

# Use of administrative data from the view of the European code of practice in FADN

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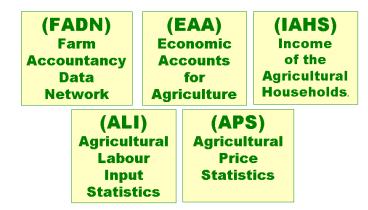


#### FADN in Sweden

FADN is made whitin the framework of "Official Statistics of Sweden" Sveriges officiella statistik

- 90 % of farms collected at Statistics Sweden
- 10 % of farms collected at Swedish Board of Agriculture

Official Statistics of Sweden in the agro-monetary area



EU Code of practise applies for official statistics of Sweden



### Code of practice indicator 8.1

When European Statistics are based on administrative data, the definitions and concepts used for administrative purposes are a good approximation to those required for statistical purposes.

- 1. The statistical authority is responsible for the statistical processing of administrative data used for European Statistics.
- 2. Statistical processing is clearly distinguished from administrative data processing When administrative data are used for statistical purposes, data are treated specifically for their statistical use. This might imply deriving new variables, applying different validation and imputation rules, creating new data files, calculating weights and new aggregates and specific quality checks.
- 3. Documentation exists describing the differences between administrative and statistical processes in terms of definitions, concepts, coverage, etc.
- 4. Studies about differences in concepts and measures are made





### Quality framework Daas et al.

Hyper-dimensions of

- 1. Source
- 2. Metadata
- 3. Data

**Dimensions** 

Quality indicators

### Quality framework Laitla et al.

- 1. OK as it is for statistics
  - output data quality,
- 2. OK after processing
  - production process, input quality.
- Improve the statistical system
  - Production process quality



### Sources of data for Swedish FADN

#### Statistical registers/surveys

- Farm Register (FSS)
- Crop survey
- Horticulture survey
- Price statistics

#### Directly from farmers

- Labour input
- Yields (if not included elsewhere)
- Inventories of buildings, equipment, machinery (only year 1)
- Inventories of stocks
- Investments
- Basic information

#### Other data sources

- IACS data on (subsidies) (areas), (crops)
- Central cattle data base (cattle)
- Taxation registers (value of farm)
- Organic control bodies (Organic production)
- Accountancy data (sometimes extended with stocks etc.)
- Swedish milk (milk deliveries)



	IACS Subsidies Areas Crops	Central cattle data base (Nr of cattle in stocks purpose of sales)	Taxation register value of farm	Control bodies for organic production	Accountancy data	Swedish milk
Source dimensions						
1. Supplier	+++++	++++	++++	+++++	+++	+++
2. Relevance	+++++	++++	+++	++++	++++	+++++
3. Privacy & security	+++++	++++	++++	+++++	+++++	+++++
4. Delivery	+++++	++++	++++	+++	+++	+++++
5. Procedures	+++++	++++	++++	++++	++++	++++
Metadata dimensions						
1. Clarity	+++++	++++	++++	+++	+++++	+++++
2. Comparability	+++++	++++	++++	++++	+++	+++++
3. Unique keys	+++++	++++	++++	++++	+++++	+++++
4. Data treatment	+++++	++++	+++++	+++	++++	+++++



	IACS Subsidies Areas Crops	Central cattle data base (Nr of cattle in stocks purpose of sales)	Taxation register value of farm	Control bodies for organic production	Accountancy data	Swedish milk
Data						
1. Technical checks	+++++	++++	++++	++++	+++	+++
2. Over-coverage	+++	+++	+++	++++	++++	+++++
3. Under-coverage	++++	++++	++++	+++++	+++++	++++
4. Linkability	++++	+++	++	++++	++++	+++++
5. Unit non-response	++++	++++	++++	++++	++++	+++++
6. Item non-response	++++	++++	+++++	++++	++	+++++
7. Measurement	+++++	++++	++	++++	++++	+++++
2. Processing	+++++	++++	++	++++	++++	+++++
3. Precision	++++	+++	++	++++	++	+++++
4. Sensitivity	+++++	++++	++++	+++	++++	+++++



### Starting point - the users

#### EU:Administrative use

- Report according to (EG) nr 834/2007

#### EU:Statistical use

- FSS
- FADN (areas, crops, animals, animals slaughterd)

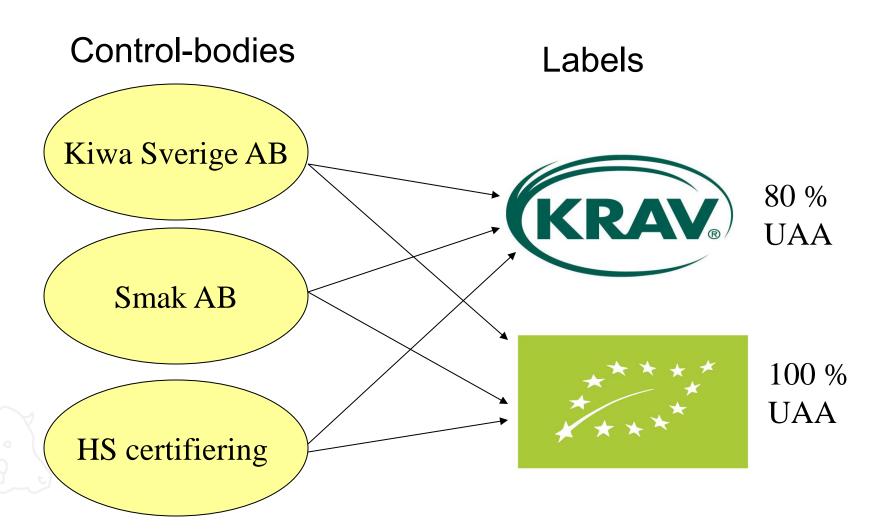
#### Aditional swedish use

- Swedish official statistics regarding areas, nr of animals and production
- National environmental indicators





