



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY

The Irish Agriculture and Food Development Authority

Growing Ireland's Agri-Food Sector – Preparing for the Abolition of Dairy Quotas

Presentation to Dairy UK Growth Agenda Seminar

June 26th 2013, London

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Director
Teagasc

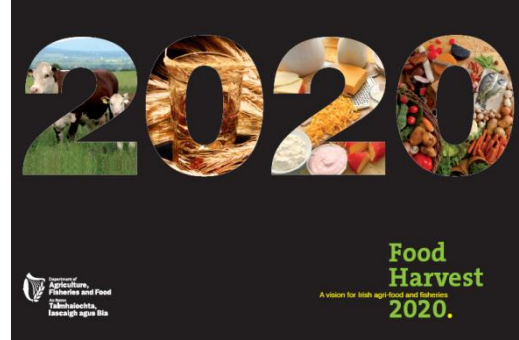
Outline

- ❑ Food Harvest 2020 – targets and implementation
- ❑ Achievability of FH dairy targets
- ❑ Initiatives by public and private sector to support expansion
- ❑ Risks to expansion

Food Harvest 2020



Economic Growth – Food Harvest 2020



Overall Vision

Act **smart**

Prioritise R&D

Improve skill levels

Maximise adoption of best practice

Foster creativity and entrepreneurship

Rationalise and collaborate at industry level

Improve focus on consumer preferences

Review institutional support and regulatory burden

Think **green**

Prioritise environmental protection

Capitalise on natural advantages and resources

Build environmental credibility through research and actions

Develop an umbrella 'Brand Ireland'

Satisfy consumer requirements and preferences

Conserve biodiversity

Align sustainability across the supply chain

Achieve **growth**

Increase the value of primary output in the agriculture and fisheries sector by €1.5 billion by 2020

Increase value-added output by €3 billion by 2020

Achieve an export target of €12 billion by 2020



Ambitious Food Harvest 2020 Targets

□ National

Increase the value of primary output in overall sector by €1.5 billion - 33% increase

Raise the sector's value-added by 40% from €7.9 to €11 billion

Exports for the sector to rise to €12 billion - a 42% increase

□ Sectoral

50% increase in volume of milk produced and processed by 2020

40% output value growth target for the cattle (40%?) and sheep sectors and a 50% output value growth target for the pig sector

FH2020 Implementation

- ❑ High level (Cabinet) national commitment to agri-food sector
- ❑ *High Level Implementation Committee* chaired by Minister and involving all relevant State Agencies
- ❑ Quarterly targets set for State and private sector actions
- ❑ Encouragement of greater collaboration across the sector
- ❑ Targeting of State support on priority areas
- ❑ Encouragement of industry leadership to focus on restructuring and R&D investment

Irish dairy industry to 2020 - clear vision and strategy

Industry Vision FH2020

Lessons from Expansion

Avenues to increased milk production

Strategic Priorities

**To increase
Irish milk
production by
50% by 2020**

- The Irish Dairy Industry 1975-1985
- The New Zealand Dairy Industry 1984-2010
- Opportunities for expansion in milk production

- Cow numbers
- Stocking rate
- Milk yield /cow
- Land area

- Milk production efficiency
- Milk Quality
- Increase Grass DM production
- Environment
- Finance availability
- Education/training

Lessons from expansion: Irl vs. NZ

- ❑ 1975 to 1985 milk production in *Ireland* increased by **5.7%** per year:
 - 49% increase in milk yield/cow
 - 11% increase in cow numbers
 - 47% decrease in dairy farm numbers
- ❑ 1986 to 2010 milk solids in *New Zealand* increased by **4.4%** per year:
 - ~100% increase in cow numbers
 - 30% increase in milk yield per cow
 - 55% increase in land area allocated to dairying

Avenues to increased milk production

1. Cow numbers
2. Milk yield /cow
3. Stocking Rate
4. Land area

1. Increased dairy cow numbers

- ❑ 3% Increase in dairy cow numbers/year likely
- ❑ Last year a record 380,000 female calves were born to dairy bulls implying 95,000 extra dairy cows by 2015 or well over 3% p.a.

