Hannah Dairy Research Foundation

# Quality in the Dairy Supplychain

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AHDB

# Focus for today

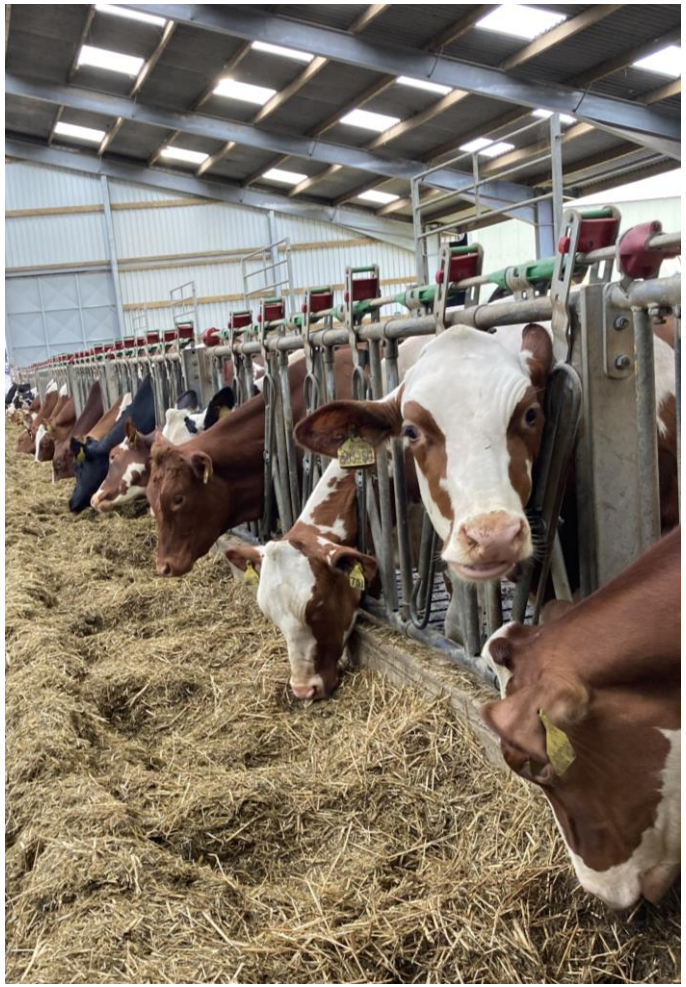
- Qualification
- Understanding quality - Perspective
- Farmer activity as individuals
- Measurement
- Minimising waste streams
- Environmental / Sustainable production
- Dairy RoadMap targets

# Experience

- Coming out of college wanting to be involved in any type of livestock farming bar-dairy
- Seven years dairy farming
- Twelve years in major milk processor, farm liaison, auditing, and retail support
- Five years in Retail
- Four years in AHDB supporting the wider industry
- Thirty-one years in Agriculture!

# Quotations on quality

- **Aristotle** once wrote “We are what we repeatedly do. Excellence then is not an act but a habit…so then if we repeatedly practice high standards and discipline, and it is the creation of those habits that enable us to defeat a determined and audacious enemy.”
- Inspection with the aim of finding the bad ones and throwing them out is too late, ineffective, and costly. Quality comes not from inspection but from improvement of the process.
  **William Edwards Deming**
- Quality means doing it right when no one is looking
  **Henry Ford**



# Quality at farm level

- Farmer activity as individuals, influences the whole product quality throughout the dairy supplychain
  - Milk product quality
  - Reputational quality
  - **Sustainable quality at farm level**

