. 31 of 2014) were introduced in January 2014 in response to the findings of a review of existing regulations.

9.7 Environmental Impact Assessment

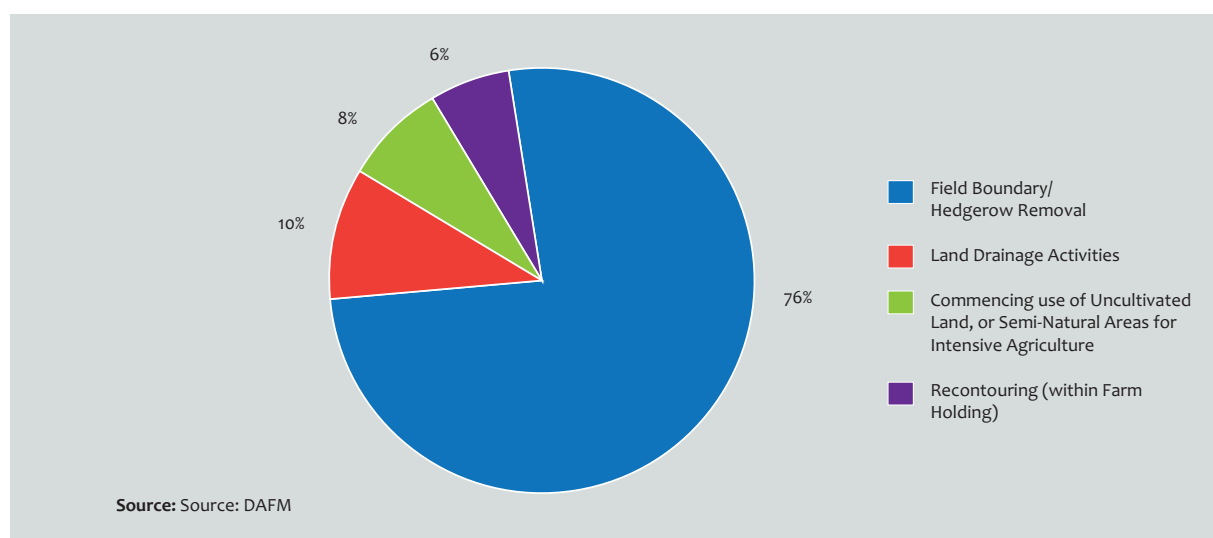
The European Communities (Environmental Impact Assessment) (Agriculture) Regulations (S.I. No 456 of 2011) were issued in response to a judgement by the European Union Court of Justice in relation to the Environmental Impact Assessment Directive. The ECJ found that Ireland was overly reliant on the use of size thresholds to determine if an Environmental Impact Assessment was required on a project. It was deemed that such thresholds did not take sufficient account of other relevant criteria e.g. the nature, location and cumulative nature of these projects.

The three activities covered by the EIA are:

- Restructuring of rural land holdings
- Commencing to use uncultivated land or semi-natural areas for intensive agriculture
- Land drainage works on lands used for agriculture.

In 2015, 149 screening applications were received under these regulations. These applications may be broken down as in Figure 9.3. Two applications did not fall under the remit of these Regulations. Details of screening application decisions are available on the DAFM website.

FIGURE 9.3 SCREENING APPLICATIONS UNDER ENVIRONMENTAL IMPACT ASSESSMENT



9.8 National Climate Change Strategy

Note: The Department of the Communications, Climate Change and Natural Resources (DCCCNR) will lead and take over this function formerly carried out by DECLG as lead Department in relation to climate change matters there exists a whole of Government approach to developing policy relating to climate change issues.

The Climate Action and Low Carbon Development Act of 2015 provide a statutory framework to initiate a transition to a low-carbon economy, climate resilient and environmentally sustainable economy. Specifically, the long-term policy vision is for an approach to carbon neutrality in the agriculture and the land-use sector including forestry, which does not compromise the capacity for sustainable food production.

Feedback received through public consultations was considered in the drafting of DAFM's sectoral contribution to the National Mitigation Plan which is currently being drafted by the DCCCNR. DAFM is also preparing sectoral adaption plans, while the DCCCNR is facilitating discussions around plan development and advancement through the Sectoral Adaption Steering Committee.

Mitigation Initiatives

In order to reach the goals set out by the numerous international agreements and national strategies, there exist a number of means to initiate change. Ireland's Rural Development Programme 2014-2020 contains a suite of measures to address GHG emissions and other environmental pressures, such as ammonia emissions and nitrate loss arising from agricultural activities. GLAS, TAMS and the Knowledge Transfer Programmes all aim to educate and encourage the use of nutrient management planning and low emission slurry spreading technology (See section 9.10). GLAS offers opportunities to support emission reductions and carbon sequestration through various actions such as hedgerow/tree planting, minimum tillage and encouraging the sustainable management of upland peatlands, while at the same time addressing other environmental threats such as biodiversity and water quality, through these and a range of other actions contained within this Scheme. The locally-led agri-environment measures currently under development, will offer further opportunities to complement the environmental objectives in GLAS, through more innovative approaches.

Nitrates Derogation

A renewal of derogation was approved by the EU Nitrates Committee in February 2014. Derogation allows intensive farms to maintain higher stocking rates subject to certain conditions. Derogation is justified on the grounds that the vast majority of Ireland's agricultural area is grassland, and that this grassland has a long growth season. The current Nitrates Directive requires that farmers comply with a stocking rate limit of 170kgs of nitrogen per hectare per year. This is the equivalent of two dairy cows per hectare.

DAFM provides farmers with detailed nitrogen and phosphorus statements on holdings. Statements are now available for the end of June, August, October and December periods. The SMS text alert messaging facility for nitrates information will continue for 2016. Farmers will also be encouraged to access this information themselves through DAFM's agfood.ie website. Advisors may also receive nitrogen and phosphorus data for clients at intervals throughout the year.

9.9 Rural Development Programme 2014-2020

Ireland's 2014-2020 RDP was formally adopted by the EU Commission on the 26th of May 2015 and contains a suite of extensive measures that address all farming sectors and support community led local development by means of LEADER. The Programme is co-funded by the EU's European Agricultural Fund for Rural Development (EAFRD) and the national exchequer. EU support for the RDP via the EAFRD will amount to €2.19 billion over the 7-year Programme lifespan and this EU funding will be supplemented by exchequer funding to bring the total support available under the RDP to €3.9 billion.

TABLE 9.1 EAFRD and national funding over the RDP lifetime

Measure	€ millions
Measure 1 - Knowledge transfer and information actions	126
Measure 2 - Advisory services, farm management and farm relief services	8
Measure 4 - Investments in physical assets	425
Measure 7 - Basic services and village renewal in rural areas	6
Measure 10 - Agri-environment-climate	1,585
Measure 11 - Organic farming	56
Measure 13 - Payments to areas facing natural or other specific constraints	1,370
Measure 16 - Co-operation	7
Measure 19 - Support for LEADER local development	250
Technical Assistance	6
Source: DAFM	

A description and state of play of the measures contained in Ireland's 2014-2020 RDP is contained below.

Measure 1 – Knowledge Transfer and Information Actions (€126m)

Knowledge transfer discussion groups are farmer meetings facilitated by highly qualified advisors that involve the transfer and exchange of information and best practice across the beef, sheep, dairy, equine, poultry and tillage sectors. Online applications were invited from suitably qualified agricultural advisors to act as KT Group Facilitators and these applications were put through a ranking and selection process. Successful applicants for the first three sectors were notified in Q1 of 2016, with the second three sectors to be completed in May.

Under this measure, *training* will also be provided to farmers by DAFM approved advisors under both the GLAS & the BDGP, in order to optimise delivery of these schemes. This training will also begin in 2016.

Measure 2 – Advisory Services (€8m)

Continuous Professional Development (CPD) for Agricultural Advisors will allow advisors to enhance their knowledge base on an on-going basis and ensure that they are familiar with the latest techniques and regulatory requirements. The first element of CPD is for advisors who want to deliver training to farmers on the carbon navigator via BDGP while the second element of CPD covers Knowledge Transfer facilitation skills. The initial tranche of CPD courses began to roll out in early 2016.