2. Increased milk yield per cow

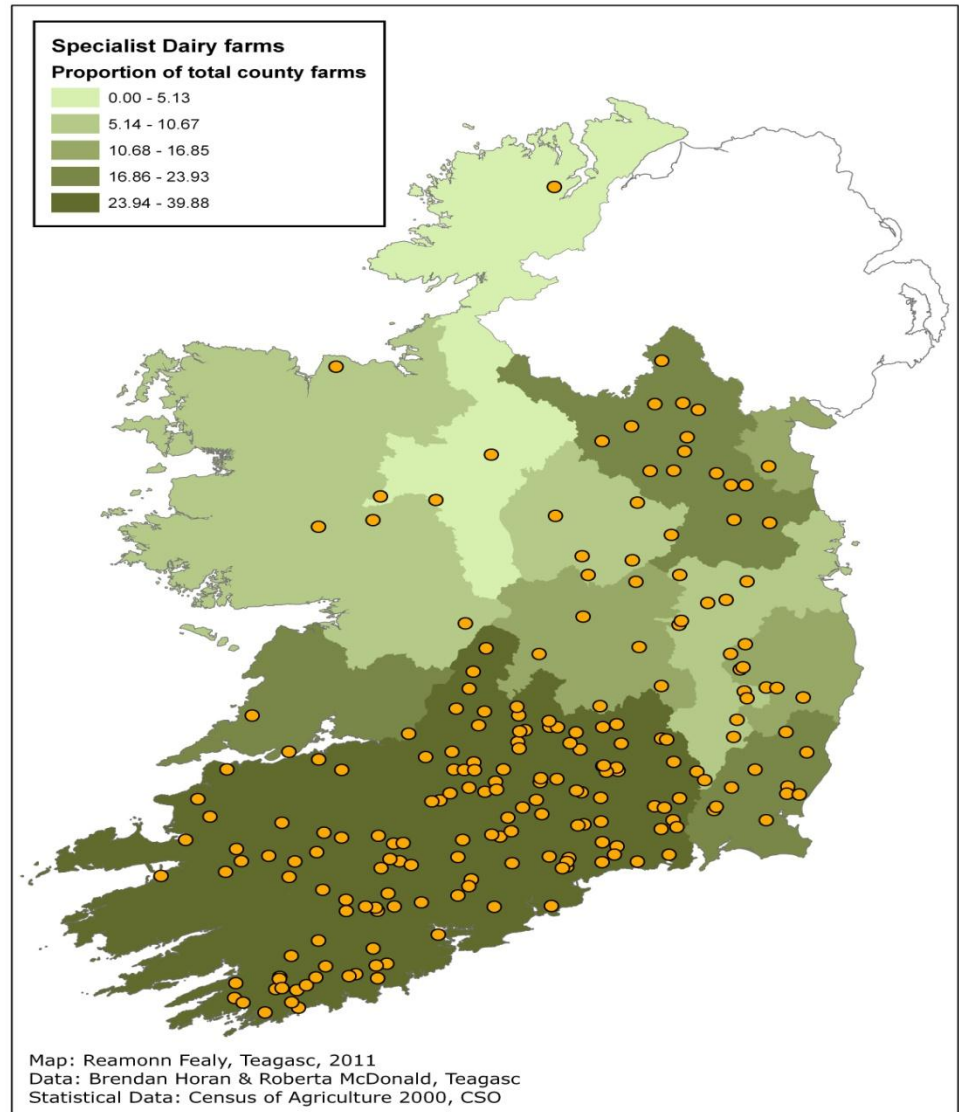
- ❑ 2% Increase in Milk Yield/Cow/Year likely
- ❑ In line with international trends
- ❑ ROI EBI increasing by 10 units per annum
- ❑ Increased genetic merit + earlier calving + longer lactations + more mature herds

3. Increased stocking rate

- ❑ Big scope to increase SR
- ❑ National rate at 1.9 cows/ha is well below 2.37 (NL), 2.4 (DK) and 2.8 (NZ)
- ❑ Low SR substantially due to the relatively low milk quota available/ha.
- ❑ A modest increase in the SR from 1.9 to 2.1 cows/ha would increase milk production by over 10%.

