Climate-KIC

Co-funded by the European Union

Voices from the field:

An Irish perspective on capacities needed to transition to net-zero

15 MAY 2024
13:30 CET / 12:30 GMT+1
ONLINE

REGISTER

FARMEYE

Co-funded by the European Union

An Analysis of Capability and Capacity Needs of Stakeholders in the Transition to a Net-Zero and Resilient Land, Agri-Food System in Ireland

February 2024

FARMEYE

Climate-KIC

Co-funded by the European Union

REPORT

An analysis of capability and capacity needs of stakeholders in the transition to a net-zero and resilient land and agri-food system in Ireland

This research aims to map and analyse the capability (skills, knowledge and resources) and capacity needs (in terms of performance) of key stakeholder groups involved in Ireland's transition to a net-zero and sustainable land, agri-food system (with specific focus on EIT Climate-KIC's Deep Demonstration programme), resulting in the identification of barriers and potential opportunities for improved, scaled, or new formal and non-formal learning needs.

https://www.climate-kic.org/sustainablefoodireland/resources/

Background

EIT-Climate KIC and the Deep Demonstation:

The Deep Demonstration partnership between the Irish **Department of Agriculture, Food, and the Marine** and **EIT Climate-KIC**, Europe's largest climate innovation initiative, aims to accelerate the agri-food system's pathways to climate neutrality. EIT Climate-KIC is doing so by applying its 'Deep Demonstration' model of innovation to the entire agri-food and bio-based value chain, from soil to farm to fork to society. This involves working with stakeholders from both public and private sectors, including finance and education, as well as civil society, to develop and deploy coordinated innovation actions that work – in practice and at scale – and to obtain insights and lessons about this portfolio of solutions. **FARMEYE** is supporting this work through research support and technical expertise.

Introduction - Project Objectives

FARMEYE

Aim:

Support EIT Climate-KIC to deepen their knowledge of the overall capability and capacity building landscape and respective stakeholder needs in Ireland to inform future Deep Demonstration activities.

Objectives:

- What capability and capacity building needs should be addressed to ensure the success of the Deep Demonstration flagship roll out over the next 3 years?
- Which learning providers or experts are already doing work that aligns with the goals of each of the flagship areas?
- What are the barriers to scale up, or gaps that need to be filled?
- What recommendations will be made on the back of this research going forward?

Co-funded by the European Union

FARMEYE

DATA SOURCES AND COLLECTION:

Surveys

- Farmers = 87
- Agricultural Consultants = 15

Focus Groups

- Farmers = 2 (3 farmers per group)
- Agricultural Consultants = 6 Knowledge transfer experts / consultants

