

SUPPORTS THE ECONOMY

Export value of over €4 billion per annum Represents c.35% of all Irish food and drink

60,000 jobs supported by the industry



PROVIDES HEALTHY BALANCED MEALS

Milk provides a rich matrix of nutrients unmatched by non-dairy alternatives

3 servings a day a balanced diet

Grass-fed cows produce human edible protein 2.5 times more efficiently than grain-fed cows



IS UNIQUE - OUR GRASS-FED FAMILY FARMING SYSTEM

Grass-fed cows with the freedom to roam outdoors

Less intensive farming animal welfare friendly Generations of family



DELIVERS THE NATURAL TASTE CONSUMERS LOVE

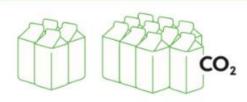
Rich, creamy milk

Naturally rich in beta-carotene

Rich golden colour and superior taste



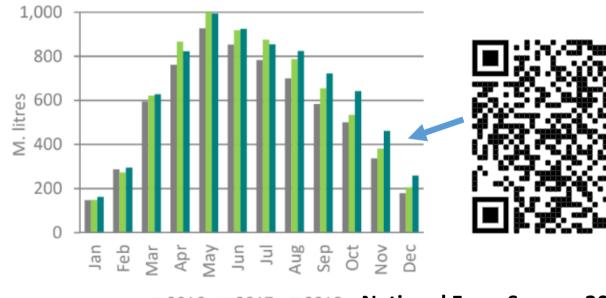
THE MOST CARBON EFFICIENT SYSTEM IN THE NORTHERN HEMISPHERE



On average, other countries produce 2 times more carbon per litre of milk than Ireland

National Farm Survey, 2018

Fig. 14: Irish milk production 2016 - 2018





■2016 ■2017 ■2018 National Farm Survey, **2018**

Dairy



Traditionally most profitable farm enterprise

most influential)

Gross Output

Total Costs

of which Direct Payts

of which direct costs

of which overheads

Family Farm Income

Increased income volatility in recent years



42H	T PUSH		Spring	Summer	Autumn	winter
.ov	FLOW	Cashflow In	Milk Sales Calf Sales Winter cattle sold	Milk Sales (Peak Output) Calf Sales	Milk Sales (declining) Basic Payment & Greening (50%) AEOS / GLAS (75%) Area of Natural Constraint (100%)	Milk Sales (small) Cull cow Sales BPS & Greening (50%) AEOS / GLAS (25%)
		Cashflow Out	Feed Costs Fertiliser Drawings & Overheads	Fertiliser, Contractor, Vet & Al, Merchant Credit, Bank repayments, Drawings & Overheads	Fertiliser, Contractor, Bank repayments, Drawings & Overheads	Feed Drawings & Overheads

Sustainability more influential in **Consumer** purchasing decisions

2018/2017

change

-2%

+5%

+17%

+23%

+9%

-31%



Table 4: Components of Average Dairy FFI 2018

2018

€213,782

€21,022

€152,336

€93,493

€58,843

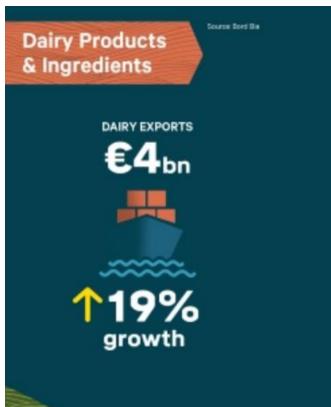
€61,446

Economics

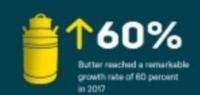
AIB

Nearly half (48%) of consumers are price conscious when shopping (combined 'price'/'value for money')

Bord Bia



Exports to EU26 markets have expended by 44 percent to €1.2bn



€850m





Bord Bia

20 farmhouse cheese producers - top quality hand made food

Artisan Produce €500m per annum from 300 producers

Growth of farmers markets - turnover in excess€10m

Unique, hand made, with distinct taste & flavour

Range of products - cheese, bread, meats, preserves

Factors that influence purchase decisions and willingness to pay a premium

Locally produced	42
Animal welfare	35
Transparency on where the product has come from	30
Safe	30
Healthy	28
Natural	21
Organic	18
Sustainable	15
Fairtrade	12
How far the food has travelled	11

Dairy [] How far the food has travelled

Bord Bia

Bord Bia

Use secondary data to discuss the impact of milk quality on milk price



Key Trends in the Global Marketplace

Dairy & Meat driving export value growth

Growing the success of Irish food & horticulture

Seafood Ed. Hort Meat & Livestoo 33% Growing the success of Irish food & horticulture

Ireland is the second largest supplier to China - after the Netherlands. Danone, Abbott and Wyatt, three of the biggest infant formula producers in the world manufacture here and buy their milk in the Irish market.