4. Increase land area allocated to dairying

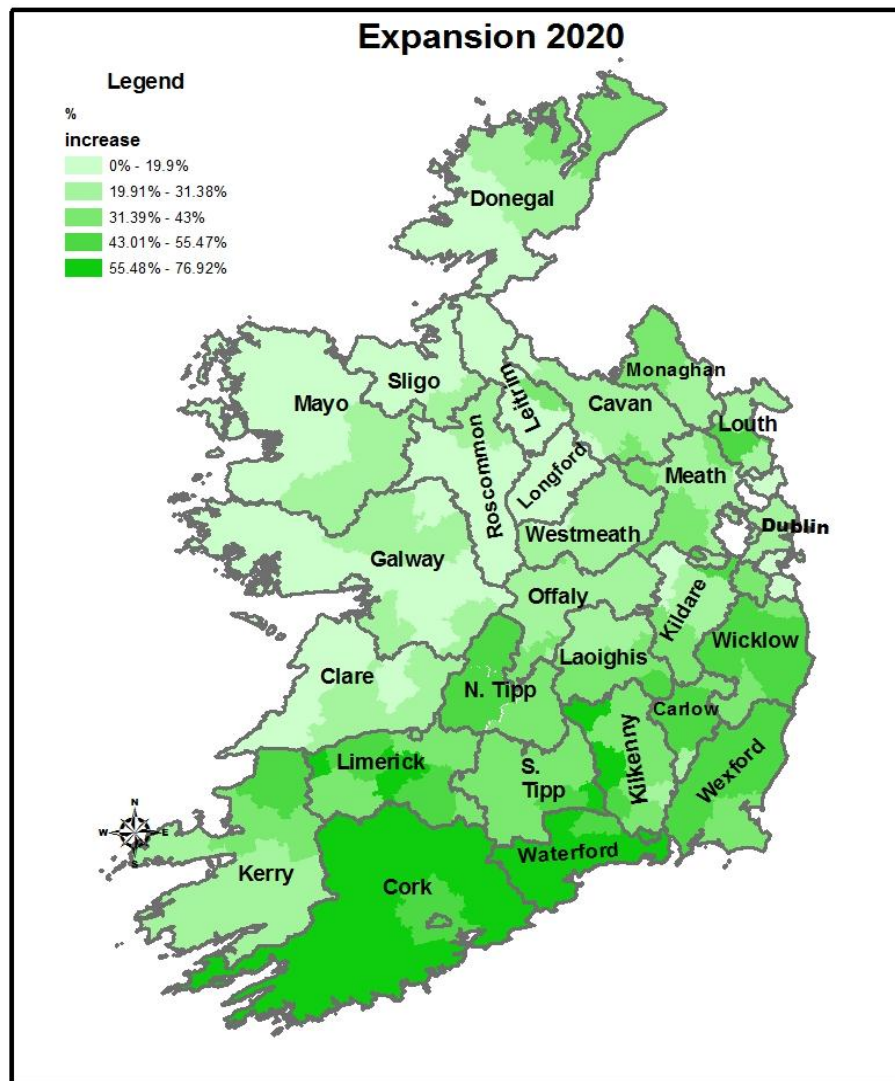
Geographic distribution
of New Entrant dairy
farmers(2009 -2011)
in relation to existing
specialist dairy farms



Anticipated ROI dairy stats by 2020

	Average 2007-2009	2015	2020
Milk Delivered (m litres)	4,950	5,837	7,450
Cow Numbers (000)	1,100	1,125	1,350
Milk Yield (litres/cow)	4,631	5,187	5,520
Protein %	3.33	3.38	3.42
Fat %	3.82	3.91	3.97
Dairy Farmers	18,970	18,000	18,000
Average Herd Size	58	63	75

