

Farm Level Indicators for New Topics in policy evaluation

FADN and FLINT data collection

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What is **Farm Accountancy Data Network (FADN)**?

- Instrument for evaluating the income of agricultural holdings and the impacts of the Common Agricultural Policy;
- Most data are based on accountancy records;
- Data are confidential;
- Voluntary participation;
- 80.000 sample farms;
- 5.000.000 observed farms;
- Variables described in a specific questionnaire (Farm return);
- Liaison Agencies collect the data;
- Guided by a Committee;
- Main output: FADN standard results;

Legal base:

- **Council Regulation (EC) No 1217/2009** of 30 November 2009 setting up a network for the collection of accountancy data on the incomes and business operation of agricultural holdings in the European Community
- **Commission Implementing Regulation (EC) No 385/2012** of 30 April 2012 on the farm return to be used for determining the incomes of agricultural holdings and analysing the business operation of such holdings - As amended by Regulation (EC) No 1320/2013 of 3 December 2013
- **Commission delegated regulation (EU) No 98/2014** of 1 August 2014 supplementing Council Regulation (EC) No 1217/2009 setting up a network for the collection of accountancy data on the incomes and business operation of agricultural holdings in the European Union

Different organisation settings of FADN in Europe (liaison agency and data collection)

Data collection Liaison Agency	Accounting Office	Advisory Service	Own liaison agency Staff
Ministry	<ul style="list-style-type: none"> • UK, • Slovenia, • France, • Czech Republic, • Estonia, • Belgium, • Portugal 	<ul style="list-style-type: none"> • Estonia, • Romania 	<ul style="list-style-type: none"> • Luxemburg, • UK, • Estonia, • Cyprus, • Bulgaria, • Belgium, • Portugal, • Malta
Research Institute	<ul style="list-style-type: none"> • Finland, • Germany, • Austria, • Hungary 	<ul style="list-style-type: none"> • Latvia, • Finland, • Poland, • Italy, • Lithuania 	<ul style="list-style-type: none"> • Ireland, • Netherlands
Statistical Office	<ul style="list-style-type: none"> • Denmark 	<ul style="list-style-type: none"> • Sweden 	<ul style="list-style-type: none"> • Sweden

Type Y and X of FADN systems in Europe

(based on Poppe, 2002)

	Type Y	Type X
Primary/secondary	Primary data collection	Secondary data collection
Data collected by	own staff	buying from accounting office
Fixed costs	high	low
Marginal costs	low	high
Information feedback to farmers	high	low
Interest by farmers	high	low
Data use by research	often (critical success factor)	incidentally

FADN on EU level

- In-depth monitoring of farm income
- Impact assessments
- Policy evaluations
- Assessments of potential effects of changed market conditions
- Modelling: from ex-post analyses (feeding evaluations) to ex-ante analyses (feeding impact assessments)
- Ad-hoc requests (e.g., in crisis situations)
- Research projects

Source: based on DG Agri

Role of FADN in evaluations

- **61 out of the 89 evaluations** carried out by DG AGRI since the year 2000 were dependent on information from FADN.

Source: Yves Plees, DG AGRI Evaluation and Studies unit

The FADN SWOT

Strengths <ul style="list-style-type: none">• Unique source of harmonised farm data• level economic data representing 90% of EU farming• Established methodology, long time series, strong network• Intensive use of data for policy purposes	Weaknesses <ul style="list-style-type: none">• Limited sample size• Voluntary participation of farmers (possible selection bias)• Delay of data availability
Opportunities <ul style="list-style-type: none">• Structural change in agriculture fewer, bigger farms (more likely to keep accounts)• Technological innovations potential for better integration of different data sources• Further developments in variables and indicators (e.g., FLINT)	Threats <ul style="list-style-type: none">• Declining willingness of farmers to participate• Budget cuts at EU and MS level• Greater policy focus on non income related factors

Source: Gesa Wesseler, DG AGRI E.3, <http://ec.europa.eu/agriculture/rica/>

FLINT data collection



Connection

FADN



FLINT

- ✓ existing infrastructure
- ✓ low set-up costs
- ✓ environmental sustainability can be connected to economical sustainability
- ✓ support of DG Agri to speed up the process
- ✓ less increase in burden on farmers