There are 6 Food Sustainability Priorities for Leaders













Growing the success of Irish food & horticulture

Bord Bia



Source: Independent.ie

Ireland produces 10%

world's infant formula

consumed globally -

Bordbia





Annual Global Consumption Growth

1.5 1.0

0.5

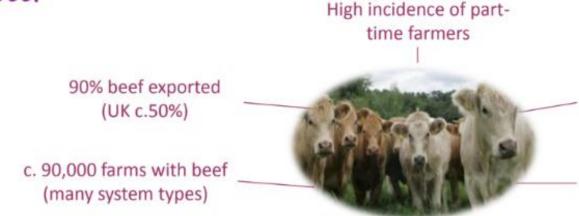
Source: FAO/OE0

Global meat demand growth slowing

Artisan meat is locally a variety of unusual



Annual Global Consumption Growth (%)



Traditionally low margin farm enterprise

> Heavily dependent on direct payments



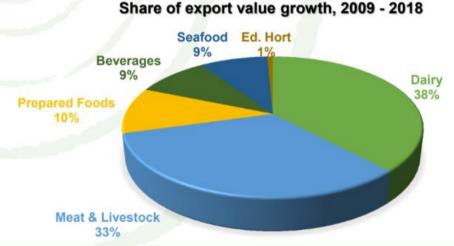
Ц		Spring	Summer	Autumn	<u>Winter</u>
Ņ	Cashflow In	Selling Stock	Selling Stock	Selling Stock Basic Farm Payment AEOS / GLAS (75%) Area of Natural Constraint (100%)	Basic Farm Payment Selling Stock AEOS / GLAS (25%) Beef Genomics payment
	Cashflow Out	Feed & Fertiliser Buying Stock Drawings & Overheads	Buying Stock Feed & Fertiliser, Contractor, Repayments	Buying Stock Feed & Fertiliser, Drawings & Overheads	Buying stock Feed Drawings & Overheads

Over half of growth to come from Asia One fifth in Latin America Africa & North America to show good growth Bord Bia Growing the success of Irish food & horticulture

Beef **Economics**

Beef

Dairy & Meat driving export value growth



Growing the success of Irish food & horticulture

Price Calculato

Bord Bia

Growing food demand, growing environmental pressure



National Farm Survey, 2018

141546621077 4421 5932 A O+3+

Source: Teagasc National Form Survey, Central Statistics Office and Dept. of Agriculture, Food and the Marine

Female Store purchase price

Male Finished Animals Price average €1,475 per head (unchanged)

Female Finished Animals Price

average €1,272 per head (up 1%)

average €852/head (down 7%)

The table shows the average prices recorded for R3 prime male cattle in Ireland, the UK and across the EU for the most recent available week, and the equivalent week in the last 2 years.

Rising income to influence meat growth



Factory Kill Out Sheet

Male Store purchase price

(Cattle Finishing)

average €952/head (unchanged)

average €1,189 per hectare (up 13%)

average €420 per hectare (down 12%)

	Euro Price for the Most Recent Week and Same Time Last Year (€/kg deadweight, excl. VAT)									
	Country & Type	Saturday 6 January 2018	Saturday 5 January 2019	Saturday 4 January 2020						
	EU + Young Bulls	€ 3.98	€ 3.76	€ 3.67						
	IE + Steers	€ 3.93	€ 3.67	€ 3.55						
UK + Steers		€ 4.15	€ 3.98	€ 3.96						

3 Part Bia, Cattle Dashboard and Tables, Beef Market Tracker

Weight Weight P/Kg FQA Breed Sex Grade Age 23 378.00 370.40 3.75 393.60 3.75 A O+3+ 23 401.60 0.00 23 A O=3+ 23 499.80 A R+3+ 141863511307 4414 5916 A R-3= 23 463.80 0.00 454.50 3.85 Yes FR 151749631133 23 424.20 415.70 3.75 5917 A O+3+ 141863561311 23 417.80 0.00 409.40 3.85 4412 5918 A R-3= Yes 4413 5919 A O=3+ FR 141649961368 23 406.60 0.00 398.50 3.75 Yes 141862691538 4438 5920 A R-3+ 23 453.80 0.00 444.70 3.85 Yes 151674781665 5921 A R=4= 23 469.40 0.00 460.00 3.85 FR 4430 141632812252 4427 5922 A O=3= 23 408.60 0.00 400.40 3.75 Yes 141649921380 4434 5923 A R-3+ 23 483.00 0.00 473.30 3.85 Yes FR 5924 A R=3+ 508.60 141600711055 4423 23 0.00 498.40 3.85 FR 5925 A O=3+ 141600751050 4428 23 408.40 0.00 400.20 3.75 Yes 151873692184 4424 5926 A R-4= 22 383.40 0.00 375.70 3.85 Yes AAX 151873652189 5927 A R=3+ 22 382.20 0.00 374.60 3.85 AAX 4436 Yes 141654791579 4422 A R-4-22 434.20 425.50 3.85 5928 0.00 Yes 151001963755 4417 5929 A R=3= 22 415.20 0.00 406.90 3.85 Yes 428.10 3.85 141480441585 4433 5930 A R=3+ 22 436.80 0.00 Yes 452.20 381038672630 4416 5931 A R+4= 22 0.00 443.20 3.85