Animal Health and Welfare Training for on farm advisors provides training to specialist advisors so they can to deliver on farm animal health and welfare advisory services. The advice to be provided on farm will strategically target a number of core areas such as Johne's disease, BVD, SCC and significant animal health issues in the pig and poultry sectors. All BVD training events were delivered by Animal Health Ireland in the first quarter of 2016 while Johne's disease training is scheduled to commence in the second quarter of 2016.

Measure 4– Investments in Physical Assets (€425m)

The *Targeted Agricultural Modernisation Scheme (TAMS II)* follows on from a similar measure in the previous RDP. The objective of this scheme is to encourage capital investment in a number of target areas which will promote increased competitiveness and sustainability in those sectors. Target areas include: Dairy equipment, Low emission spreading equipment, Animal welfare and farm safety, Pig and poultry investments, Organic Capital Investment, Farm nutrient storage, Animal housing and a Young Farmer Capital Investment Scheme.

Measure 7–Rural Services and Renewal (€6m)

GLAS Traditional Farm Buildings builds upon the success of the Heritage Buildings Scheme and ensures that small traditional farm buildings and other structures are restored and conserved for renewed practical agricultural use. This is a complementary measure to GLAS and therefore participation in GLAS is the prime eligibility condition. This scheme will be administered by the Heritage Council on behalf of DAFM and the first tranche of applications was opened in April 2016. Further applications will be invited at regular intervals throughout the Programming period to end December 2020.

Measure 10– Agri-environment – climate (€1,585m)

The *Green, Low-Carbon, Agri-Environment Scheme (GLAS)* is open to all farmers and promotes agricultural actions that aim to address the issues of climate change, water quality and the preservation of priority habitats and species. GLAS is a highly targeted scheme and has a three tier hierarchy that is designed to ensure the targeted and prioritised delivery of environmental benefits. Tier 1 and Tier 2 are based on Priority Environmental Assets and Actions, and if a farmer has Tier 1 on their holding or chooses to do a specific Tier 1 action, they will gain priority access to the scheme. Tier 3 is made up of more general actions some of which are more environmentally conscientious than others and thus are weighted to match their importance.

26,263 farmers were approved into GLAS under the first tranche, which opened in May 2015 while 11,500 farmers will be approved under the second tranche of GLAS, which opened in October 2015. This brings the total number of farmers in the scheme to some 38,000 - a record number of entrants to an agri-environment scheme in a single year.

The *Beef Data Genomics Programme (BDGP)* requires farmers to undertake a range of actions designed to deliver accelerated genetic improvement in the quality of the beef herd and, as a result, the associated climate benefits such as reduced emissions intensity. The establishment and maintenance of a large scale data collection system is central to the approach and this will be done through the collection of data from commercial suckler cow herds. This feeds into a genomics based breeding index which ranks the efficiency of animals on a star based system, with 5 star being the most efficient. Overall BDGP will inform farmers in selecting robust and resource efficient suckler cow and bull replacements.

In excess of 20,000 farmers have been paid €36.8m million in respect of the 2015 scheme year. Applicants are continuing to confirm compliance and payment runs are continuing on an on-going basis.

Locally led schemes promote local solutions to specific issues and complement the national and more broad-based GLAS scheme supported under the Rural Development Programme. The expansion of the Burren conservation scheme is the first such locally-led scheme and farmers will be recruited into it in 2016. Over 400 applications were received by the closing date of 21st December, 2015 and 200 farmers have been accepted into the first tranche. It is planned to seek applications for an intake of an additional 100 farmers in late 2016. The next schemes to be launched following EU Approval are the Hen Harrier and the Freshwater Pearl Mussel.

Measure 11– Organic Farming (€56m)

The *Organic Farming Scheme (OFS)* aims to encourage farmers to convert from conventional farming methods and to apply organic farming methods, as well as maintain these methods after the initial period of conversion which will be a maximum period of two years. Its overall objective is to deliver enhanced environmental and animal welfare benefits and to encourage producers to respond to the market demand for organically produced food.

The first tranche of the OFS attracted a record 870 applications. Approval letters were issued to 725 successful applicants on 22 December, 2015, and an 85% moiety of the first year payment was issued to 548 applicants on 23 December, 2015. The second tranche of the new OFS which closed on 31 December, 2015 attracted 332 applicants. The OFS has now met all targets for the RDP period in terms of intake and area and further applications can only be accepted if additional funds are provided.

Measure 13– Areas facing natural constraint (€1.37bn)

The *Area of Natural Constraints (ANC)* measure is based on the previous Less Favoured Areas Scheme and the Disadvantaged Areas Scheme and its objective is to compensate farmers for income foregone and additional costs linked to the disadvantage of the area concerned. A separate category of support within the structure of the ANC scheme will be made available to compensate Island Farmers in recognition of the specific constraints faced in these areas. Payments to farmers in areas facing natural or other specific constraints will aim to:

- ensure continued agricultural land use, thereby contributing to the maintenance of a viable rural society;
- maintain the countryside; &
- maintain and promote sustainable farming systems, which in particular take account of environmental protection requirements.

To date, over 95,500 applicants have been paid a total of €202m.

Measure 16– Co-operation (€7m)

European Innovation Partnerships (EIPs) aim to create greater linkages between research and on farm implementation. The EIP approach is supported via the RDP through the funding of EIP operational groups which are clearly linked to supporting innovation and best practice. An EIP Stakeholder Conference will be held in the second half of 2016 and calls for proposals will be published later in 2016.

Collaborative Farming aims to address some of the structural, economic, and social challenges facing Irish agriculture such as poor land availability, farm size, work/life balance issues, the development of skills sets and the knowledge base, and intergenerational transfer. All new farm partnerships will be eligible to receive a contribution of 50% towards the vouched costs of legal accounting and advisory costs involved in the setting up the partnership, up to a maximum of €2,500. To date €81,000 has been paid to 87 farm partnerships in the Collaborative Farming scheme.

Measure 19– LEADER (€250m)

LEADER is administered by the Department of the Environment, Community and Local Government (DECLG) and supports actions in rural areas targeted at addressing local needs under the broad themes of economic development, social inclusion and rural environment. Local communities direct where this funding is provided through the formation of, and participation in, Local Action Groups (LAGs), and the design and implementation of Local Development Strategies (LDS). The selection of Local Action Groups to deliver LEADER Local Development Strategies in 28 sub-regional areas is on-going and is expected to be concluded in the second quarter 2016.

National Rural Network (NRN)

The establishment of a NRN is an EU legislative requirement as part of Ireland's Rural Development Programme and Irish Rural Link in partnership with the Wheel, (NUI Galway) and Philip Farrelly & Co. was selected following a competitive tender process in January 2016.

The running of the NRN is funded via Ireland's 2014-2020 Rural Development Programme and it will aim to:

- Increase the involvement of stakeholders in the implementation of the rural development programme;
- Improve the quality of implementation of the rural development programme;
- Foster innovation in agriculture, food production, forestry and rural areas.

9.10 Future Developments of Ireland's RDP

The first amendment to Ireland's RDP was formally submitted to the European Commission and includes a range of adjustments and additions to the existing RDP Measures. It will be approved in 2016 and will introduce:

- Changes to GLAS 2, on foot of a review of GLAS 1
- The Burren Programme
- An amendment to TAMS II to introduce a tillage scheme, rainwater harvesting and sheep fencing.
- Changes to the Organic Farming Scheme to allow for the extension of 'old' contracts and the inclusion of additional land.
- Permission to be a member of 2 Knowledge Transfer Groups.
- LEADER clarifications in relation to use of second-hand equipment, use of payment costs instead of simplified cost options and inclusion of reference to advance payments.

9.11 Organic Farming

The Organic Farming Action Plan was launched in 2013. It set out four main objectives:

- Increase the production base in Ireland, replacing where possible imports with Irish organic produce
- Promote awareness of the potential export market
- Seek to develop a sustainable export market for Irish organic produce
- Identify issues which impede the growth of the Organic Sector with an emphasis on developing solutions

At the end of 2015, there were 2,084 organic operators in Ireland, including 1,750 producers. These producers utilise 61,000 hectares, or just over 1.3% of the total Utilisable Agricultural land Area in Ireland. This is over twice the land utilised by organic farmers in 2002.