Potential growth in milk supply at regional level 2020

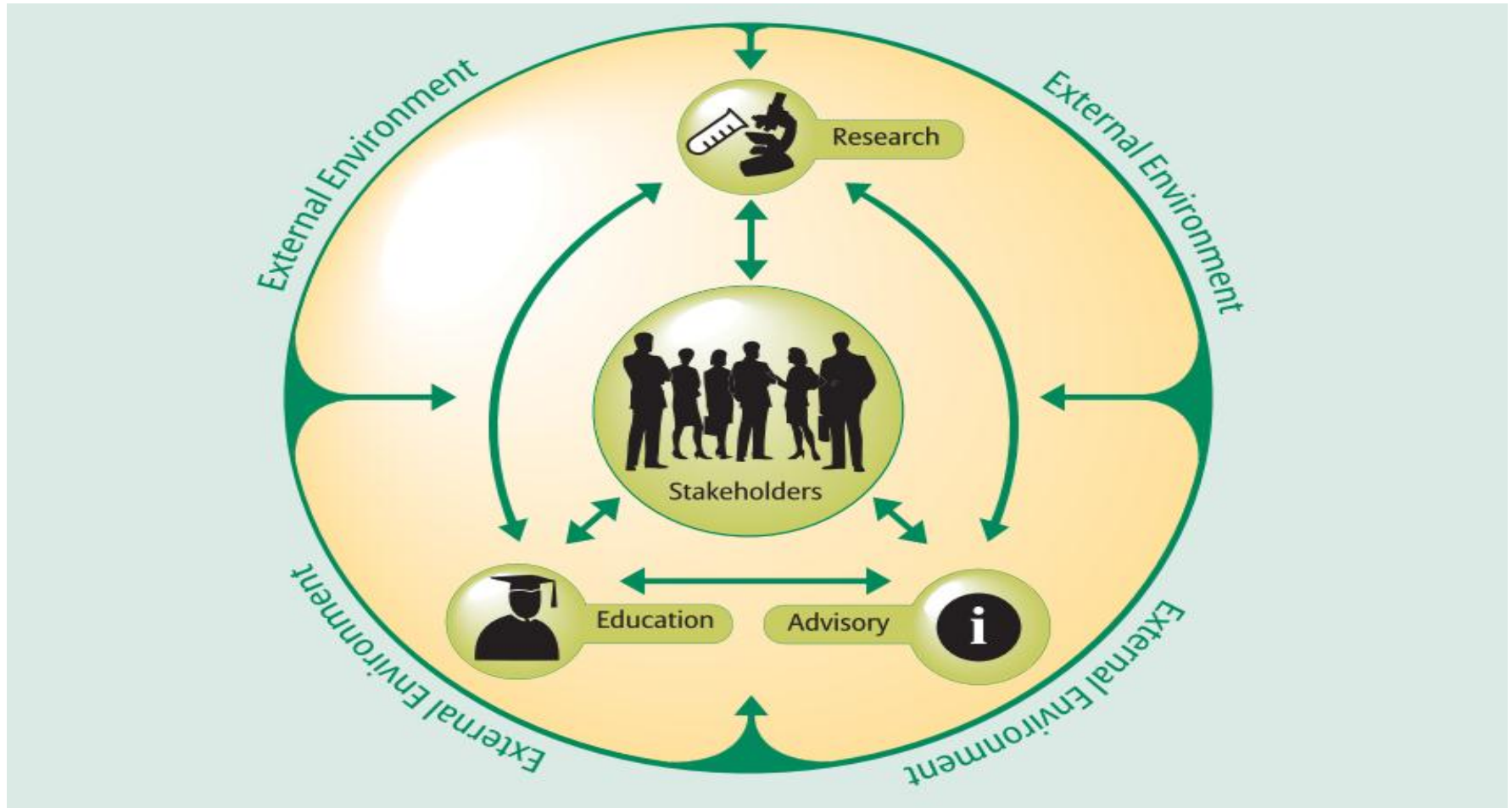


- ❑ Average national potential increase in milk supply estimated at c. 50%
- ❑ Range from 0% to 76.92%
- ❑ The South and the South East in particular Cork, Limerick, Waterford, Tipperary, Wexford, Kilkenny, Carlow and Wicklow have the highest expansion capacity

