

Bioregional Weaving Lab

Workshop 2 report

(Deliverable 4.2.)



Dairy Deep Demo

06 Dec 2023

10:30am - 3:30pm

Location: Copper Coast Visitor Centre, Bunmahon, Waterford

Facilitators: Sarah Prosser, Pieter Ploeg, Ali Crighton

Please note:

- This workshop report captures only one kind of insight as part of a longer and more holistic process and does not reflect final conclusions
- It is not for further distribution
- Stakeholders involved have not agreed to being contacted beyond the WP4 lead partner (BWL) at the moment



Introduction

This report is an account of the second workshop held as part of the DAFM/EIT Climate KIC partnership 'The Ireland Deep Demonstration Project for Sustainable Agriculture', in particular Workstream 4, led by BWL Waterford, part of Flagship 6 looking at the future of dairy.

This workshop follows in-person and online visits and conversations with key stakeholders in the dairy system in the Waterford bioregion, as well as the first workshop, held on October 12th 2023. The stakeholders include both farmers and non-farmers. Many are dairy farmers working with approaches that work 'with nature', for example organic, regenerative, no-chemicals or other approaches that are not the dominant and conventional 'extractive' farming practices seen in most of the dairy sector today. Others include more conventional, intensive dairy farmers, non-dairy farmers, and representatives of organisations in the ecosystems around dairy farming.

Aims of workshop:

- Re-visiting the Four Impact Pathways which emerged from previous collective work and conversations
- Co-visioning a 'sustainable' future for dairy

Workshop process



Participants & Outline

Session 1: deep dive discussions into the Impact Pathways, for iteration and development

Session 2: collective visioning using the Four Returns Framework

| Count | Name | Role |
|-------|-------------------|--|
| 1 | Farmer 1 | Dairy Farmer (Kilmacthomas) |
| 2 | Farmer 2 | Dairy Farmer (BRIDE Project, Farming with Nature) |
| 3 | Farmer 3 | Dairy & Beef Farmer (Kilmacthomas) |
| 4 | Farmer 4 | Dairy Farmer (South Wexford) |
| 5 | Farmer 5 | Dairy Farmer (East Cork) |
| 6 | Farmer 6 | Dairy Farmer (co-founder Irish Organic Milk Suppliers Co-op) |
| 7 | Farmer 7 | Dairy Farmer (Camphill) |
| 8 | Ex-farmer and IRL | Irish Rural Link rep (ex-dairy farmer) |
| 9 | Farmer 8 | Horse breeder (ex-dairy farmer) |
| 10 | Lawpro | LAWpro representative |
| 11 | Retired farmer 9 | Retired farmer (Waterford) |
| 12 | Retired farmer 10 | Retired farmer (Waterford) |
| 13 | Farmer 11 | Dairy Farmer & SETU academic professor |

Key Questions

- What defines and describes the working, sustainable / regenerative dairy system of the future?
- What systems changes do we need to get there via the four impact **pathways** identified in Workshop 1, and more widely?

Framing where we are: looking out to the holistic system from farm level



Session 1: Revisiting the emerging impact pathways

Session 1: Revisiting the emerging impact pathways

The Pathways which emerged from workshop 1 and subsequent collective work are listed below.

- 1. Education of farmers (and those around them) present and future**
- 2. Routes to market - (less 'middlemen' / shorter value chains)**
- 3. Holistic, diversification and bioregional approaches**
- 4. Food nutrition awareness and science**

Session 1 explored the desk-research conducted on 3 of the Pathways, followed by discussion on each



Pathway #1 desk research

EDUCATION

- 1. Introduction**
- 2. General Food Education Environment in Ireland**
 - 2.1 Primary School
 - 2.2 Secondary School
- 3. Formal Training in Food and Agriculture**
 - 3.1 Formal Training.
 - 3.2 Formal Training and Education in Agriculture
 - 3.3 Formal Training in Food Systems and Food Studies
- 4. Informal Training On-Farm**
 - 4.1 Trainings tied to farm payments, mandatory and voluntary.
 - 4.2 Compliance Requirements Linked to Milk Supply
 - 4.3 Trainings Available Through Cooperatives and Membership Organisations
- 5. Peer-led Learning through Practice**
- 6. Education examples from beyond Ireland**
 - 6.1 Diversity of Knowledge Offerings
 - 6.2 Diversity of How Knowledge is Made:
 - 6.2.1 Land and Leadership Initiative, Vermont, USA.
 - 6.2.2 Youth-led Rural & Farming Festival and Skill-share
 - 6.2.3 Farm Incubators