The sector receives substantial financial support through the Organic Farming Scheme which is funded through the Rural Development Programme (See Section 9.10).

In addition, Organic farmers may also avail of capital grants under the Organic Capital Investment Scheme. The scheme is part of the Targeted Agricultural Modernisation Scheme II. The purpose of this scheme is to ensure a regular supply of high quality organic produce for the market. Processors may also avail of the Organic Investment Grant Scheme. This directs financial assistance towards projects which aid in the production, handling and preparation of organic produce. It also assists in the development of facilities for the preparation, grading, packing, storing, distribution and sale of organic products.

9.12 Bio-energy Willow Scheme

The Bio-energy (Willow) Scheme 2015 was launched 24th March 2015 with a closing date for applications of 30th April 2015. The purpose of the scheme is to develop a renewable wood biomass resource that will also contribute to farm incomes and rural development.

This scheme commenced in 2007 on a nationally funded pilot basis and continued until 2010. The scheme was co-funded under the Rural Development Programme for Ireland (RDP) 2007-2013 for the years from 2011 to 2014. The Scheme was nationally funded in 2015. A full review is being undertaken of the Scheme to address the low take-up and no further Schemes have been announced pending completion of this review.

9.13 Research

Agricultural Catchment Programme

The Agricultural Catchments Programme (ACP) is a Department funded research and advisory programme, operated by Teagasc, in six agricultural catchments (Cork, Wexford (2), Louth, Monaghan and Mayo). The purpose of this programme is to evaluate the effectiveness of the Good Agricultural Practices farmers are required to implement under the Nitrates Directive. Phase 3 of this programme is currently in effect; this Phase covers the 2016-2019 operating period.

Data arising from the ACP has indicated that the Nitrates Regulations have had a positive impact including a reduction of Nitrogen Inputs, increased nutrient management and some evidence of reduced nutrient loss from agricultural land to water. Consequently, water quality has demonstrated signs of recovery, although these figures are preliminary as there is a time lag between the introduction of measures and their eventual impact upon water quality. The ACP has also developed sustainability indicators to track the environmental and economic performance of agriculture within the regulatory environment. Findings also indicate that Irish farmers are producing milk, meat and crops in an environmentally sustainable manner.

Sustainable Healthy Agri-food Research Plan (SHARP)

Scientific research has a central role to play in developing our understanding of cost effective mitigation options for agriculture and the carbon sequestration potential of our natural land resources. To this end, DAFM recognises the important role that the agriculture and land use sector plays in protecting the environment and is strongly committed to providing funding for targeted research in the area of agriculture, sustainable intensification and sustainable land management. DAFM's Sustainable Healthy Agri-food Research Plan (SHARP) has aimed to develop technologies and to advise the agriculture sector on how to improve the resource efficiency and sustainability of agricultural production.

International Research Affiliations

Ireland participates in research on an international level providing funding to organisations such as the UN Food and Agricultural Organisation (FAO) for Projects on Benchmarking and Monitoring the Environmental Performance of Livestock Supply Chains.

Ireland is also engaged with the EU Joint Programming Initiative – Agriculture, Food Security and Climate Change (FACCE-JPI) which provides and steers research to support sustainable agricultural production and economic growth, to contribute to a European bio-based economy, while maintaining and restoring ecosystem services under current and future climate change. Over the course of 2015 FACCE-JPI advanced plans for a joint Research call for proposals under the 'ERA-GAS' European Research Area Co-fund to further enhance the state of knowledge in monitoring and mitigation of GHG's. The ERA-Gas Call will be launched in 2016 and Ireland, through the Department and Teagasc have pledged to commit €1 million to facilitate Irish research involvement. Ireland was also a founding member of the Global Research Alliance on Agricultural GHG's in December of 2009.

To further raise the profile and importance of balancing the needs of climate change and food security Ireland is also an active member of the Global Alliance on Climate Smart Agriculture (GASCA). GASCA aims to bring Governments and other stakeholders together to discuss the three pillars of smart agriculture.

- Sustainably increasing agricultural productivity and Income
- Adapting and developing resistance to climate change
- Reducing and/or removing GHG emissions where possible.

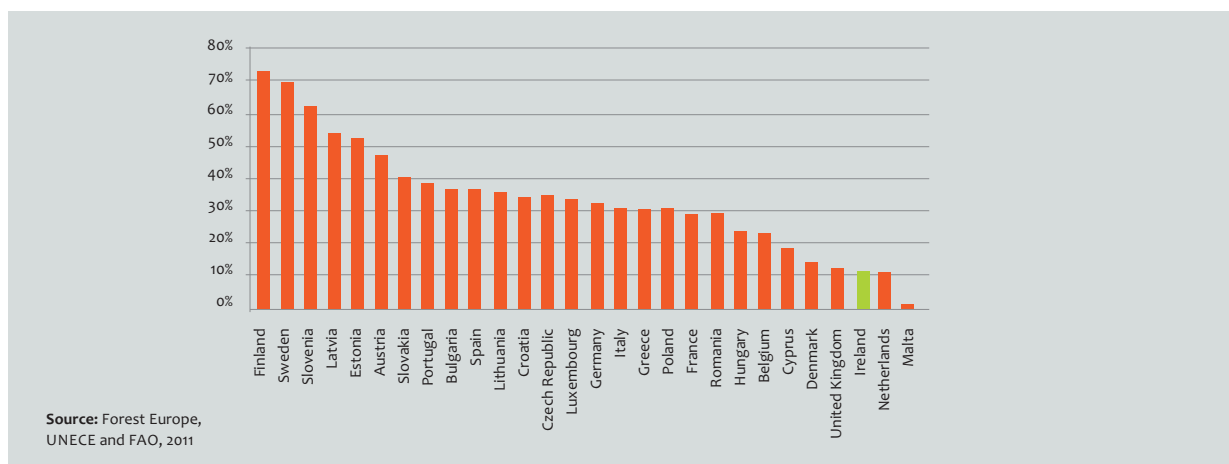
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Chapter 10 Forestry

10.1 Overview

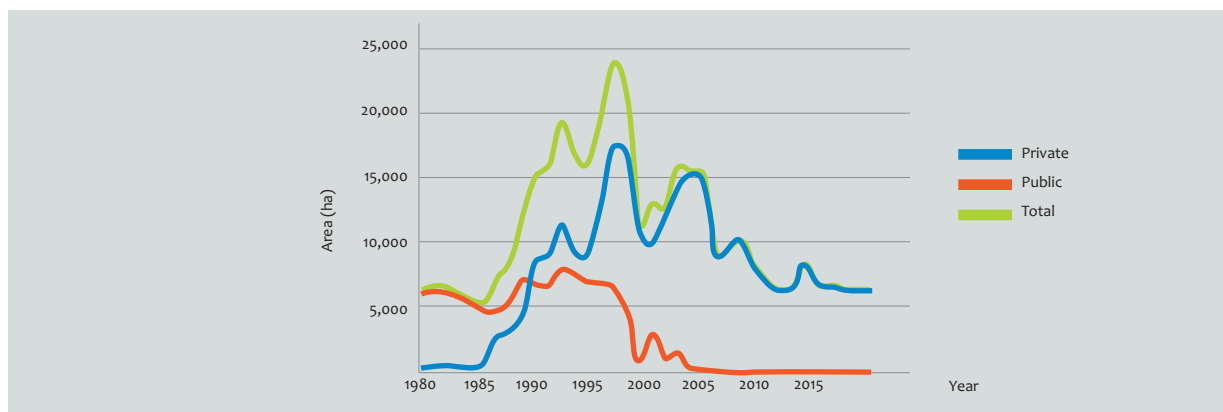
By the end of 2012, forest cover in Ireland had reached 731,652 hectares (DAFM, 2012), or 10.5% of total land area. This compares to a European (EU-27) average of about 33% (Forest Europe, UNECE and FAO, 2011).