22

360.40

0.00 353.20 3.75

Factory Prices

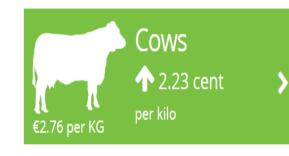
Last updated week ending 15th December 2019











国级宏观结



December 2018

Lives	tock Nu	mbers
attle	Digo	Shoon

_	Cattle	Pigs	Sneep
		'000	
2017	6,673.6	1,616.4	3,981.8
2018	6,593.5	1,572.2	3,743.5
% change	-1.2	-2.7	-6.0
_			

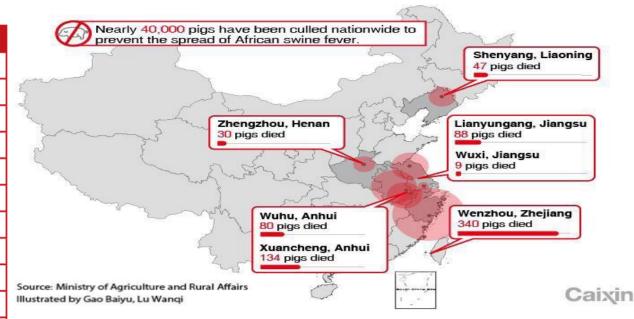
www.cso.ie

Source: www.agriland.ie

Technical Performance 2018

Table 1: Sow Productivity	2016	2017	2018
Number of Herds	111	107	104
Average Herd Size	775	728	762
Average Maiden Gilts %	12.1	11.6	12.4
Litters per Sow per Year	2.38	2.36	2.34
Average Weaning Age Days	28	29	30
Empty Days per Litter	13	14	14
Number Born Alive per Litter	13.15	13.50	13.69
Number Born dead per Litter	0.88	0.92	0.96
Piglet Mortality %	10.8	10.7	11.1
Weaner Mortality %	2.85	2.91	2.90
Finisher Mortality %	2.49	2.21	2.43
Number of pigs produced per sow per year	26.25	27.01	26.9
Sow culling rate per annum %	50.1	49.3	49.2
Sow mortality per annum %	4.9	5.2	6.3
Feed per sow per year tonnes	1.31	1.30	1.31

Five Provinces Report Outbreaks of African Swine Fever



Number of cattle, sheep and pigs 1847-2017

Figure 23.2 Number of cattle, sheep and pigs 1847-2017

2018

105.6

5.7

4.1 1.6

1.8

1.8 14.1

2.4 1.2

0.4 1.2

1.9

2.5 0.4

0.7

2.1

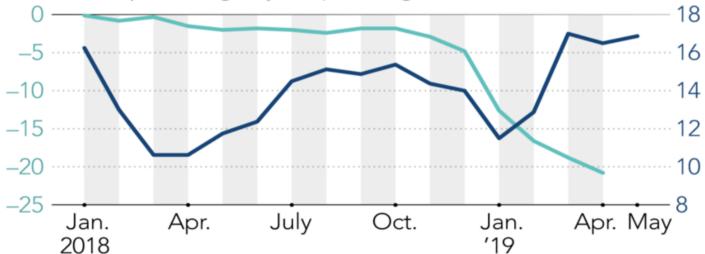
1.3

43.2

China's plunging pig population sends pork prices soaring

U.S. continue.