Pathway #2 desk research

ROUTES TO MARKET

1. Introduction

2. Context

2.1 Cooperatives

2.2 Irish Organic Dairy

3. Routes to Market Opportunities

3.1 Sell At the Farm-Gate

3.2 Sell Beyond the Farm Gate

3.3 Community-run networks

4. Routes to the Public Market

Case study: Irish Organic Milk Suppliers Co-operative (IOMS)

- Alan Hearne presented the process and current updates for the co-op
- ~70 members inc. those with small herds
- Formed ~2 years ago, now in need of market access in order to encourage more conversion to organic dairy
- Ultimately the aim is to procure processing/drying facilities for value-add products e.g., organic Irish butter
- Acknowledging high set-up costs but large returns in the future



Pathway #3 desk research

HOLISTIC, BIOREGION APPROACHES

1. **What is a Holistic Approach?**
2. **Opportunities Based on National Examples & Trends**
 - 2.1 Agroforestry
 - 2.2 Payment for Ecosystem Services
 - 2.2.1 Carbon Sequestration
 - 2.2.2 Biodiversity
 - 2.2.3 Nitrogen
 - 2.3 Farm Matching
 - 2.4 Eco-Tourism and Heritage
 - 2.5 Social Farming
 - 2.6 Governance
3. **Examples from Abroad**



Pathways discussion outcome

Participants discussed for each of the three pathways:

1. What works best?
2. What should be phased out?
3. What could be introduced?
4. **Visioning** if the pathway came to life in the future, what would it look like?



1. Education and communication ecosystem

The title of this Pathway was collectively adapted following discussion, in order to capture the importance of 'communication' between the farm and system of stakeholders surrounding it, for the purpose of changing awareness as well as providing input data for continuous iterative change.

1. *What works best?*

- **Demonstration:** "if they can see it they will remember it"
- Tangible, **interactive** experience
- Marketing/**story:** consumer is aware of environmental and health benefits of organic/regenerative/'natural' farming, "no chemicals" message is clear
- Making the story / word "sexy" e.g., 'organic', 'natural', 'farming with nature'
- Linking **schools** to on-farm education

1. *What should be phased out?*

- Education that promotes only monocultural, industrial business, with chemicals, pesticides, antibiotics, and hyperproduction

1. *What could be introduced?*

- More use of **social media** for educating consumers
- **Community** around food - getting people back on to the land/farm for experiential learning
- More ecology, biology and biodiversity focused education
- **Access** to land/facilities for students of agriculture, once they graduate
- Mandatory food/ag education in secondary schools

1. *Visioning if the pathway came to life in the future, what would it look like?*

- Young people can understand the connection between farming, food and **nutrition**, to make informed choices
- Food is accurately named and marketing is **not misleading**. (e.g. is ultra high-processed food really food?)
- Farmers are educated about **soil** in an experiential, hands-on way
- There is more **independence** in the national agricultural education/training providers
- People have **confidence** in cooking good quality raw foods, and ask themselves "is it organic" when choosing food

2. Routes to market - (less 'middlemen' / shorter value chains)

1. *What works best?*

- **Guaranteed** market for organics (e.g. public procurement and strategic export)
- Farmer and consumer owned **cooperative** supplying **local** markets via vending machines (as an early-stage) and independent retailers (e.g., Ardkeen grocers), as well as supermarkets (e.g., Supervalu), and milk powder to export markets (later-stage development)
- Better **distribution** systems e.g., door to door delivery of fresh milk

1. *What should be phased out?*

- **Dependence** on the facilities of large processing corporations / retailers, restrictive cooperative contracts and fluctuating prices
- Regenerative products only accessible to most **wealthy** consumers

1. *What could be introduced?*

- Bringing consumers into local co-operatives (e.g., IOMS) legally
- **Combining** products through food hubs

1. *Visioning if the pathway came to life in the future, what would it look like?*

- Natural Irish milk designation, an ethical **export** in terms of foreign policy
- Bioregional PGI status for uniqueness of product from the Waterford bioregion, featuring producer groups with consumers
- Local cooperatives that are community owned, led, or supported with non-farmer stakeholders involved
- **Exporting** 'more than' organic or 'organic +' milk powder and butter - also nationally
- Distributed access to dairy **integrated** with all food e.g., horticultural production
- Milk delivered directly from farms to schools
- Retail prices funnelled back into marketing and education

3. Holistic, bioregional farming

1. *What works best?*

- **Diverse** income streams
- **Symbiosis**: connection between dairy farm and ecosystem surrounding it e.g., local grain growers. Farm matching through partnerships and regionally.

