



What training and support for farmers in transition

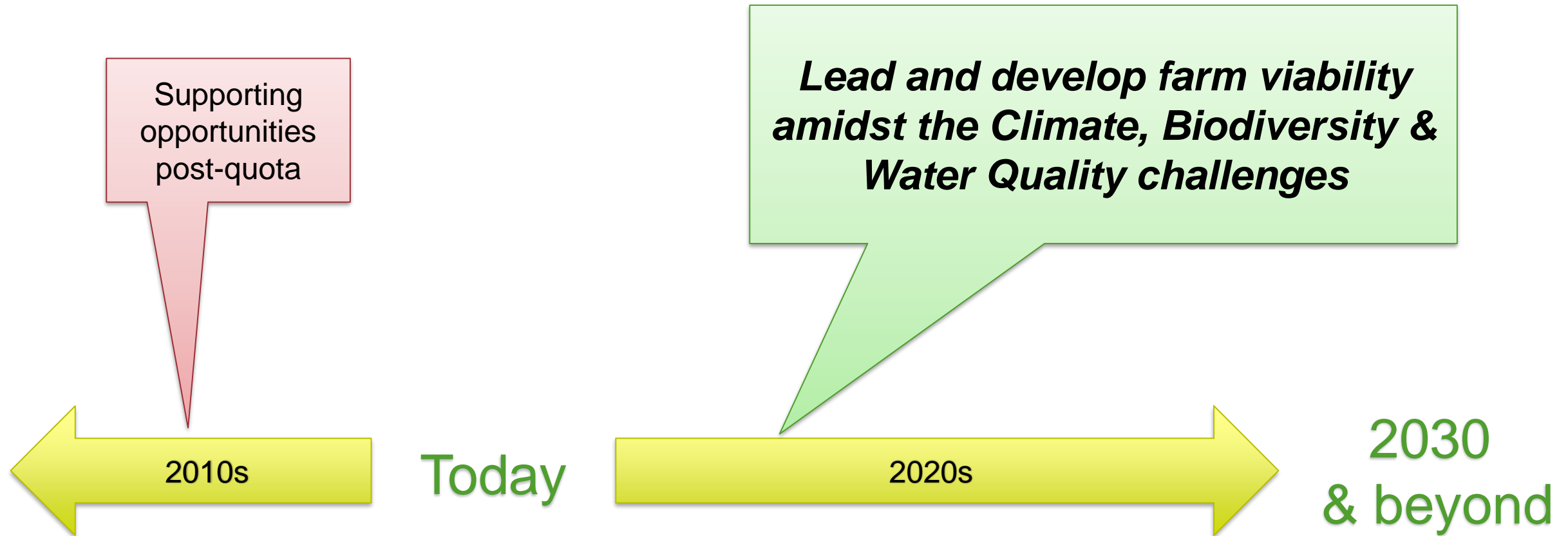
Prof Frank O'Mara
Director, Teagasc

French Presidency Meeting
Paris
13 June 2022

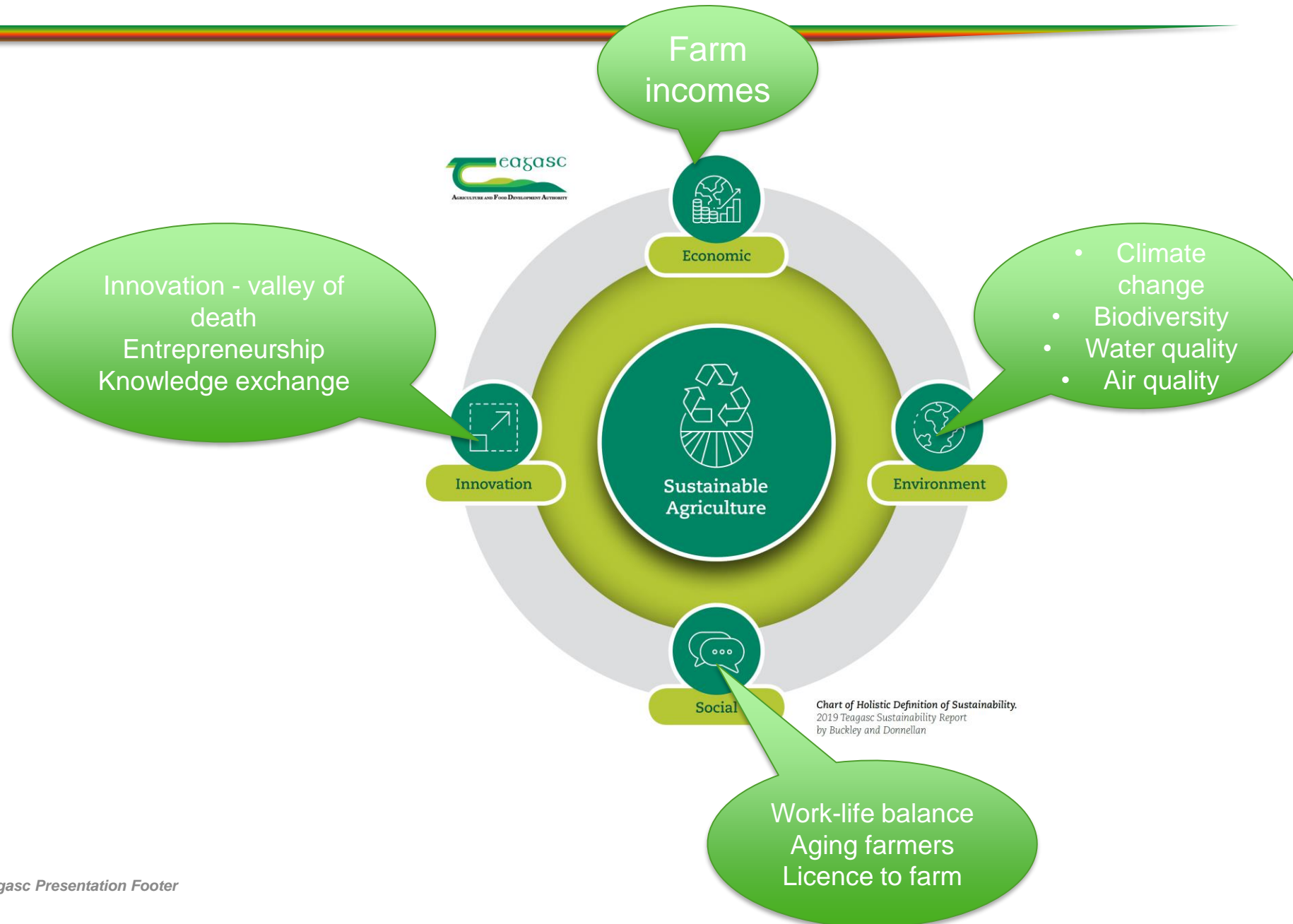
Overview

- Getting the message right
- What tools/techniques/approach to use
- Innovation support vs scheme support – a big step up for advisory services
- Putting it all together – the Teagasc Signpost Programme as an example