Interviews

- Agri Corporate Representatives = 6

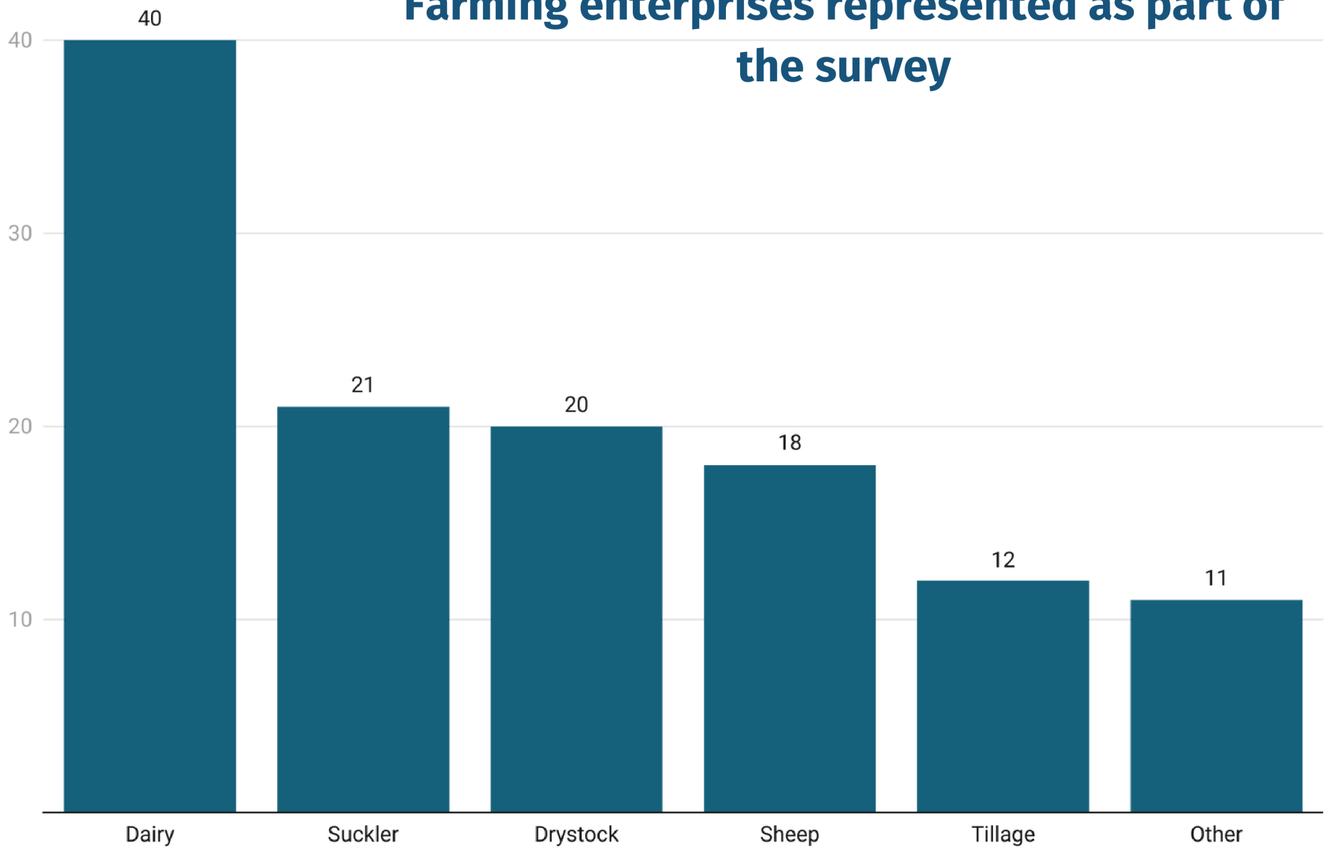
Learning Provider Database

- Online desk research

All data was collected in Oct/Nov of 2023

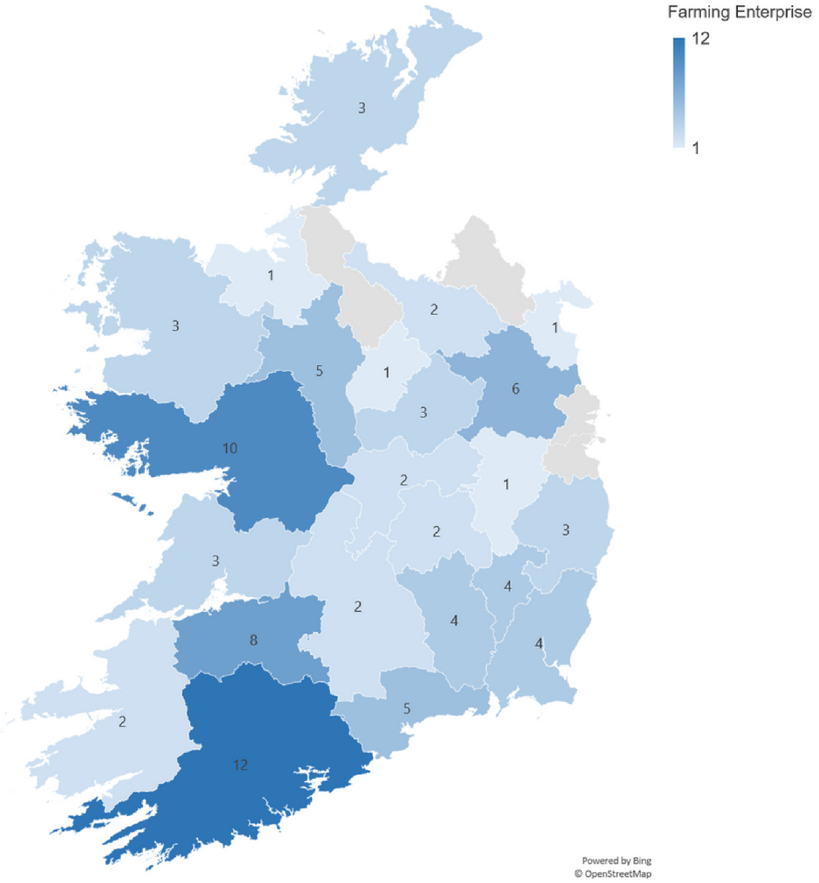
Farmer Responses

Farming enterprises represented as part of the survey



*A number of farmers that responded to this survey have multiple enterprise types, therefore the total number in the above graph will not equal the total number of survey respondents.

Geographic Representation



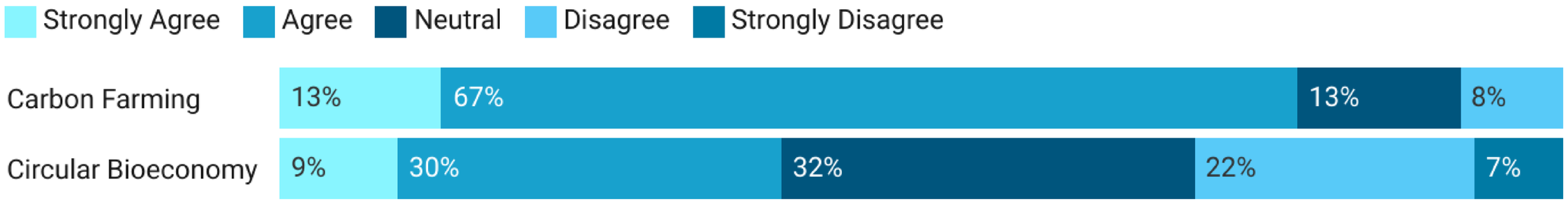
Farmer Demographics

*Farmers **were not randomly selected** and were contacted through FARMEYE's network, meaning there is likely a bias among this cohort towards more sustainable practices.