1. *What should be phased out?*

- Linear, narrow approaches to farming
- Extractive farming

1. *What could be introduced?*

- Agri-food tourism
- Machine banks

1. *Visioning if the pathway came to life in the future, what would it look like?*

- **Children** are brought on to farms more
- Eco-**tourism** is thriving
- Alternative income sources that can combine naturally with dairy
- Land is your platform, you can stack **enterprises** on it
- Farm **partnerships** - bilateral and in regional alliances
- Unexpected outcomes of the market e.g., horse box coffee-esque developments
- The **Bioregional** approach creating significant value indirectly (not income generating)
- **Meitheal** culture, sharing equipment and facilities. independence and quality

Session 1 analysis

The diagram (right) shows the role of the Pathways (arrow #2) in the co-created **vision**. The Pathways are topics that stakeholders have defined as most likely to bring about change, they are the concrete interventions that will lead to the 4 Returns which underpin the framework for the future of sustainable dairy.

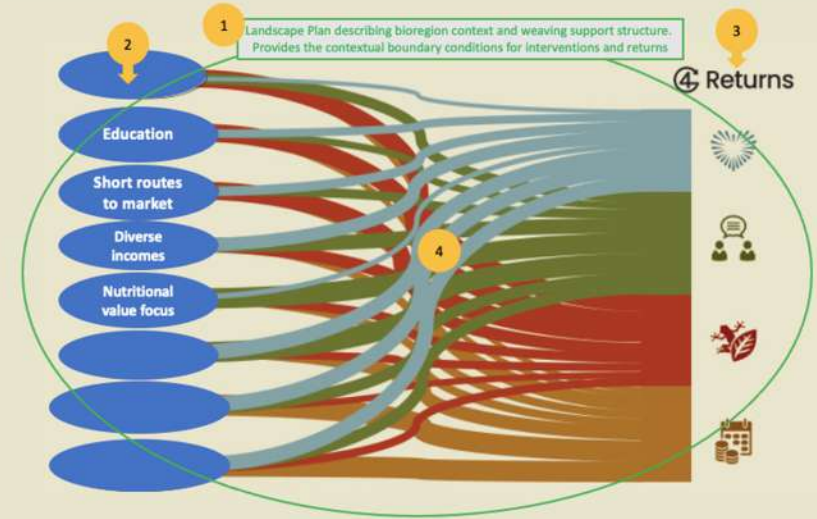
Pathway 1: Education and communication eco-system

Stakeholders co-visualised an eco-system of education and communication wherein the average person can understand the meaning behind terms like “organic”, “regenerative”, and the importance of the practices of farming on the nutritional implications of the food that they consume.

Learning is tangible, experiential and interactive, and begins at an early age with school children visiting on-farm, contributing to the creation of a community around food production and consumption.

Farmers learn together, through practice and demonstration and the education/training given to farmers is run by independent individuals/organisations, without conflicts of interest.

Ultimately, **food system literacy is normalised across and within all groups of society**. We have moved away from a linear and narrow understanding of farming as simply an economic endeavour, towards an education system that acknowledges the bedrock nature of human food systems for the health of all life on earth.



In concrete, actionable terms, two key elements emerged:

1. More **farm-visits** (with local community, and among farmers themselves), creating a decentralised, local, independent, context-specific, experiential ecosystem of learning around dairy production and consumption
2. **Story-telling/marketing:** communications/media as a tool for amplifying the understanding/story of “organic”/“regenerative”/“sustainable dairy farming”

Session 1 analysis

Pathway 2: Routes to Market

Stakeholders co-visioned an ecosystem of market access for dairy farmers through routes which are more decentralised, local, independent, shorter, and co-owned with local community.

Dairy that is produced in less conventional, more “regenerative/organic” ways, is not prohibitively more expensive, and is distributed in conjunction with other food e.g., local grains/meat.

On the export market, Irish dairy farmers can be rewarded for farming in more ‘sustainable’ ways, through a designation which is fair, accurate and financially beneficial.

