Farm Level Indicators for New Topics in policy evaluation

Conclusions and recommendations

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Project results

- Definition of set of sustainability indicators at farm level
- IT infrastructure for collecting, managing and using farm level sustainability data
- Farm level sustainability performance measurement at 1100 farms in Europe
- Show cases to show added value for policy making and research
- Reports and scientific papers

Impact

- Integrated dataset for scientific analysis of trade-offs and jointness of different sustainability themes
- Evaluation and better targeting of policy measures
- Benchmarking and improvement of sustainability performance based of farm level indicators
- Dissemination through international interest groups and publications
- Community of practises involved in project
- Dialogue with policy makers at EU and national level

Lessons learnt

- Close links between research, government and farming sector are important
- Priority and awareness of sustainability issues differs between countries, affects data availability and willingness
- Data collection can be successful under different organisational models and different data collection processes. Give MS freedom on how to organise it.
- Integration with other data collection improves quality and feasibility

Basic recommendations

- Policy researchers need to understand relation between policy measure and farm management with exact relation between inputs, outputs and income.
- Collecting these data on the same set of farms is conceptually and empirically superior to a solution of separate panels (as illustrated in some show cases)
- Collecting environmental data very often also depends on systematic recording of flows: environmental accounting is based on documents also used in financial accounting. Reduces administrative burden and increases quality

This leads to preference for FADN

- (Environmental) statistics:
  - Do not show relation between inputs, (bad) outputs and income at the same farms. However, relation between policies and farm management in impact analysis is needed
  - Can have quality problems if not based on systematic recording cross checked with financial accounts.
- Separate panel on environmental accounting (and social indicators):
  - Same quality problems
  - Conceptually and empirically less good than 1 (FADN) panel
  - Higher costs and total administrative burden, as much more farmers are visited.
- Fits in Basic act of FADN

FLINT proposal : adapt FADN

1. CAP Reform and other policies demand better data for policy evaluation

2. Collect sustainability data on a sub-sample of 15.000 farms

3. Financed by additional resources or from a reduction of current FADN sample

Starting from a wide set of Scenarios for the future

Budget/workload Scope of data collection	**Data collection on full FADN**	**New variables on a sub sample of FADN farms**	**Reduced FADN sample for old and new variables**	**Reduced frequency of some variables (once every X year)**	**Alternative farm level data collection system**
No change in data collection					
Extension of FADN with new data with fully integrated data collection					
Extension of FADN with additional data on same farms but separately collected					
Separate environmental network with fully separated data collection					

Pros and cons of separate network

- Integrated data collection FADN + FLINT
  - (+) Allows integrated policy analysis
  - (+) Jointness and trade-off between objectives / indicators
  - (+) Use of existing procedures and quality mechanisms
  - (-) Increased complexity of data collection
  - (-) Need to reconsider field of observation?
  - (-) Wide variety of objectives complicates sample design
- Separate network for e.g. environmental variables
  - (+) Possibility to optimise design for specific variables
  - (+) Optimised design results in more reliable estimates
  - (+) Burden can be distributed among farmers
  - (-) Needs to be established (requires time and resources)
  - (-) No or weak link with economic performance and farm management
  - (-) No direct link with policies, policy measure more difficult to evaluate

Meetings with national Ministries

- Common feeling that there is a need for sustainability data. Some ad-hoc data collection takes place
- Having an integrated dataset would be crucial for policy analysis (even it is not optimal for certain aspects)

- Monitoring costs are limited compared to subsidy payments
- Agricultural policy is mainly EU policy, monitoring needs are also at EU level

- Data collection (and exchange of data) affected by privacy laws in a country
- Make use of existing data where possible, also strengthen legal framework

Additional data collection for national purposes (items in place in some countries)

- Succession
- Water usage
- Information on livestock housing to calculate manure applications
- Pesticide usage and nutrient balance
- Use of fertilizer amounts
- Education and training
- Advisory service
- Ownership management
- Market outlet
- Greening
- Insurance
- Amounts of feedstuffs for animals
- Energy (types, quantity)
- Household economics, private consumption, taxes paid
- Soil type
- Energy use
- GHG calculation
- More detailed variables than FADN (e.g. crop categories, animal categories)

