





2022 Review & 2023 Outlook

- Domestic and global perspectives
- Production
- Prices
- Inputs
- Dairy enterprise margins





Dairy Review 2022

- Global dairy markets
 - Stagnant supply
 - Robust demand
 - Uplift in dairy product prices
- Irish Dairy sector
 - Record high milk prices
 - Stable milk production
 - Elevated production costs

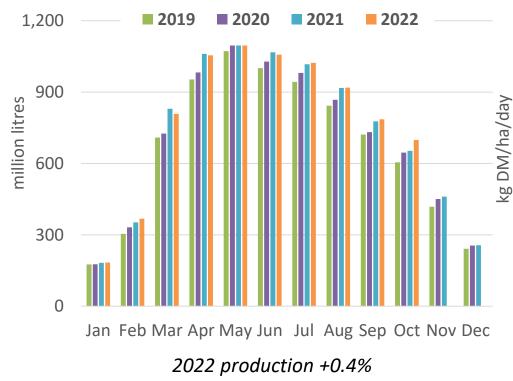




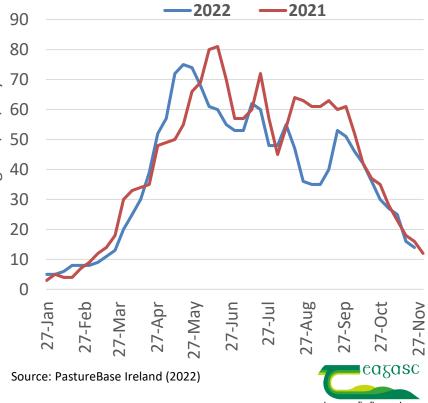


No substantial increase in Irish Milk Production in 2022

Growth in cow numbers offset by reduced yields

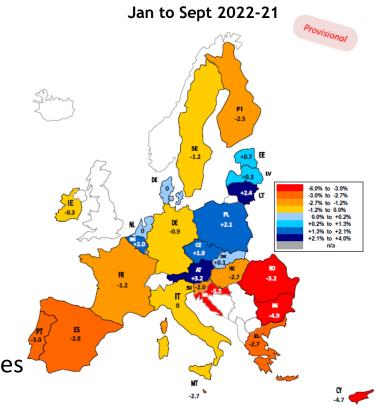


Reduced grass growth across some regions



EU milk production flat in 2022

- Weaker supply growth
 - marginal decline in EU27 for year to Sept 2021
 - -0.5% expected for full year
- Decline across main producers
 - Challenging weather
 - Reduced productivity & quality
 - Depletion of fodder stocks
- Competiveness risk due to prevailing high prices



Source: EU Commission MMO



Production decline across key exporters in 2022

Overall weaker production growth in 2022 compared with 2021 (calendar year)

	2018	2019	2020	2021	2022e
	Million Tonnes				
EU27	1.29	0.23	1.63	0.12	-0.77
NZ	0.47	-0.16	0.08	0.01	-0.89
US	0.93	0.36	2.13	1.31	0.28
AUS	-0.02	-0.59	0.25	-0.03	-0.51
ARG	0.43	-0.19	0.77	0.44	0.05
Sum	3.10	-0.35	4.86	1.85	-1.84