The FLINT data collection in numbers

- 9 Member States
- 1000 pilot farms
- 33 topics
 - 7 social
 - 9 economic/innovative
 - 17 environmental
- 10 new tables
- 1060 new items
- Around 300-400 new data per farm

Structure of the FLINT farm return (example)

Code	Category	Columns	
		Value Type	Quantity
		VT	Q
AS	Advisory Services		
1011	Consultancy of Public Advisor	Z1_AS_1011_VT	Z1_AS_1011_Q
1012	Consultancy of Farmers' cooperative	Z1_AS_1012_VT	Z1_AS_1012_Q
1016	Consultancy of Other farmer based providers	Z1_AS_1016_VT	Z1_AS_1016_Q
1013	Consultancy of Private Advisor	Z1_AS_1013_VT	Z1_AS_1013_Q
1014	Consultancy of Companies	Z1_AS_1014_VT	Z1_AS_1014_Q
1015	Consultancy of Others	Z1_AS_1015_VT	Z1_AS_1015_Q
CI	CAP and Cross Compliance		
2010	Information Sources	Z1_CI_2010_VT	
ET	Education and Training		
3010	Manager Training	Z1_ET_3010_VT	
3020	Employee Training	Z1_ET_3020_VT	Z1_ET_3020_Q

Z1
Z2
Z3
Z4

- E1: Greening
- E5: Nutrient balance
- E9: On-farm RE prod.
- E11: Soil erosion
- E16: Water usage, storage

- E3: Semi-natural areas
- E7: Indirect energy use
- E6: Soil organic matter
- E12: Use of legumes
- E17: Irrigation practices

- E4: Pesticide usage
- E8: Direct energy usage
- E10: Nitrate leaching
- E14: GHG calculation