FIGURE 10.1 Forest Cover as % Total Land Area in the EU-27



Since the mid-1980s, most new planting in Ireland has been undertaken by the private sector following the introduction of State and EU support programmes. The level of afforestation by the private sector exceeded public planting (excluding reforestation following clearfelling) by the mid to late 1980s, with the latter decreasing substantially thereafter. Now, nearly half of forestry land is owned by the private sector (46.8%)¹. In 2012, over 53% (389,356 hectares) of forests were in public ownership and almost 47% (342,296 ha) in private ownership (National Forest Inventory 2012). In 2015 a total of 6,293 hectares of new forestry was funded by the Department of Agriculture, Food and the Marine.

FIGURE 10.2 Annual Public, Private and Total Afforestation, 1980-2015



¹ The 2006 National Forestry Inventory (NFI) was the first statistical and multi-resource inventory carried out on the national forest estate. Field data collection for the second NFI commenced in 2009 and was completed in 2012. During 2015, the third NFI cycle commenced. All NFI publications, including the main findings booklet are accessible on the Department's website at www.agriculture.gov.ie/nfi

10.2 Forest Strategy and Financial Supports

The Forest Service promotes afforestation as a viable land use for landowners through the provision of planting grants and payment of annual premiums. In 2015, €98.7 million of capital expenditure was invested in forestry development, 96% of which went towards afforestation grants and premiums. An additional €4 million was spent on other forestry support schemes for forestry and woodland reconstitution and development projects.

TABLE 10.1 ANNUAL CAPITAL EXPENDITURE ON FOREST SCHEMES, 2005 – 2015

Year	Total Expenditure €m	Total Afforestation Programme €m	Forestry Support Schemes
2005	110.8	97.0	13.8
2006	111.0	93.6	17.4
2007	117.1	103.2	13.9
2008	117.0	*104.8	12.2
2009	111.0	*102.3	8.7
2010	114.4	*107.8	6.6
2011	110.9	*103.8	7.1
2012	108.2	*101.6	6.6
2013	106.5	*100.8	5.7
2014	108.1	*102.5	5.6
2015	102.7	*98.7	4.0

*Balance of €1.3m for 2008, €1m for 2009, €0.5m for 2010, €0.6m for 2011, €0.4m for 2012, €0.5m for 2013, €0.6m in 2014 and €0.3m in 2015 expended on sundry capital expenses

Source: Figures compiled by Forestry Division of Department of Agriculture, Food and the Marine

10.3 Forestry in 2014

In 2014:

- the total roundwood harvest (including firewood) was 3.11 million m³, which was the highest on record. Over 80% of harvest came from Coillte, with the balance from the private sector. Roundwood available for processing, which excludes firewood, and includes imports (mainly from Northern Ireland and Scotland) was 2.96 million m³. This material was processed into sawnwood, wood-based panels and other products such as wood chip and pellets.
- sawmill roundwood intake was 1.95 million m³, which was converted to 0.90 million m³ of sawn timber. Coillte supplied 74% of this roundwood, with the balance supplied by the private forest sector, with some imports.
- consumption of sawn timber in the Republic of Ireland grew by 9%, driven by an improvement in construction markets.

TABLE 10.2 ROUNDWOOD AVAILABLE FOR PROCESSING IN THE REPUBLIC OF IRELAND, 2010-2014

	2010	2011	2012	2013	2014
	000 m ³ Overbark				
Commercial softwood					
Imports less exports	28	55	-18	49	68
Coillte	2,217	2,299	2,269	2,474	2,434
Private sector	463	386	343	328	447
Commercial hardwood					
Imports less exports	0	0	0	-1	0
Coillte	0	1	1	2	6
Private sector	0	1	1	1	0
Total	2,708	2,742	2,596	2,853	2,955

Source: COFORD, 2015

TABLE 10.3 SOURCES OF SOFTWOOD FIBRE, 2010-2014

Fibre source	2010	2011	2012	2013	2014
000 m³ OB Roundwood equivalent					
Roundwood	2,708	2,740	2,594	2,851	2,949
Sawmill residues	842	829	853	897	925
Wood-based panel residues	101	115	104	110	114
Residue imports				108	49
Harvest residues	0	40	30	30	60
Post-consumer recovered wood (PCRW)	280	270	250	250	300
TOTAL	3,931	3,994	3,882	4,246	4,397

Source: COFORD, 2015

TABLE 10.4 USES OF SOFTWOOD FIBRE, 2010-2014

Fibre use	2010	2011	2012	2013	2014
000 m³ OB Roundwood equivalent					
Sawmilling	1,603	1,580	1,622	1,710	1,815
Round stake	118	116	131	117	147
Wood-based panels	1,400	1,340	1,276	1,407	1,377
Wood biomass energy use by the Power generation and forest products sectors*	554	572	611	704	760
Other uses					
Horticultural bark mulch	27	34	40	50	40
Wood chip for commercial biomass use	39	41	30	100	100
Export of forest product residues	58	196	112	88	88
Other uses	132	115	60	70	70
TOTAL	3,931	3,994	3,882	4,246	4,397

*Wood biomass is used by the forest products sector for process drying, heating and for the generation of electricity
Source: COFORD, 2015

10.4 Trade

In 2014, exports of forest products from the Republic of Ireland reached €370 million, a 9% increase on 2013. Wood-based panels accounted for €198 million, the balance comprising paper and sawn timber exports. Export volumes of wood-based panels were relatively unchanged on 2013, while exports of sawn timber increased by 19.5%. 80% of the forest products which were produced in Ireland were exported. Key markets for Irish forest exports were the UK, Germany and the Benelux countries. 52% of the Irish market for sawn softwood timber was supplied by domestic production with the balance being imported. Only 6% of the Irish market for sawn hardwood was supplied domestically.

FIGURE 10.3 TIMBER AND PAPER PRODUCTS TRADE, 2010 TO 2014

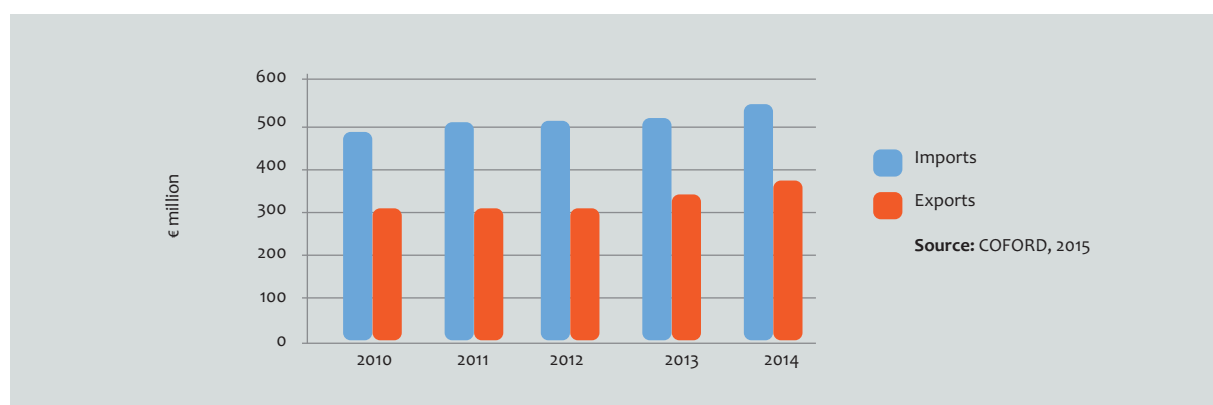


TABLE 10.5 TIMBER AND PAPER PRODUCTS TRADE, VOLUME AND VALUE, 2014

		Imports		Exports
	000 m ³	€ million	000 m ³	€ million
Sawn timber	205	74	718	122
Wood-based panels	235	98	662	198
	000 tonnes	€ million	000 tonnes	€ million
Pulp products	46	42	0	0
Paper and paper-board products	404	340	67	50
Total		554		370
Source: COFORD, 2015				

Ireland was the fourth largest exporter of sawn softwood timber to the UK. Over the period 2007-2014, Ireland's market share of the UK sawn softwood timber market more than doubled from 3.34% to 7.00%.