- Pig population (left, percentage change from a year earlier) - Pork prices (right, yuan per kilogram)



Source: Ministry of Agriculture and Rural Affairs, National Bureau of Statistics



Pig Economics

Production Costs 2018

ECONOMY Chinese pork prices risk 70%	Table 5: Feed and Non-Feed Cos	sts	
surge as African swine fever rages. Tighter		Со	ost per kg dead
		2016	2017
supplies of staple meat deal new	Feed	102	100.6
economic blow amid trade row with	Non-feed Costs excluding Building	ng and Financ	
	Healthcare	6.4	6.3
USSHIN WATANABE, Nikkei staff writer	Heat, Power, Light	4.2	4.2
*	Transport	1.0	1.3
JUNE 17, 2019 12:50 JST	Artificial Insemination	1.9	1.9
DALIAN, China An outbreak of	Manure	1.8	1.7
•	Labour / Management	13.5	14.4
African swine fever is tearing through	Repairs	2.6	3.0
China's pig stocks, and there is no end	Administration	0.9	0.9
Cillia's pig stocks, and there is no end	Environment	0.5	0.5
in sight. With concerns over pork	Insurance	0.9	1.0
	Housing Rental	1.4	2.5
supplies mounting, soaring meat prices	Contract Finishing Costs	1.7	2.4
could deal a fresh blow to China's	Water	0.5	0.5
could deal a fresh blow to China's	Dead Pig Disposal	0.9	0.8
economy as trade tensions with the	Stock Depreciation	1.9	1.8
•	Miscellaneous	1.2	1.2
U.S. continue.	Total Non-feed Costs excluding	44.0	4.4.4

Pig Herd Performance 2018



2.43 FCE (Weaning to Sale)

2.43



2.34 Litters/Sow/Year

26.9

Pigs produced/Sow/Year



2.42

11.1% Pre-weaning 2.9% Weaner 2.43% Finisher

Mortality

112.6 kg Live Weight 86.2 kg Dead Weight

1,760 g Daily Feed Intake 717 g Average Daily Gain Our Farm Born alive

2.44

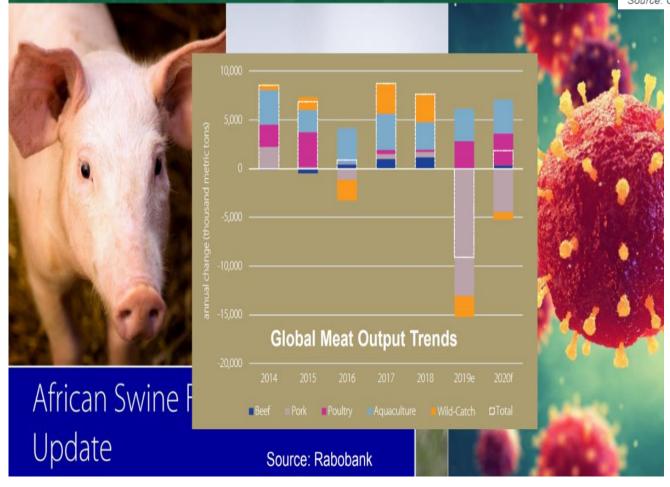
% Pre-weaning Mortality % Weaner Mortality % Finisher Mortality t Pigmeat Sow/Yr from

g ADG, ____g DFI, __ Live weight ____ Dead weight

Number of livestock in June

Table 23.3 Number of livestock in June Description 2015 7,363.5 Total cattle 6,963.5 36.5 25.0 1,432.7 Dairy cows 1,295.8 1,397.9 1,081.0 1,075.8 1,103.7 Other cows 4,555.5 4,832.9 4.694.6 Other cattle 5,138.7 Total sheep 2,488.1 2,515.2 Other sheep 2.603.6 **Total pigs** 1,536.9 1.594.3 1,556.9 1.4 1.4 1.3 147.8 148.5 143.4 Female breeding pigs Mules, jennets and asses 9.2 10.8

Source: CSO and Department of Agriculture, Food and the Marine



Global Meat Market trends are, and will be, driven by ASF

Developments



www.agriland.ie

by the inhabitants of the country.

amount of freshwater available

the highest water footprints per capita

2,483

united states

19%

infport dependency

water footprint of different foods



Water footprint per capita, m1 per year

1200-1300

609 1000

in agriculture

,240

Table 25.1 Landings by Irish Vessels in Ireland and in Foreign Ports 2007-2016 (Tonnage and Value)

Fish landing by Irish vessels

Tonnes (Live weight equivalent) Foreign Foreign Ireland 166,350 199,762 33,412 155,252 59,827 215,079 149,209 163,726 27,090 190,816 52,723 201,932 186,099

282,231 166,361 115,870 153,605 32,494 164,615 153,440 318,055 159,390 49,510 208,900 33,774 162,303 207,939 216,908 45,635 31,370 326,945 249,205 306,544 295,575 20,482 202,926 242,635 212,306 232,788 31,401 272,603 220,344 275,696 241,202 22,204 242,608 204,194 29,834 234,028 220,404