Z5
Z6

- E11: Innovation
- E14: Farm duration
- E18: Marketing contracts

- E12: Producing under label
- E15: Efficiency field parcel
- E19: Risk exposure

- E13: Market outlet
- E17: Insurance
- E16: Modernization

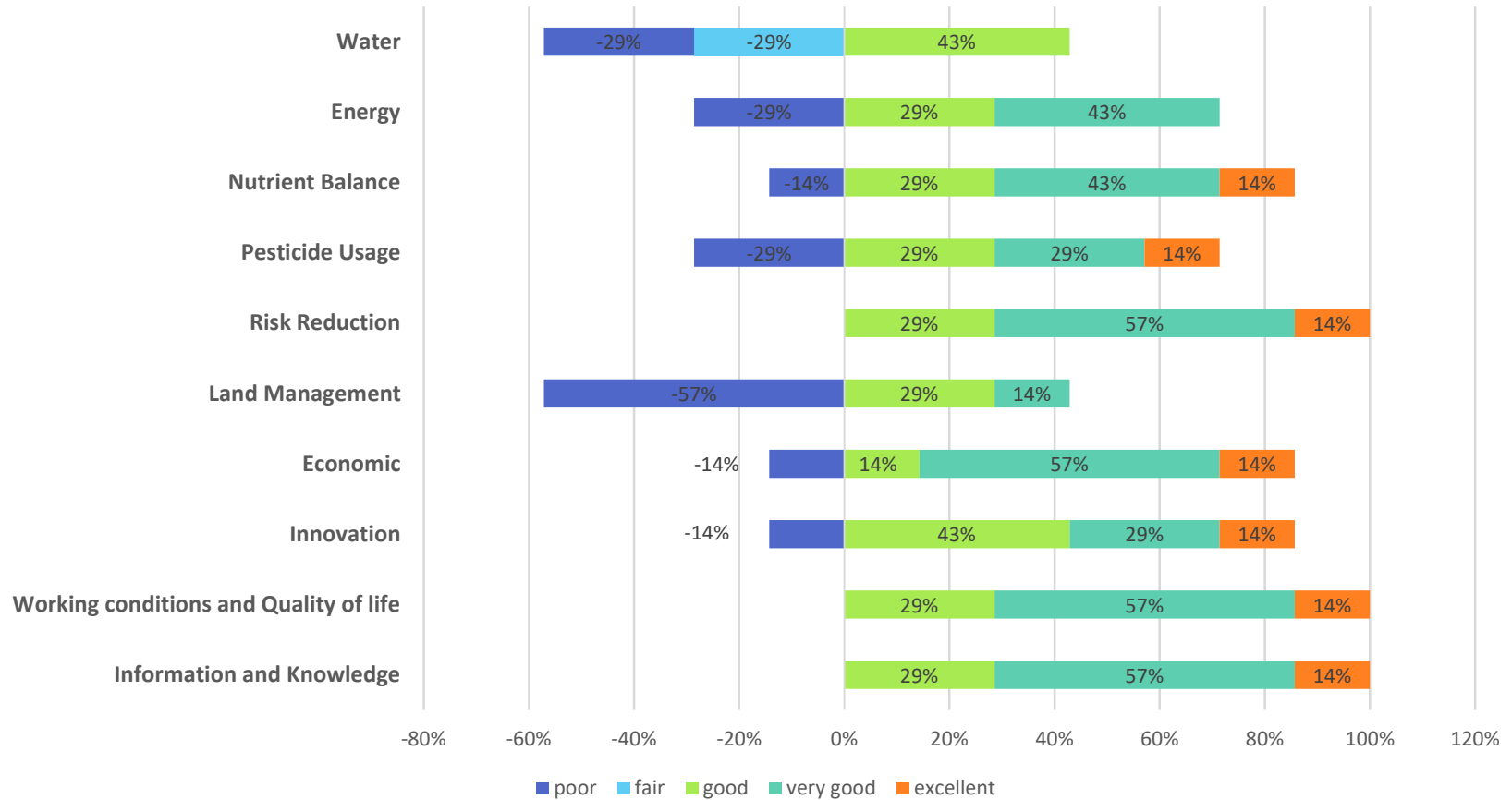
Z7 - Z8
Z9
Z10

- S1: Advisory service
- S4: Social engagement
- S7: Social diversification

- S2: Education and training
- S5: Working conditions

- S3: Ownership management
- S6: Quality of life

Assessment of data availability



Source: online survey

Organization of FADN data collection in the Member States involved in the Flint project

Country	Liaison agency (FADN)	How is the data collected (FADN)?
France	Ministry of Agriculture	Partly by Regional LAO employees, partly by private firms
Ireland	Research Institute	Partly by LAO employees, partly by private firms
Spain	Ministry of Agriculture	Partly by Regional LAO employees, partly by private firms
Poland	Research Institute	By accountancy offices which are agricultural advisory centres and legal entities of the NUTS 2 (<i>voivodship</i>) local governments
Greece	Ministry of Agriculture	By state employees at the Prefectures, belonging to the Ministry of Interior
Germany	Ministry of Agriculture	Partly by Regional LAO employees, partly by private firms
Hungary	Research Institute	Outsourced to private firms (with more or less data treatment and controls at LAO level)
Netherlands	Research Institute	Partly by LAO employees, partly by private firms
Finland	Research Institute	Outsourced to private firms (with more or less data treatment and controls at LAO level)

