

Farm Accountancy Data Collection

Survey on the methodology used in different European countries

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Summary

Switzerland collects and evaluates accounting data from farms. To allow Swiss data collection methods to be compared with those of other European countries, nine European countries completed a questionnaire.

Each country concerned has a minimum size threshold for the inclusion of farms in its field of survey. In some cases farms are also excluded for the following reasons: too big, involved in fringe activities or having special forms of organisation.

The samples cover all strata. However, the number of farms per stratum differs.

Half of the countries use a selection procedure based on random sampling. A systematic rotation of the farms surveyed is not consistently applied in any of the countries.

Some evaluating institutions work with other bodies that are organisationally independent from them, while others collect the data themselves. Tax accounting is compulsory in some countries but does not serve as the sole source of survey data in any country.

Farmers receive financial compensation only in the three German-speaking countries. However, in all countries except for Denmark, it is customary for the farmer to receive an evaluation of his own farm. Other incentives are also encountered.

A balance sheet and some form of profit and loss account are drawn up in all of the countries. In some cases the income from non-agricultural activities and the private consumption of the farm manager's family is also taken into account.

The results of the questionnaire provide an initial overview of the differences and similarities between the methodologies used by the various countries concerned.

Key words

Farm accountancy data collection, methodology, questionnaire, Europe



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Abbreviations

ART	Agroscope Reckenholz-Tänikon Research Station ART, Switzerland
CHF	Swiss francs
ESU	European Size Units (for the definition of farm sizes), in euros
FADN	Farm Accountancy Data Network (a European Union project)
nR	Country not using random farm sampling
SGM	Standard Gross Margins, in euros
R	Country using random farm sampling



1. Introduction

Like other European countries, Switzerland collects and evaluates farm accountancy data. One of the main aims in doing so is to record the current economic status of Swiss agriculture. The data is evaluated by the Agroscope Reckenholz-Tänikon (ART) Research Station, which forms part of the Federal Office of Agriculture.

In order to compare its own data collection methods with those of other European countries, the ART sent a questionnaire to 19 countries in June 2007. The following nine countries replied:

- Austria
- Belgium (Flanders only)
- Denmark
- England (part of the United Kingdom)
- Finland
- Germany
- Hungary
- Italy
- Netherlands

Croatia also replied. The data collection system there in according to the EU-requirements will bi built up during 2008.

This document sets out the most important results and conclusions emerging from the questionnaire.

First-hand information on individual countries must be requested directly from the countries concerned. In Section 5, there is a list of all persons who completed the questionnaire.

2. Results of the questionnaire

2.1 Field of survey

The field of survey comprises all farms that qualify as survey material in principle, taking account of given delimitation criteria (e.g. minimum farm size).

Each country sets a **minimum size limit** below which a farm is excluded from the field of survey. Both financial and non-financial criteria are used (cf. Table 1):

- Financial criteria always consist of Standard Gross Margins (SGMs), which are mostly expressed in European Size Units (ESUs).
- As a non-financial criterion Switzerland uses 11 thresholds relating to the size of agricultural land or livestock numbers, of which at least one must be exceeded. England worked with SGMs until the 2003/04 financial year, since which time it has been using the non-financial criterion of Standard Labour Units (SLUs). For the Farm Accounting Data Network (FADN), England continues to use ESUs in accordance with EU requirements.
- In Denmark, either a given Standard Gross Margin (financial criterion) or a given surface area (non-financial criterion) must be exceeded.



	Table 1: Minimum	farm size	for inclusion	in the	field of survey
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Financial criterion	Austria, Belgium (Flanders), Finland, Germany, Hungary, Italy, Nether- lands
Non-financial criterion	Switzerland (surface area and livestock numbers), England (Standard Labour Units)
Both	Denmark (Standard Gross Margin or surface area)

The overall technical and economic evolution of the sector can result in a given farm that used to generate an adequate income becoming too small to secure a living for the farmer. The average farm size is thus increasing in most areas. It would therefore be conceivable, in principle, to directly raise the minimum farm size over time to take this trend into account. At the present time none of the countries surveyed makes regular and systematic use of this possibility. Adjustments are possible by indirect means:

- if the Standard Gross Margins used are regularly recalculated. The trend towards falling product prices and rising costs is resulting in farms having to be bigger in order to achieve the same Standard Gross Margins.
- if the SLUs are regularly adjusted to reflect technical advances. This results in increasingly large farm units being able to be run by the same number of SLUs.