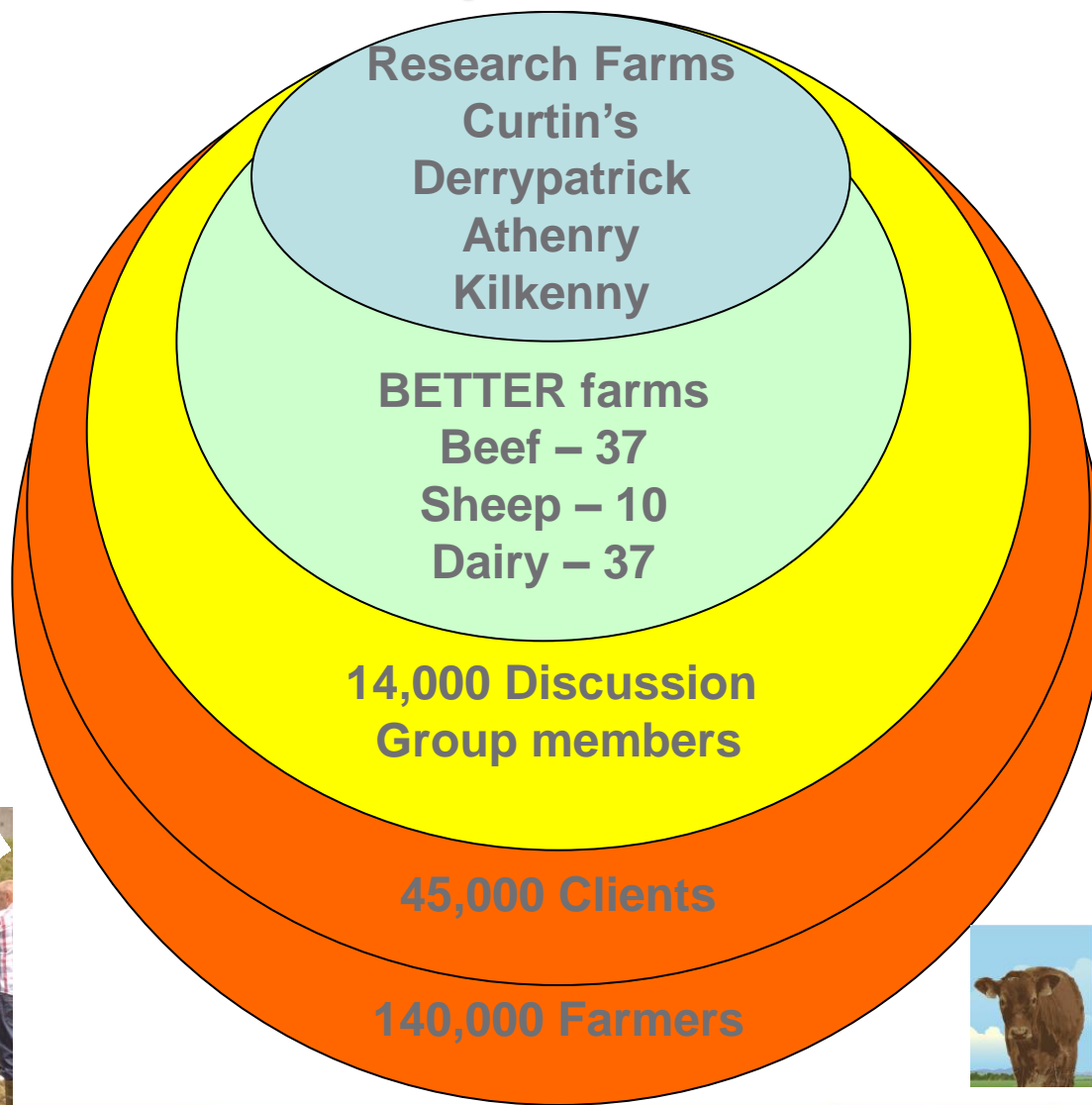
Initiatives by dairy sector actors to support expansion

- ❑ Major investment by dairy cos in new production and innovation facilities
- ❑ Public support for production research through reestablishment of 3 new (+ 2 in planning) Dairy Research Demonstration Farms
- ❑ Public support for expansion of membership of Dairy Discussion Groups – 1/3 of Irish dairy farmers are now members of Discussion Groups
- ❑ Publication of detailed Dairy Manual and Land drainage Manual in preparation
- ❑ Public support for food research re functional foods, processing technology and novel foods
- ❑ New educational and training programmes established for Professional Dairy Farm Managers and New Entrants
- ❑ Collaboration with Irish Food Board (Bord Bia) to carbon footprint dairy and beef sectors and in the development of an advisory tool (*“Carbon Navigator”*) to deliver on farm improvements in the footprint with a view to rigorous verification of claims to underpin “Origin Green” marketing initiative