Farmer Survey Responses (n=87)

FARMEYE

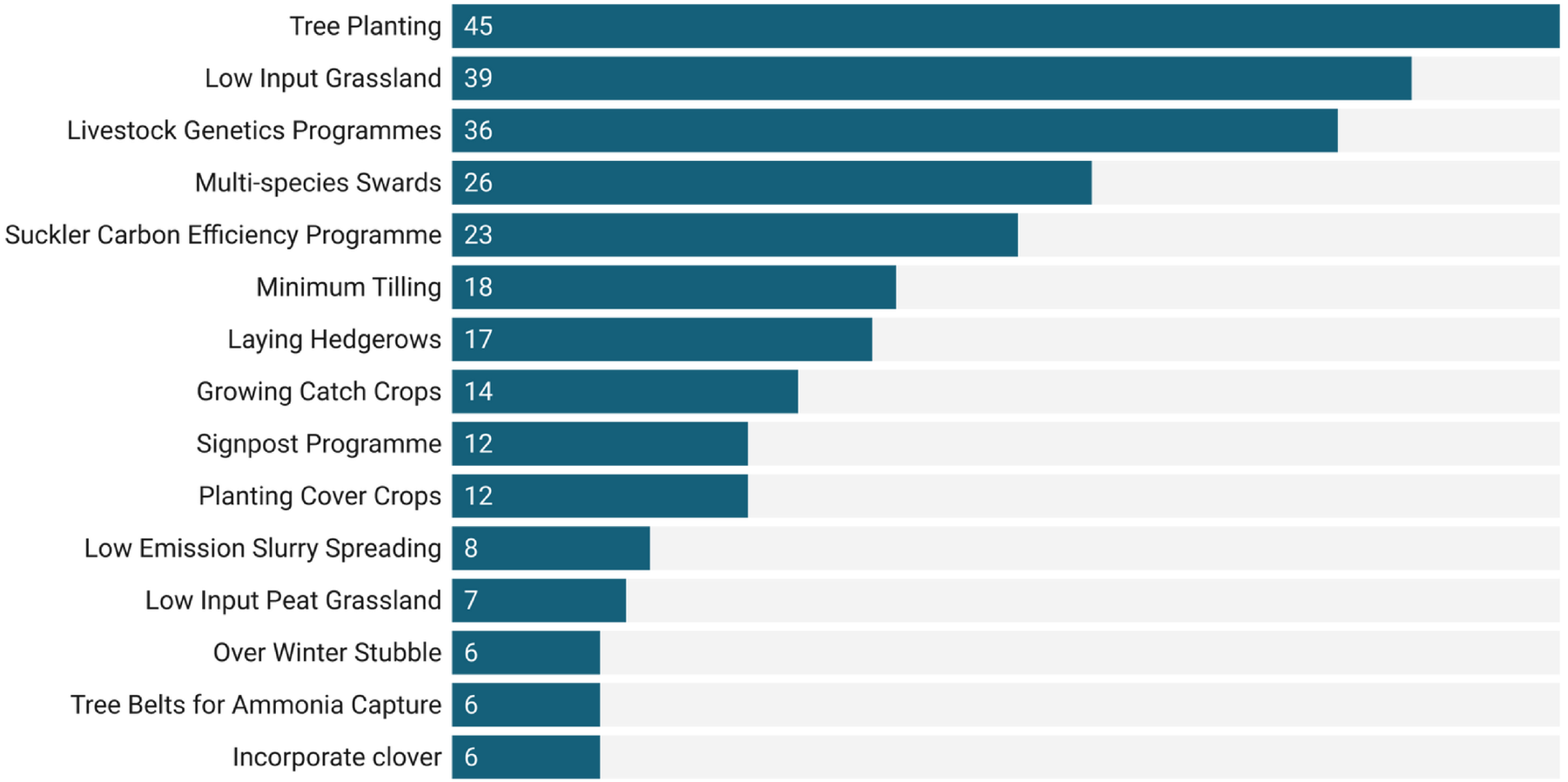
Self-reported understanding of terms “Carbon Farming” / “Circular Bio-economy”



Farmer Survey Responses (n=87)

FARMEYE

Self-reported carbon farming practices carried out by farmers



*Survey participants were able to select multiple sustainability measures; therefore, the total number in this graph will not equal the number of participants

Farmer Survey Responses (n=87)