Three countries have defined a **maximum farm size** in addition to a minimum farm size (cf. Table 2). The threshold here is always an SGM (e.g. expressed in ESUs). The reasons indicated for the introduction of this maximum size limit are that farms exceeding the maximum threshold are either difficult to reach or their unique character prevents them from being included in the classification system.

Table 2: Maximum farm size for acceptance in the field of survey

Maximum farm size	Austria, Belgium (Flanders), Netherlands
No maximum farm size	Denmark, England, Finland, Germany, Hungary, Italy, Switzerland

It is not as easy to obtain accounting figures for some types of farm as for others. For example, in Switzerland it is difficult to recruit specialist vegetable-growing, horticultural and pig farms. It would be conceivable to **exclude these types of farm group from the field of survey in the same way as small farms are excluded** as in any case little data is available from them. The questionnaire shows that this practice is applied mainly in the case of agricultural fringe activities and special forms of organisation. Forest holdings and purely horticultural businesses were cited as examples in the questionnaire, as well as non-commercial public institutions, legal persons and bodies.

One could also **exclude certain farm groups after the survey** on the grounds that it has proven impossible to obtain sufficient or even any data for them. According to the questionnaire, this is not done in any of the countries concerned.

The field of survey never covers the total agricultural population of a given country owing, among other things, to the minimum size threshold. The four tables below show the **coverage of the total agricul-tural population by the field of survey** for various variables. In interpreting the results it is important to bear in mind that the coverage is, of course, determined by the definition of the total agricultural population.

Table 3 shows that the field of survey covers between 13% and 82% of all farms of the total agricultural population, depending on the country concerned. This figure is below 50% for Hungary and England. However, as these countries' agricultural sectors are characterised by a high proportion of small farms, the coverage in terms of utilised agricultural area, percentage of animals and percentage of overall gross margins is still well above the 80% level.



Table 3: Coverage of the total agricultural population - Number of farms

Country	Coverage	Country	Coverage
Switzerland	82%	Austria	56% (rural farms)
Denmark	81%	England	35%
Netherlands	77% (Farms < 1'200 ESUs)	Hungary	13%
Belgium (Flanders)	62%	Germany	Unclear
Finland	62%	Italy	No reply

Table 4 shows the proportion of utilised agricultural area covered by the field of survey. The results are above 85% in all cases.

Table 4: Coverage of the total agricultural population – Proportion of the utilised agricultural area

Country	Coverage	Country	Coverage
Denmark	98%	Belgium (Flanders)	90%
Switzerland	96%	Austria	86%
England	95%	Finland	86%
Netherlands	94% (Farms < 1'200 ESUs)	Germany	No reply
Hungary	91%	Italy	No reply

Table 5 shows that, in the majority of cases, over 90% of animals (expressed in livestock units) are covered by the field of survey. At 82% Hungary is the only country that falls below this figure.

Table 5: Coverage of the total agricultural population – Proportion of animals (in livestock units)

Country	Coverage	Country	Coverage
Denmark	99%	Austria	92%
Finland	97%	Hungary	82%
Switzerland	97%	Germany	No reply
Netherlands	>95% (Farms < 1'200 ESUs)	England	No reply
Belgium (Flanders)	94%	Italy	No reply

In every country, the field of survey covers at least 87% of the overall Standard Gross Margin (expressed in European Size Units (ESUs)) (cf. Table 6).

Table 6: Coverage of the total agricultural population – Percentage of the overall Standard Gross Margin (in ESUs)

Country	Coverage	Country	Coverage
Denmark	99%	Belgium (Flanders)	89%
Switzerland	97%	Austria	89%
England	96%	Hungary	87%
Finland	93%	Germany	No reply
Netherlands	91% (Farms < 1'200 ESUs)	Italy	No reply

In Switzerland the farm data is obtained by private accounting offices, which are also responsible for recruiting the farms for the survey. There is a certain delay between the specification of a reference sample by the evaluating institution and the recruitment of the corresponding farms. The possibility of



estimating the future field of survey in advance has therefore been discussed in Switzerland. None of the countries responding to the questionnaire follows this practice.