Mobilising research, extension and education/training to support expansion



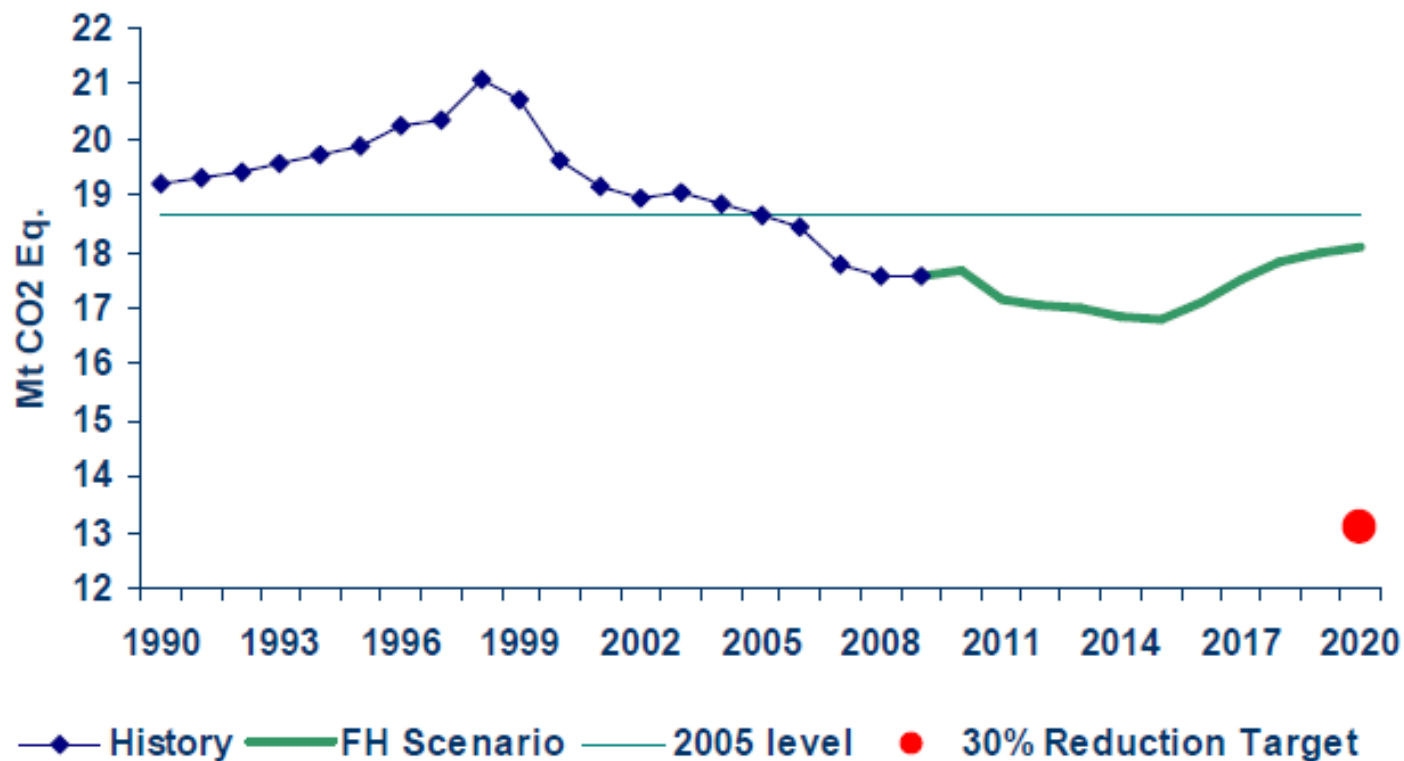
Research and extension operational model



Risks to expansion

- Low milk price and/or volatile prices
- Restricted access to finance
- Environmental limitations (Chart)
- Failure to achieved improved efficiency at farm level (table)
- Fragmented processing sector (Chart)
- Failure to innovate sufficiently (Chart)

GHG Emissions from Irish Agriculture under FH2020 Scenario



Source: Teagasc 2011

Efficiency targets for ROI dairy sector 2020

	Current Average	Expected Average in 2020	Best performance
Milk Yield (kg/cow)	4,902	5,420	5,600
Milk Solids (kg fat plus Protein)	358	407	468
Protein and Fat %	3.37/3.94	3.43/4.08	3.65/4.70
Mean calving date	14 th March	5 th March	14 th Feb
EBI of dairy female born (€)	119	150	150
SCC ('000)	252	200	<200
6-Week calving rate (%)	55	70	90
Stocking Rate (cows/ha)	1.9	2.2	2.8
Concentrates/cow (kg)	875	750	400
Herbage utilized (kgDM/ha)	7.3	10.0	13.2
Cows/labour unit (numbers)	50	75	100

