

Representativity in FADN/FSDN

A selection that --- ensures a representative sample

- All relevant types and sizes of farming --- are to be covered at the level of detail which provides representative results on important farm groups, within the limits of the sample size.
- is not to under- or overrepresent major characteristics of farms in the field of survey significantly.
 - farming methods such as organic farming and characteristics of farms such as part of the activity dedicated to beekeeping.
- In cases of a non-random selection of sample farms for FSDN, the selection procedure is to aim at avoiding bias ---
 - in particular, for a proper assessment of income of the surveyed farms.

Representativity in FADN / FSDN

(Kruskal and Mosteller, 1979)



Meaning 5. Coverage of the population: Noah's Ark.



Meaning 7. Some specific sampling method: The Sampling Department in action.



Meaning 9. Good enough for a particular purpose: Boy fishing with worm and safety pin.

Quality of official statistics

Relevance	Dark Green
Accuracy	Yellow
Timeliness, punctuality	Light Green
Accessibility” and “clarity”,	Light Green
Comparability	Dark Green
Coherence	Dark Green

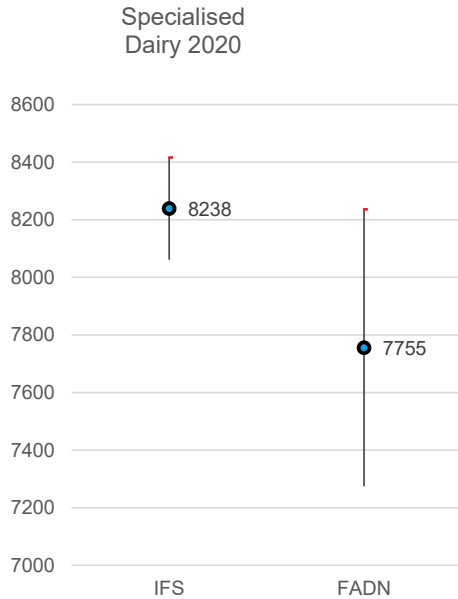
Reserachers/ evaluaters

- Relevance
- Panels- holdings that are in FSDN several years
- Variance in the material
- Coherence

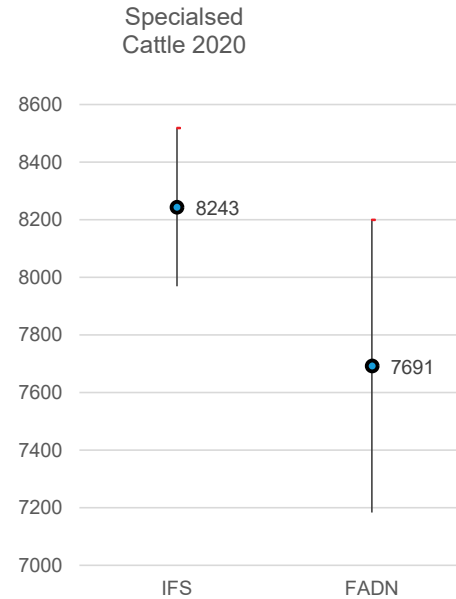
Two types of analyses

1. Accuracy and precision, estimated totals
 - Are there significant differences between FADN and IFS/EAA
 - What is the confidence interval
2. Are there significant differences between the farms that say yes to participate and those who say no, averages

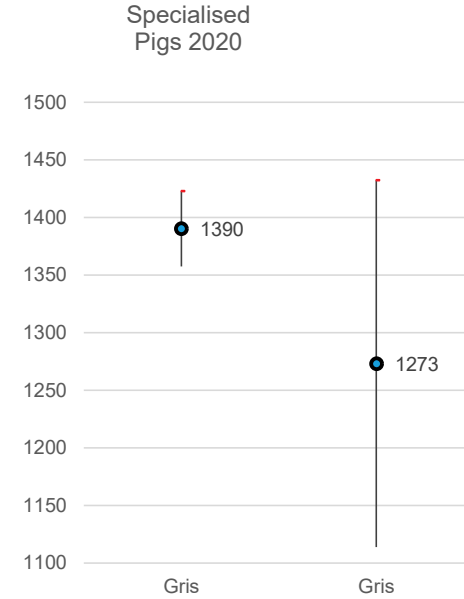
Annual work unit, estimated totals, confidence intervals