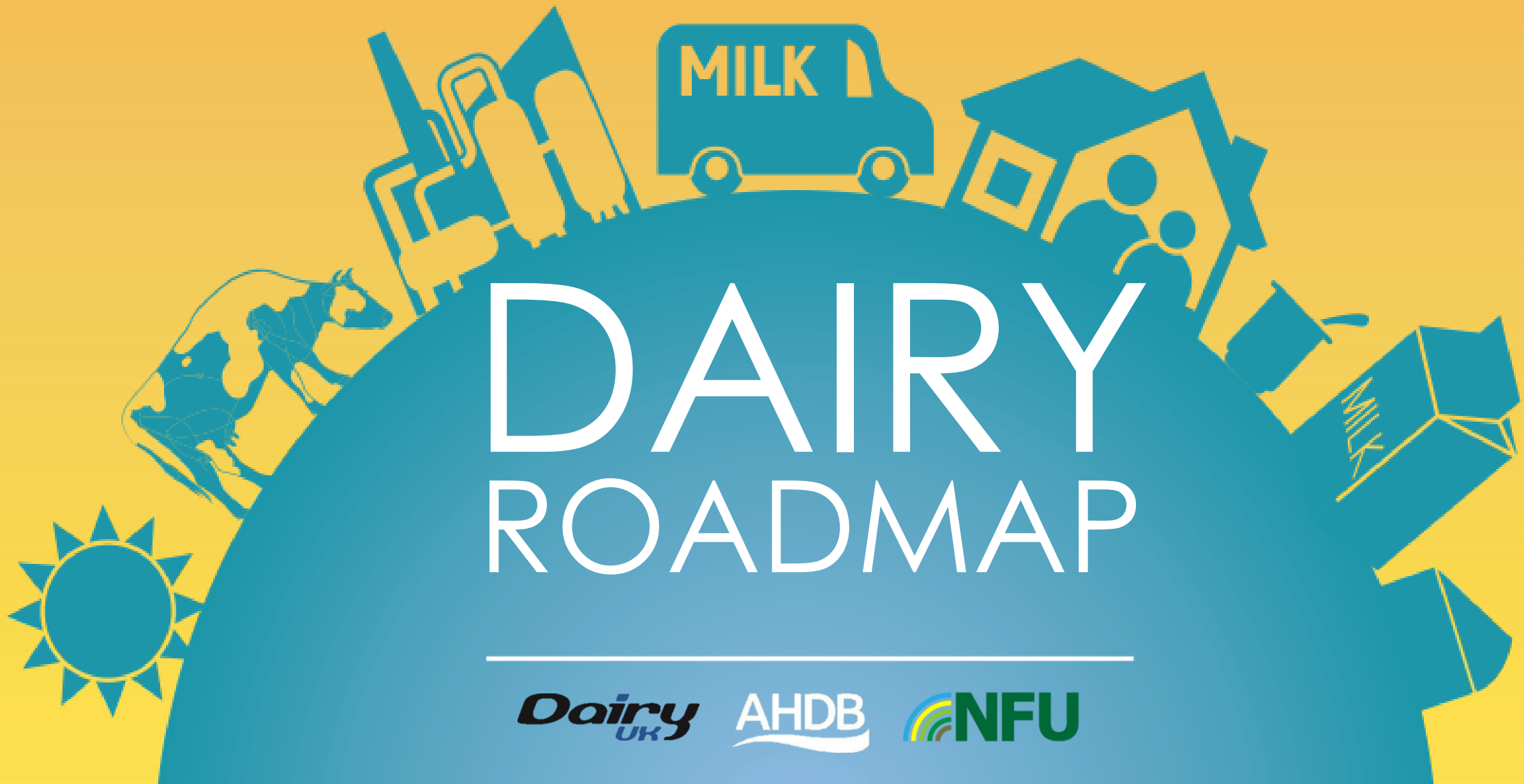
# Quality at farm level

- Farmer activity as individuals;
- Measure to manage
- Characteristics…
  - Comparable Farm Profit (CFP)
  - Benchmarking vet / Consultancy groups
  - Discussion Groups / Strategic Dairy Farms
  - Webinars / Podcast / Study tours

# Farm influenced by supplychain expectations

- Activity at group level, processors, retail aligned, dairy industry
  - Milk Recording organisations NMR / CIS / QMMS
  - Red Tractor standards – 365 day compliance
  - Dairy RoadMap voluntary targets set since 2008.

- Processor and Retail group standards
  - Calf health & welfare
  - Requirements above RT Standards – USPs
  - Environmental standards




# DAIRY ROADMAP

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UK Dairy Roadmap

# Current Targets - Farmers

**2015 Dairy Farmer Targets**

| | |
|---|---|
| 4 | 10-15% of dairy farmers investigating and/or implementing at least one form of renewable energy. |
| 5 | 50% of dairy farmers implementing new developments and/or technologies to reduce emissions from agriculture. |
| 7 | Dairy farmers encouraged to calculate carbon footprints and implement carbon reduction plans. |

**2020 Dairy Farmer Targets**

| | |
|---|---|
| 1 | 30% reduction in GHG emissions from dairy farms between 1990 and 2020. |
| 4 | 40% of energy used on dairy farms is from renewable sources. |

**2025 Dairy Farmer Targets**

| | |
|---|---|
| 1 | 90% of dairy farmers implementing technologies/practices to reduce emissions from agriculture. |
| 2 | 85% of all farmers using expert advice to optimise feed plans, which is directly linked to reduced emissions. |

There are also additional targets within the Dairy Roadmap Climate Ambition:

- All farmers engaged with carbon foot-printing by June 2023.
- Net zero $CO_2$ emissions by 2050.
- Sustained decline in NO and $CH_4$ emissions.
- Eliminate F-gases from dairy supply chain where possible.

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UK Dairy Roadmap

# Target Review – Climate Change

END GOAL: Limit global warming to 1.5°C. Zero contribution from the dairy sector towards global warming by 2050.

UK Dairy Roadmap

# Target Review – Water

END GOAL: No serious pollution incidents, compliance with Farming Rules for Water, sustainable water usage and best treatment/use of wastewater including reuse where possible.

