

## Data-driven decisions contribute to sustainable farming

- **Economic Sustainability**
  - Enhancing financial viability
  - Optimizing resource allocation
- **Environmental Sustainability**
  - Minimizing the environmental footprint
  - Precision agriculture for input use efficiency
- **Social Sustainability**
  - Farmer health and wellbeing
  - Animal welfare
  - Social and community engagement
- **Holistic Decision Making**
  - Integrating economic, environmental, and social data

## Irish FADN Challenges and Opportunities

Many of the members of the in person data collection team were nearing retirement

Widening of the data collection schedule helped to justify replacement of staff

Growing range of data requests from policy makers to support CAP policy and environmental policy development

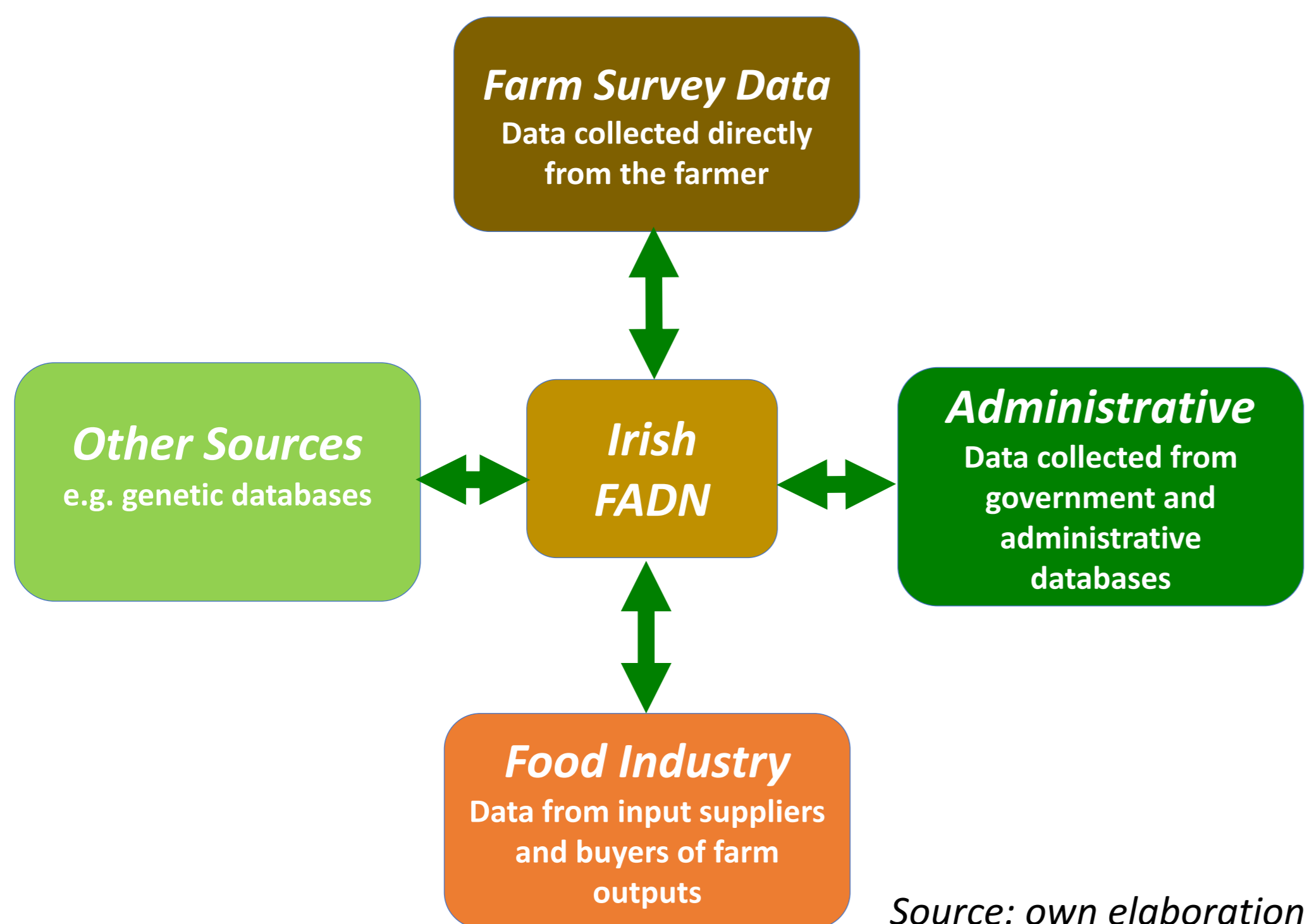
Availability of new data categories strengthened the relevance of FADN to supply data to answer questions