THE DAIRY INDUSTRY IN IRELAND

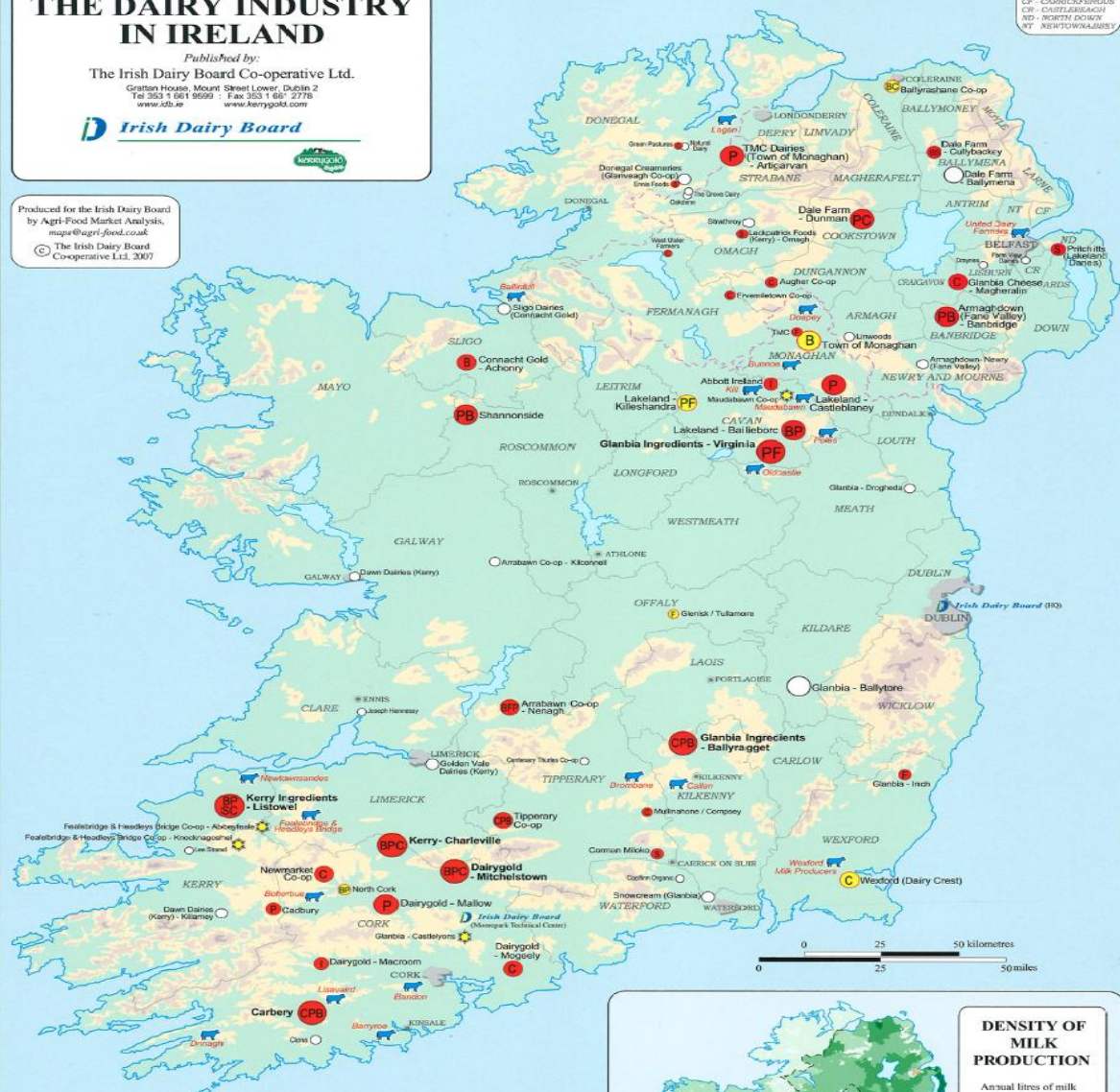
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Irish Dairy Board



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ABBREVIATIONS
CF - CARRICKFERGUS
CR - CASTLEBRIDGE
ND - NORTH DOWRY
WT - NEWTOWNBARNEY



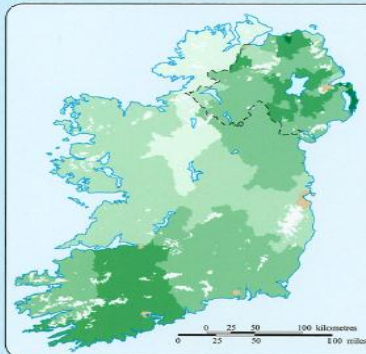
PROCESSING SITES
Annual intake of milk or milk equivalent (million litres)

LIQUID MILK	LIQUID MILK and MILK PRODUCTS	MILK PRODUCTS
○ >300	● >300	● >300
○ 200 - 300	● 200 - 300	● 200 - 300
○ 100 - 200	● 100 - 200	● 100 - 200
○ 50 - 100	● 50 - 100	● 50 - 100
○ 25 - 50	● 25 - 50	● 25 - 50
○ 10 - 25	● 10 - 25	● 10 - 25
○ <10	● <10	● <10