In concrete, actionable terms, one key element emerged:

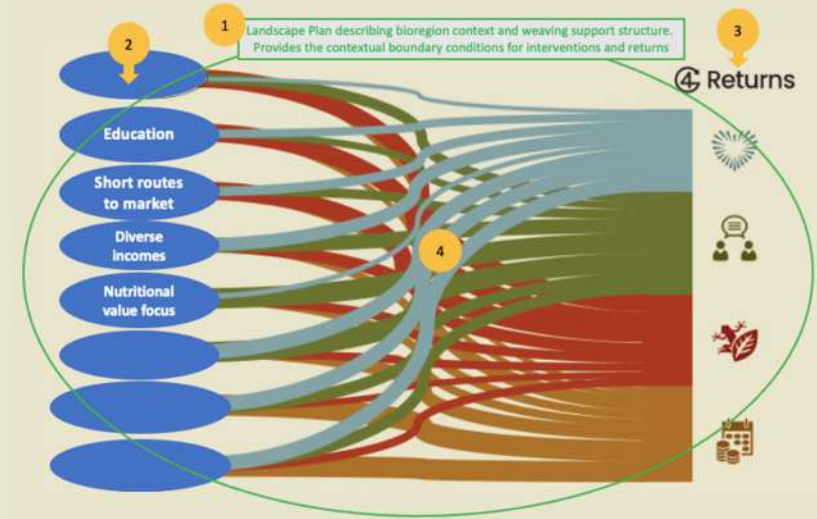
1. The **IOMS** cooperative has already made significant steps towards operation, with focus now being on procurement of processing facilities. Combined input could help move the coop to the next stage. In future, more localised co-owned (with community) cooperatives could be feeding into the national IOMS, with the aim of exporting organic Irish milk powder / butter.

Pathway 3: Holistic, bioregional approaches

Stakeholders co-visioned an ecosystem of dairy farming wherein diverse income streams provide economic resilience and sufficiency to farmers, and farming is embedded within a broader off-farm context, through partnerships with other local farms for the purpose of sharing/trading. Farming is not seen as merely extractive, and plays a role in its bioregion in the context of delivering on the 4 Returns.

In concrete, actionable terms, one key element emerged:

1. Funding of **bioregional weaving labs** for the emergence and sustainability of holistic, bioregional approaches to dairy farming which are woven into the broader ecosystems surrounding the farm.



Session 2: collective visioning

Session 2: co-visioning

1. Quantitative visioning:

- Donal Sheehan presented the **Sustainable Farming Index (SFI)**, a metric system intended to measure dairy farmers across all three pillars of sustainability; economic, environmental and social (which also includes inspiration as a dimension)
- The index is holistic and includes aspects often disregarded from conventional farming indices e.g., animal welfare
- It is valuable to farmers for the purpose of education, awareness, and tracking their farming overtime and it redefines what it means to be a “good” farmer.
- The Impact Pathways previously presented link to the SFI outcomes and the outcomes feed back to the Pathways
- The energy of all participating farmers listening to the SFI framework for the first time was tangible - this was something they could relate to.
- There was an appetite for testing this innovation.
- **It provides a tool for quantitatively visioning what is or could be the ‘new normal’ for sustainable dairy**

1. Qualitative visioning:

- Participants were invited to record their visions for the future of dairy farming across all 4 Returns (social, natural, inspirational and financial). They began the work alone, then combined into pairs, which then combined into groups. At each successive 'joining together', participants adapted or evolved their visions to incorporate each other's work.



Return of Inspiration

Giving people hope and a sense
of purpose



Social return

Bringing back jobs, education
and social connections



Natural return

Restoring biodiversity and soils
for healthy and resilient
landscapes



Financial return

Realising long-term sustainable
income for communities

Qualitative co-visioning outcomes

1. Return of Inspiration

- Inspire dairy consumers to be more **interactive** with dairy producers
- **Pride** in your contribution to society - **nourishment** by food produced well (high quality)
- Future proof farming that meets the needs of the future and facilitates a comfortable way of life and a great place to bring up a family
- Happy healthy cows and farmers
- The energy to plan, create, **hope** for the future and to imagine changes and improvements
- Amplified **provenance** of dairy: rewarding local food
- **Youth** involved - relevant tech/innov appreciated e.g., social media
- Governance standard: Govt policy goes where **we** want it to go - not being landed on us
- **Land stewardship: being a custodian/caretaker of the farmland**
- **Lifestyle** hero - dairy farmers experience community, joy, acceptance, and their work is contentful, fulfilling, rewarding, groundbreaking, balanced and skill-building