### Supplier: Control-bodies





#### What the consumers see





### Procedures Legal prerequisites

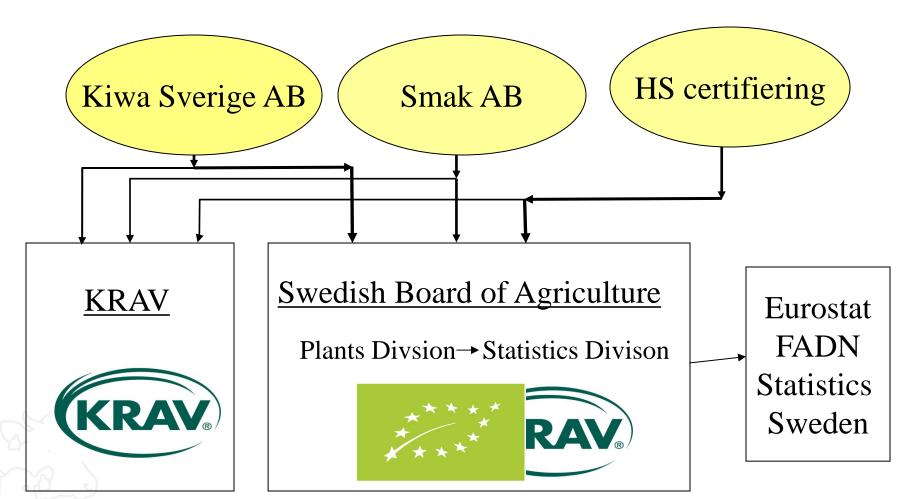
#### Transmission of data

- Informal agreement
  - The "KRAV-software" has an added module with "EU-certification not KRAV".
  - The module fulfills the demands in the regulation
- The Swedish regulation
  - Specifies variables to send to the Swedish Board of Agriculture





### Delivery: the reporting





### Control body register

Clarity- comparbility- unique keys - data treatment

Information about the holding unique identiferis

#### Crops

Organic crops and organic areas during the year

#### **Animals**

- Average number of dairycows and sows during the year
- Highest number of ewes in this year's production
- Number of slaughtering pigs produced during the year
- Born or bought calves during the year
- Number of cows sold for breeding less than 4 months old





Control bodies for organic production

#### Source dimensions

1. Supplier ++++

2. Relevance +++++

3. Privacy & security +++++

4. Delivery +++

5. Procedures +++++

#### Metadata dimensions

1. Clarity +++

2. Comparability ++++

3. Unique keys ++++

4. Data treatment +++





### Farm register

Information about the holding including keys from other registers

FSS-years (Reference day first Thursday in June)

- Areas, animals
- Information about the holding including keys from other registers

Other years (Reference day first Thursday in June)

- Cattle is updated every year from Cattle database
- Surveys on animals covering sheep, pigs and poultry
- Last known value



### FADN- all years

#### Organisational information

- All information from Farm register including organisational id of the holder, Production place numbers for the cattle register, FSS\_id
- Information on linkage FADN-Farm register (FSS)

#### **FADN-variables**

- Number of animals in stock
- Number of animals sold
- Area of crops
- Crop yields



### Linkability

#### Farm register (FR) - FR\_id. **←** Cert\_id -Org\_id.← -Name adress telephone ← - Type of animal - PPN\_id ← Control bødies - Cert\_id. **FADN** - Org\_id. - Org\_id. - Name, adress, phone-- Name adress telephone Type of animals - PPN id Area of crops - FR\_id - Type of animal Area of crops

## Information of organic production in FADN

Farm register (animals)

- Type of animal
- Number of animals
- Area of crops
- Crop production



# How organic register is used for FADN

**Animals** 



Animal production



Crop-areas Crop production



Holdings
FADN (IACS)
+ Control reg.

Holdings
FADN (IACS)
+ Control reg.

Holdings
FADN'(IACS)
+ Control reg.

Holdings
FADN'(IACS)
+ Control reg.

Variables
FADN (cattle,
FADNsurvey)

Variables
FADN (swedish milk, survey)

Variables
FADN (IACS)
+ control reg.

Variables
FADN (Survey)
Sometimes
cropsurvey



#### Tecnical checks



- Big differences of area of crops
- Not the same crop
- Duplicates between control-bodies
- Not the same type of animal





Control bodies for organic production

#### Data

1. Technical checks +++++

2. Over-coverage ++++

3. Under-coverage +++++

4. Linkability ++++

5. Unit non-response ++++

6. Item non-response ++++

7. Measurement Not relevant

2. Processing +++++

3. Precision Not relevant

4. Sensitivity Not relevant



#### **Positives**

- Benefit from the work for the organic statistics
- Benefit from the work with linking between adminstrative registers and the farm register
- Reduced responseburden
- Better data quality





### Thank you...

... for your attention...

...Questions?