241,553

Source: CSO

All happening in a world with increasingly complex challenges



Sustainability

33,933

207,620

24,788

280,570

Services

■ Public Services 1.8%

Annual Carbon Emissions by Region

1.5%

255,783

Agriculture

F-Gases _

2.0%

Industrial

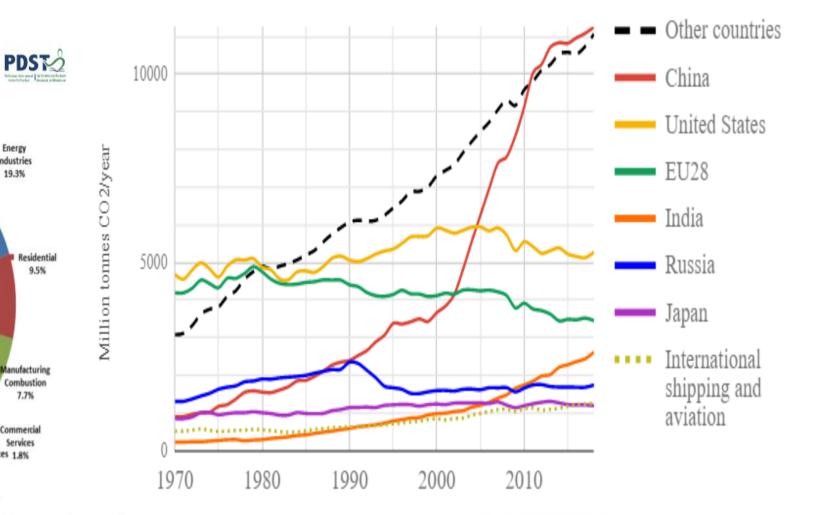
Transport

1985

1990

Africa — Cen & S America — Middle East — Eurasia — Europe — North America — Asia & Ocear

World fossil carbon dioxide emission 1970-2018



World Population

Years A.D.

Economics

Ireland's Greenhouse Gas Emission by Sector 2017 (EPA 2019)

■ Energy Industries ■ Manufacturing Combustion ■ Public Services

Industrial Processes

Agriculture

Residential ■ Commercial Services Transport F-Gases ■ Waste

Source: WaterFootprint.org and WWF

periods for fertilisers

More than 2.8 billion people n 48 countries will face water

by 2025. By the middle of the

century, this will have reached

Lap of rafee

51%

28%

import dispendency - impart dependency - import dependency - import dependency

2,223

thailand

8%

countries most dependent on water imports

Age of farm holders

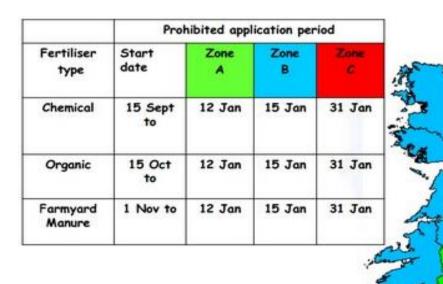
greece

35%

Table 22 4 Age of farm holders

Source: CSO

Table 22.4 Age of farm	•		
			000's
Age	2010	2013	2016
Less than 35	8.7	8.2	7.4
35-44	24.6	22.8	21.4
45-54	34.6	34.8	32.5
55-64	35.1	35.6	34.7
65 and over	36.6	37.7	41.2



Agriculture, Food and the Marine Prohibited application

6,000,000,000 8,000 6,000 4,000,000,000 3,000,000,000 2,000,000,000 2,000 1,000,000,000

20

Number of cattle, sheep and pigs 1847-2017

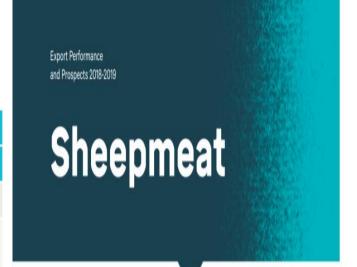
Figure 23.2 Number of cattle, sheep and pigs 1847-2017

The output value of the Sheep and Lamb sector in 2017 was €262.6 million, a 2% increase on 2016 output figures.