Source: RICC 1605



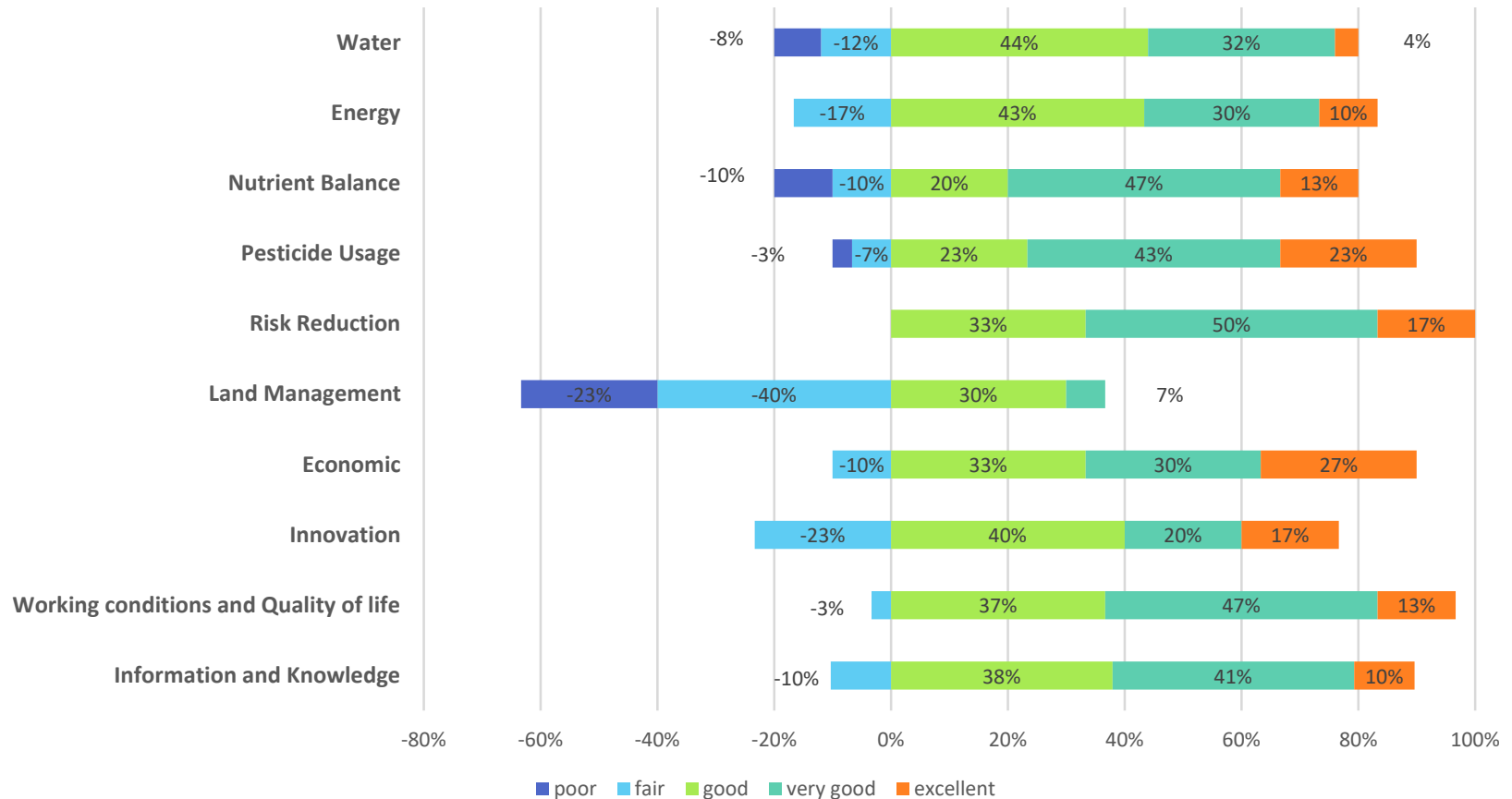
Sample size and the year of data collection by Member States in the Flint project

¹	FRA	IRE	ESP	POL	ELL	DEU	HUN	NED	FIN
Sample farms for FLINT	150	65	165*	140	110	95	100	150	50
Collected	280	65	128	146	124	52	102	155	50
Accounting year	2014	2014/ 2015	2015	2015	2015	2014/ 2015	2015	2015	2015

