

Sectoral Road Map: Dairying

Market and policy issues

- EU milk quotas will be abolished on April 1, 2015.
- This road map takes into account: the 2% increase in EU milk quota allocated in 2008; the 1% increase each year between 2009 and 2013; and, the 2% in 2009 due to butter fat adjustment.
- In the medium term, the outlook for international dairy product prices are good but with the risk of increased price volatility. Therefore dairy farm businesses must move to control their future by adopting farming systems insulated from market price volatility and external cost exposures to the greatest possible extent.

Shape and size of sector in 2018

- Dairy farm numbers will continue to decline to 15,500 dairy farms in 2018.
- Dairy cow numbers will increase by 277,000 (1.104 million in 2008 to 1.382 million in 2018) or 2.5% per year.
- National milk production will increase to 7,101 million tonnes in 2018; an increase of 39% above 2008 or 43% above 2009 levels.
- Average milk delivered per farm will increase to 458,123kg.
- Average herd size will increase to 89 cows.



Technical performance

	Sectoral Average		High Performance Target
	Current	2018	
Milk yield (kg/cow)	4,661 ¹	5,140	5,400
Milk solids (kg fat plus protein)	334 ¹	378	450
Protein %	3.34 ¹	3.40	3.60
Fat %	3.82 ¹	3.95	4.70
Calving interval (days)	389	380	365
Mean calving date	March 16	March 10	Feb 20
EBI (€)	75	140	125
Level of AI usage (%)	52	60	95
SCC	246	200	<200
Six-week calving rate (%)	53	65	90
Cows/labour unit	50	67	100
Stocking rate (LU/ha)	1.9	2.1	2.8 ²
Replacement rate (%)	25	22	18
Herbage utilised (kg DM/ha)	6.4	8.7	13.0
GHG (kg CO ₂ e/kg MS)	16.06	13.53	11.5
Nitrogen efficiency (%)	24.7	28.5	32.7
Concentrate per cow (kg)	1,042	750	400
Nitrogen (kg/ha) (2004-2008)	148	192	250
Margin at 27c/l (€/kg MS; full labour costs included)	-0.07	1.00	1.95
Net margin (€/hectare; full labour costs included)	-42	821	2,489

¹ CSO figures for 2008 deliveries, milk solids and fat and protein content.

² A target of 2.8 LU/ha is just within the current nitrates derogation limit.



Environmental and land use implications

- The area under dairying will increase as numbers of dairy cows and replacement heifers increase nationally. An increasing number of beef and tillage farms may enter dairying particularly following the removal of milk quota regulations.
- The majority of the 43% increase in milk production above 2009 levels will be produced in the southern half of the country.
- The Nitrates Directive will result in a requirement for increased management capabilities and nutrient efficiency but will not unduly restrict efficient and innovative dairy farmers.
- While cow numbers will increase by 25% and milk production per cow by 13%, the greenhouse gas emissions per unit of milk production will be reduced.

Research and advisory actions

- Develop and transfer key technologies to increase on-farm productivity and to exploit our competitive advantage from grazed grass.
- Complete scientific research which underpins and enhances the competitiveness of the dairy industry and communicate the knowledge acquired and generated to relevant stakeholders through scientific papers, technical and popular articles, and Open Days. Expand the number of discussion groups to communicate technical messages to dairy farmers.
- Promote farm partnership and share farming options.
- Achievement of the technical performance targets will require the development of an effective model for technology uptake. Recently established initiatives include:
 - the BETTER (Business Environment Technology through Training, Extension and Research) Farm Programme on spring and winter milk farms;
 - the Dairy Efficiency Programme (DEP) which supports the adoption of best practices in grassland management, breeding and financial management by farmers using a discussion group format;
 - the Greenfield Dairy Programme which highlights technologies appropriate for new and expanding dairy farms; and,
 - the Dairy Degree Programme, in collaboration with UCD, which meets the needs of future dairy farmers and agri-business personnel.

- Further actions are also required. These include:
 - the development of an effective programme for improving milk quality in conjunction with Animal Health Ireland (AHI) and industry partners. Such a programme will focus on identifying and promoting practices to reduce somatic cell count and chemical residue levels in Irish milk;
 - the identification and establishment of BETTER farms in wetland areas. This initiative is required to identify and promote the adoption of technologies appropriate to dairy farming on heavy clay soils;
 - linkages with industry partners, e.g., milk processors and ICBF, will be an essential component of the Teagasc extension programme.
- The outcome of the above actions will be an increase in the productivity and competitiveness of Irish dairy farmers. This will be achieved through a combination of:
 - an increase in grass utilised per hectare used by dairy cows;
 - an increased rate of genetic progress in the national herd fuelled by an increased supply of high EBI dairy replacements;
 - an earlier and more compact seasonal spring calving pattern; and,
 - improved labour efficiency on dairy farms.

Comments

Post 2015, the rate of expansion in milk production in Ireland will increase further as EU milk quotas will no longer constrain milk output. Teagasc's dairy research and advisory programmes must continue to identify and promote the new technologies identified above as the Irish dairy industry experiences a period of rapid change.

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The road map for dairying is available on www.teagasc.ie.