Sustainability: Setting the Scene

Teagasc, Agricultural Economics & Farm Surveys Department

Rural Economy and Development Programme
Presentation Overview

- Sustainability definition
- Data source
  - Teagasc National Farm Survey (NFS)
- Current state of play
What is Sustainability?

- "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
  - Brundtland Commission, Our Common Future (1987)

- Sustainable agriculture is defined as a practice that meets current and long-term needs for food, fibre, and other related needs of society, while maximizing net benefits through the conservation of resources to maintain other ecosystem services and functions, and long-term human development
  - (Rao and Rogers, 2006)
Multi-dimensional concept

- Sustainability is intersection of:
  
  1. Economic
  2. Environmental
  3. Social

Success

Failure
Data Source: Teagasc National Farm Survey

- Conducted by Teagasc on an **annual basis since 1972**

- Operated as part of the **EU Farm Accountancy Data Network (FADN)**.
  - Fulfils Ireland’s **statutory obligation** to provide data to EU

- Teagasc as a collection agency
  - Provide database of micro data on Irish Agriculture

- Teagasc as a research institution using that data
  - for research, policy analysis & to inform stakeholders
A random, **nationally representative** sample

- Selected in conjunction with **Central Statistics Office** (CSO)

Each farm is assigned a **weighting factor** by the CSO

- Census of Ag. (10 yrs) and Farm Structures Survey (5 yrs)

- Representative of circa 90,000 farms

- Pigs and poultry not included

- **Small farms** not included
  - < €8,000 standard output
  - Covered in Teagasc small farms survey
Transparency

- No standard approach to report sustainability
- Rival methods exist
  - Public domain vs proprietary metrics
- Aim to report as complete a range of metrics as available resources allow
- Made available to public
- No cat in the bag
- No greenwash
Environmental Challenges: GHGs

- Irish agriculture comprises
  - 33% of Irish GHG emissions
  - 45% of Irish non-ETS GHG

- GHG targets
  - 20% emissions reduction by 2020
  - 30% non-ETS reduction by 2030 (2030 Effort Sharing)
    - with 10% allowable to flexible mechanisms
    - LULUCF credits and transfers from ETS

- No subsector targets within non-ETS

- Non ETS Emissions projected to increase
  - Transport and Agriculture

- Can mitigation action bring emissions onto a downward path?
Cattle Population 1975-2018

Source: CSO (December Figures)
Annual Fertiliser Sales in Ireland 1975-2018

Source: DAFM
NFS Family Farm Income
2016, 2017, 2018e & 2019f

€,000

Dairy | Cattle Rearing | Cattle Other | Sheep | Tillage | Weighted Average
---|---|---|---|---|---
volatile | 2016 | 2017 | volatile | low

0 | 20 | 40 | 60 | 80 | 100

Agriculture and Food Development Authority
Setting a direction of travel

- Measuring metrics is the first step towards managing metrics.
- Need to consider which sustainability problems to tackle and to what extent?
  - This includes recognition of trade-offs.
  - Setting of priorities.
- Need a bridge between
  a) Defined ambition for the sector.
  b) What is realistically achievable.