Table 3.6 Output Value¹¹ (€m) and Numbers (000's) of Sheep and Lambs, 2016 – 2017

		2016		2017 12
	Value	Number	Value	Number
Live Exports	4.68	48	3.36	35
Export Slaughterings + Other from 2013	281.46	2,889	307.09	3,180
Other Slaughterings				
Total Disposals	286.14	2,937	310.45	3,215
Imports	41.78	432	46.51	493
Changes in Stocks	11.06	113.4	-1.34	-12
Total	255.42	2,618	262.6	2,711

Source: Central Statistics Office, Final Estimates on Output, Input and Income in Agriculture



for 2018 are €315m, a 15% gain on last year on the



growth

Rich and delicious: Have you

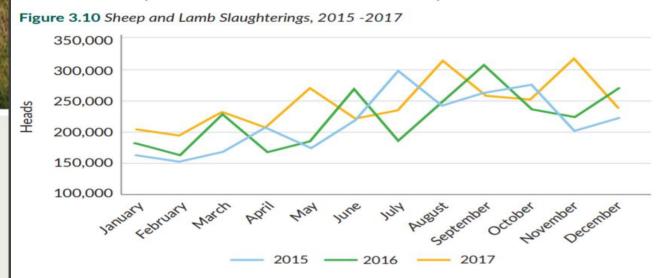
tried sheep's milk ice-cream yet?



Sheep Economics



The vast majority of slaughtered ovines are lambs. Lambs typically reach target live weight (30-40kg) (max carcase weight c 21kg) around 4 months of age. Counties Donegal, Galway, Mayo, Kerry and Wicklow have the largest lamb flocks. The majority of sheepmeat exports now come in the form of prime cuts rather than whole carcasses. The cumulative sheep slaughtering figure for 2017 was 2,948,493 head in comparison to a figure of 2,670,855 heads for 2016 which represents an increase of 10% for the same period.



A CACH ■ CACH		<u>Spring</u>	<u>Summer</u>	<u>Autumn</u>	<u>Winter</u>
CASH FLOW FLOW	Cashflow In	Selling Stock	Selling Stock	Selling Stock Basic Farm Payment AEOS / GLAS (75%) Area of Natural Constraint (100%)	Basic Farm Payment Selling Stock AEOS / GLAS (25%) STAP
	Cashflow Out	Feed & Fertiliser Buying Stock Drawings & Overheads	Buying Stock Feed & Fertiliser, Contractor, Repayments Drawings & Overheads	Buying Stock Feed & Fertiliser, Drawings & Overheads	Buying stock Feed Drawings & Overheads



Mid Season Lowland Lamb Factsheet **Average Performance**



Irish Sheep Slaughter 3.22 million head (up 1.3%)



Stocking Rate (Mid Season Lowland)



Irish Lamb Slaughter 2.7 million head (down 0.1%)



Weaning Rate

1.32 lambs/ewe (down 5%)



Sheep Meat Exports

57,000 tonnes (up 12%



Lamb Mortality

(Mid Season Lowland) 9% (up 29%)

F | Irish Ewe Numbers

2.7 million (down 3.8%)



Lambs Weaned/ha (Mid Season Lowland) 10 lambs/ha (down 9%)



Ireland is the fourth largest

sheepmeat exporter in the



Average sheepmeat price in Ireland in 2017 was €430/100kg, representing approximately 90% of the EU average price. Exchange rate movement post Brexit announcement increased the challenges faced by Irish sheepmeat farmers, as UK producers became more competitive on the French market.

The output value of the Sheep and

Lamb sector in 2017 was

Ireland's national herd is

at the end of 2017, in over

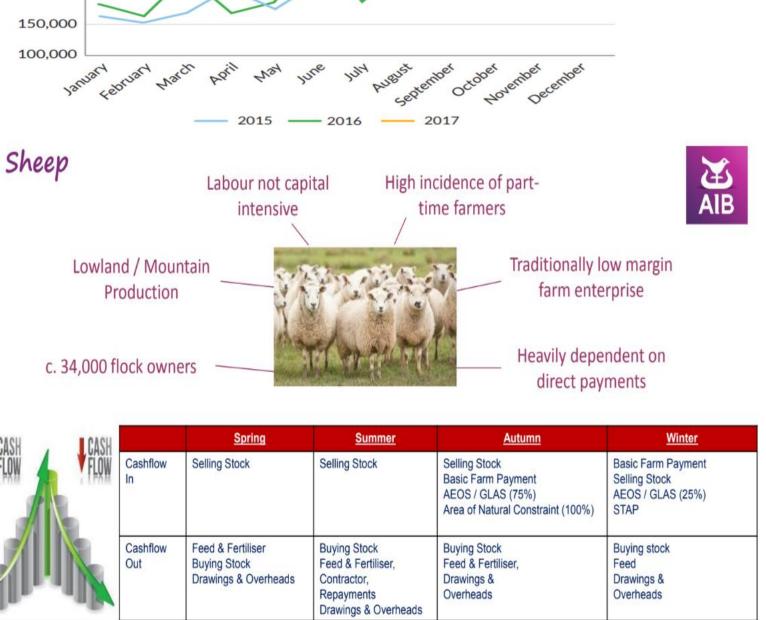
36,000 flocks

across the country.