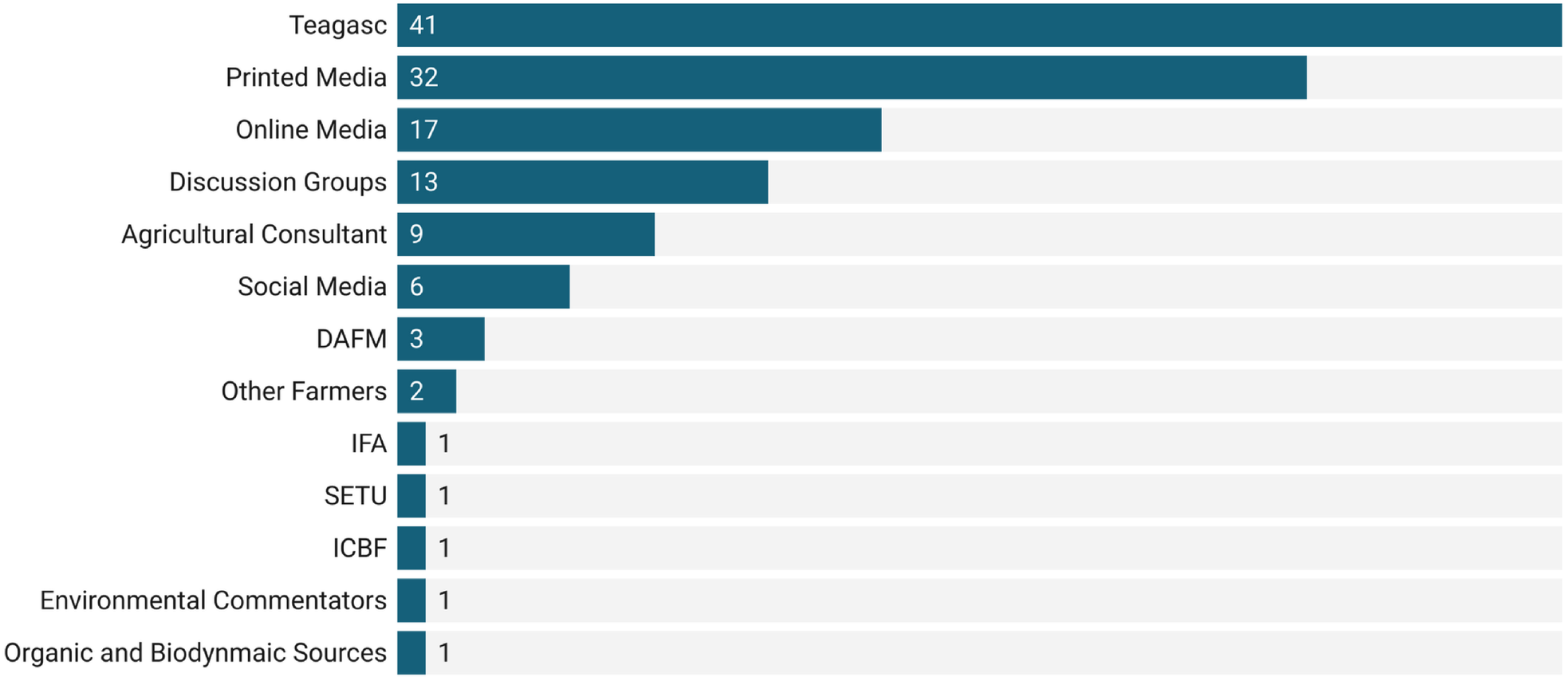
FARMEYE

Self-reported assessment on whether sustainability and environmental information was easily accessible

Farmer Survey Responses (n=87)