2022 relative to **2021**



EU

AUS



US

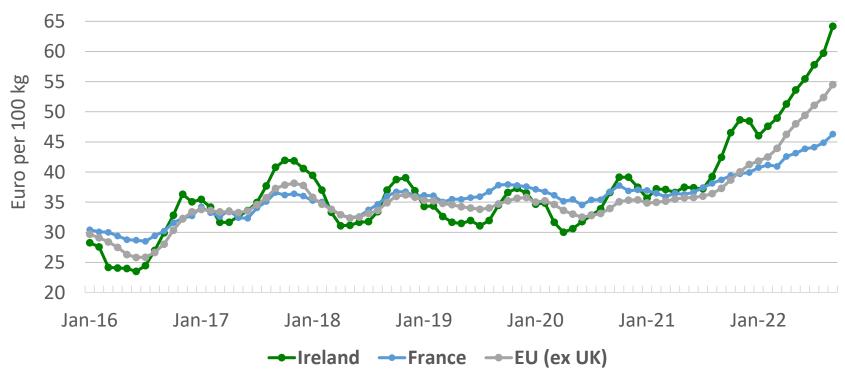
ARG

Source: Eurostat, DCANZ USDA and author estimates



EU milk price variation

Raw milk price 2016 - 2022

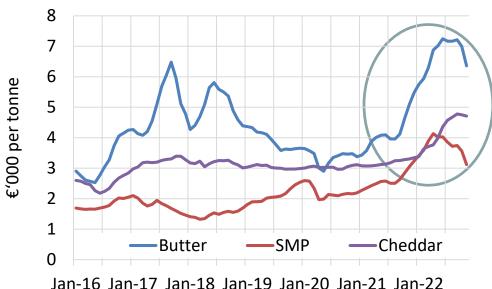


Source: Milk Market Observatory



Dairy Product and Milk Prices 2022

EU Dairy product prices

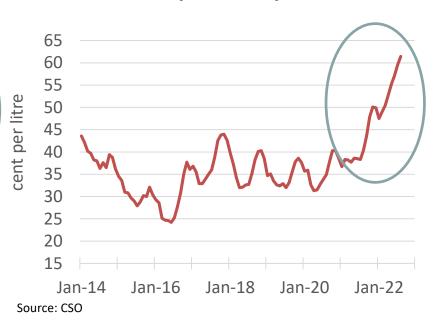


Source: MMO

Significant price increases for Butter, SMP & Cheddar

- Declines evident from Q4 2022
- WMP price also up considerably

Irish producer prices



Avg. Irish milk price up substantially (44%) in 2022 (vs 2021)

- 57.8 cent per litre (act. fat/protein)
- Note: issue of fixed price contracts



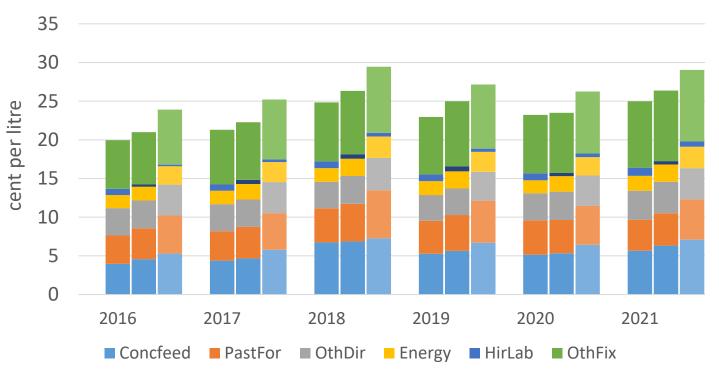
Dairy enterprise analysis





Milk Production Range of Costs per Litre Top, Middle and Bottom groupings 2016-2021

Many farms have production costs that differ from the average

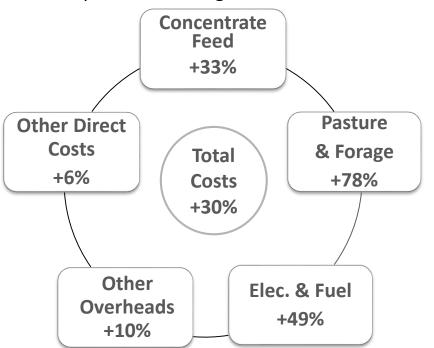




Extreme Cost Pressures in 2022

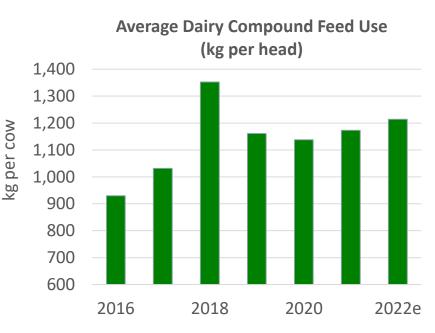
Costs per litre 2022e

Expenditure change relative to 2021



Source: Teagasc NFS data and Authors' estimate for 2022

* Assume no change in production on the farm

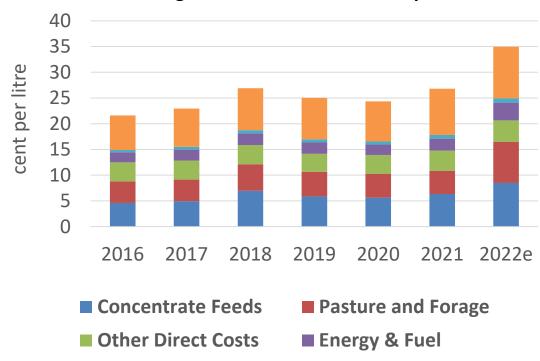


- 2022e Feed use up 4% to 1,214 kg per cow
- Farm specific drivers e.g. location



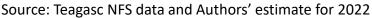
Substantial increase in 2022 input costs

Average Cost of Milk Production per Litre



- Average costs 34.9 cpl in 2022
 - Up from 26.8 cpl in 2021
 - driven by fertiliser, feed & fuel
 - Concentrate costs 8.5 cpl
 - Pasture and forage 7.9 cpl
 - But, net margin +70% (23.9 cpl)









However, average net margin up substantially in 2022

Average net margin per ha. €2,950 in 2022



- Gross output per ha +44%
- Total costs per ha +30%
- Net margin per ha +69%



Source: Teagasc NFS data and Authors' estimate for 2022e



2022 Dairy Summary



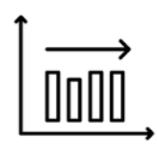


30% 个 total costs (34.9cpl)