Figure 3.9 Sheepmeat Prices, 2015 -2017 (€ per 100 kg)







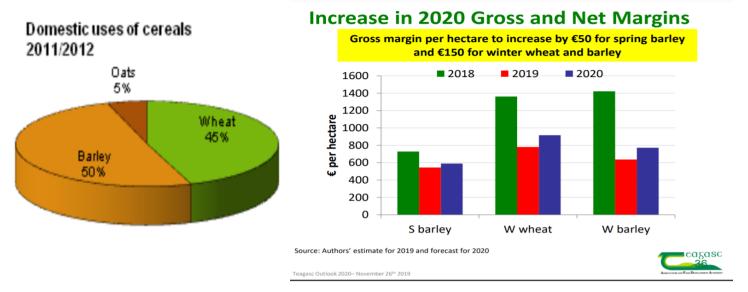
The number of production microbreweries has increased from 15 in 2012 to 75 in 2018, a fivefold increase. However, there were only five additional microbreweries operating in 2018, as compared with 2017. This is the lowest increase since 2012, when consistent data began to be compiled. Figure 2.1: Number of Independent Production Microbreweries by Year 2012 2013 2014 2015 2016 2017 2018

Year

Current Performance of the Independent Microbrewery Sector

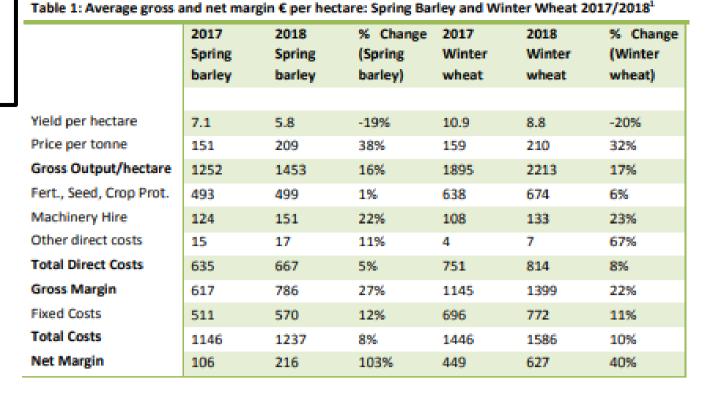
Irish self-sufficiency in cereals increases to 92% in 2011/2012

Tillage **Economics**



Irlsh Cereal Enterprise 2018

Average Performance

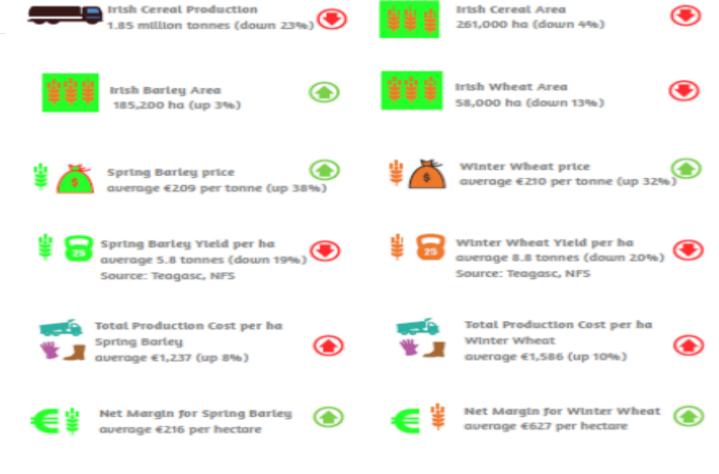


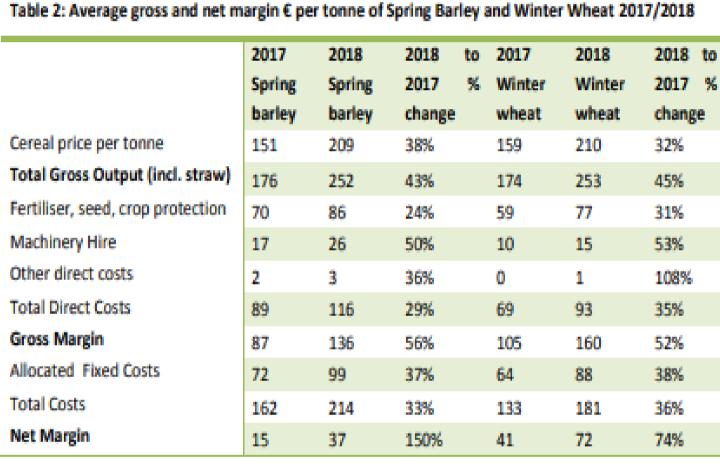
¹ The estimates value of straw is based on market value prices minus variables costs of production. This is a divergence from previous years when straw was assigned an opportunity cost rather than a market value. Note: 2017 figures are re-estimated based on the new methodology.