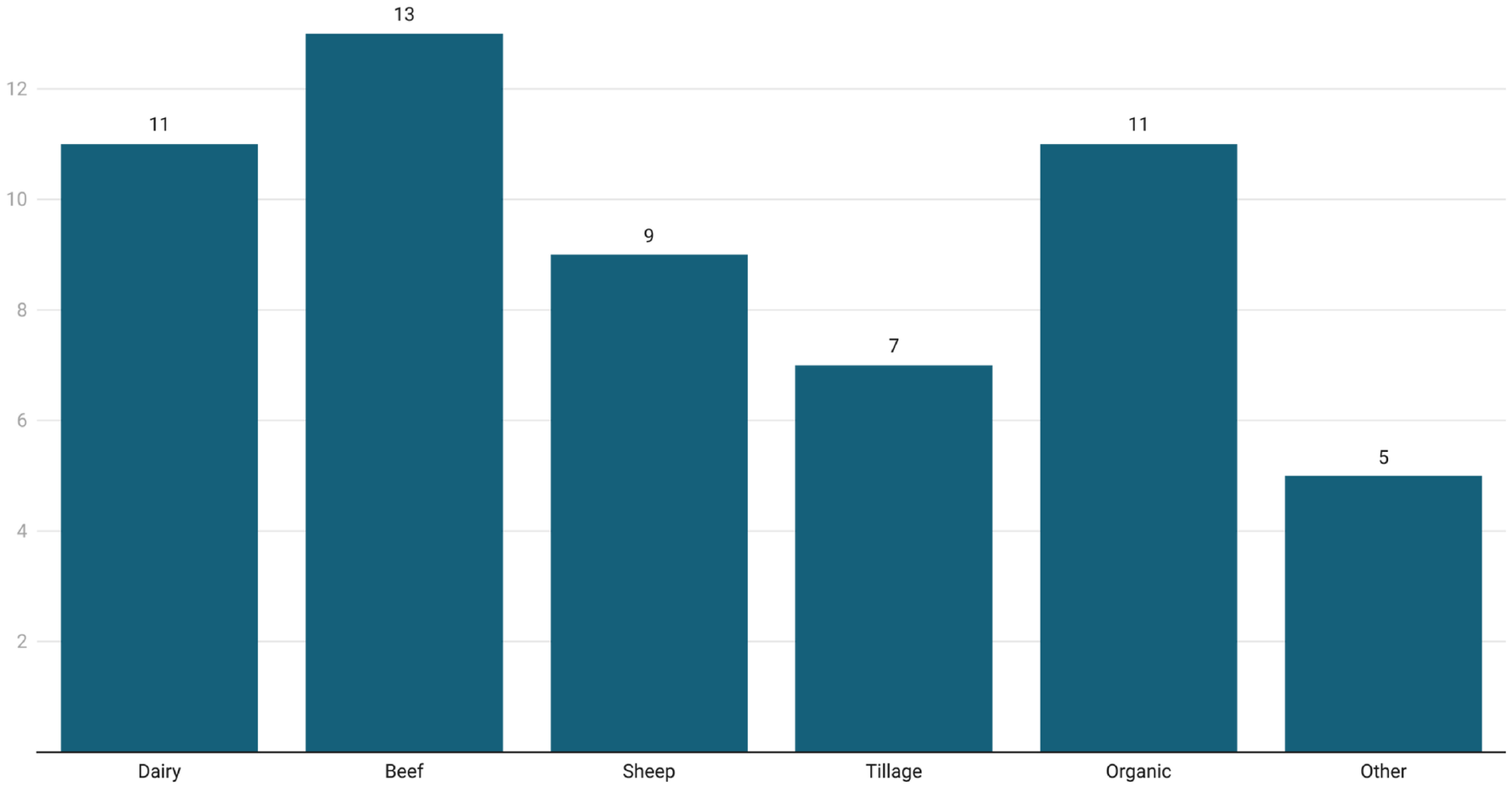
FARMEYE

Self-reported sources used by Farmers to find Information on sustainability and environmental impact



*Numbers in the chart represent how many times these information sources were mentioned in the survey

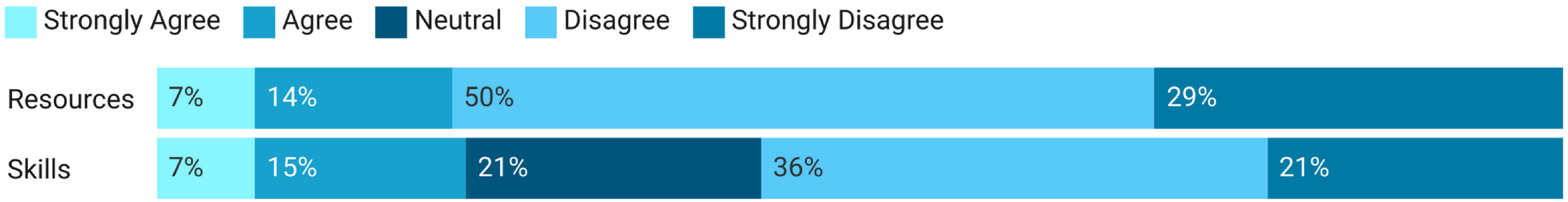
Agricultural Consultant Responses (n=15)



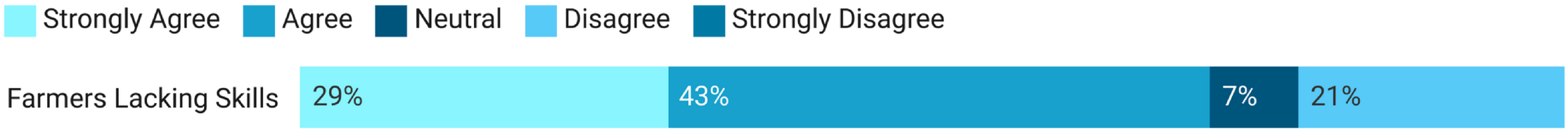
Farming enterprises that participating agriculture consultants advise

“Do you agree that you have access to adequate resources to teach you more about carbon farming, emissions reductions, and improving on farm sustainability measures?”

“Do you agree that you have the skills and knowledge to effectively baseline farms on key sustainability elements relevant to carbon farming?”



To what extent do you agree with the following statement?
"Many farmers lack adequate skills and knowledge to carry out effective sustainability practices on their farms."



Topics That Consultants Identified as Valuable for Further Learning

FARMEYE

- Carbon Emissions Calculations
- Full Carbon Accounting
- Water Usage and Quality
- Farm Hedgerows Quality
- Selling Carbon Credits
- Soiled Water and Slurry Production
- Forestry
- Solar and Dairy Efficiency
- Multi-Species Sward Inclusion
- Regenerative Farming
- Nutrient Recycling and Carbon Sequestration