The 10-year challenge



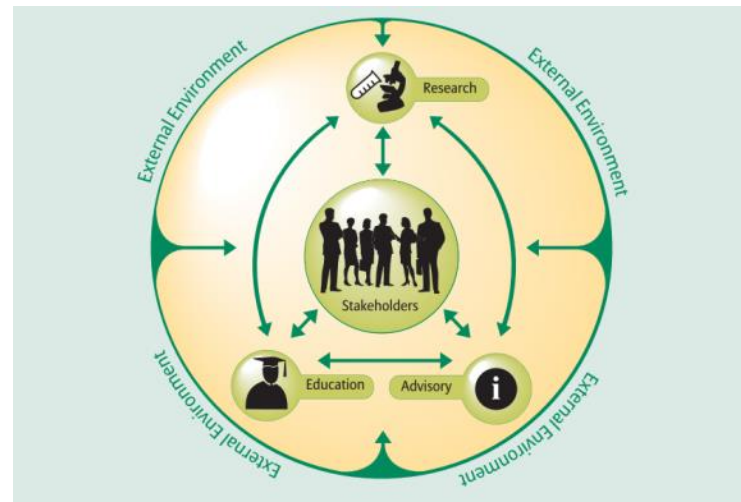
Addressing sustainability requires several dimensions



Key principles for embracing all dimensions of sustainability

- A whole system approach is needed. Actions must be evaluated for their impact “*From Soils to Gut*”
 - Farmers need production blueprints that are future proofed
- Principles of a good AKIS: partnership is essential and all stakeholders have a role and a voice