22 igure 22.1 Number of farms by farm size & region 2016 Southern and Eastern

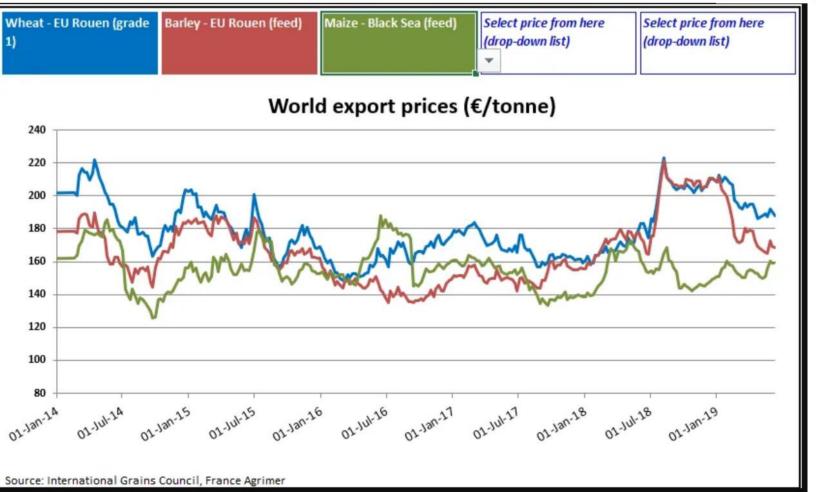
420

20-<30





	2008/11	2020	2	008/11	2020		2020
ble 1.1 :	Crop Yield and	Area Pot	ential 200	8/11-2020			
Net Margin		15	37	150%	41	72	74%
Total Costs		162	214	33%	133	181	36%
Gross Margin Allocated Fixed Costs		72	99	37%	64	88	38%
		87	136	56%	105	160	52%
Total Direct	Costs	89	116	29%	69	93	35%
Other direct	costs	2	3	36%	0	1	108%
Machinery H	lire	17	26	50%	10	15	53%
Fertiliser, seed, crop protection		70	86	24%	59	77	31%
Total Gross	Output (incl. straw)	176	252	43%	174	253	45%



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2020 Wheat Price Increase

Target Yields for Winter Wheat

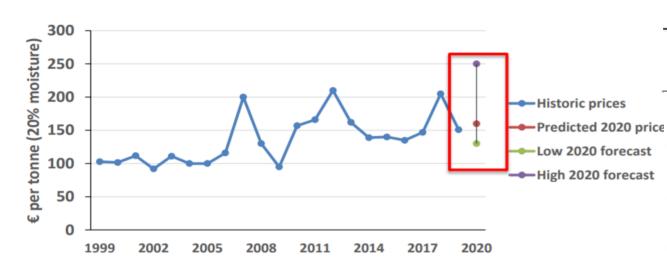
Gross Margin Target Winter Wheat

10.2 tonnes per hectare

€860 per hectare

achieved on 13% of farms

achteved on 88% of farms



- Area, yield, demand to influence price
 - Lower winter cereal planting EU and Ireland
 - Return to trend yields, slight downward movement in EU yields
 - Upward pressure on 2020 harvest price (5 %)
- Futures not always get it right

Target Yield for Spring Barley

Gross Margin Target Spring Barley

achteved on 6% of farms

achieved on 73% of farms

7.4 tonnes per hectare

(€ 🐿 €540 per hectare

Weather, trade wars and market dynamics

4	=eagas
C	
Asucus	CHE AND FOOD DEVELOPMENT ACTO

Table 1.1 :	: Crop Yield and Area Potential 2008/11-2020					
Crop	2008/11 Tonnes	2020 Tonnes	2008/11 Ha	2020 Ha	2020 Increase Ha	
Barley	1,288,900	1,755,500	184,000	223,660	39,660	
Wheat	820,400	1,109,400	91,800	105,800	14,000	
Oats	158,420	246,320	21,100	34,860	13,760	
Pulses	18,700	64,700	3,560	10,300	6,740	
OSR	32,300	287,300	8,100	59,900	51,800	
Energy	36,000	628,000	4,500	66,800	62,300	
Potatoes	415,000	482,000	* 8,700	10,170	1,470	
Beet	480,000	1,800,000	8,000	30,000	22,000	