Common Themes

Access to Technology and Tools

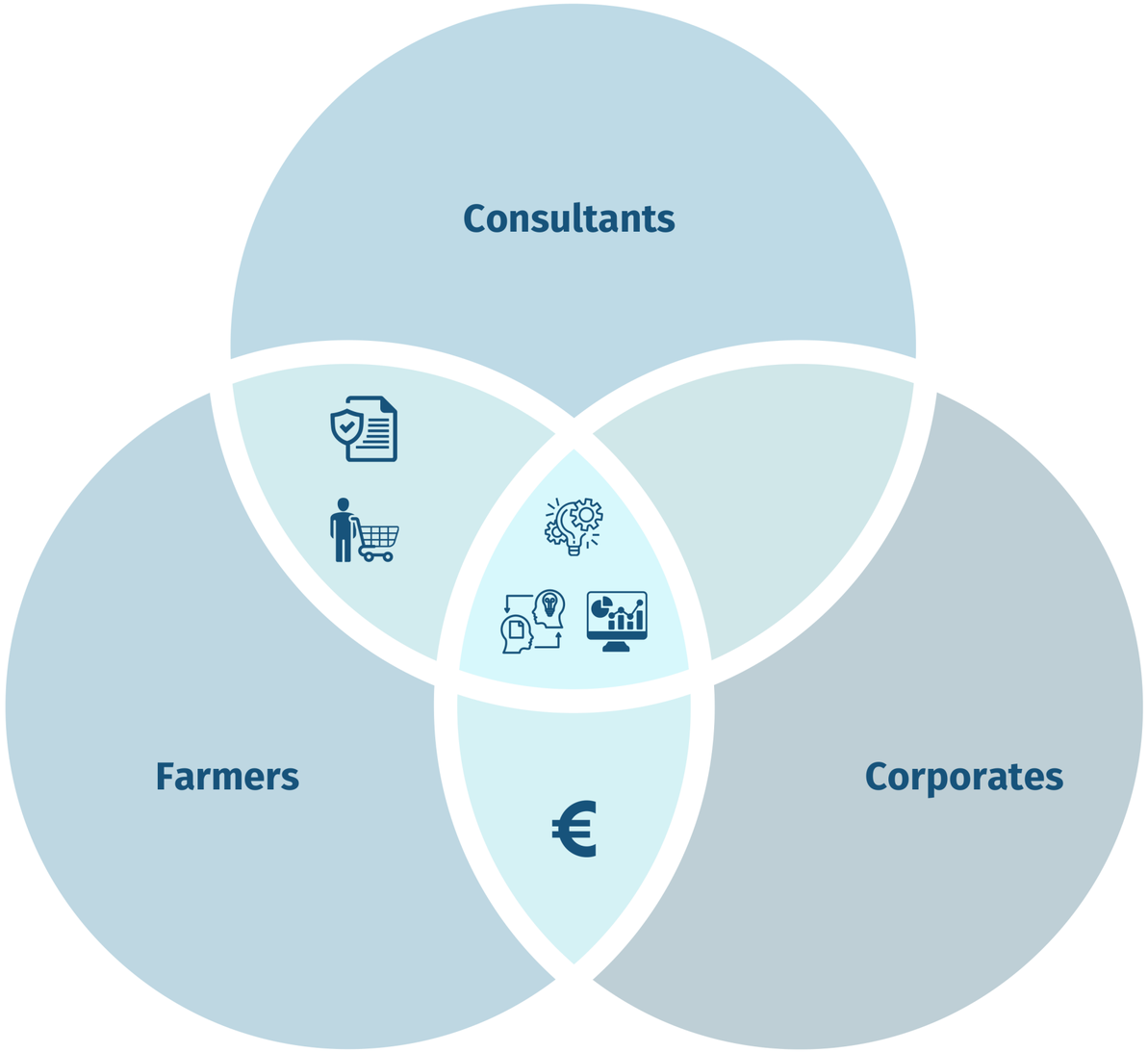
Data - Security, Management, Access & Verification