2.2 Stratification

Each country divides its sample into various **strata**. The number of strata varies widely from one country to another. The following variables are commonly encountered in the stratification system:

- Type of farm (all countries)
- Size categories (all countries except England)
- Regions (six out of the ten countries)

Other stratification variables cited are:

- Legal form of the enterprise (legal person: yes/no)
- Type of farming (organic/non-organic)
- Height classes
- Type of business (main source of farmer's income/part-time business)

The **percentage of farms per stratum** is determined in different ways. There are basically two possibilities:

- Same percentage of farms in each stratum (proportional allocation, e.g. in relation to the number of farms in the field of survey)
- The percentage of farms is optimised for each stratum according to certain criteria and thus differs from one stratum to another (optimal allocation, e.g. taking account of the standard deviation of a variable of special interest)

An overview is provided in Table 7. Nine of the ten countries use a form of optimal allocation. Only England uses a purely proportional allocation.

Six of the ten countries use the Neyman-Tschuprow optimal allocation method at least to some extent, whereby the sample size is determined for each stratum taking account of the standard deviation of a variable of special interest (cf. Table 8). Three of these six countries also use a proportional allocation method alongside it. Denmark, Germany and the Netherlands each use their own optimal allocation methods.

At least four countries supplement the formalised method with "manual" adjustments. The following reasons were given for this practice:

- Larger numbers of specialised farms can be obtained
- A minimum number of farms can be secured for each stratum
- Special evaluations (e.g. for specific regions) can be made
- Larger farms are preferred



Table 7: Determination of the number of fail	rms per stratum
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Country	Method
Belgium (Flanders)	Proportional allocation between the main groups "horticulture" and "agriculture" according to the SGM . This is done because there are considerable variations in the "agricultural income" and "standard labour unit" headings in the "horticulture" sample so that an excessively high number of horticultural farms compared to the total sample would be selected if an optimal allocation were made. Neyman- Tschuprow optimal allocation within the two groups taking account of "agricul- tural income" and "Standard Labour Unit" variables.
Denmark	The optimal allocation method described here has only been partially imple- mented to date.
	The total sample is broken down into individual farm size categories using the following measurement weighted according to the number of farms per stratum: standard deviation of the standard output with reference to a regression line between standard output and SGM.
	The breakdown into types of farm within the different size categories is then done proportionately to the respective number of farms in the field of survey.
Germany	The allocation of the total sample size to the different federal states is done in accordance with the principle of comparable precision with an exponent of 0.3 (cf. KRUG & AL., 2001, pages 123ff.). This allocation method is based on an assumed graduation of the relative standard error of a reference criterion between the strata, in each case depending on the mean values of the stratum for this criterion. Instead of a concrete allocation criterion, a notional criterion is used here, for which the unitary mean values and variation coefficients are imputed to the different federal states: in other words, the allocation to the states is based exclusively on the number of farms in the field of survey (states with a small number of farms have a higher sampling ratio than those with a large number of farms).
	Within the federal states themselves, quotas are also set for the individual strata using the principle of comparable precision with an exponent of 0.25. In this case the SGM criterion is used.
England	Proportional allocation with a sampling ratio of three per cent of the farms.
	"Manual" adjustment: Higher sampling ratio for certain specialised farms, e.g. pigs, poultry or horticulture.
Finland	Mean value between the Neyman-Tschuprow optimal allocation (standard deviation of the "annual labour unit" variable) and the proportional allocation according to the number of farms.
	"Manual" adjustment: Each stratum must contain at least 5 farms.
Italy	The total sample size is determined nationally and regionally on the basis of the variation coefficients for the following three variables: SGM, standard output and cost level. No formula specified. "Manual" adjustment: At least five farms per stratum.
	Strata containing no or very few farms are eliminated or aggregated with similar strata. Optimal allocation as follows: combination of an interpolation of Neyman-Tschuprow for several variables and a generalisation of the optimal allocation according to Bethel (both really used? The Bethel method is an application of the Neyman-Tschuprow optimal allocation to cases where the optimisation process needs to take account of several different survey variables). Variables taken into account: SGM, standard output and cost level (cf. BETHEL, 1989)
Netherlands	Allocation among types of farm: Based on the relevance in terms of number of farms, economic value and policy measures (formula?).
	Optimal allocation within farm types, whereby both the lower and upper limits of the stratum (economic size category) and the number of elements per stratum are determined. The variable used here is the SGM (formula?).