TABLE 10.6 IRELAND'S SHARE OF THE UK FOREST PRODUCTS MARKET BY PRODUCT TYPE, 2011-2014

Product	Market share			
	2011	2012	2013	2014
Sawn softwood	6%	7%	8%	7%
Particleboard including OSB	24%	20%	15%	13%
Fibreboard including medium density fibreboard	36%	36%	34%	37%

Source: United Nations Economic Commission for Europe (UNECE) Market report for Ireland

On average, over the period 2011 to 2014, the UK, Germany and the Benelux markets were destinations for 84% of panel exports with the UK being the most significant. Over this period, the Irish panel products sector was the largest exporter of medium density fibreboard to the UK.

10.5 Environment

Within the United Nations Economics Commission for Europe (UNECE) region, wood energy is the principal source of renewable energy. Most of this demand is concentrated in the European Union, driven by the EU 2020 renewable energy targets. In 2014, approximately 201 million m³ of the total wood harvest, or about 16% of total removals, was estimated to have been used as wood fuel in the UNECE region.

Based on data provided to the United Nations Framework Convention on Climate Change (UNFCCC), Irish forests removed 3.7 million tonnes of CO₂ from the atmosphere in 2014, after allowing for harvest and other emissions.

In 2015, the Department of Agriculture, Food and the Marine carried out a public consultation process inviting written submissions from interested parties on a discussion document on the potential for greenhouse gas mitigation within the agriculture and forest sector. The mitigation plan is in the final stages of preparation.

10.6 Forest Health

The Department's Forest Service have regulatory responsibility for implementing the forestry aspects of the EU Plant Health Directive, Council Directive 2000/29/EC, on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community. The Forest Service implements the provisions of the Directive relating to timber, wood packaging material (pallets, crates etc) and surveys of the national forest estate for quarantine pests and diseases.

Both *Hymenoscyphus fraxineus* (Ash Dieback disease) and *Phytophthora ramorum* disease outbreaks in Japanese larch continue to be of concern to the Department.

<p>Ash Dieback <i>Hymenoscyphus fraxineus</i></p>	<p>By end of March 2016:</p> <ul style="list-style-type: none"> ■ Confirmed findings of the disease in 132 forest plantations distributed over 19 counties, ■ Confirmed findings of the disease in native hedgerows in 12 counties ■ Confirmed findings of the disease in roadside/motorway landscaping plantings in 13 counties. ■ To date the presence of the disease has been confirmed in planted ash sites in 24 of the 26 counties in Ireland. ■ The Department had also spent just under €2.6 million on the Chalara Reconstitution Scheme on eradication and replanting efforts in young forestry plantations affected by the disease. <p>The Department directly or indirectly supports research projects on the disease, in particular those involving breeding ash trees for resistance or tolerance to the disease. DAFM also participates in the European Cooperation in Science and Technology (COST) funded action into the disease (FRAXBACK).</p> <p>Systematic surveys for the disease will be continued in 2016</p>
<p><i>Phytophthora ramorum</i> (up</p>	<p>By December 2015:</p> <ul style="list-style-type: none"> ■ Disease confirmed present in Japanese larch at 47 locations from 26 at the start of the previous year). ■ Disease affecting approximately 311 ha of forestry, primarily in the South-West, South-East and East of the country. <p>Since 2010, the Forest Service has worked with Coillte (as the principal landowner affected) in undertaking sanitation felling of infected larch in an effort to limit spread and continued to do so in 2015. Four statutory disposal notices were issued in 2015 in relation to forest properties infected with the disease.</p> <p>Other tree species have been affected at these Japanese larch sites including beech, noble fir and Spanish chestnut. Invasive wild rhododendron where it is infected is a major source of inoculum.</p> <p>Surveying for the <i>P. ramorum</i> disease in public and private forests will be continued in 2016.</p>

10.7 Forest Seed and Plant Marketing Regulations

The Forest Service Inspectorate is responsible for implementing Council Directive 1999/105/EC on the marketing of forest reproductive material. Forest reproductive material is a collective term to describe seeds, plants and cuttings, which are important for forestry purposes. The aim of the legislation is to ensure that forest reproductive material, which is marketed, is from approved suitable sources and is clearly labelled and identified throughout the entire process from tree seed collection to processing, storage, forest nursery production and delivery to the final forest user.

Forest plants may also be subject to the requirements of the EU Plant Health Directive, Council Directive 2000/29/EC on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community.

10.8 Exports of Wood Packaging Material

The Forest Service is responsible for the implementation of the FAO, IPPC, International Standard for Phytosanitary Measures (ISPM) No. 15, Guidelines for regulating wood packaging material in international trade. ISPM No. 15 describes phytosanitary measures to reduce the risk of introduction and/or spread of quarantine pests associated with wood packaging material made of raw wood, in use in international trade.

Wood packaging material, which is being exported from Ireland to most non-EU countries around the world, is required to comply with ISPM No. 15. ISPM No. 15 thereby facilitates exports by Irish companies of goods of all kinds, which are being transported using wooden pallets, crates, loose wood dunnage, etc.

During 2016, a priority will be to draft and introduce national legislation under the Forestry Act 2014 to give legal affect to ISPM No. 15 in Ireland.

10.9 Forest Genetic Resources

The Forest Genetic Resources Reproductive Material: Seed Stand and Seed Orchard Scheme was launched in June 2015.

The National Register of Basic Material (formerly known as the seed stands register) is compiled, reviewed and updated annually in order to comply with EU Directive 199/105/EC on the marketing of forest reproductive material, and to support the use of well adapted, productive and, where feasible, improved material.

Future Trees Trust Broadleaf Tree Improvement Programmes

The Future Trees Trust (comprised of government agencies, representatives of third level institutes, research organisations, forest owners, foresters and private individuals in the UK and Ireland) continued its tree improvement programmes in ash, birch, cherry, oak, Spanish chestnut, walnut and sycamore.

The European Forest Genetic Resources Programme (EUFORGEN)

Ireland joined Phase V of the EUFORGEN programme which will run from 2015 to 2019. Over the course of this Programme EUFORGEN will continue the pan-European implementation of Strasbourg Resolution 2 and other relevant FOREST EUROPE commitments on forest genetic resources. Furthermore, the Programme will contribute to the implementation of relevant decisions of the Convention on Biological Diversity and the Global Plan Action on forest genetic resources adopted by the FAO Conference in 2013. EUFORGEN will operate as before through working groups and workshops but with updated objectives. Ireland hosted the 11th Steering Committee meeting in November 2015 where results from the previous phase were put to the committee and objectives for the new phase discussed.

The Programme will continue to disseminate reliable information on forest genetic resources in Europe, coordinate the conservation of forest genetic resources in Europe, and prepare analyses on topics and issues relevant for the use of forest genetic resources. EUFORGEN will also continue maintaining the EUFGIS information system.

10.10 Outlook for the Forest Products Sector

The markets for forest products in the UN Economic Commission for Europe (UNECE) region are showing mixed signs of recovery. In 2014, the consumption of roundwood continued to increase in all three UNECE subregions and, overall, was 7% higher than in 2010.

TABLE 10.7 CHANGE IN CONSUMPTION IN EUROPE BETWEEN 2013 AND 2014

Fibreboard	+6.6%
Particleboard	+4.4%
Sawn Softwood	+2.7%
Sawn Hardwood	+4.5%
Wood-Based Panels (WBP)	+4.7%
Source: UNECE	

The current strong demand for roundwood from Irish forests is expected to continue through 2016. There is scope to grow exports and to increase the level of harvest from the private sector to meet increasing demands for forest-based biomass for heat and power generation. The projected level of demand for roundwood in 2020 from both the conventional timber processing sectors and from the emerging forest-based biomass sector is shown in the Table below. Most of the additional harvest to meet this level of demand will have to come from the private sector.

TABLE 10.8 ESTIMATED ROUNDWOOD DEMAND IRELAND AND NORTHERN IRELAND, 2020

Demand source	000 m³ overbark
Roundwood for sawmilling	3,283
Roundwood for boardmills	880
Residues for boardmills	720
Wood biomass energy demand	3,259
Residues from conventional demand steam	-1,736
TOTAL	6,406
Source: COFORD, 2015	

There are further opportunities for the Irish sawmilling sector to grow its market share in the UK. In 2014, 85% of construction timber used in the UK was imported. Ireland's share of this market is just 7.0%, allowing considerable scope for further market expansion. This scope can widen further if construction output increases in the UK.