2017	7%
2018	7%
2019	6%
2020	6%
2021	6%

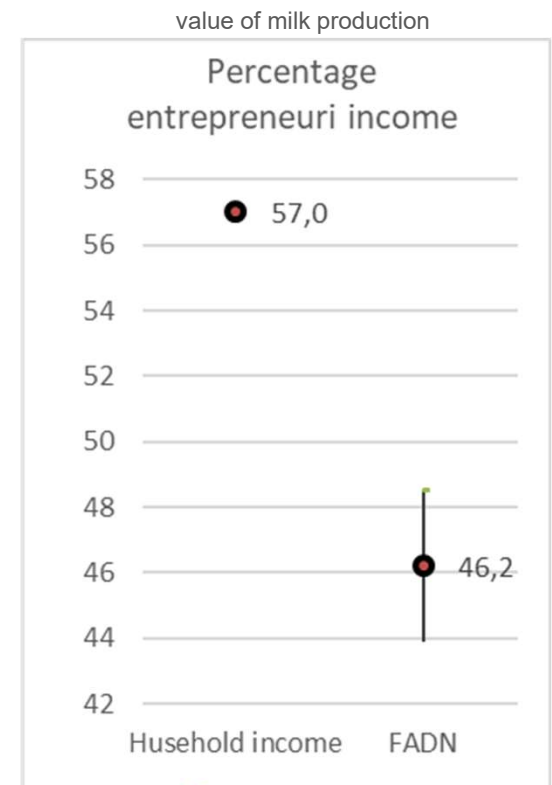
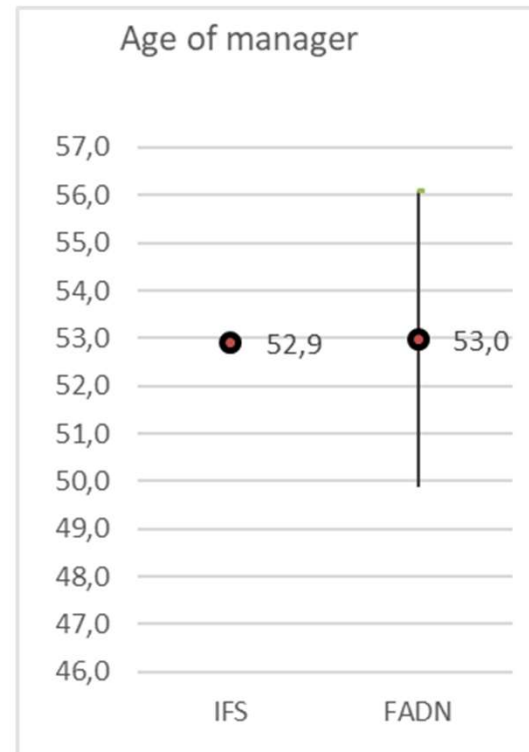
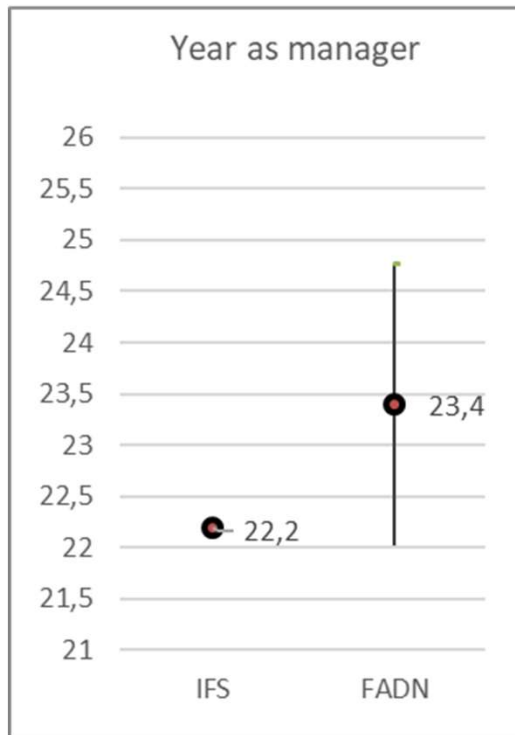


2017	8%
2018	8%
2019	6%
2020	7%
2021	6%



2017	18%
2018	17%
2019	15%
2020	13%
2021	11%

Specialised dairy,



2020 9%

Non response 2019-2020

We need to call four farms for one yes

It is more difficult to recruit small farms

	Said yes	Said no	of calls for one y
A01_RO1_Specialised cereal_800_1599	12	119	11
A02_RO1_Specialised cereal_1600_3199	19	42	3
A03_RO1_Specialised cereal_3200_5599	9	21	3
A04_RO1_Specialised Dairy_1600_3199	3	19	7
A05_RO1_Specialised Dairy_3200_5599	10	19	3
A06_RO2_Specialised Dairy_1600_3199	10	33	4
A07_RO2_Specialised Dairy_3200_5599	17	29	3
A08_RO3_Specialised Dairy_1600_3199	4	23	7
A09_RO3_Specialised Dairy_3200_5599	5	17	4
A10_Riket_Specialised Dairy_5600_	25	56	3
A11_Riket_Specialised meat_800_3199	54	167	4
A12_Riket_Specialised meat_3200_5599	10	19	3
A13_Riket_Specialised pig_1600_5599	11	23	3
A14_Riket_Specialised pig_5600_	16	23	2
Total	205	610	4

Variables checked for differences

Variable	Source
Standard output	IFS
Age of manager	IFS
Area of arable land	IFS
Area of forestry	IFS
Nr of cattle	IFS
Nr of pigs	IFS
Calculated AWU	IFS
Houshold entrepreneurial income	Household survey

Differences between farms who said yes and no, averages for household income and land