Incentives / Sustainability Bonuses

Knowledge Transfer - Demo Farms / National Hub / Access for all

Policy Change - Clarity & Consistency

Consumer /Retailer Engagement



Cohort Specific Needs

FARMEYE

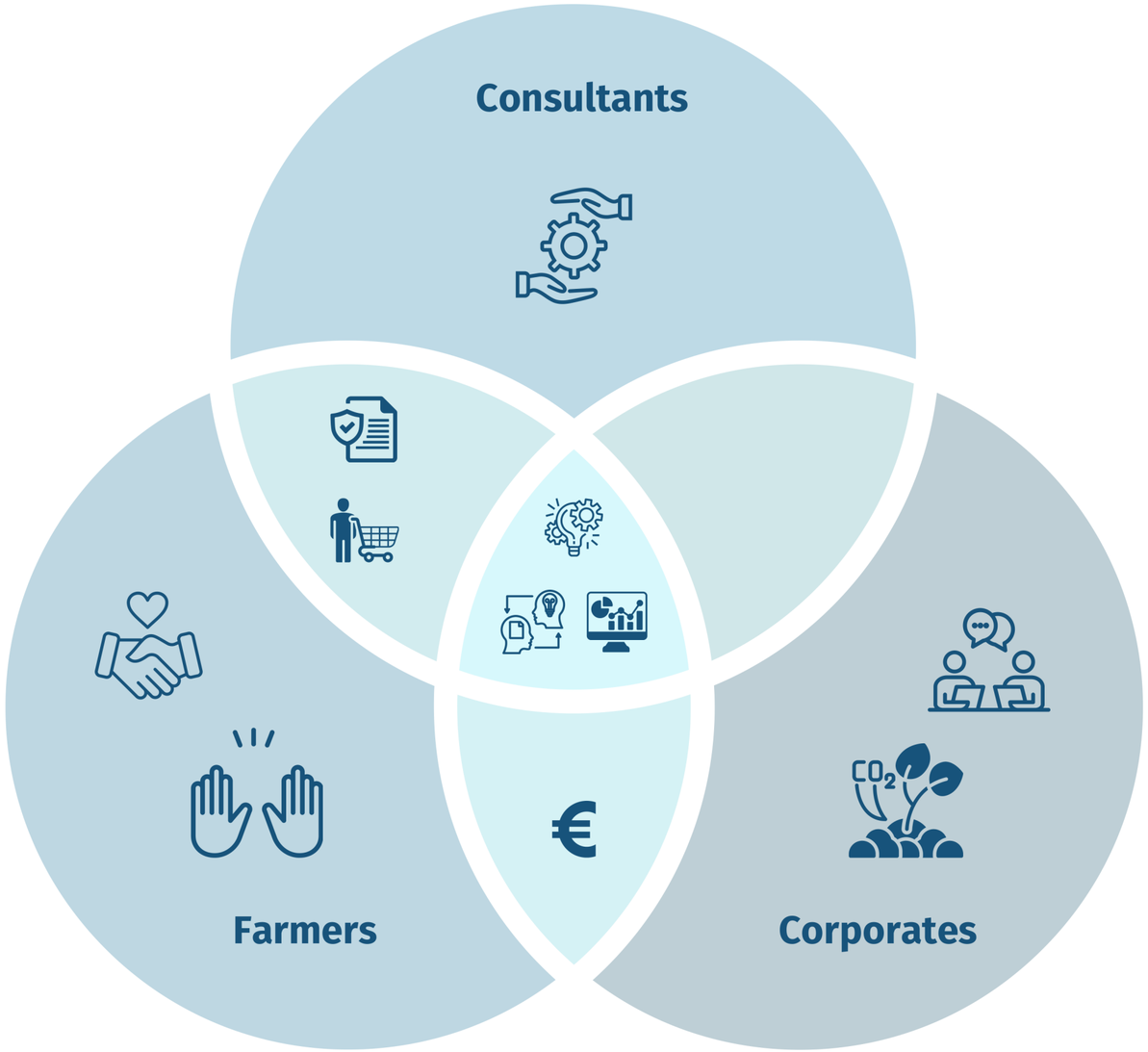
External Consultancy

Carbon Farming Implementation

Information on New Farming Practices

User-Friendly Information

Acknowledgment and Recognition



Current Experts and Learning Providers

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Provider type (Universities, Vocational Centres, Agencies, Industry Associations etc)	Provider business model (Private, NGO, Public, Public-Private, other)	Provider funder/funding source	Provider name	Provider website	Provider location (city, region)	Contact (email address)	Learning programme/course(s) name(s)	Learning programme/course link(s)	Content or sector-specific expertise (open tags)	Target audience (open tags)	Previous qualifications required to complete course	Format (online or not)	Course Duration	Accredited/ Certified/ ETCS (qualification type)	Price/ affordability	Learning outcomes or objectives (open ended)	Relevance to Deep Demo Flagship areas (tags)
2	University	Public		Atlantic Technological University	https://www.atu.ie/	Galway	Dr Ian O'Connor, Head of Department of Natural Resources and the Environment ian.oconnor@atu.ie	BSc Agriculture and Environmental Management	https://www.gmit.ie/bachelor-of-science-honours-in-agriculture-and-environmental-management	* Soil Science * Agricultural Enterprise Diversification * Rural Development and Agricultural Policy * Climate Change Adaptation and Mitigation * Biodiversity and Conservation * Integrated Sustainable Agriculture * Environmental Legislation	Undergrads	N/A	In Person	4 Years	BSc(Hons)(NFQ Level 8)	3,000/year		Flagship 2, 3, 4, 5, 6 and 7
3	University	Public		Technological University of the Shannon	https://gurteencollege.ie/course-detail/level-8-degree-in-agricultural-sustainability-bsc-hons/?id=10	Gurteen College Campus and Technological University of the Shannon (Thurles)	bridge.doyle@tus.ie	BSc Agricultural Science and Sustainability	https://tus.ie/courses/us870/	* Introduction to Sustainable Development * Environment and Sustainable Development * Farm Biodiversity Skills * Introduction to Environmental Impacts of Agriculture * Agri-Environmental Policy and Key Issues * Environmental Monitoring and Assessment * Economy and Sustainable Development * Carbon Management in Agriculture	Undergrads	N/A	In Person	4 years	BSc (Hons)	3,000 / year		Flagship 2, 3, 4, 5, 6 and 7
4	University	Public		University College Cork	https://www.ucc.ie/en/	Cork	* Professor Frank Buckley frank.buckley@ucc.ie * Philomena Fogarty p.fogarty@ucc.ie	BSc Agricultural Science	https://www.ucc.ie/en/ck41 2/	* Physics for Agriculture & Environmental Management * Sustainable Food Production * Introduction to Environmental Management * Soil Science and Soil/Land Management * Agri-Food Co-operatives and Sustainability * Global Food Policy	Undergrads	N/A	In Person	4 years	BSc(Hons)(NFQ Level 8)	3,000	* Describe agriculture as an integrated system, involving application of aspects of environmental, chemical and biological sciences to the study of farmland and livestock in a sustainable practice * Apply scientific methods and techniques in the examination of the farmland environment and in the health and welfare of livestock	Flagship 2, 3, 4, 5, 6 and 7
5	University	Public		University College Dubin	https://www.myucd.ie/courses/agriculture-food-nutrition/food-agribusiness-management/	Dublin	agandfoodprogrammes@ucd.ie	BAgrSc Food & Agribusiness Management	https://www.myucd.ie/courses/agriculture-food-nutrition/food-agribusiness-management/	* Land Use and the Environment * Soil Science Basics * Agri-Environmental Issues and Policy * Food and Agricultural Policy * Agri-Environmental Economics and Policy	Undergrads	N/A	In person	4 years	BAgrSc (Hons) (NFQ Level 8)	3,000/year	* Explain key agricultural, food and environmental policies, and analyse their effects on the food system, the wider rural economy and the natural environment * Understand core animal, crop production and environmental sciences, and evaluate their role in efficient farm management and achieving desired environmental objectives	Flagship 2, 4, 5, 6 and 7
6	University	Public		University College Dubin	https://www.myucd.ie/courses/agriculture-food-nutrition/animal-crop-production/	Dublin	agandfoodprogrammes@ucd.ie	BAgrSc Animal and Crop Production	https://www.myucd.ie/courses/agriculture-food-nutrition/animal-crop-production/	* Land Use and the Environment * Buildings and Environment * Climate Change and Agriculture * Soil Science Applications * Wildlife Conservation * Agri-Environmental Nutrient Management	Undergrads	N/A	In person	4 years	BAgrSc (Hons) (NFQ Level 8)	3,000/year	* Understand the animal and crop industries in Ireland and globally in a way that is welfare and environmentally friendly and guarantees the production of safe food * Explain the importance of sustainability in relation to animal and crop production systems from a social, economic, global and environmental perspective.	Flagship 5, 6 and 7
7	University	Public		University College Dubin	https://www.myucd.ie/courses/agriculture-food-nutrition/dairy-business/	Dublin	agandfoodprogrammes@ucd.ie	BAgrSc Dairy Business	https://hub.ucd.ie/usis/W_HU_MENU.P_PUBLISH?p_tag=MAJR&MAJR=DBS1	* Land Use and the Environment * Trees and Forests in Ireland * Soil Science Basic * Climate Change and Agriculture * Agri-Environmental Issue and Policy * Agri-Environmental Nutrient Management	Undergrads	N/A	In person	4 years	BAgrSc (Hons) (NFQ Level 8)	3,000/year	* Implement knowledge to offer well-founded advice on sustainable dairy systems, incorporating knowledge of current and future policy constraints	Flagship 6