AKIS: Agricultural Knowledge and Information System



Signpost Programme messages

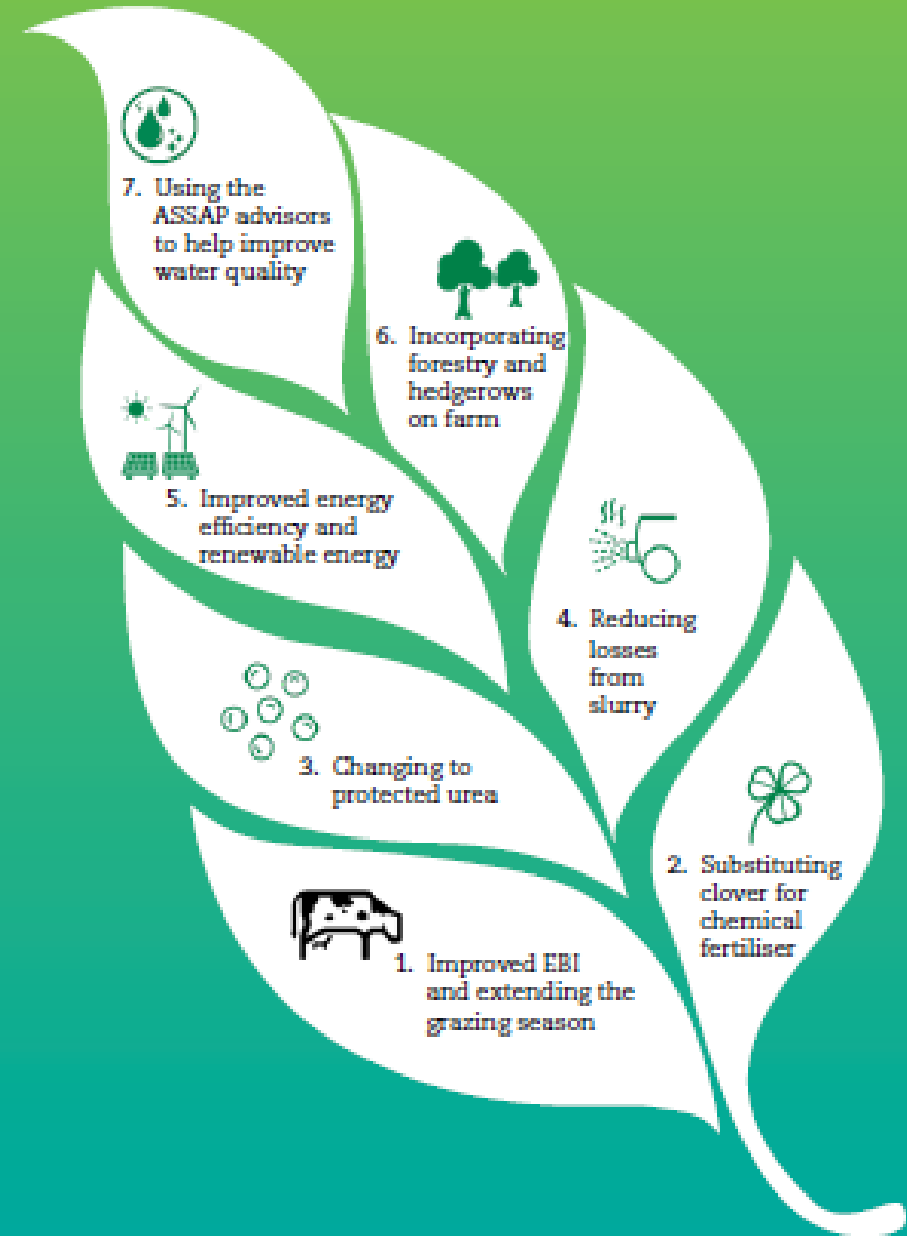
Signpost Programme is a new Teagasc advisory programme with over 50 partners to lead Climate action by Irish farmers

Messages address water, ammonia, biodiversity, as well as climate, and also positively affect farm incomes in general

EBI is Economic Breeding Index, the genetic selection index for dairy cows in Ireland

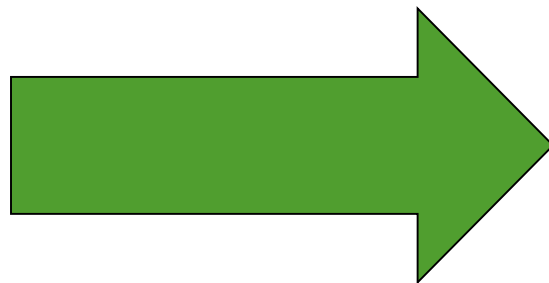
ASSAP is an advisory programme focussed on water quality (Agricultural Sustainability Support and Advisory Programme) delivered by Teagasc and dairy co-operatives