Austria	Neyman-Tschuprow optimal allocation (standard deviation of the "income from agriculture and forestry" variable).
	"Manual" adjustment: Each stratum must contain at least 15 farms; the available data must allow special evaluations to be made (e.g. mountain farm cadastre groups, federal states, main production areas).
Switzerland	A combination of proportional allocation (4.2% of all farms per stratum) and the average of three optimal allocations done according to Neyman-Tschuprow (standard deviation of the "agricultural income", "earnings per family labour unit" and "farm income" variables).
	1000 of the approx. 3500 farms are " manually " allocated based on the following criteria: minimum number of farms per stratum, priority to farms with over 20 hectares and minimum and maximum quotas for all types of farm in the different height classes and regions.
Hungary	Neyman-Tschuprow optimal allocation (No details of the variables taken into account).
	The two largest farm size categories (more than 100 ESUs and more than 250 ESUs) were merged into one, as the number of farms within them was too small.

Table 8: Neyman-Tschuprow optimal allocation

The Neyman-Tschuprow optimal allocation is based on the following formula (cf. Cochran, 1972, formula 5.20):

$$n_h = n \frac{N_h S_h}{\sum_{h=1}^L N_h S_h}$$

 n_h = Sample size in stratum h

n = Total sample size

 N_h = No. of elements in stratum h of the total agricultural population

 S_h = Standard deviation of a given target variable in stratum h of the field of survey

2.3 Sampling

Sampling methods can essentially be divided into two different categories:

- **Random sampling:** Here, in principle, each farm in a given stratum has the same chance of being selected for the sampling as any other.
- Non-random sampling: Not every farm in a given stratum has the same chance of being selected for the sampling. Farms that are "easy to recruit" are given preference over those that are not easy to recruit. All countries that use this variant set specific quotas for each stratum. The strictness of compliance with these quotas varies from one country to another.

Half of the countries responding to the questionnaire use a selection process based on random sampling. Among the countries using random sampling, the response rate ranges between 0 and 100 per cent, depending on the country and on the stratum concerned, except in Finland and Italy, where it is unknown. The response rate is unknown in all the countries where random sampling is not used (cf. Table 9).



Two of the five countries using random sampling have adopted the system fairly recently. Italy implemented the change in 2003, while Finland did so in 1995. We are unable to judge how successful the change was in the context of this report.

Furthermore, Italy is the only one of the ten countries concerned where farmers are obliged by law to take part in statistical surveys. In all the other countries participation is voluntary.

Random sampling	Denmark (79%)
	England (6-25%, depending on type of farm)
	Finland
	Italy
	Netherlands (26% on average; 0 to 100%, depending on stratum)
	Ireland*
	Sweden*
Non-random sampling	Belgium (Flanders)
	Germany
	Austria
	Hungary
	Switzerland
	France*
	Spain

Table 9: Sampling method and response rate (* data from other sources)

The countries that do not use random sampling explained their choice by the following main arguments:

- It was feared that the non-response rate would be too high (four out of the five countries).
- The statistical office is only able to supply anonymous data, i.e. without names or addresses, because of data protection laws (Hungary).
- For time series analyses it is interesting to be able to use a core number of farms taking part over a long period (mentioned once).

Table 10 shows that, among the ten countries concerned, Switzerland has the highest **percentage of farms from the field of survey for which data is actually collected (6.1%)**. The percentage is also high for Denmark and Germany and ranges between 2% and 3.5% for the other countries, while the percentage for Italy could not be established. Italy and Germany have by far the biggest sample sizes in absolute terms.