A total of €113.8 million in funding for capital and current expenditure has been allocated for the overall forestry programme in 2016. This will provide funding to meet commitments under previous forestry programmes along with funding schemes approved under the new Forestry Programme 2014-2020. The 2016 funding should facilitate payment for at least 6,660 hectares of new planting along with providing financial support for the building of harvesting roads and other support scheme measures.

Chapter 11 Fisheries

11.1 Overview

The seas around Ireland (ICES Sub Areas VII and VI) contain some of the most productive and biologically sensitive areas in EU waters. Most of the fisheries stocks within these areas come under the remit of the Common Fisheries Policy (CFP). The 2016 fishing opportunities or TACs (Total Allowable Catches) for the waters around Ireland totals 1,076,563 tonnes of fish. Ireland's share of these fishing opportunities amounts to 213,449 tonnes.

In addition, Ireland also possesses valuable inshore fisheries, particularly shellfish such as lobster, crab, whelk and scallop. These inshore fisheries represent a very important resource base for the coastal communities around Ireland.

11.2 Common Fisheries Policy

The new Common Fisheries Policy has been in force since 1 January 2014.

The overarching goal of the new Common Fisheries Policy is to end overfishing and to make fishing environmentally, economically and socially sustainable thus resulting in a competitive and viable seafood sector for all.

Key features of the new CFP include:

Regionalisation

The CFP brings the decision making process closer to the fishing grounds, in particular to national administrations, fishermen and other interest groups. This allows for the introduction of measures appropriate to regions as opposed to a 'one size fits all' approach. Under the regionalisation process, Ireland and the other Member States of the North Western Waters Region (Belgium, France, the Netherlands, UK and Spain) work together to agree a discards plan.

Phased ending of discards

Discarding is the practice of returning unwanted catches to the sea, either dead or alive. This is done for a number of reasons including quota restrictions, market conditions, minimum landing sizes or because of certain catch composition rules. One of the key elements of the new CFP is the phased introduction of a landing obligation, or discard ban, for species subject to catch limits. The discard ban is being phased in over a number of years, starting in 2015 with pelagic fisheries, extending to demersal fisheries in 2016, and being fully implemented across all TAC species by 2019.

Maximum Sustainable Yield

Another key element of the new CFP is the setting of fishing levels on the basis of the Maximum Sustainable Yield Principle (MSY). This should lead to healthy fish stocks, to higher quotas for Irish fishermen and more sustainable fishing patterns. It will end the practice of widespread overfishing and mean a more viable fishing industry for the longer term. The aim of the CFP is to achieve MSY for all stocks by 2020 at the latest.

Technical measures

Technical measures to avoid and minimise catches of juvenile fish form an important element of the delivery of the discards ban and the sustainability of fish stocks under the reformed CFP.

Hague Preferences

Under the Hague Preferences, which were agreed by Heads of State in 1976, Ireland receives additional shares of quotas for the whitefish stocks such as cod, haddock and whiting in the waters off our coast when stock levels are decreasing. Under the new CFP, the Hague Preferences have been maintained and given increased reference.

Fish quotas remain a public asset

The reformed CFP delegates the responsibility for the management of quotas to individual Member States. In Ireland, quotas are treated as a public asset and are managed by the Minister of Agriculture, Food and the Marine.

11.3 National Strategic Plan for Aquaculture

During 2015, the National Strategic Plan for Aquaculture was developed. It lays out the strategic objectives for aquaculture and commits to 24 actions under the plan.

Actions in the plan include the introduction of a set of Guiding Principles for the Sustainable Development of Aquaculture, together with Scale Limits and Phasing in relation to the Development of Individual Offshore Salmon Farms. Other initiatives include

- a review of the regulatory framework for aquaculture licensing and associated administrative procedures,
- financial supports to build capacity, foster knowledge, innovation and technology transfer and
- expert advice and training for aquaculture operators in business planning, disease management and environmental best practice.

11.4 Fish Quota Management

The management arrangements for quotas differ from species to species and are determined by the Minister following consultations with industry. A key objective of whitefish quota management is the avoidance of very early closure of fisheries through rapid exhaustion of quota. This is important because Ireland's whitefish fisheries are mixed and an early closure may lead to discarding of marketable fish. The fishing of pelagic species is generally confined to the spring and autumn months.

11.5 Inshore Fisheries and Natura 2000 Management

At national level, management and conservation of fish stocks is implemented through the provisions of the Sea-Fisheries and Maritime Jurisdiction Act 2006. The National Inshore Fisheries Forum advises on non-quota sea-fisheries within six nautical miles of the coast and met on five occasions during 2015 to discuss and develop proposals concerning inshore fisheries and interaction with Natura 2000 sites. Measures were developed and implemented for razor clam fisheries both nationally and at regional levels. A policy paper was developed for public consultation on non-commercial pot fishing. Mitigation measures were introduced for Natura 2000 sites in Cork, Mayo and Wexford and further roll-out of mitigation will take place during 2016.

Management of the all-island mussel seed fishery continued throughout 2015. There were a number of short-term localised fishing events during the year in addition to the normal autumn fishing season. A second surveillance audit of the fishery was carried out in September as part of the fishery's conditional MSC (Marine Stewardship Council) certification. The audit, completed by SAI Global Assurance Services, found that the fishery is operating in a well-managed and sustainable way and provided for its continued conditional certification.

11.6 Aquaculture Licensing

During 2015 significant progress was made in a number of key areas which will enable the continued sustainable growth of the industry.

The Department has continued to work to address the backlog in the processing of aquaculture licence applications in 2015. The background to the backlog is that in 2007 the European Court of Justice issued a negative judgement against Ireland for breaches of the EU Birds and Habitats Directives. A large element of the judgment concerned a failure by the State to put in place adequate assessment of aquaculture licence applications in 'Natura 2000' areas. In the negotiations to address this judgment, a process was agreed with DG Environment (in 2009) and this is being implemented. The process includes data collection, the setting of Conservation Objectives, carrying out of Appropriate Assessments and appropriate licensing, taking account of, among other things, Natura requirements. The process is ongoing and considerable progress has been made.

Appropriate Assessments have now been received by the Department in respect of fifteen bays. In 2015 the Minister made 104 licence determinations. It is expected that in the order of 200 licence determinations will be made in 2016.

The enhanced licence application templates, which were developed in recent years, are being implemented as existing licences fall to be renewed. Key features of the new licence templates include:

- enhanced provisions on environmental monitoring,
- greater clarity on the requirements for operators in relation to operational conduct and monitoring,
- the possibility of group-marking of sites for navigational purposes
- specific provisions covering company registration/dissolution, tax certificates, payment of fees etc.
- species specific licence templates.

Deep Sea Aquaculture

An application by Bord Iascaigh Mhara (BIM) for an aquaculture licence for the cultivation of finfish near Inis Oirr in Galway Bay was received by the Department in 2012. On 21 December 2015, the Department was informed by BIM that the Board of BIM had decided to withdraw its Aquaculture and Foreshore Licence application with immediate effect.

It is understood that BIM is investigating the suitability of sites off the coast of Mayo and that an Aquaculture Licence application will be submitted to the Department shortly.

11.7 Seafood Production

Irish Seafood Exports

In 2015, France remained the largest export market. Exports to the four main markets in Africa – Nigeria, Cameroon, Egypt and Ghana accounted for a total of 20% of total seafood export values.