Source: online survey



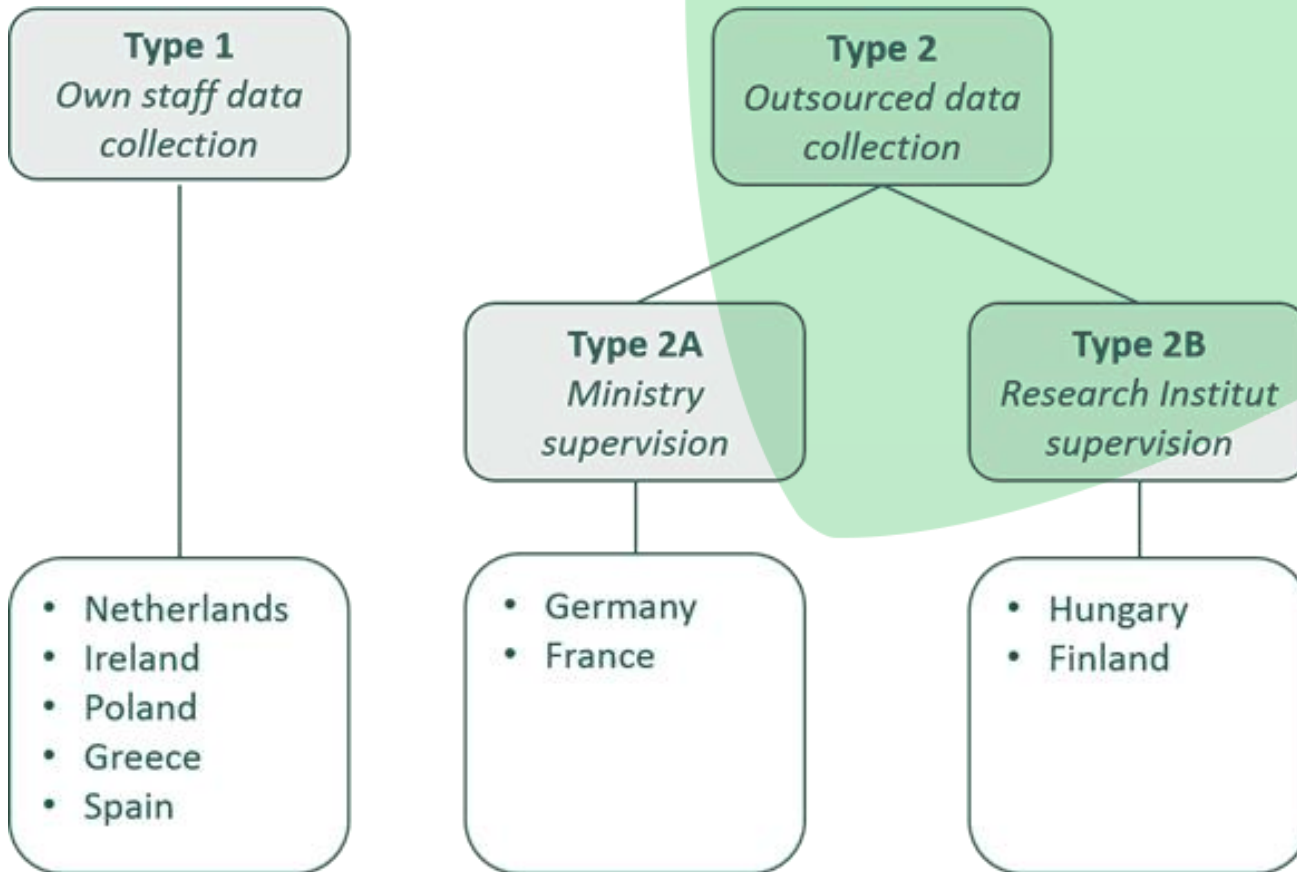
Feasibility of data collection



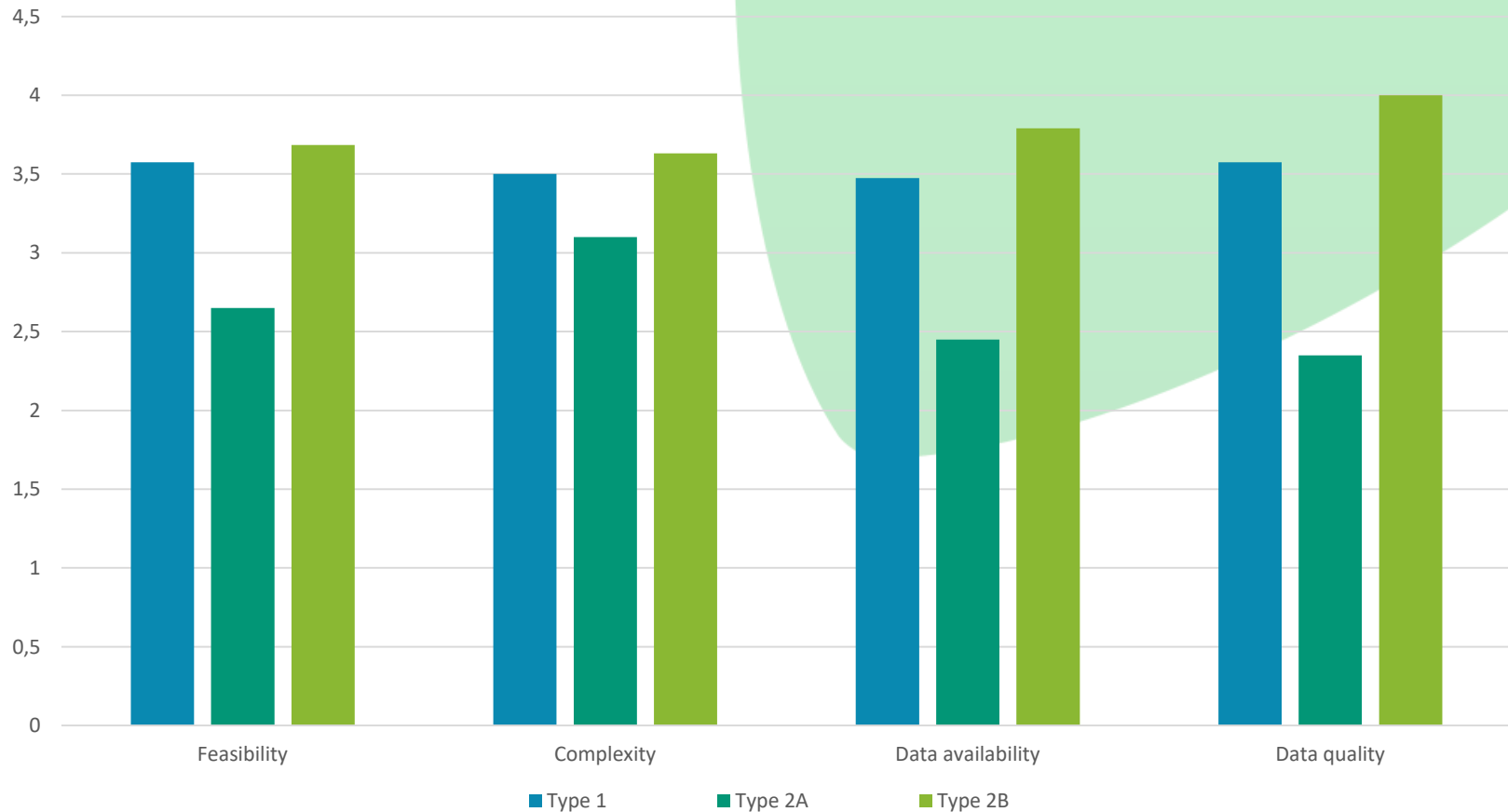
Source: online survey



FADN data collection systems

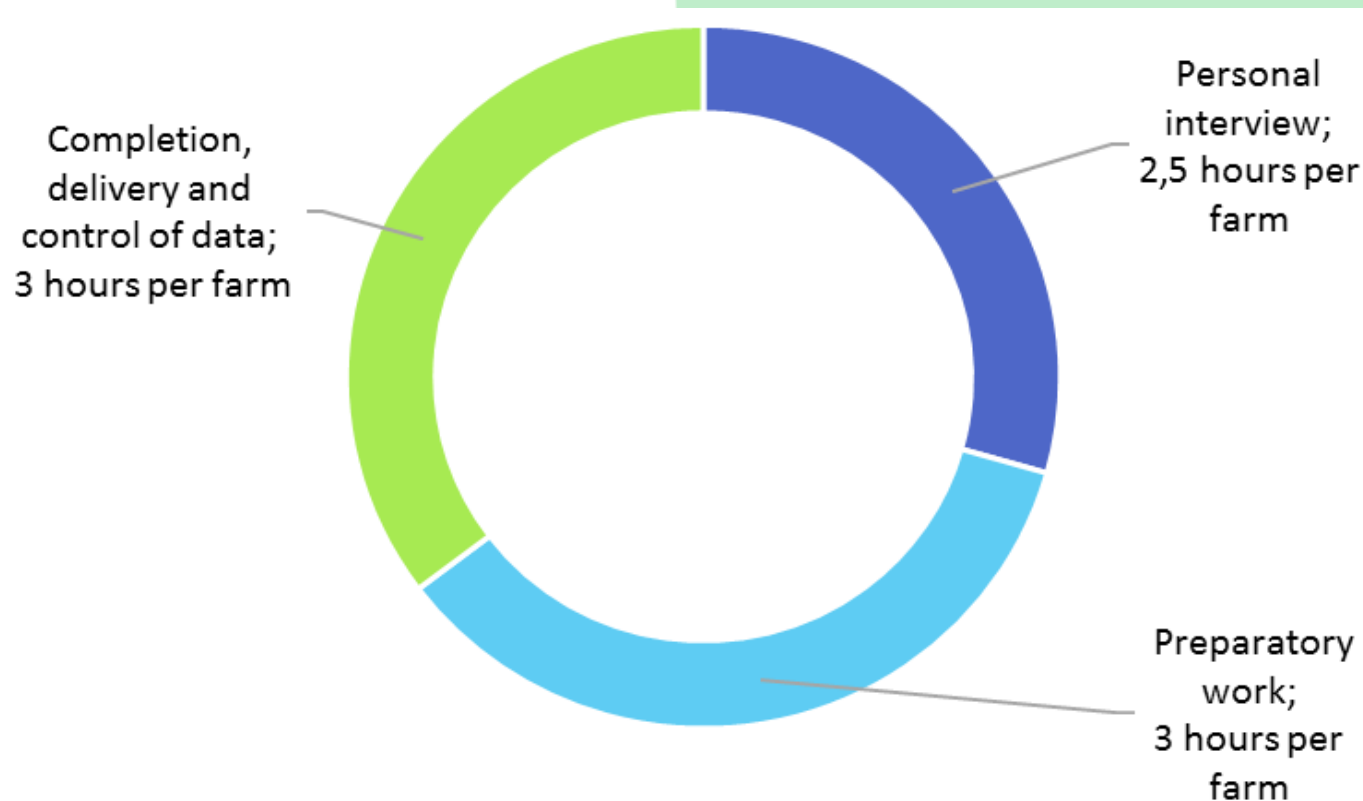


Feasibility of data collection in different administrative environments



Source: online survey

Time required for data collection per farm



Source: online survey

Experiences (data collection)

- Some countries already collecting more data than required by FADN – experienced
- Many FLINT variables already indirectly available in FADN information flow (e.g. quantities on invoices)
 - reduce information collected from farmers
- Knowledge/skill of data collectors important
 - Explain how data will be used
 - Explore where data may be already available
 - Ensure quality of data collected
- Variables with problems tend to be country specific
 - some social indicators are cultural specific

Experiences (farmer participation)

- Relationship with normal data collector important for participation
- Perceived importance & awareness of sustainability varies by country
 - Impacts on willingness to participate
- Some variables are 'threatening' or 'private' – country specific
 - Reconsider in recommendations, skip or explain.
- Average time need between half an hour till max. 4 hours for additional FLINT variables

Experiences (overall)

- Data collector's attitude changed from hesitant to more enthusiastic
- Collection of new data always causes some initial problems and need for adaptation –
 - Despite reviews and prior testing, still some issues need to explained more clearly
- However, first year collection of sustainability data seems far less complicated than first year FADN data collection
- Collection in scope of FADN provides advantages in terms of farmer participation and quality assurance

Thank you for your attention!

<http://www.aki.gov.hu>