Table 10: Percentage of farms from the field of survey for which data is actually collected (sample size in brackets)

Country	Percentage of farms	Country	Percentage of farms
Switzerland	6.1% (3,426)	Austria	2.3% (2,273)
Denmark	5.5% (2,200)	Netherlands	2.2% (1,420)
Germany	4.8% (12,420)	Finland	2.1% (950)
Belgium (Flanders)	3.4% (720)	Hungary	2.1% (1,940)
England	2.7% (1,836)	Italy	Unclear (13,911)

The countries were asked whether they **systematically replaced the farms in their samples** (**rota-tion**). For example, one fifth of the farms in the sample could be replaced every year so that each re-



mains in it for five years. None of the countries questioned implements this kind of systematic rotation policy at present. However, England is addressing the issue.

It is usually left to the farm (or office) supplying the data to decide how long the farm remains in the sample. Only the following two countries mention time limits:

- Netherlands: "Usually" not more than 10 years
- England: Not more than 15 years (exceptions: specialist pig, poultry and horticultural farms)

Some countries cited an **approximate current rotation figure**. As mentioned above, however, rotation is not systematic in any of the countries and may be influenced by all kinds of factors and random events. The cited rotations range between six per cent (Flanders) and 20 per cent (Denmark and the Netherlands). (cf. Table 11).

Country	Rotation	Country	Rotation
Denmark	20%	Austria	5-10%
Netherlands	20%	Belgium (Flanders)	6%
England	10%	Other countries	Response missing or un- clear

Table 11: Rotation in selected countries

2.4 Organisation

As can be seen in Table 12, half of the evaluating institutions work **with other bodies that are or**ganisationally independent from them. In the other half, members of the evaluating institutions collect the data themselves.

Like Switzerland, Denmark and Finland work with accounting offices. However, unlike Switzerland, the farms are selected randomly. It would be interesting to investigate whether all accounting offices in Denmark and Finland are able to provide the evaluating institutions with data or if this would be possible at least from the technical and organisational point of view. In Switzerland this is not currently the case. If random sampling were introduced in Switzerland it could lead to the following problem: farms that are customers of an accounting office not working in collaboration with the evaluating institution would be excluded from the sample. One of the main problems hereby would be the use of different software tools.

Table 12: Path of data from the farm to the evaluating institution

	Random sampling	Non-random sampling
Via a body independent from the evalu-	Denmark	Switzerland
or tax adviser)	Finland	Germany
		Hungary
Directly to the evaluating institution	Italy (?)	Belgium (Flanders)
	Netherlands	Austria
	England	

Table 13 shows that the keeping of **tax accounts** is generally **compulsory** in five of the countries. In Italy, Germany and Hungary it is compulsory only for some farms, and in Belgium and Austria it is not compulsory at all. Tax accounts are not the sole source of survey data in any of the countries questioned.



	Partial source of data for the survey	Not direct source of data for the survey
Tax accounting	Denmark	Switzerland
compulsory	England	Netherlands
	Finland (only for income and expendi- ture, not for depreciation)	
Tax accounting compulsory for some farms	Italy (only large farms, available infor- mation used as data source)	Germany (large farms)
	Hungary (used as data source?)	
Tax accounting not		Belgium (Flanders)
compulsory		Austria

Table 13: Tax accounting: Obligation to keep tax accounts and use of the data for surveys

2.5 Compensation to the farmer

Table 14 shows that only farmers in the three German-speaking countries (Switzerland, Germany, Austria) receive direct financial compensation. In Germany the rate of compensation is $55 \in$ per farm per year, while in Austria it is $110 \in$. In Switzerland the financial compensation received by the accounting offices serves as an important survey management tool. The average compensation for the accounting offices is $350 \in (580 \text{ CHF})$ per farm per year. The farmer receives direct or indirect compensation from the accounting office, the amount of which varies from one office to another.

In all of the countries except for Denmark the farmer receives an evaluation (accounting-based) of his own farm. In most of the countries the farmer also receives an evaluation of a group of similar farms. This is not the case in Denmark and Italy.