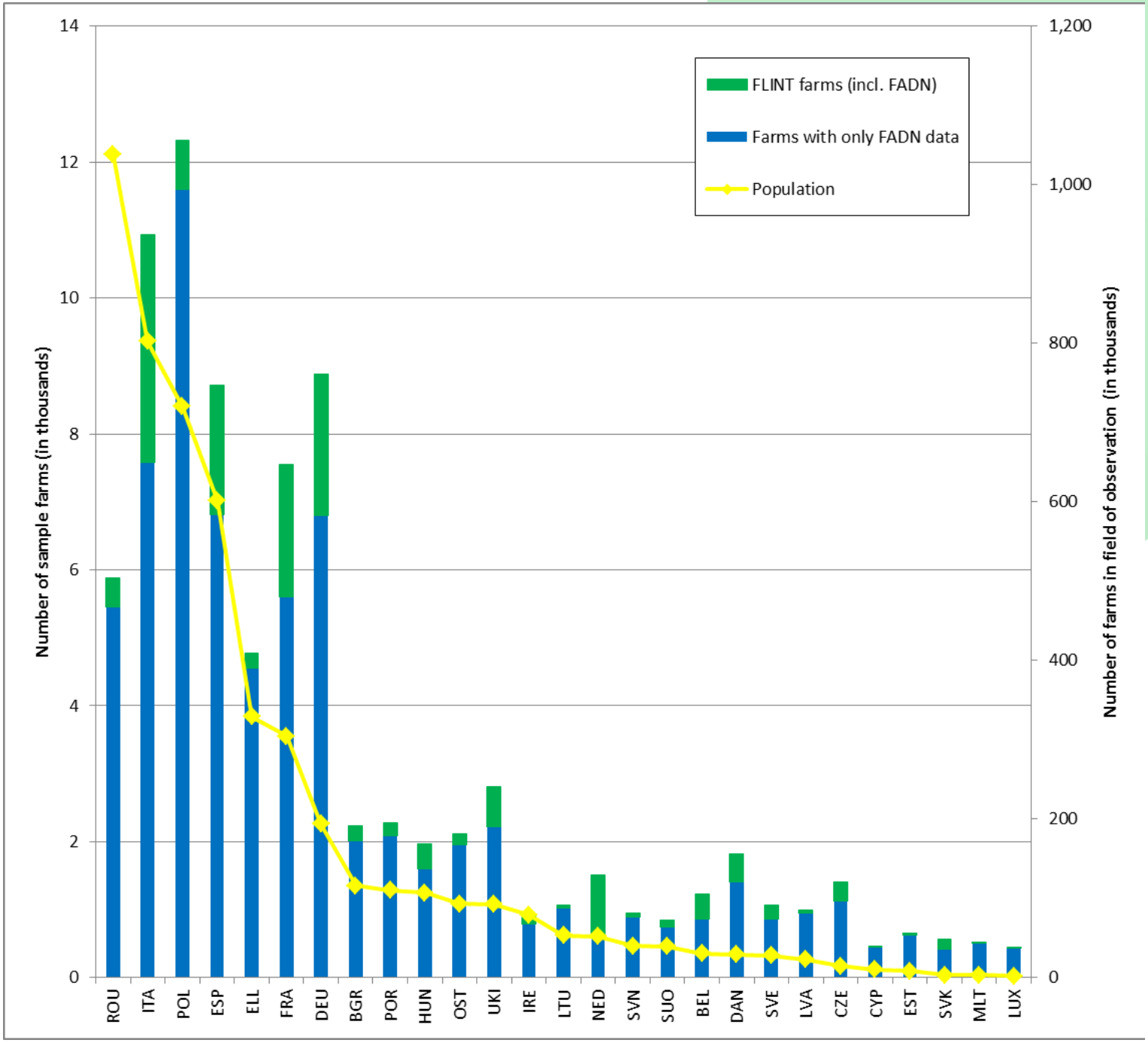
Conclusions FADN committee

- Everything is feasible, but at which costs
  - In terms of budget
  - In terms of burden on farmers
- Most discussion on social indicators
  - Qualitative nature, frequency of collection, expertise of data collectors
- Implications for knowledge and training of data collectors
- Support for sub sample approach
- Costs is the major limitation
- Potential to strengthen FADN
- No large differences between different organisations models of FADN

Detailed recommendations (1)

- Start collecting FLINT data
- Including FLINT data on all FADN farms would increase total running costs with 40%.
- More feasible option to collect FLINT data on a subsample of farms.

- **Create FADN sub-sample of 15.000 farms on which sustainability data are collected**
- Distribution of 15.000 over member states based on optimal allocation over the member states


FLINT farms (incl. FADN)
Farms with only FADN data
Population
Number of sample farms (in thousands)
Number of farms in field of observation (in thousands)
0
2
4
6
8
10
12
14
0
200
400
600
800
1,000
1,200
ROU
ITA
POL
ESP
ELL
FRA
DEU
BGR
POR
HUN
OST
UKI
IRE
LTU
NED
SVN
SUO
BEL
DAN
SVE
LVA
CZE
CYP
EST
SVK
MLT
LUX

Recommendations (2)

- Would increase operating costs of FADN (to be paid by MS or EU?)
- Alternative solution within current budget limitations:
  - Reduction of current sample of about 85.000 to 75.000 farms
    - impact on quality of estimates (at EU and MS level) of economic indicators very limited.

Recommendations (3)

- Setting up FLINT data collection requires investments (software, instructions)
- DG-AGRI could support exchange of experiences and best practises
- Recommendation to start a FLINT-2 project.
  - Could start soon
  - Make use of existing data in MS for policy analysis in 2018 (also from FLINT partners who will continue their data collection)
  - Transfer of FLINT knowledge to other MS, start testing

  And:
  - Connect with developments in IT and private sustainability schemes
  - Share best practises and legal arrangements in use of administrative and commercial data

In conclusion: where do we stand now ?

- Data on new indicators is clearly needed for impact assessment of policies, to defend and improve the CAP
- Collecting the data in FADN has clear advantages over other options (environmental statistics, separate panel)
- FLINT showed that data collection is feasible.
- FLINT showed how such data improves policy analysis.
- FADN can keep its relevance by innovating its data collection

FLINT

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