Milk Collection / Receiving Centre
 Milk Selling Co-ops (with an integrated processing facilities)
 Product type:
 B - butter, butter oil
 C - cheese
 F - fresh products
 P - powders
 I - infant foods
 S - spreads, food ingredients, speciality products

Relief (feet)
 over 2000
 1000 - 2000
 500 - 1000
 below 500

National Border
 Regional (County) Boundaries
 Major towns (selected)

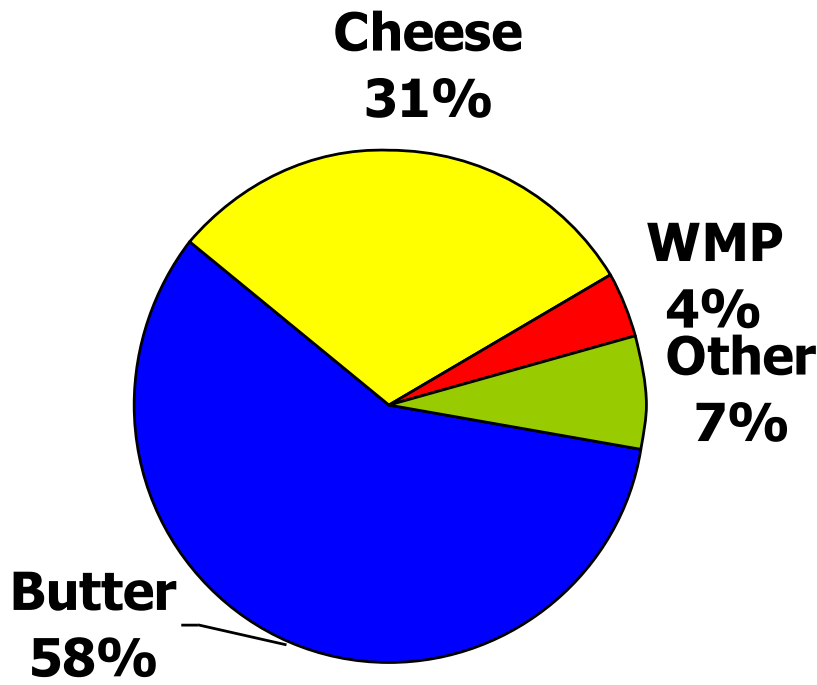


DENSITY OF MILK PRODUCTION
Annual litres of milk per hectare of total land area

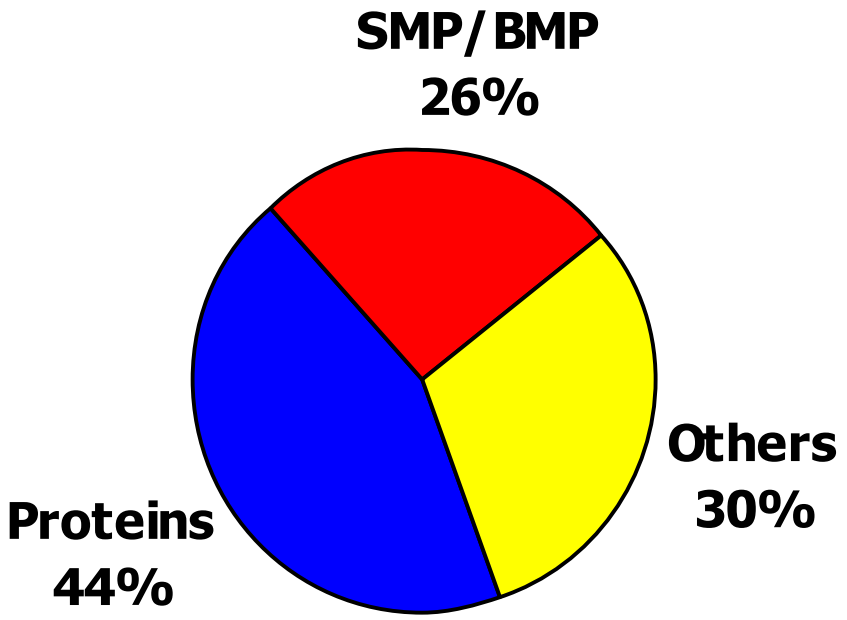
- Over 3000
- 1500 to 3000
- 500 to 1500
- 200 to 500
- less than 200

Areas with little or no milk production
 Urban areas
 National borders

Whole Milk Utilisation



Skim Milk Utilisation



Thank You