Farmers taking part in the survey are sometimes also offered the following benefits, depending on the country concerned:

- Business management advice
- Publications of the evaluating institutions: Switzerland, Finland, Netherlands
- · Prognoses for the farm's next accounting year: Finland
- Free data collection software: Austria

In Italy the only advantage for farmers participating in the accountancy network is an evaluation of their own farm. However, participation is in any case compulsory. According to the information provided by Denmark, Danish farmers derive no direct benefits from taking part.



Table 14: Advantages for farmers taking part in the accountancy network

Country	Advantage	Advantage					
	Financial compen- sation	Evaluation of the farmer's own farm	Evaluation of a group of similar farms	Business man- agement advice	Publications by the evaluating institu- tion	Prognoses for the farm's next ac- counting year	Free data collec- tion software
Belgium (Flanders)		Х	Х				
Denmark							
Germany	55€/year	Х	Partial	Partial			
England		Х	Х	Limited			
Finland		Х	Х	Partial	Х	Х	
Italy		Х					
Netherlands		Х	Х		Х		
Austria	110€/year	Х	Х	Partial			Х
Switzerland	Х	Х	Х	Partial	Х		
Hungary		Х	Х	Х			

2.6 Data collected

In the area of **financial data** a balance sheet and a form of profit and loss account is drawn up in all countries. We are unable to draw many conclusions on the level of detail in the individual countries here. The Netherlands appears to go into the greatest level of detail in its national accounting data evaluation system. Here every individual invoice, including all details relating to quality, supplier, purchaser, etc., is included in the survey. The national variant covers only some of the farms in the Netherlands. The others are covered in the framework of the Netherlands EU-variant, which is less detailed.

As can be seen in Table 15, business management criteria are used for the assessment and depreciation of assets in the majority of cases. In Germany, at least the evaluation of assets is based on tax valuations.

Table 15: Criteria for the assessment and depreciation of assets

Business management criteria	Austria, Denmark, Finland, Hungary, Italy, Netherlands, Switzer- land
Tax valuations	Germany (assessment)
No response	Belgium (Flanders), England

In some countries the assets are depreciated in a linear manner, while in others the process is either linear or degressive, depending on the balance sheet heading concerned (cf. Table 16). None of the countries that completed the questionnaire uses the degressive depreciation alone.

Table 16: Depreciation method - linear/degressive

Linear depreciation	Austria, Belgium (Flanders), Italy, Switzerland
Linear or degressive deprecia- tion (depending on item)	Denmark, England, Netherlands (NL mostly degressive)
No response	Germany, Finland, Hungary



In principle, assets can be depreciated on the basis of cost value or replacement value. Table 17 gives details of the practices followed in the various countries.

Table 17: Depreciation method - according to cost value/replacement value

Cost value	Germany, Hungary, Italy, Switzerland
Replacement value	Belgium (Flanders), Finland
No response	Austria, Denmark, England, Netherlands

According to Table 18 four countries collect data on both the **income of the farmer's family from non-agricultural activities** and the family's **private consumption**. In three countries neither of the two are surveyed as a general rule. Only one of the two is surveyed in Hungary und England, while in Germany one of the two is surveyed in the case of small income and secondary income businesses. The collection of data on non-agricultural income and private consumption also seems to be possible in countries where farms are selected on a random basis (Denmark, to some extent the Netherlands).

Table 18: Collection of data on non-agricultural income and private consumption

	Private consumption data collected	Private consumption data not collected
Data on non-	Switzerland (nR)	Germany (Small/secondary income farms) (nR)
agricultural income col-	Denmark (R)	England (R)
lected	Netherlands (Income voluntary) (R)	
·	Austria (nR)	
Data on non-	Hungary (nR)	Germany (Main income farms) (nR)
agricultural income not		Finland (R)
collected		Italy (R)
	Belgium (Flanders) (nR)	

R: Country using random sampling; nR: Country not using random sampling

The extent to which **physical or technical data** is collected varies considerably. The following information is collected in all countries:

- Number of labour units and/or working hours/days
- Size of agricultural land
- Number of livestock

All the countries rate the **overall quality of data collected** as at least generally satisfactory.

