

Reducing Environmental Footprint while Building a Stronger Dairy Business



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Family Farm

41Ha Milking Platform
17Ha Replacement block
100 Cows

Fragmented & Steep

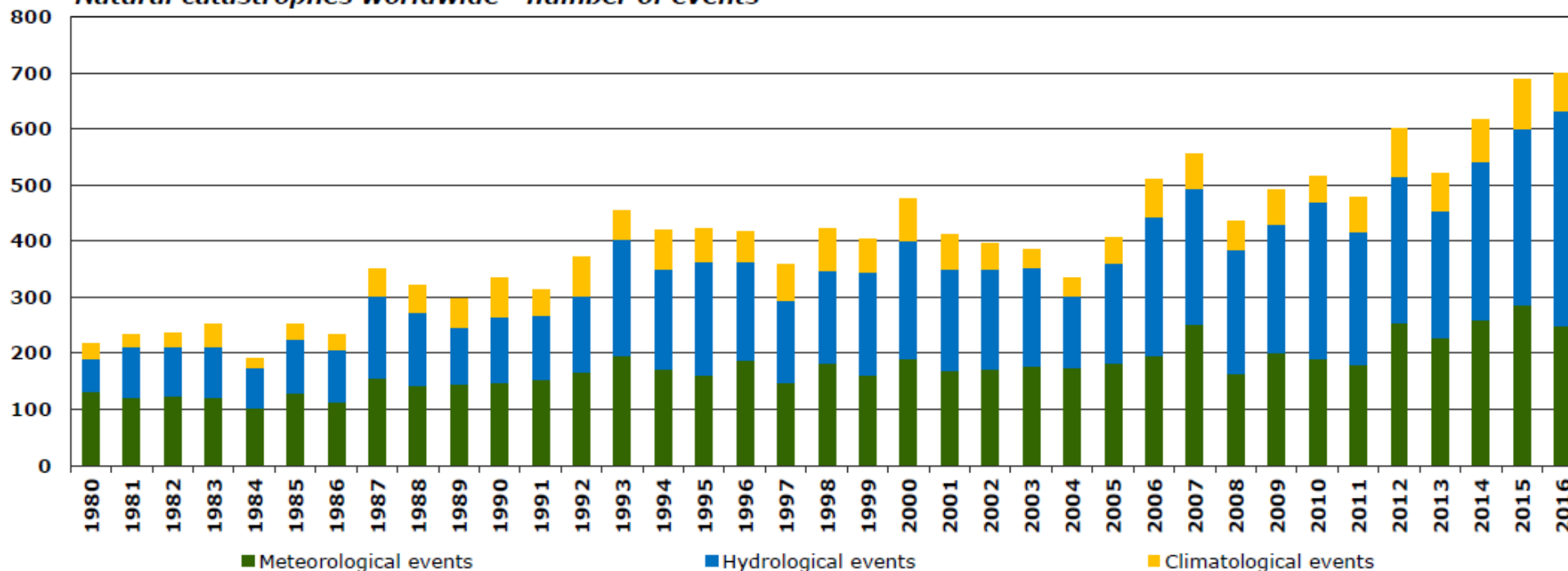
Milking OAD since 2009



WORLDWIDE EXTREME WEATHER EVENTS



Natural catastrophes worldwide - number of events



*Meteorological events: Tropical storm, extra-tropical storm, convective storm, local storm
Hydrological events: Flood, mass movement
Climatological events: Extreme temperature, drought, forest fire*

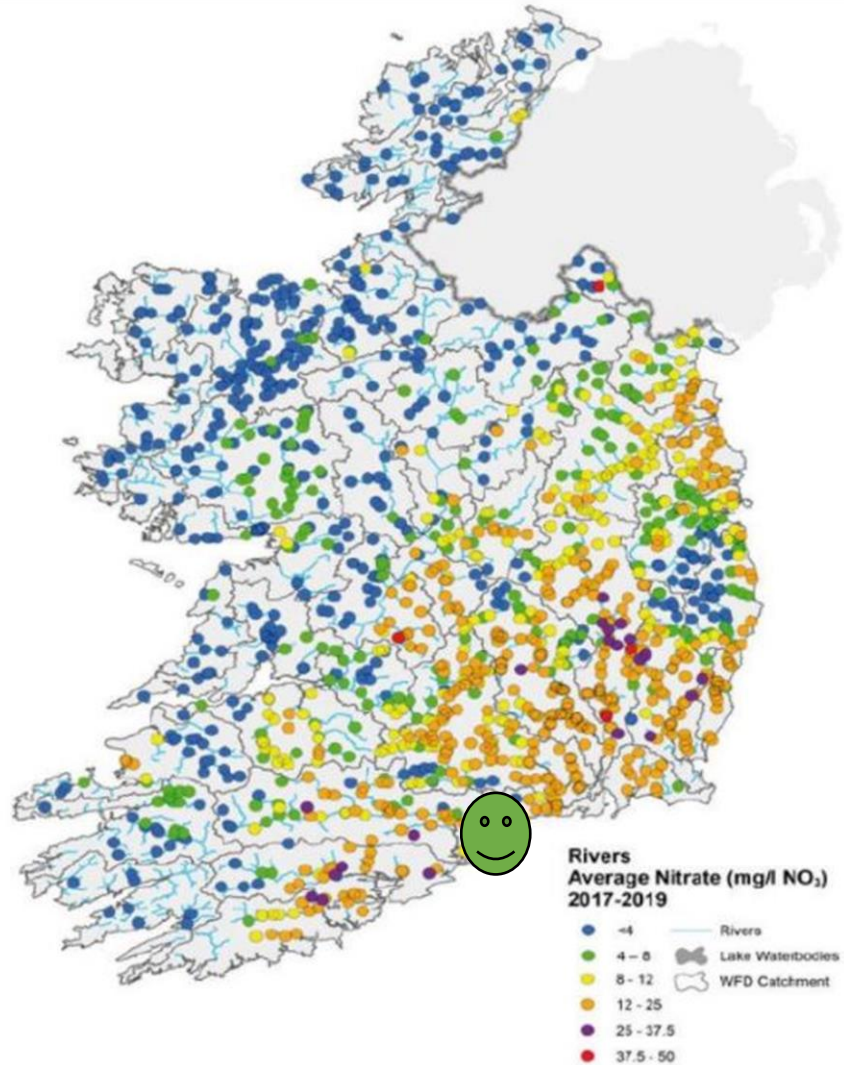
Source: © 2017 Münchener Rückversicherungs-Gesellschaft, Geo Risks Research, NatCatService (January 2017)