1. **Agricultural Consultants Association (ACA)**
2. **BASE Ireland**
3. **Climate Ready Academy: Skillnet**
4. **Department of Agriculture, Food, and the Marine (DAFM)**
5. **Environmental Protection Agency (EPA)**
6. **Irish Cattle Breeding Federation (ICBF)**
7. **Irish Creamery Milk Suppliers Association (ICMSA)**
8. **National Rural Network (IRN)**
9. **Skillnet Ireland**
10. **National Organic Training Skillnet (NOTS)**
11. **Sustainable Energy Authority of Ireland (SEAI)**
12. **University networks include:** Atlantic Technological University (ATU), Munster Technological University (MTU), South East Technological University (SETU), Technological University Dublin (TUD), Technological University Shannon (TUS), University College Cork (UCC), University College Dublin (UCD), University of Galway (UoG)
13. **Teagasc**

Participants Recommendations

FARMEYE

Farmer Recommendations

- Sustainable Farming Networks
- Educational Workshops, Training Programs and Courses

Agri Consultant Recommendations

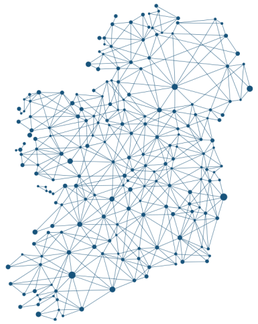
- Involvement in Existing National Programs
- Centralise Digital Support Hub

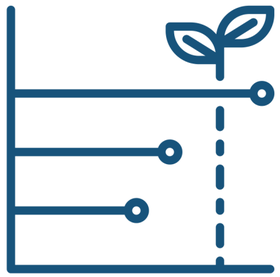
Agri Corporate Recommendations

- Knowledge Dissemination
- Guidance on data requirements

FARMEYE Recommendations

- Provide an Interactive Natural Capital Atlas of Irish Agriculture in 2024
- Empower Farmers With the Tools and Standards to Assess Their 2024 Soil Carbon Baseline
- Implement a 2024 Above-Ground Carbon Baseline
- Fair and Accessible Capability Building Activities for All
- CSRD Reporting Support for Scope 1, 2 and 3 for Agri Corporates within the Irish Agri Food Sector





Implications for the Deep Demonstration

What capability and capacity building needs should be addressed to ensure the success of the Deep Demonstration flagship roll out over the next 3 years?

- **More awareness-raising around the term “circular bio-economy” among farmer and agri-consultant groups through targetted campaigns;**
- **Support to agri-consultants to develop their skills and resources around carbon sequestration, carbon baselining, and carbon credit markets;**
- **Promote further events, open-days or local networks that support knowledge transfer on carbon farming or circular bio-economy at the local level;**
- **Ensure equal involvement of various agri-consultant groups in any activities or services provided (eg. between Teagasc and ACA);**
- **Dairy flagship should consider aligning its data collection with current corporate CSRD needs;**
- **Continued research around learning needs for specific target groups**

FARMEYE

FARMEYE TEAM

Saidhbh McIntyre
BD Associate

Eoghan Finneran
CEO

Stephen Coen
General Manager

Questions?