7 Steps to Improving Farm Sustainability

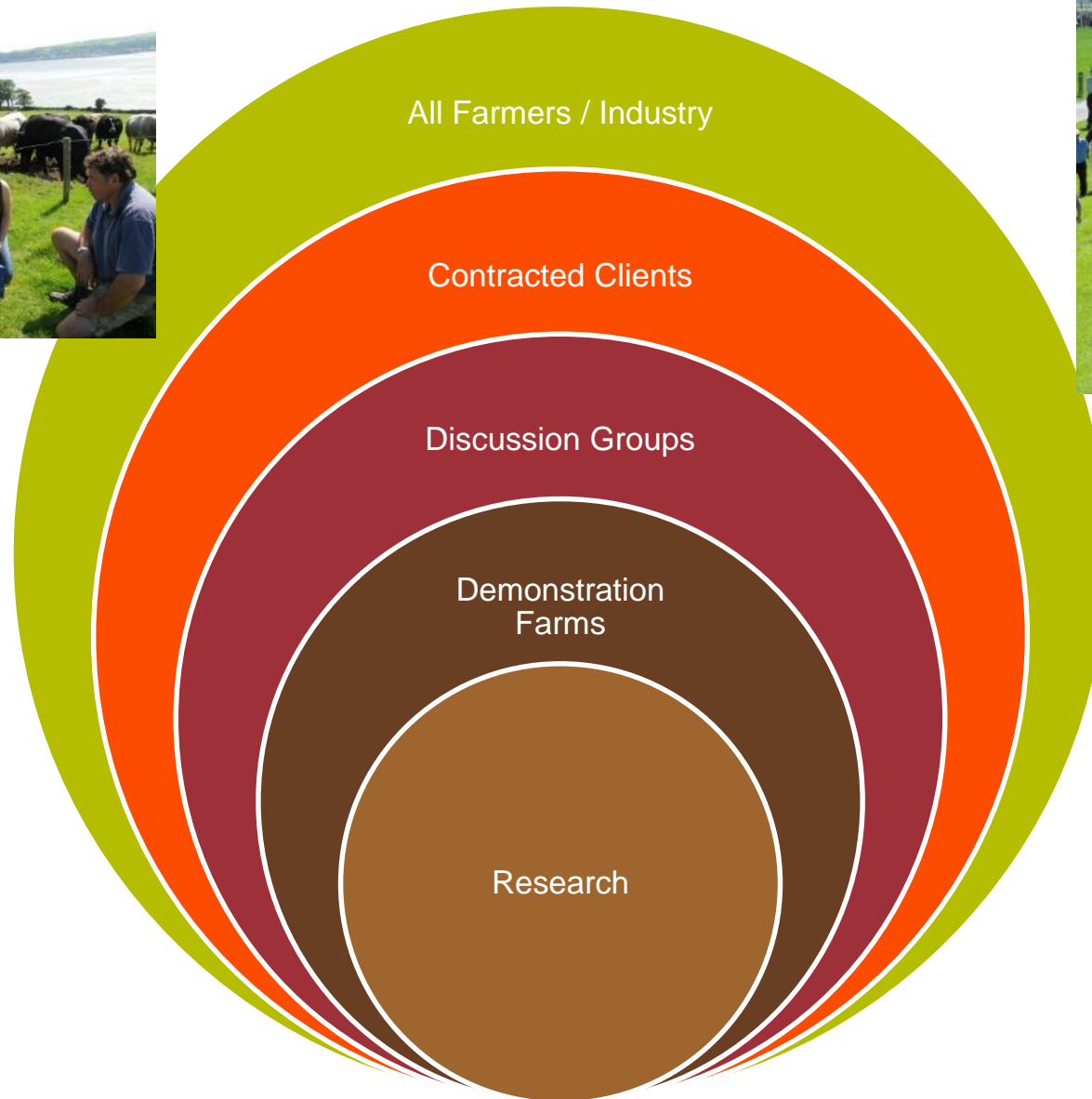


What tools / techniques / approaches to use

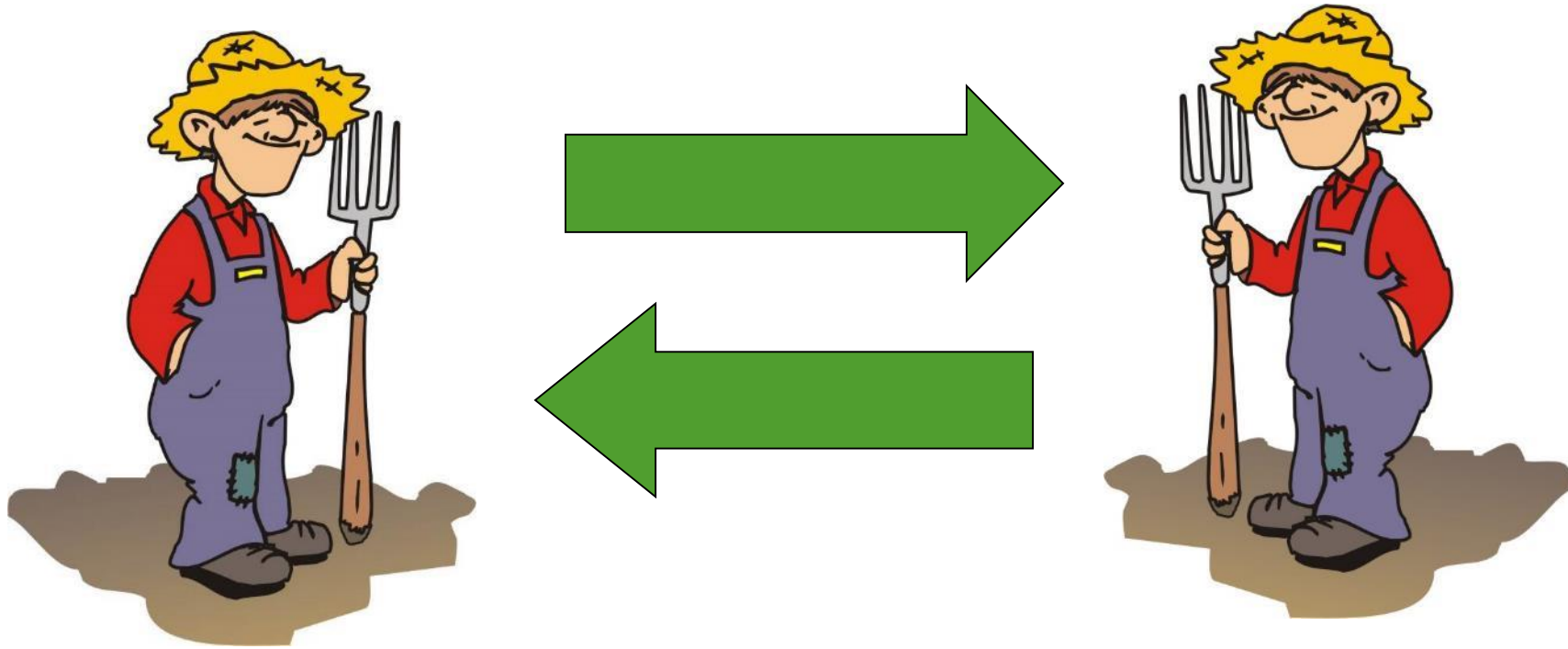
Transfer of technology



Operational Model for Knowledge Transfer



Transfer of technology



How Advisory methods can improve effectiveness

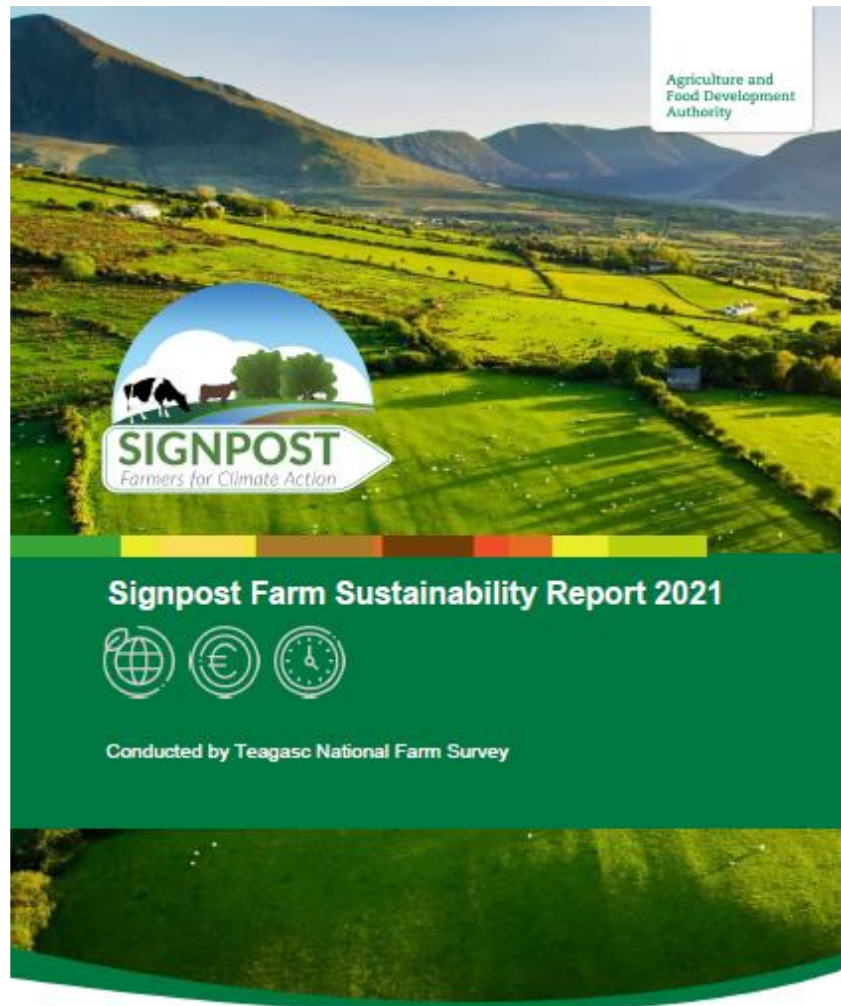
Adviser as Instructor



Adviser as Facilitator



Benchmarking – sustainability report



Signpost Farm Sustainability Report 2021

Summary: Environment Indicators

Dairy

Greenhouse gases	Farm Figure	NFS Average (2018-2020)	
Total farm greenhouse gas (GHG) emissions	921.3	510	t CO2 Eqv
Total hectares farmed	102.0	59.5	ha
GHG emissions per ha farmed (IPCC)	9.03	8.67	t CO2 Eqv
GHG emissions per kg FPCM (LCA):	0.91	1.06	kg CO2 Eqv

Ammonia

Total farm ammonia (NH3) emissions	4.1	2.9	t NH3
NH3 emissions per ha farmed	40.4	49.4	kg NH3

Conducted by Teagasc National Farm Survey

Nutrient Use

Nitrogen use efficiency	30.0	23.8	%
Nitrogen balance per ha	144	184	kg

Please refer to the List of Abbreviations on page 2.