June 2021 EPA Report

“... an analysis to identify the catchments where nitrogen concentrations are too high to support healthy aquatic ecosystems...”

“The main sources of nitrogen in Irish catchments are from agriculture and urban waste water.....”

“...in the predominantly rural catchments, more than 85% of the sources of nitrogen in the catchment are from agriculture”



River nitrogen
concentrations

KPIs



Farmer	
Cows/Labour unit	129
Ave hrs worked/wk	38
Grass Grown/Ha	11.7t
Cost/kgMS	€ 3.23 TARGET €3.00
Milk Price/KgMS	€ 4.24

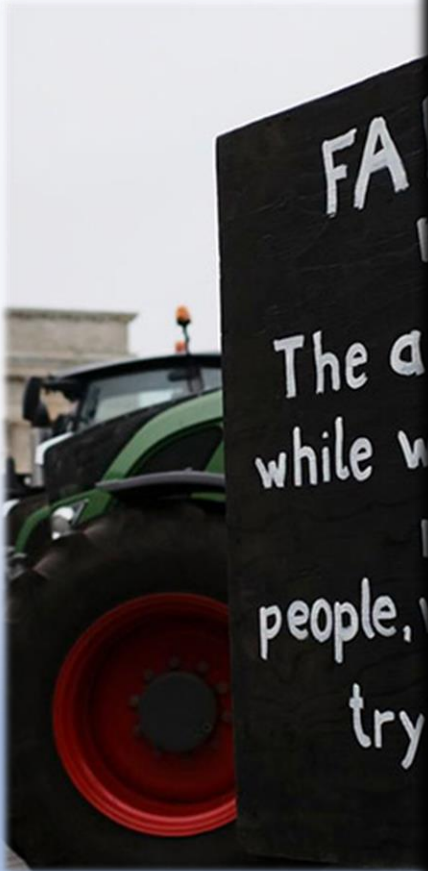


Cows	
EBI	179 (Top 3%)
Milk Solids sold per cow	438kgMS/cow TARGET 450kgMS
Fat/Protein	5.4% 4.15%
6 week calving rate	89%
Calving Interval	364 days
Empty Rate	7%



Environment	
Habitat cover	8% TARGET >Quality
Watercourse	1km
Hedgerows	12.25km
N Surplus	176kg/Ha TARGET 110kg
Clover/ Multi Species	13% + 25% overseeded

ECONOMY.....VS.....ENVIRONMENT



Clover



Table 3: Sward and milk solids production of cows grazing clover and grass or grass-only swards (2014-2016)

	Grass + clover	Grass only
Sward production		
Annual dry matter yield (T DM/ha)	17.0	15.5
Clover content (%)	26.0	-
Pasture disappearance (kg DM/cow/day)	16.5	15.5
Milk production		
Milk solids yield (kg/cow)	486	428
Fat % /protein %	4.63 / 3.73	4.65 / 3.76
Lactating liveweight (kg/cow)	507	499



Multi-Species Swards

- The next generation of pasture
- Watch this space!



- Pyrennial Rye Grass
- Red Clover
- White Clover
- Timothy
- Meadow Fescue
- Chicory
- Plantain



Hedgerows/Field Margins

- Multi-functional
- Barriers and shelter for stock
- Intercepting runoff
- Water retention
- Habitat
- Carbon storage
- CAP payments



Take Home Points

- Increased risks in farming due to climate change
- Agricultural impact on water quality & GHG emissions
- Win-win scenarios targeted, can be farm specific
- Cost reduction without impacting profitability = ↑↑RESILIENCE
- Be open, learn from research/other farmers/experimentation
- Sustainability means being profitable now AND into the future
=> we need multiple benchmarks of success

THANK YOU!