# Target Review – Climate Change

END GOAL: Limit global warming to 1.5°C. Zero contribution from the dairy sector towards global warming by 2050.

**New Targets**

- Discuss your carbon footprint results with an advisor and develop a plan in line with at least 3% reduction in emission intensity (kg $CO_2e$/kg FPCM) per year until 2030, with a 2023 baseline. ***This may be revised as more data becomes available.***
- Share carbon footprint information with the Dairy Roadmap by 2024.
- Undertake carbon footprint calculations at least every 3 years (ideally annually).
- Share renewable energy data with the Dairy Roadmap by 2025.
- 50% renewable electricity usage by 2030 (home produced and renewable tariffs).
- 100% renewable electricity by 2035.
- All farmers to undertake actions which help improve data on farm efficiency, animal health and welfare by 2030, using systems such as milk recording, genetic testing and bulk milk sampling.

UK Dairy Roadmap

# Target Review – Waste & Recycling

END GOAL: All non-natural farm waste to be reused or recycled, with zero waste to landfill.

UK Dairy Roadmap

# Target Review – Soils

END GOAL: Farmers know and actively manage their soils, resulting in increased soil organic matter content, good NPK balance and living roots and ground cover whenever possible.

UK Dairy Roadmap

# Target Review – Biodiversity

END GOAL: Improve biodiversity on dairy farms.

UK Dairy Roadmap

# Target Review – Air Quality

END GOAL: Minimise emissions, dust and secondary particulates resulting from agricultural activities to reduce wider environmental and human health impacts.

UK Dairy Roadmap

# Summary of activity needed

- Farmers adopting and engaging with current and new technology that can support their businesses to thrive, reduce waste while displaying the characteristics of high performing farms.
- Industry stakeholders support helping farmers with advice, technology and opportunity to focus on farms reducing waste of all types including effort, product and inefficiency.
- Dairy Industry continuing to work together as a supply chain in order to share responsibility for quality products in our “consumers eyes” and in their baskets and on their plates.

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# AHDB at AgriScot


**Stand location**

Our AHDB Stand can be found in the Highland Hall, Stand number 100


# Appendix

- Targets detail

UK Dairy Roadmap

# Target Review – Water

END GOAL: No serious pollution incidents, compliance with Farming Rules for Water, sustainable water usage and best treatment/use of wastewater including reuse where possible.

**New Targets**

- Zero serious pollution incidents per year by 2030.
- All dairy farmers to follow Best Practice for wastewater by 2026 (expect 50% in 2024, 75% in 2025, 100% by 2026).
- Put in place systems to evaluate water usage by 2025 – this data will be used to set targets for water efficiency improvements.
- Processors to assess water risk in their supply chains by 2024. Engage with catchment level projects in high-risk sourcing areas. Monitor catchment status, reaching sustainable status in at least 50% of sourcing areas by 2030.

**Proposed Further Targets**

- Add targets for diffuse pollution incidents – EA data can be used to determine reasonable targets.

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UK Dairy Roadmap

# Target Review – Waste & Recycling

END GOAL: All non-natural farm waste to be reused or recycled, with zero waste to landfill.

**New Targets**

- 100% of non-natural waste is recycled or recovered as standard by 2030.

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UK Dairy Roadmap

# Target Review – Soils

END GOAL: Farmers know and actively manage their soils, resulting in increased soil organic matter content, good NPK balance and living roots and ground cover whenever possible.

New Targets

- Measure NPK and pH every 2 years and soil organic matter at least every 5 years from 2024.
- Assess NPK balance at least every 2 years.
- Develop and follow a nutrient management plan, with evidence of improvement.
- Test slurry regularly and apply according to soil requirements where possible.
- Share nitrogen efficiency data with the Dairy Roadmap by 2027.

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UK Dairy Roadmap

# Target Review – Biodiversity

## END GOAL: Improve biodiversity on dairy farms.

**New Targets**

- All farmers engaged with Dairy Roadmap biodiversity strategy by 2030.
- Monitor biodiversity on at least 50% of UK dairy farms by 2030.
- Share evidence of continuous improvement to on-farm biodiversity, in line with government targets to increase wildlife populations by at least 10% by 2042 (using a 2022 baseline; this legal target currently applies to England only).
- All palm and soy certified as deforestation and conversion free by 2025.

UK Dairy Roadmap

# Target Review – Air Quality

END GOAL: Minimise emissions, dust and secondary particulates resulting from agricultural activities to reduce wider environmental and human health impacts.

**New Targets**

- All new slurry systems must be designed to minimise emissions.
- Low emission slurry spreading techniques must be adopted by 2027 (for example by injection, trailing shoe, or trailing hose).

**The Clean Air Strategy for England will enforce legislation around manure storage and handling. Targets from the Clean Air Strategy will be incorporated within the Dairy Roadmap.**

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