Collated by: Kevin McNamara
 Conducted by: Teagasc National Farm Survey 3

Some technologies are easier to adopt than others

Protected urea, low emissions slurry spreading – farmer buys the technology

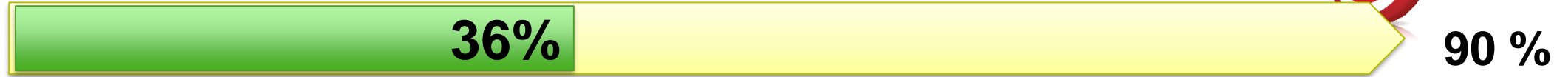


Multi-species swards – farmer must learn and adapt grazing management

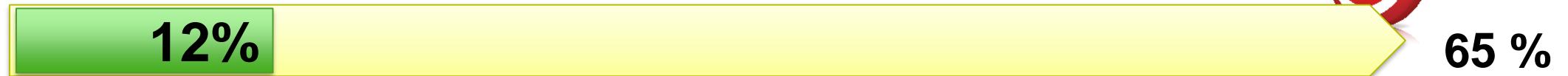


Scale of the adoption challenge – 3 Examples

Low emissions slurry spreading



Protected Urea *(Substitution of CAN)*

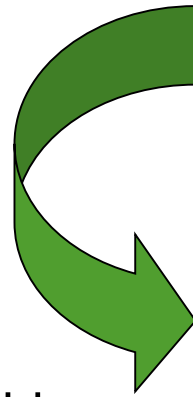


Reduced N usage *(Lower N rates, Clover (c. 750,000 ha), Slurry etc)*



Integrating Research and Knowledge Transfer

Researchers create new knowledge

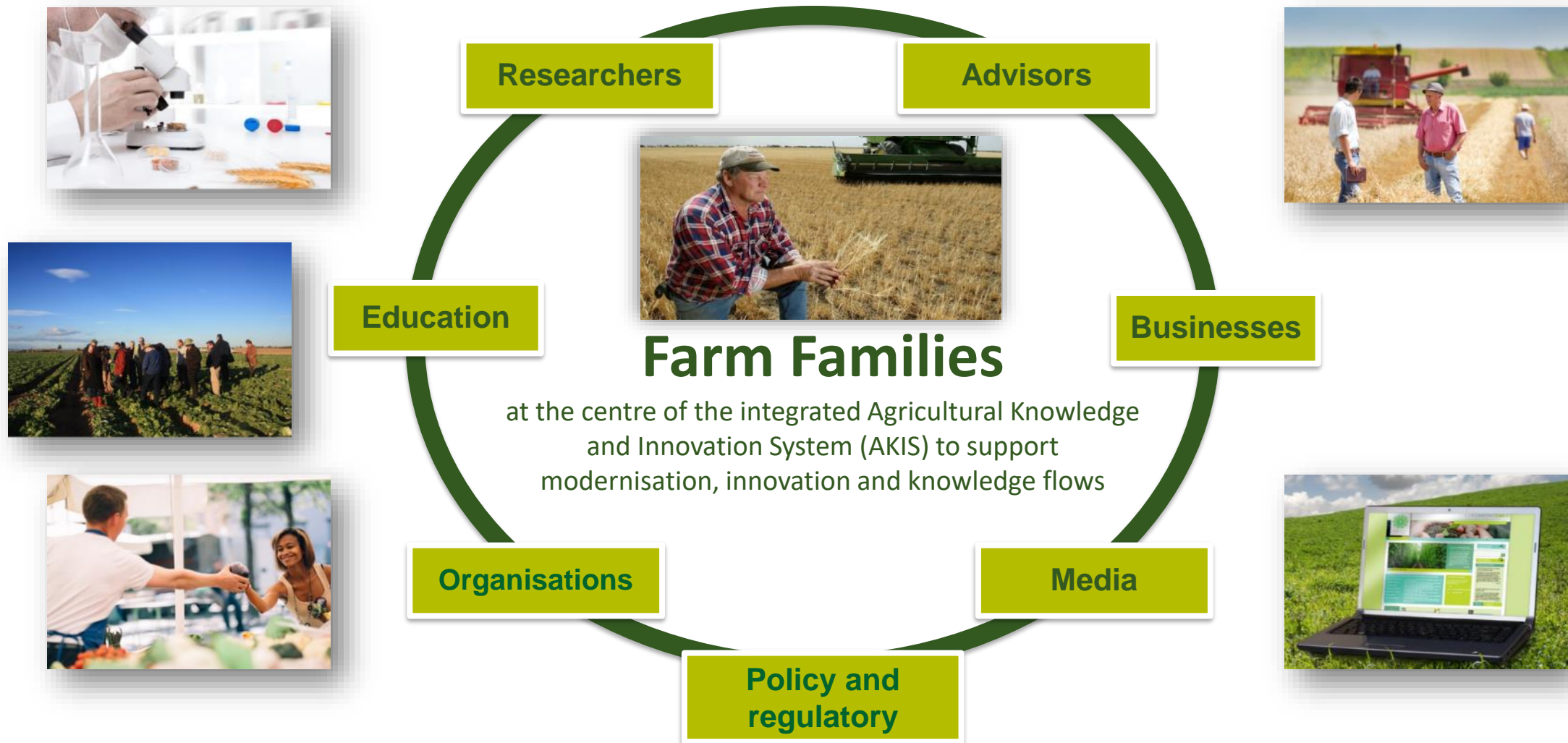


Specialists mould this knowledge into information for farmers



Advisers work with farmers to implement the new and existing technology

The AKIS in Ireland



The nature of advisory work is changing

Current: Schemes-focused Advisory work

- **Basic Payment Scheme**
- **Disadvantaged Area Scheme /ANC**
- **Derogation & Fertilizer plans & Fertilizer records**
- **Nitrate/Cross Compliance Inspections**
- **TAMS**
- **GLAS**
- **Partnerships/ Share Farming/Leasing/Contracts**

- CAP will bring a new round of schemes in 2023

Future policies for innovation support

- Support for Best Practice in Advisory activities
 - Co-ordinated and branded programmes
 - Collaboration between rural actors
 - Peer to peer learning and benchmarking
 - Targeted farm visits/supports
 - Feed back channels to research
 - Examples
 - SignPost, Burren Life, Industry joint programmes,

Shifting from Service Based Advisory Work to Innovation Support

▪ Service based

- Easier to be paid for
- Short term or one off
- Based on schemes
- Mainly mandatory
- Easy to build farmer contact
- Trust needed

▪ Innovation based

- Difficult to get paid for
- Longer term relationship
- Scheme decision support
- Mainly voluntary
- Difficult to build farmer contact
- Trust essential

The mix of both is important, Teagasc funding drives innovation based activity.