Growing need to understand the interaction between economic, environmental and social aspects of farming

Opportunity for FADN to demonstrate wider relevance of new FSDN to policy makers and researchers

## Irish FADN Data Collection Methodology

- The Irish FADN has expanded its data collection activity by collecting additional data directly and through data sharing.



## Phases of Development

- Including social and environmental sustainability variables in the dataset was a three phase process, requiring identification of the data, collection of the data and processing of the data into meaningful variables.
- Each of these steps took a considerable amount of time.



### Major Decisions

Data Identification	Data Collection
<p>Needed to identify which new data needed to be collected.</p> <p>Required discussion with economists animal, crop, environmental and social scientists.</p>	<p>Needed to ask farmers new questions, but had to limit farmer response burden.</p> <p>Had to source more data through data sharing with other organisations.</p> <p>Ask questions only farmers can answer.</p>
Data Processing	Data Dissemination
<p>New complex variables had to be generated.</p> <p>Experts had to verify that these variables had been generated correctly.</p> <p>Verification took a considerable time.</p>	<p>Needed to consider how new data should be interpreted and presented.</p> <p>Connect with new audiences.</p> <p>Decision made to produce a specific annual report on agricultural sustainability.</p>

## ...but GDPR compliance needs to be addressed

Data sharing is attractive in that it saves both time and money. However, GDPR compliant data sharing has to be authorised by farmers and some farmers can be reluctant to co-operate.

## Potential End Users of the Data

- **Farmers:** Utilise data to make informed decisions on crop selection, resource allocation, and optimise farm operations for increased efficiency and profitability.
- **Agricultural Consultants and Advisors:** Provide data-driven recommendations and insights to farmers for improving their farming practices and overall sustainability.
- **Agribusinesses and Input Suppliers:** Optimise supply chains and production planning based on insights from farm data, ensuring timely delivery of inputs and services to farmers.
- **Agricultural Researchers and Scientists:** Use data for research purposes, to study emerging trends, develop new technologies and improve agricultural practices.
- **EU and National Governments:** Leverage data to formulate policies, regulations, and incentives that support sustainable agriculture and rural development.
- **Environmental Organisations:** Use environmental data to monitor and promote sustainable farming practices and support the development of environmentally friendly agriculture.

## Potential Users of the Data

- **Financial Institutions and Investors:** Rely on economic and financial data to assess investment opportunities, provide loans, and make financial decisions related to agriculture
- **Research Institutions and Students:** Use farm data for academic research, teaching, and learning about modern farming practices and sustainability in agriculture.
- **Insurance Companies:** Utilise farm data to assess risk, develop insurance products, and set premiums for agricultural insurance.
- **Technology Developers and Innovators:** Use data to develop and improve agricultural technologies, precision farming tools, and farm management software.
- **Consumer Representative Groups:** Access information about farming practices, sustainability efforts, and food production to make informed choices about the products they consume.
- **Farmer Unions and Industry Groups:** Use data to represent the interests of farmers, advocate for policies that benefit the agricultural industry, and promote sustainable farming practices.
- **International Organisations and Donor Agencies:** Utilise data to design and evaluate agricultural development programs, allocate funds, and support global food security initiatives.