2.7 Publications

The type and extent of publications varies. It is interesting to note that, with the exception of Switzerland, all the countries that answered the question on **Internet publication** indicated that they publish databases or at least tables of their results on the Web (cf. Table 19).

Yes	Denmark, England, Finland, Germany, Hungary, Italy, Netherlands
No	Switzerland
No response	Austria, Belgium (Flanders)

Table 19: Publication of tables or databases on the Web

2.8 Planned changes

The countries were asked to indicate whether they were planning or considering **major changes to their methodologies**.



The following items were cited in several cases:

- New selection plan
- Move from Standard Gross Margins to Standard Output

England mentions the following points:

- General review of statistical methods (in progress)
- Estimation using calibration techniques (completed)
- Robust estimation of sampling errors (started)
- Assessment of impact of non-response (in progress)

In the **Netherlands** changes are continually being implemented. Two items were mentioned in particular:

- Get electronic invoices directly from large suppliers or processors on standarised format and on a very detailed level (called EDI circle).
- Coupling with databases of nature quality for farmers involved in nature management.

3. Conclusions

The results of the questionnaire have provided an initial overview of the differences and similarities between the methodologies used by the different countries. For more detailed questions, the countries concerned can now be asked for information in a more targeted manner if required.

Four of the countries questioned work with accounting offices in a similar way to Switzerland and are therefore of primary interest to Switzerland when it comes to comparing methodologies (cf. Table 20).

Random sampling	Non-random sampling
Denmark	Switzerland
Finland	Germany
	Hungary

Table 20: Countries working with accounting offices

Germany appears to be closest to Switzerland as, like Switzerland, it does not have a random sampling approach and its farmers receive financial compensation.

Denmark and Finland are examples of countries that use random sampling and work with accounting offices. In both countries tax accounting is compulsory, as in Switzerland, and the associated data is used as one of the sources of information for survey purposes. In Denmark data is collected on non-agricultural income and private consumption, as in Switzerland. This is not the case in Finland.

4. Acknowledgements

The responses from the persons listed in Table 21 made this report possible. Daniel Kilchmann from the Federal Statistics Office also provided valuable input. The author would like to thank all those involved for their cooperation.



5. Bibliography

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The people listed in Table 21 kindly agreed to complete the questionnaire and make their replies available to us.

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Table 21: Responding persons/bodies

Land	Name	Institution	Postal address	E-Mail
Austria (I/II)	Josef Binder	Bundesanstalt für Agrarwirtschaft	Marxergasse 2, A-1030 Wien	josef.binder@awi.bmlfuw.gv.at
Austria (II/II)	Martin Hellmayr	LBG Wirtschaftstreuhand	Boerhaavegasse 6, A-1030 Wien	m.hellmayr@lbg.at
Belgium (Flanders)	An Van den Bossche	Flemish government, Department of Agriculture and Fisheries, Division for Agricultural Policy Analysis	Ellips, 6de verdieping, Koning Albert II-laan 35 bus 40, 1030 Brussels	An.vandenbossche@lv.vlaanderen.be
Croatia	Zaklina Jurisic	Ministry of Agriculture, Forestry and Water Ma- nagement	UL. Grada Vukovara 78, 10000 Zagreb	zjurisic@mps.hr
Denmark	Steffen Møllenberg	Institute of Food and Resource Economics	Rolighedsvej 25, 1958 Frederiksberg C	steffen@foi.dk
England	Selina Matthews	Department for Environment, Food & Rural Af- fairs (DEFRA)	9 Millbank, c/o 17 Smith Square, London SW1P 3JR	Selina.matthews@defra.gsi.gov.uk
Finland	Arto Latukka	MTT Economic Research	Luutnantintie 13, 00410 Hel- sinki	arto.latukka@mtt.fi
Germany	Josef Hauser	Bundesministerium für Ernährung, Land- wirtschaft und Verbraucherschutz, BMELV, Ref- erat 426: Ertragslage und Betriebserhebungen)	Rochusstrasse 1 53123 Bonn	Josef.Hauser@BMELV.bund.de
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