	Average of entrepreneurial household income			Agricultural land		
	Said yes	Said no	Diference %	Said yes	Said no	Diference %
A01_RO1_Specialised cereal_800_1599	107 984	111 737	3%	46	47	2%
A02_RO1_Specialised cereal_1600_3199	188 399	205 573	9%	129	125	-3%
A03_RO1_Specialised cereal_3200_5599	320 357	206 567	-36%	332	314	-5%
A04_RO1_Specialised Dairy_1600_3199	222 262	233 259	5%	38	40	6%
A05_RO1_Specialised Dairy_3200_5599	281 745	243 382	-14%	103	99	-5%
A06_RO2_Specialised Dairy_1600_3199	214 771	258 417	20%	32	33	5%
A07_RO2_Specialised Dairy_3200_5599	353 639	467 550	32%	89	87	-2%
A08_RO3_Specialised Dairy_1600_3199	190 052	151 180	-20%	41	38	-7%
A09_RO3_Specialised Dairy_3200_5599	327 458	386 250	18%	152	102	-33%
A10_Riket_Specialised Dairy_5600_	398 109	287 846	-28%	259	284	10%
A11_Riket_Specialised meat_800_3199	147 845	230 859	56%	37	46	24%
A12_Riket_Specialised meat_3200_5599	265 361	403 308	52%	126	136	7%
A13_Riket_Specialised pig_1600_5599	260 433	240 057	-8%	95	148	56%
A14_Riket_Specialised pig_5600_	319 592	591 023	85%	187	172	-8%

Significant differences

Significant differences in 11 cases out of 112

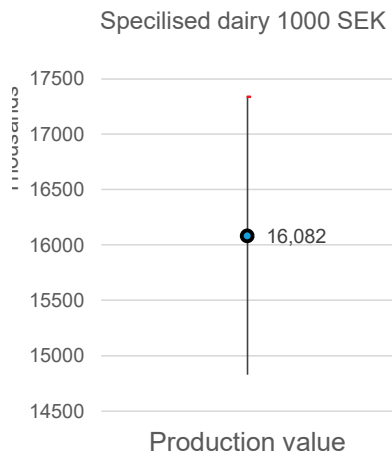
strataforkl	Variable	Method	Variances	tValue	Probt
A01_RO1_specialised cereal_800_1599	Forestry area	Satterthwaite	Unequal	-3,767	0,001
A01_RO1_specialised cereal_800_1599	Age of manager	Folded F	Equal	-2,770	0,006
A01_RO1_specialised cereal_800_1599	Standard output	Folded F	Equal	2,561	0,012
A01_RO1_specialised cereal_800_1599	Cereals	Folded F	Equal	2,137	0,035
A09_RO3_Dairy_3200_5599	Cereals	Satterthwaite	Unequal	-3,147	0,006
A09_RO3_Dairy_3200_5599	Arable land	Folded F	Equal	-2,287	0,033
A11_Riket_cattle_800_3199	Standard output	Folded F	Equal	2,908	0,004
A11_Riket_cattle_800_3199	Cattle	Folded F	Equal	2,784	0,006
A11_Riket_cattle_800_3199	Age of manager	Folded F	Equal	-2,045	0,042
A11_Riket_cattle_800_3199	Arable land	Folded F	Equal	1,985	0,048
A14_Riket_Gris_5600_	Age of manager	Folded F	Equal	2,606	0,013

Conclusions

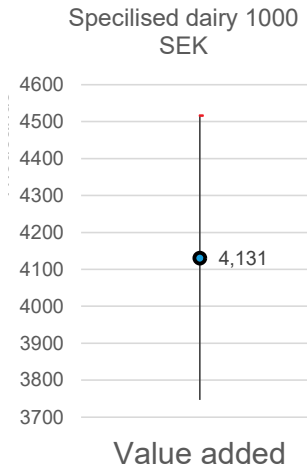
1. It is possible to discuss the quality of FSDN in relation to user needs using tools from the European statistical system
1. It is possible to assess some aspects of the representativity in FSDN
2. Some methods requires knowledge of the farms not participating in FSDN some do not.



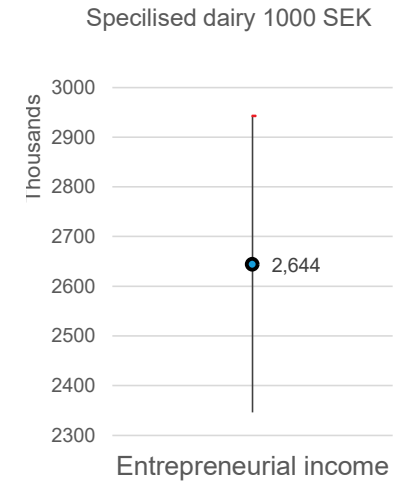
Special dairy, confidence interval, total value, percent



2014	7%
2015	8%
2016	10%
2017	9%
2018	9%
2019	7%
2020	8%



2014	10%
2015	10%
2016	12%
2017	10%
2018	17%
2019	13%
2020	12%



2014	19%
2015	16%
2016	15%
2017	11%
2018	34%
2019	13%
2020	16%