70% ↑ net margin per litre (23.9c)

69% ↑ net margin per ha (€2,950)

1.4% ↑ in dairy cow numbers



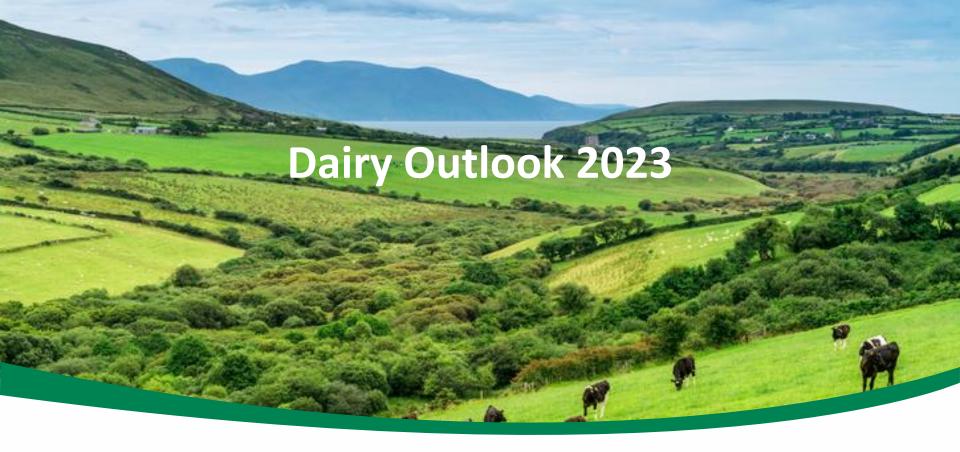
Stable milk production



Slight drop in milk yield per cow









Dairy Outlook 2023

Global dairy markets

- Uncertainty, particularly on the demand side
- Affordability as a result of lower economic growth
- Modest supply growth expected across main exporters
- Prices to ease back if demand growth slows

Irish dairy sector outlook

- Irish milk price to decline by approx. 15%, on average
- ~49cpl (actual constituents vat incl.)
- Production volume forecast to increase, 4%
- Production costs to remain elevated



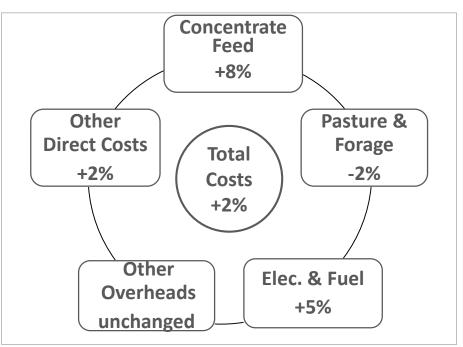




Dairy input costs to remain high in 2023

Costs per litre 2023f

Expenditure change relative to 2022



- Input prices to remain elevated in 2023
 - Feed, fertiliser and fuel
- Cost of production to stay high (35.7cpl, avg.)
 - Concentrate costs 9.2 cpl
 - Pasture and forage 7.8 cpl
 - Lower net margin -40% (14.3 cpl)







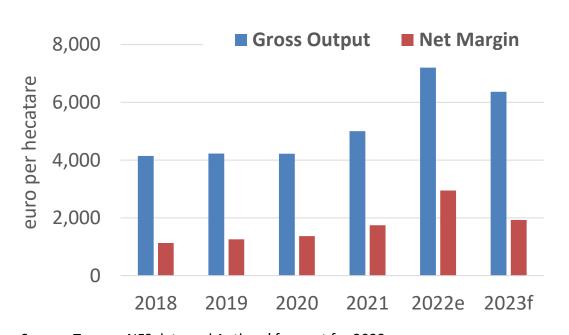
Source: Teagasc NFS data and Authors' forecast for 2023



^{*} Assume average increase in production (3% per ha)

Net margin forecast for 2023 – a return to more normal levels

2023f Average net margin per ha. €1,928



- Normal weather assumed
- Gross output per ha -12%
- But, net margin per ha -35%



Source: Teagasc NFS data and Authors' forecast for 2023



2023 Dairy Summary



4% ↑ in milk production

2% 个 costs (35.7cpl avg.)

Some ↑ dairy cows and yields





Lower milk price (49cpl avg.)

40% \downarrow net margin per litre (14.3c)

35% drop in net margin per ha. (€1,928)



Overall Summary

- 2022 record growth in dairy commodity and milk prices
 - Upward trend in Irish milk prices
 - Highly inflationary cost environment
 - Historic increase in average net margin and farm income
- 2023 forecast more uncertain
 - Downward movement in international dairy product prices
 - Decline in Irish milk prices
 - Continuation of high cost environment
 - Substantial drop in net margin to more 'normal' levels