2. Return of Social Capital

- Dairying contributes positively to the local community (clean water, employment, biodiversity etc)
- Sharing good food, integration with local consumers, knowing your customers, creating strong relationship between consumer and producer
- Outreach to our intergenerational community, including the experiential education of children, farmer is a participant in their community, has the **time** and **energy** to do so, contributing to social and community activities
- Quality of life is high, farmers have a life outside the farm gate
- Farmer can welcome visitors without inconvenience
- Beneficial, fair, inclusive, rewarding, family-friendly work
- **Work life balance and community participation**
- Farmers feel pride and excitement, and are respected for their knowledge, and wisdom

Qualitative co-visioning outcomes

3. Return of Natural Capital

- The energy to **restore** + trust nature and to farm in good and bad weather/ground conditions in safety
- Restoring, regenerating, appreciating, protecting and valuing nature
- **Space for nature** without penalty, value of nature / biodiversity is given a figure, priced in - soil at the foundation of all farming choices
- Honest farming, improving practices to enhance **biodiversity** (planting trees, woodland, hedges)
- **Chemical free** farming, care of water courses, best use of animals
- **Working with nature** + producing a good product, **diversity**, small scale, local production, reducing food miles
- **Stewardship: protection** not degradation - chemical free, clean water - Leave the farm and the countryside in a better place than you got it
- Dairy farming contributes positively to **carbon cycling**

4. Return of Financial Capital

- The economic energy to invest and enjoy the fruits of labour
- Financial viability of a small farm - the **market** rewards good practice / environmental awareness
- Financial **independence** / healthy income from work that is balanced, fair, stress-free, respected and dignified
- **Circular and fair:** reinvestment and diversification of income
- Less additives to producing milk, paid a fair price for nutritious product
- Independence, balanced, dependable, peace of mind, resilience
- **Value** for the consumer - direct link between the two
- Control and **freedom** for the farmer e.g., over what they do or don't buy

Session 2 synthesis: Report on co-created vision (D4.2.1)

The co-vision of the new normal for 'sustainable' dairy farming is such that:

Inspiration is returned through:

- Inter-generational community interaction around dairy farming
- The security, ability and energy to create, experiment and inspire
- Pride in the quality nourishment of dairy that is produced locally to people
- Farmers have fair influence on government policy and are respected as stewards of the land

Social Capital is returned through:

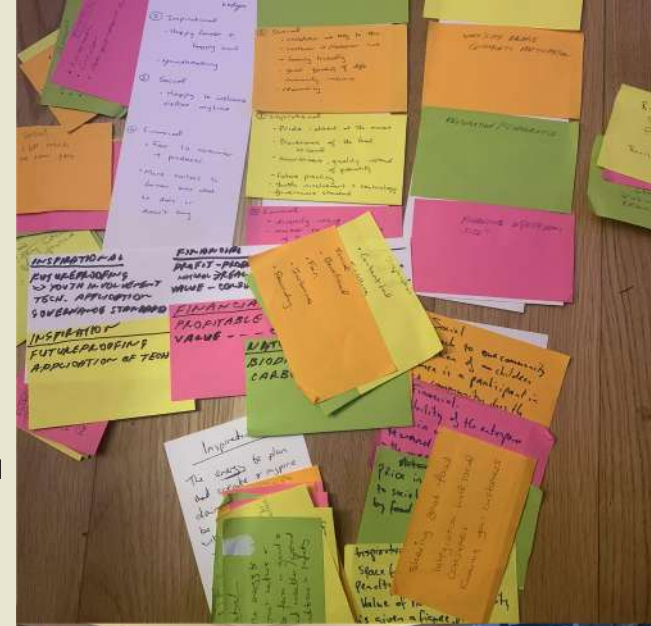
- Contribution and interaction with the local intergenerational community / consumers through social and educational processes
- A balanced lifestyle for dairy farmers that ensures the time and energy for socialising

Natural Capital is returned through:

- Protection and regeneration of biodiversity / landscapes in and around the dairy farm, which is rewarded by markets and society
- Dairy products that are nourishing for consumers and come from healthy livestock

Financial Capital is returned through:

- A fair, dignified, living wage which enables / rewards the farmer to experiment and invest in farming practices which are beneficial for human and ecosystem health.
- Independence, resilience, and diversity in income for dairy farmers



Feedback on the Flagship Vision Framework

FLAGSHIP OUTCOME

Transition to a 'new normal' for sustainable dairy contributing to absolute emission reduction at scale, increased carbon capture and co-benefits for the environment (water, soil and biodiversity) and communities

X farms converted to new normal leading to desired impact (TBD)

Outcomes of feedback:

Participants responded to the Flagship's vision for the future of sustainable dairy. This was presented as the 'outcome' of the Change Pathways of the Flagship. The purpose of this feedback is for the process of sense-checking / iteration of the vision and framework

Main points concluded:

- Participants noted that the 'flagship outcome' first mentions emissions reduction and carbon capture, both of which were not included in any of their own qualitative collective visioning work
- Participants sensed that the 'flagship outcome' can be "gamed" or "faked", except for what is in brackets, i.e. water, soil and biodiversity.
- They sensed that what is most real is what is in the brackets. The main outcome can be targeted for vested interests, increasing sales, and making the status quo appear more sustainable, without "grabbing the bull by the horns" and making the system truly sustainable across all 4Rs and for water, soil, biodiversity and communities.
- They see it as an industry approach which is top-down
- The participants proposed that the Flagship outcome should be in **reverse**: namely, systemic and mindset drivers for **water, soil, biodiversity and communities** will ultimately deliver on solving the symptoms of the problem (**emission reduction at scale**), yet this flagship outcome tries to solve the symptoms first.

Report on appetite for testing collective/specific innovations (D4.2.2)

Participants responded positively to the notion of continued engagement with the Deep Demonstration going forward.

There is appetite for collaborative effort particularly in contribution to:

- The Sustainable Farm Index (SFI) co-developed by Donal Sheehan and team (see slide 19)
- The Irish Organic Milk Suppliers (IOMS) co-operative, co-founded by Alan Hearne (see slide 10)
- Publicating all of this work being done through mainstream media channels to communicate to the public the 'good' in dairy farmers/farming.
- Continuing to work on a bioregional scale where farm partnerships and alliances with other stakeholders can be established, tested and implemented.

Implementation phase pilot group:

- In terms of the implementation phase of this Flagship, participants suggested the idea of a **pilot group of 20-30 farmers** testing the SFI with continuous discussion and feedback over the course of 2-3 years
 - The SFI would be groundbreaking as a tool for holistic management and rewarding of dairy farmers.
 - It is informative as a guiding and self-reflective tool for farmers in their decision-making, and tracking their farm over time.
 - Certain metrics in the Index could be linked to results-based payments, such as space for nature.
 - It is made by farmers for farmers - hence the excitement by farmers who can relate to it

Note: There would be a need for a wider index and diagnostic tool for monitoring returns at a landscape scale (currently being developed by Commonland), and by other thematic groups (being developed by other BWL concepts in the wider-than-dairy bioregional portfolio).

Report on key systems changes & mindset shifts (D4.2.2.)

The workshop and analysis revealed key systems changes needed and mindset shifts required:

- Changes to the **education and communication ecosystem** → particularly the need to have more experiential learning across all groups (farmer and not, young and old), which is delivered in a decentralised, localised way independent of commercial interest.
- The '**farm to fork**' **system** requires changes that bring consumers closer to producers, and reward local dairy production that creates benefits across the 4R, giving farmers greater independence, freedom and resilience.
- Changes to **consumer marketing** / communication ecosystem for a **mindset shift around food system awareness** → the stories that are told around food need to accurately reflect the realities of farming practices, capturing the interconnection of farming with social & inspiration outcomes, human & ecosystem health.
- Changes to **governance systems** are needed that facilitate / fund the emergence and impact of bioregional weaving labs, in line with the **mindset shift to a holistic understanding** of farming in a broader ecosystem outside of the farm.

Next steps



Ongoing: Feedback on this report

Send an email to ali@bwl.ie

January: Evolvment session

We will meet in January to reflect on the project as it nears the end of the activation phase, consider the outcomes, and co-design the next steps going forward.
Date and location TBC.

Continued action

The IOMS co-operative and the Sustainable Farm Index (SFI) both have a lot of inspiring momentum. We are all collectively working on how we can help take both forward.

Thank you to everyone for your input and for reading the report.

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