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The Ethical Dairy: Promoting Soil Health with Organic Dairying

About David Finlay's dairy farm

David Finlay's dairy farm in Castle Douglas, Scotland, is a trailblazer in regenerative agriculture and animal welfare. Known as The Ethical Dairy, the farm has adopted an agroecological and organic approach that supports environmental regeneration, animal wellbeing, and climate resilience.

By removing chemicals and implementing a closed-loop system, the farm has achieved improved soil health, increased productivity, and greater biodiversity — offering a compelling model for the future of dairying.



Challenge: Eliminating Chemicals While Maintaining Productivity

The central challenge faced by The Ethical Dairy was to remove chemical sprays and synthetic fertilisers from its operations. This shift aimed to both reduce input costs and promote long-term soil health — all without compromising milk yields or farm viability.



THE SOLUTION

David Finlay's farm underwent a full transition to organic agriculture, eliminating fertilisers and pesticides. Key innovations include:

- **Agroecological Farming System:** Rooted in ecological principles and organic certification.
- **Cow-Calf Forage-Based System:** Calves stay with their mothers, encouraging natural suckling and enhancing milk yield.
- **Closed-Loop Nutrient Cycle:** An anaerobic digester processes waste silage and slurry into digestate, used as a natural fertiliser and soil conditioner.
- **Chemical-Free Soil Management:** Enhances biodiversity and carbon sequestration while protecting water quality.

IMPACT AND RESULTS

The results of this transition are both impressive and measurable:

- **BMilk Yield:** Increased by 25%, from 4,000 to 6,000 litres per cow.
- **Animal Welfare:** Low-stress environment has led to calmer, healthier animals that mature earlier.
- **Biodiversity Gains:**
 - Plant biodiversity up by 50%
 - Soil organic matter increased, with 5 tonnes of carbon sequestered per hectare per year
 - Improved water infiltration rates
- **Economic Resilience:** No reliance on external feed or fertiliser = insulation from price volatility.

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