TABLE 11.1

FISHERIES EXPORTS, 2015

Volume of fisheries products exports	249,993 tonnes
Value of fisheries products exports	€573 million
Change in volume of fisheries products exports, 2014-2015	-5%
Change in value of fisheries products exports, 2014-2015	+6%
Trade with UK	
% of Irish fisheries products exported to the UK in value	11%
Volume of fisheries products exported to the UK	23,798 tonnes
Value of fisheries products exported to the UK	€63 million
Change in volume of fisheries products exports to the UK, 2014-2015	-4.5%
Change in value of fisheries products exports to the UK, 2014-2015	+3.5%
Trade with EU	
% of Irish fisheries products exported to the EU in value	56%
Volume of fisheries products exported to the EU	93,637 tonnes
Value of fisheries products exported to the EU	€322 million
Change in volume of fisheries products exports to the EU, 2014-2015	-4%
Change in value of fisheries products exports to the EU, 2014-2015	+9%
Trade with non-EU countries	
% of Irish fisheries products exported to non-EU countries in value	33%
Volume of fisheries products exported to non-EU countries	132,558 tonnes
Value of fisheries products exported to non-EU countries	€188 million
Change in volume of fisheries products exports to non-EU countries, 2014-2015	-5%
Change in value of fisheries products exports to non-EU countries, 2014-2015	+3%
Source: Bord Bia	

Irish Seafood Imports in 2015

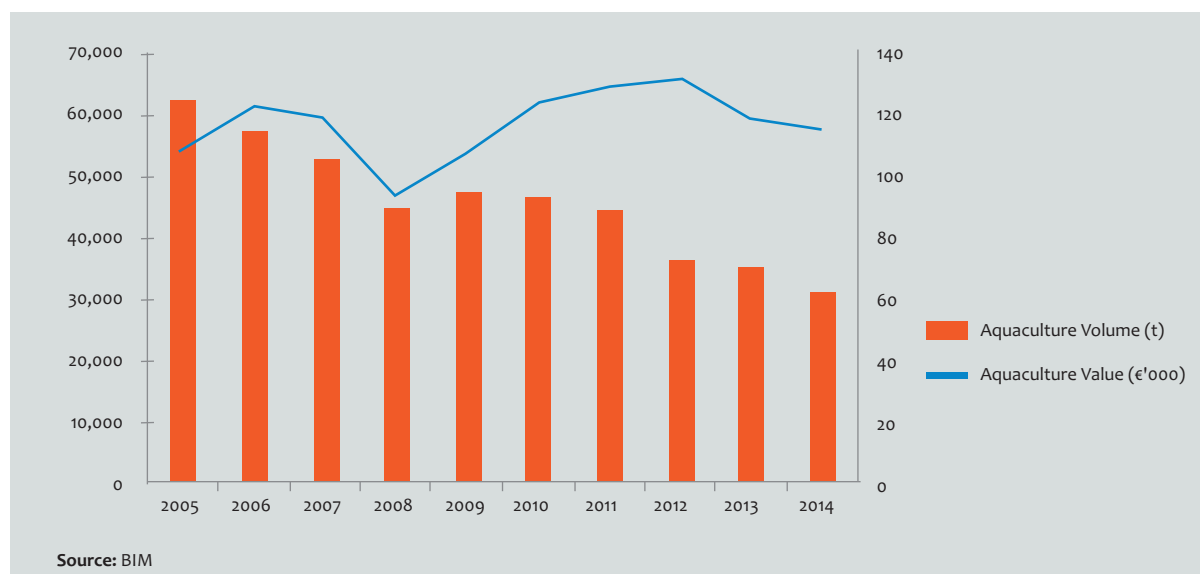
Irish seafood imports, exclusive of fish meal and oil, increased by 10% to €272 million (71,391 tonnes) in 2015. This decrease in volume is due mainly to a reduction in the direct landings by Norwegian vessels of blue whiting into Irish ports.

Main Import Markets

Great Britain accounted for 68% of total Irish imports of seafood or €184 million in 2015, followed by France at €15 million, Germany at €14 million, Denmark at €13 million, and the Netherlands at €10 million.

Irish Aquaculture Production

FIGURE 11.1 AQUACULTURE PRODUCTION - VALUE AND VOLUME, 2005-2014



11.8 The Irish Fishing Fleet

The Irish fleet contains 5 segments:

Specific Segment: This segment contains vessels which are permitted to fish for bivalve molluscs and aquaculture species.

Polyvalent Segment: This segment contains the vast majority of the fleet. These vessels are multipurpose and include small inshore vessels (netters and potters) and medium and large offshore vessels targeting whitefish, pelagic fish and bivalve molluscs.

Beam Trawler Segment: This contains vessels dedicated to beam trawling, a simple trawling method used predominantly in Irish inshore waters (except in the southeast), where it is used to catch flatfish such as sole and plaice.

Refrigerated Seawater (RSW) Pelagic Segment: This segment is engaged predominantly in fishing for pelagic species (primarily herring, mackerel, horse mackerel and blue whiting).

Aquaculture Segment: These vessels must be exclusively used in the management; development and servicing of aquaculture areas and can collect spat from wild mussel stocks as part of a service to aquaculture installations.

TABLE 11.2 FISHING FLEET AS OF 31 DECEMBER 2015

Fleet Segment	Number of Vessels	Gross Tonnage (GT)	Kilowatts (kW)
Specific	140	2,445	12,409
Polyvalent	1,833	31,481	117,388
Beam Trawl	11	1,059	2,745
RSW Pelagic	23	23,404	46,597
Total	2,007	58,389	179,139
Aquaculture	105	3,869	11,135

Source: Licensing Authority for Sea Fishing Boats

11.9 Employment

The seafood industry supports the economic viability of many coastal communities, directly generating or supporting approximately 11,000 jobs according to BIM data. This includes full and part time/casual employment in the fisheries, aquaculture, seafood processing and ancillary services sectors such as net making, chandlery, engineering and refrigeration. The last number of years have witnessed good performance in job creation in seafood processing as a result of significant investment in the sector in technology and value added seafood products.

TABLE 11.3 EMPLOYMENT IN THE SEAFOOD INDUSTRY

	Full-time	Part-Time / Casual	Total
Fisheries	3,924	1,063	4,987
Aquaculture	558	1,269	1,827
Processing	2,405	660	3,065
Ancillary			1,000
TOTAL			10,879

Source: BIM data

Chapter 12 Statistical Annex

TABLE 12.1 OUTPUT, INPUT AND INCOME IN AGRICULTURE, 2014-2015

	2014	2015	% Change 2014/2015	
	€m	€m	Value	Volume
Livestock (incl stock changes)	3,070.1	3,450.7	12.4%	4.8%
<i>of which</i>				
Cattle	2,012.3	2,358.7	17.2%	4.7%
Pigs	471.3	458.6	-2.7%	6.3%
Sheep	231.6	244.5	5.6%	2.9%
Livestock Products	2,152.5	1,929.1	-10.4%	13.7%
<i>of which</i>				
Milk	2,093.1	1,869.4	-10.7%	14.1%
Crops (incl. stock changes)	1,782.5	1,775.5	-0.4%	-1.1%
<i>of which</i>				
Cereals (Note 1)	280.5	269.3	-4.0%	-0.6%
Forage Plants	1,039.3	1,020.3	-1.8%	-1.1%
Goods Output at Producer Prices	7,005.1	7,155.3	2.1%	5.6%
Contract Work	361.9	360.0	-0.5%	1.7%
Subsidies less Taxes on Products	-33.7	-82.9	146.0%	
Agricultural Output at Basic Prices	7,333.3	7,432.4	1.4%	4.6%
Intermediate consumption	5,133.9	5,128.1	-0.1%	1.9%
<i>of which</i>				
Feedingstuffs	1,321.0	1,351.9	2.3%	6.7%
Fertilisers	565.6	565.1	-0.1%	0.5%
Energy and Lubricants	450.2	404.9	-10.1%	1.1%
Forage Plants	1,034.5	1,015.6	-1.8%	-1.1%
Contract Work	361.9	360.0	-0.5%	1.7%
FISIM (Note 2)	46.3	46.3	0.0%	
Gross Value Added at Basic Prices	2,199.4	2,304.3	4.8%	
Fixed Capital Consumption	729.2	729.2	0.0%	
Net Value Added at Basic Prices	1,470.2	1,575.1	7.1%	
Other Subsidies less Taxes on Production	1,524.6	1,413.0	-7.3%	
Factor Income	2,994.8	2,988.1	-0.2%	
Compensation of Employees	496.0	491.0	-1.0%	
Operating Surplus (Note 2)	2,498.8	2,497.0	-0.1%	

1) Commercial Sales of Wheat, Barley, Oats

2) Financial Intermediation Services Indirectly Measured

Source: CSO 2015 Output, Input and Income in Agriculture (Preliminary Estimate)