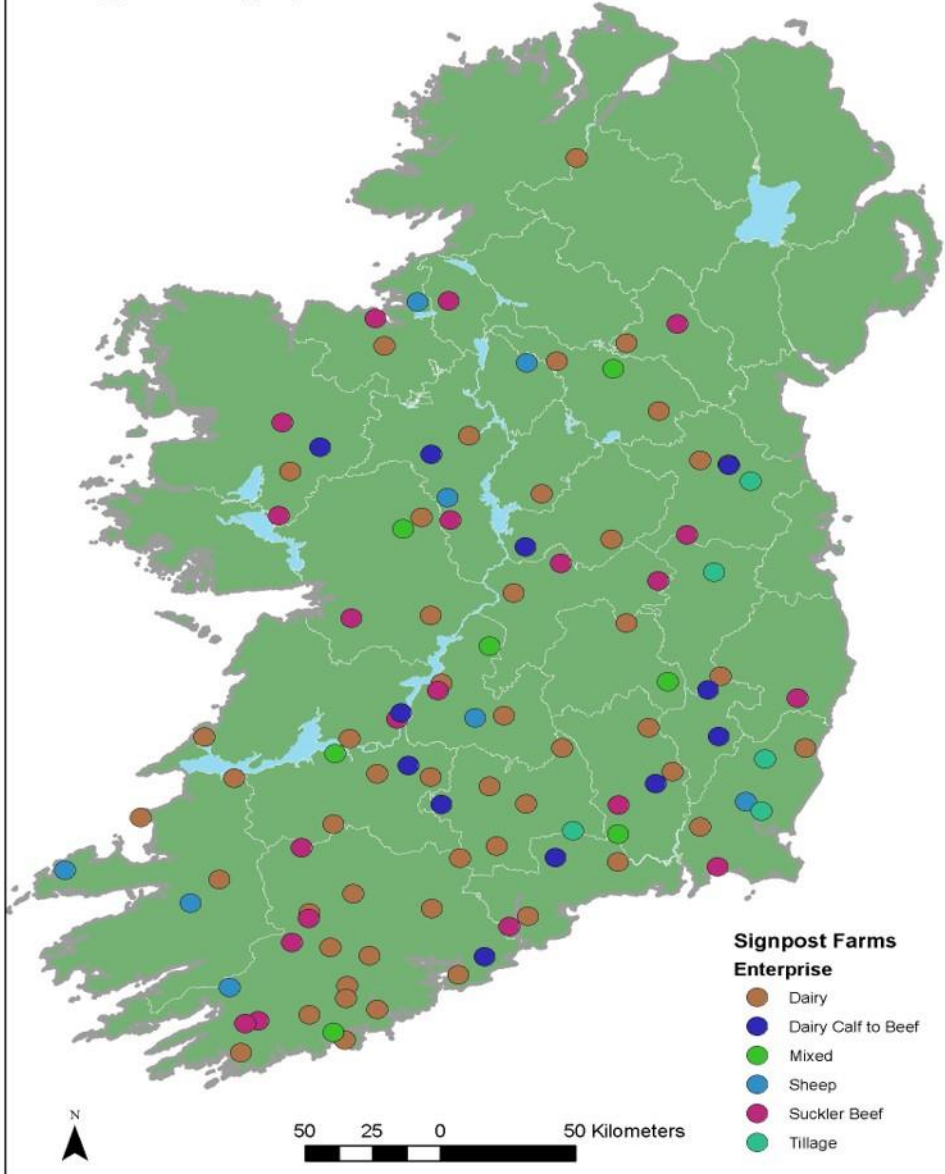
The Signpost Programme

- A national campaign (€17m over 5 years)
- Three main elements:
 - A network of demo farmers
 - An advisory campaign
 - Carbon sequestration research programme
- Main objective is to enable farmers to reduce GHG emissions, while remaining profitable and sustainable



Signpost Farm and Partners

Teagasc Signpost Farms



Partners



Government, State Agencies and Sponsors



Supporters



Objectives



1. **Lead and support the transition** of Irish farming towards more sustainable farming systems;
2. **Contribute to the agricultural sector efforts to reduce agricultural emissions in line with national policy objectives;**
3. Ensure that there are **no unintended consequences** of attempts to reduce agricultural emissions and that progress is made in both improving water quality and enhancing biodiversity;
4. **Promote farming practices and systems which can improve margins** and the overall sustainability of farming systems;
5. **Build national capability and capacity** (both of Irish farmers and those supporting them) to undertake the changes required;
6. **Be a trusted knowledge source and broker**, facilitating the alignment of programme partners and the strengthening of existing and new programme collaborations.

How will Signpost work?



- Teagasc research has given solutions
- Now is the time for action.
- All farmers have a part to play.

Summary and conclusions

- Farmers need multidimensional solutions — need to consider all dimensions of sustainability
- Modern tech transfer methods needed and you must mobilise the whole AKIS
- Transition means shifting from service-based advisory work to innovation support – much more difficult
- Teagasc Signpost Programme is a good example of a whole of industry, Living-lab type approach, with a particular focus on climate action