TABLE 12.2

ESTIMATE OF DIRECT PAYMENTS TO FARMERS (NATIONAL AND EU) DURING CALENDAR YEAR 2015

	2015
	€ Millions
Basic Payment Scheme ⁽¹⁾	1,095.520
Areas of Natural Constraint ⁽²⁾	205.852
Burren Life	1.031
Dairy Efficiency	0.000
Grassland Sheep Scheme	0.748
Premia Schemes	0.031
Beef Data Programme	10.730
Beef Genomic Scheme	3.467
Beef Data & Genomics Programme	28.989
Dairy & Pig Volatility Payment	24.000
Disease Eradication Schemes	
Bovine Tuberculosis Eradication Scheme	13.398
Brucellosis Eradication Scheme	0.001
BSE Scheme (slaughter of herds)	0.175
Scrapie Eradication Programme	0.049
Bioenergy	0.102
Rural Environment Protection Scheme	31.077
AEOS	80.275
Organics	8.030
GLAS	11.500
Sub-total without forestry premia	1,514.974
Forestry	
Forestry Premia	71.606
Grand Total	1,586.580
<p>Source: Department of Agriculture, Food & the Marine</p> <p>1) From the 2015 Scheme Year onwards, the payments are for Direct Payments Scheme and Areas Natural Constraint Scheme. Please note for the purposes of completing this return, BPS incorporates SPS (2014 & Earlier), BPS, Young Farmers Scheme, Greening and Protein Scheme payments.</p> <p>2) Area Based Compensatory Allowance Scheme incorporates DAS (2014 & Earlier) and Areas of Natural Constraint and Areas of Specific Constraint payments</p>	

TABLE 12.3

EU RECEIPTS UNDER EAGF, EAFRD AND VETERINARY FUNDS

	2014 €m	2015 €m
EAGF	1,220.00	1,216.00
EAFRD*	-	364.00
Veterinary Fund	12.00	13.00
Fisheries (FIFG, EFF, EAGF)	2.00	3.00
Other	-	3.00
Total	1,234.00	1,599.00
<p>* Includes receipts transmitted to the Department of Community, Rural & Gaeltacht Affairs</p> <p>*There were no 2007-2013 EAFRD receipts in 2014 due to 5% of overall programme receipts being retained in line with Article 24.4 of EU Regulation 1290/2005. The RDP 2014-2020 was not formally adopted by the EU until May 2015, so no claim could be made in 2014.</p> <p>Source: Department of Agriculture, Food and the Marine</p>		

TABLE 12.4

VOTE - EXPENDITURE ON AGRICULTURE, FOOD AND THE MARINE 2015

	€000s
Administration	220,091
Salaries Wages and Allowances	165,979
Travel and Subsistence	6,971
Incidental Expenses	5,448
Postal and Telecommunications	4,553
Office Machinery	24,588
Office Premises Expenses	6,112
Consultancy Services	109
Supplementary Measures to Protect the Financial Interests of the EU	597
Laboratory Equipment	5,734
Agri-Food Policy, Development and Trade	366,181
Research and Training	24,562
Development of Agriculture and Food	9,850
Teagasc	111,139
Bord Bia	30,836
Marine Institute	26,301
Bord Iascaigh Mhara	19,016
Food Aid Donations - World Food Programme	20,000
Horse and Greyhound Racing Fund	68,000
Beef Data and Genomics Programme	34,692
Beef and Lamb Quality Assurance Scheme	5,600
Sheep Technology Adoption Programme	4,000
CEDRA Rural Innovation and development Fund	729
Other	11,456
Food Safety, Animal Health & Welfare and Plant Health	72,286
Bovine Tuberculosis and Brucellosis Eradication	30,252
BSE	981
Meat Inspection Service	18,137
Fallen Animals Scheme	5,140
Animal Welfare	3,758
National Beef Assurance Scheme/Animal Identification Movement	5,285
Other	8,733
Rural Economy, Environment and Structural Changes	310,949
Rural Environment Protection Scheme (REPS)	32,009
Agri-Environment Option Scheme (AEOS)	79,801
Green Low-Carbon Agri-Environment Scheme (GLAS)	11,453
Organic farming Scheme	7,969
Land Mobility/Early Retirement Scheme	7,143
Targeted Agricultural Modernisation Schemes (TAMS)	24,830
Forestry	104,145
Fisheries	23,095
Sea Fisheries Protection Authority	10,580
Development of Commercial Horticulture	3,961
Development of Organic Sector	1,426
Haulbowline Remediation	3,672
Other	865
Direct Payments	295,134
Less favoured Areas Scheme/Areas of Natural Constraints Scheme	205,906
Clearance of Accounts	68,139
IACS	6,502
Short-Term FEOGA Financing	432
School Milk Scheme	616
Market Volatility National Top-Up	13,450
Other	89
Total Gross Expenditure	1,264,641
	(Cont'd)

TABLE 12.4

(cont'd) VOTE - EXPENDITURE ON AGRICULTURE, FOOD AND THE MARINE 2015

	€000s
Appropriations in Aid	-438,683
Recoupment of Salaries	-617
Forfeited Deposits and Securities	-32
Refunds Vets Fees	-18,171
Receipts from Veterinary Inspection Fees for Live Export	-924
Receipts from Dairy Inspection Fees	-6,459
Receipts from Sale of Vaccines, Livestock, etc.	698
Receipts from Seed Testing	-2,404
Receipts from Farmer Contribution toward the Cost of Eradicating Bovine Disease	-6,528
Land Commission Receipts	-889
Other Receipts	-2,071
Market Intervention	-20
Receipts for Intervention Stock Losses	-1,098
EAFRD Receipts	363,576
Veterinary Fund	-13,303
Other Guarantee Receipts (Agriculture)	-1,654
Other Guarantee Receipts (EAFG Fisheries)	0
Fines, Forfeitures for Sea Fishery Offences	-775
Foreshore Acts/State Property Act Receipts	-78
EU Receipts for Fisheries Conservation etc.	-305
Aquaculture Licence Fees	-340
EU Receipts for EMFF	0
European Fisheries Fund Receipts	-2,943
Sustainable Food Systems Ireland	-47
Pension levy	-15,751
Net Expenditure	825,958

TABLE 12.5

PAYMENTS TO FARMERS BY DAFM BY COUNTY, 2015¹

	Overall Payments	Total Number of Recipients	Average Payment
Galway	€132,118,357	13,409	€9,853
Leitrim	€36,154,685	3,895	€9,282
Mayo	€105,684,231	12,419	€8,510
Roscommon	€59,325,524	5,925	€10,013
Sligo	€40,460,269	4,425	€9,144
Connacht	€373,743,065	40,073	€9,327
Carlow	€32,133,470	2,013	€15,963
Dublin	€14,643,018	1,041	€14,066
Kildare	€35,842,036	2,454	€14,606
Kilkenny	€62,745,970	3,793	€16,543
Laois	€42,860,943	2,970	€14,431
Longford	€29,615,626	2,718	€10,896
Louth	€22,830,818	1,675	€13,630
Meath	€57,299,636	3,889	€14,734
Offaly	€41,796,244	3,102	€13,474
Westmeath	€47,797,205	3,555	€13,445
Wexford	€69,958,314	4,637	€15,087
Wicklow	€34,761,178	2,249	€15,456
Leinster	€492,284,457	34,096	€14,438
Clare	€77,695,854	6,778	€11,463
Cork	€206,093,550	14,586	€14,130
Kerry	€99,120,221	8,664	€11,440
Limerick	€67,139,847	5,767	€11,642
Tipperary	€121,632,485	7,802	€15,590
Waterford	€43,707,085	2,666	€16,394
Munster	€615,389,042	46,263	€13,302
Cavan	€52,096,121	5,258	€9,908
Donegal	€86,731,743	9,081	€9,551
Monaghan	€40,312,136	4,306	€9,362
Ulster	€179,139,999	18,645	€9,608
State	€1,660,556,563	139,077	€11,940

Source: Department of Agriculture, Food and the Marine

¹ Includes direct payments to farmers as well as capital and other grants. Includes both EU and exchequer related payments.